

N° 107

APRIL 1988

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FEATURES

- 48 Satisfaction Guaranteed**
Writing Contest Humor Winner:
John Sherman's story about
a costly contract with the devil.
- 50 Shangri-La**
Writing Contest Fiction Winner:
The fortune of a climber who stumbles
upon a lost village, by Phil Berggren.
- 54 Eurostone**
Part I in a series of articles
on European rock climbing hotspots.
- 64 The Bugaboos**
Randall Green and Joe Bensen chronicle
this spectacular area.
- 76 The Education of an Alpinist**
The enigmatic Kitty Calhoun
is spotlighted by Jonathan Waterman.
- 82 Cañon Tajo**
Bob Van Belle reveals
a magical spot in Baja.
- 88 Mount Shasta**
A three-season ski primer,
by Craig Ballenger.

Cover: Climber on Crescent Spire,
the Bugaboos, Canadian Rockies.
Photo: Glen Boles

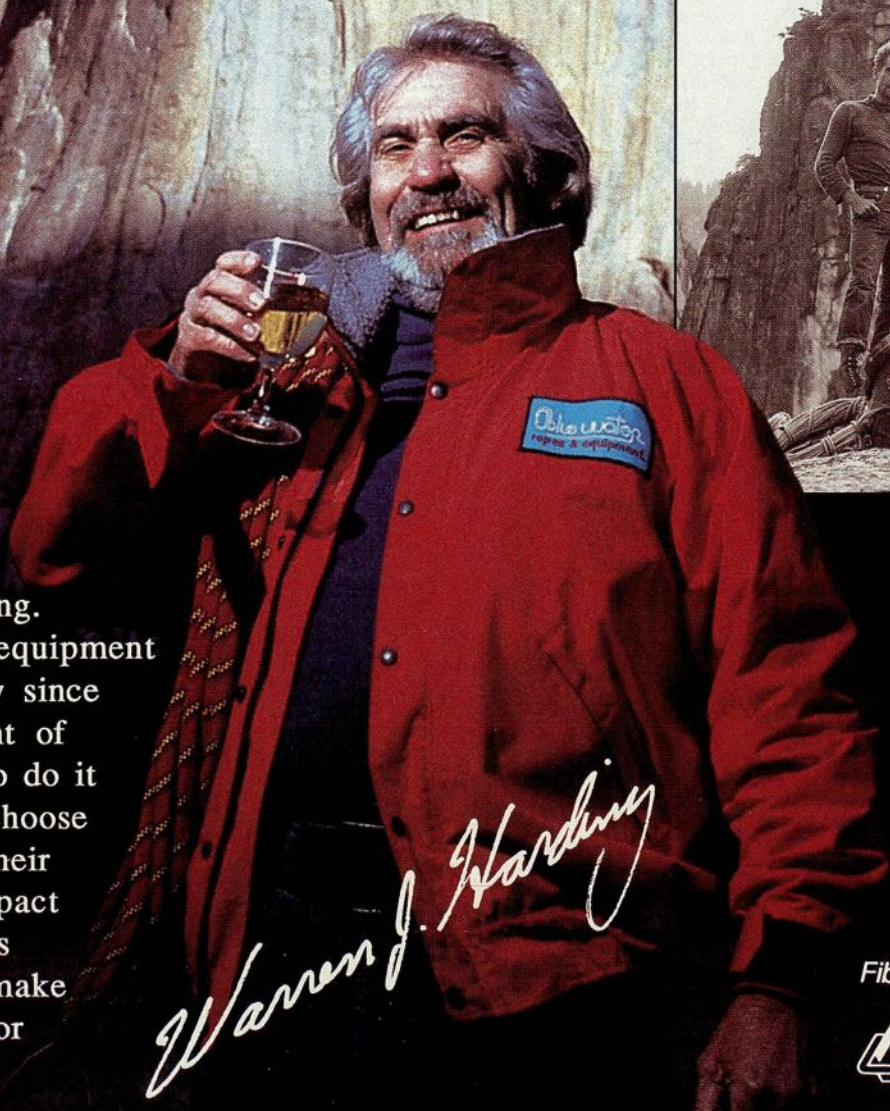
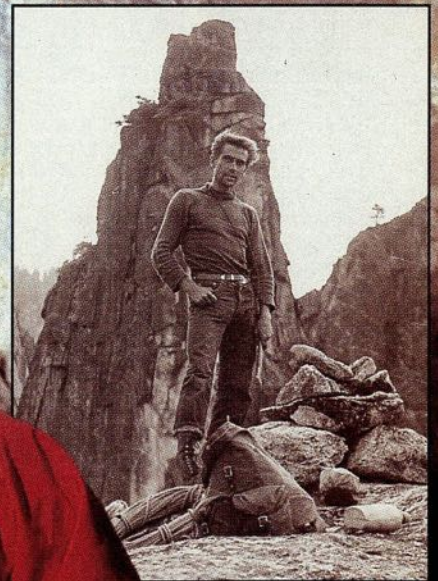
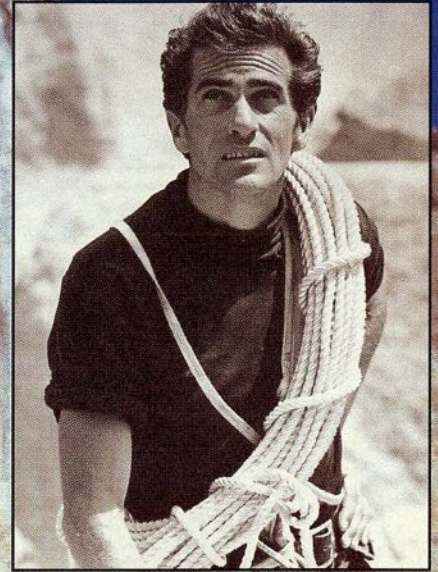
Contents: Christian Griffith on *Lakmé* (5.14a) —
his recent new route in Eldorado Canyon is
the first 5.14 to be put up by an American.
Photo: Bob Rotert

DEPARTMENTS

- 4 **Basecamp**
- 92 **Starting Out**
- 94 **Profile**
- 96 **Expeditions**
- 100 **Technique**
- 102 **Medicine**
- 106 **Training**
- 114 **Equipment**
- 128 **Access**
- 130 **Reviews**
- 136 **Letters**
- 138 **Perspective**

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Fiber by:



BASECAMP

ARIZONA

TUCSON, PHOENIX

Beaver Wall Vandalized Again

A cloud has descended over typically sunny Arizona and, unfortunately, this condition is not likely to improve with the weather. The problem once again centers around bolts. In Tucson and in Phoenix, unnamed persons (read: vigilantes) chopped bolts and even handholds on several routes.

Worst hit was Tucson where an unidentified vandal(s) pinched all the bolts from Beaver Wall. Last spring (Basecamp, *Climbing* no. 102), Steve Grossman, John Fowler and Scott Ayers removed all bolts from the Beaver Wall that could be unscrewed, sparing the ones which would require chopping. Great care was taken to minimize impact on the rock, and all bolts and hangers were returned to their original owners. The trio took full responsibility for the act, stating that their intent was to make a statement. At a meeting of locals, a consensus was reached, and the bolts were replaced on *Right Tissue*; however, it was immediately chopped by a still unidentified party. The furor died over the summer, and Beaver Wall was restored in the late fall.

On January 11, someone removed all the bolts again, but this time the impact was not *de minimis*. Two studs were chiseled, and a hold that had been fortified with epoxy was not only pried off, what remained was knocked off with a hammer, leaving an 18" scar. A meeting was immediately called, although no one claimed responsibility for the act. An uneasy standoff quietly developed in the Tucson community. Then, a week later, another route, *Feelin' Fertile* on Mean Mistreater Wall, was chopped, this time with a chisel. Ugly scars bear witness to the violence of the act. Finally, *Three Piece Route* and *Shudder Stop* below the Windy Point overlook were stripped, although it is uncertain whether this was done recently.

Presently, the Tucson climbing community remains deeply divided. The unknown vigilante(s) is holding everyone in suspense. Making a statement such as Grossman, Fowler and Ayers originally did is worthy of respect; their actions had no lasting impact on the rock. However, this unknown person(s) is a thief and a vandal, and, with any luck, will step forward to claim responsibility for the act, or be caught red-handed.

Right Tissue has since been re-

placed. The other routes on Beaver Wall (*Rage to Live*, *Golden Beaver*, and *Climb With A View*) will also be replaced soon. Climbers from all over the world have come to Tucson to repeat the Beaver Wall classics.

In a seemingly unrelated incident, *Reunion* (5.8) and *Look Sharp* (5.10) at Pinnacle Peak north of Phoenix were chopped, also in January. Equally inexplicable is the fact that the latter route had been bolted on lead, according to guidebook author Jim Waugh. No explanation has been given and the event lies shrouded in mystery. Is Arizona the last battleground in the bolt wars?

On a lighter note, the Grand Canyon state enjoyed a very climbable fall and early winter, despite Tucson's first white Christmas on record. Brit Craig Smith, beating a hasty retreat from the miserable winter days in his motherland, sojourned in Tucson last January. On Mt. Lemmon, he climbed the groove left of *The Mule* on the Ripple Wall, dubbing it *What An Ass* and rating it his usual E6 6b. It makes one wonder about the English system when his other routes of the same grade range from 5.12c to 5.13b.

At the moderate grades, Josh Tofield, Bob Kerry, and John Hayes have added several fine new routes; *Emotional Rescue* (5.8) and *Billionaire Boys Club* (5.10) were two of the best.

In the Superstitions, visiting Gunks climber Todd Swain had a field day, adding a number of high-quality routes to Bark Canyon Wall and the Fortress. He often climbed rope solo, placing all bolts on the lead. Rope soloing was apparently contagious; on Bark Canyon Wall, local Chris Raypole, unassisted, did *Tuesday Afternoon* (III 5.9), establishing an immediate classic. Once again, bolts were placed on lead. Reports indicate that peregrine falcons are nesting on Bark Canyon Wall, likely making it a seasonal climbing area.

Jim Waugh took time away from organizing the Sixth Annual Phoenix Bouldering Contest to add three routes in the Supes: *The Far Side* (5.12a), *The Trident* (5.11b R), and *Winter Solstice* (5.11d R). Word has it that many more projects are awaiting — no doubt this spring will be a busy one.

As usual, the location of the Phoenix Bouldering Contest (April 2)

is being kept a secret. What has leaked out, though, is that this year's booty is colossal: the top prize is \$500 cash and numerous gear prizes will also be awarded. Remember, if you don't play, you can't win. See you in the Valley of the Sun, and don't forget your slippers.

—Michael Jimmerson

FLAGSTAFF

Year-Round Basalt

Northern Arizona's Colorado Plateau is a fascinating area, unsurpassed by any region in the U.S for its wild beauty. Pick up any edition of *Arizona Highways*, that venerable Arizona tourist rag, and you'll see pages of photos showing the area's Ponderosa forests, snow-capped volcanoes, and unspoiled, desolate canyons.

Climbing a volcano tends to be a pumice slog, so the cliffbands lining the canyons are what really attract climbers. The Plateau's elevation of 5000 to 7000 feet gives the visitor pleasant temperatures year-round. With the approach of winter, however, most roads leading to the canyons are choked with snow, making access virtually impossible.

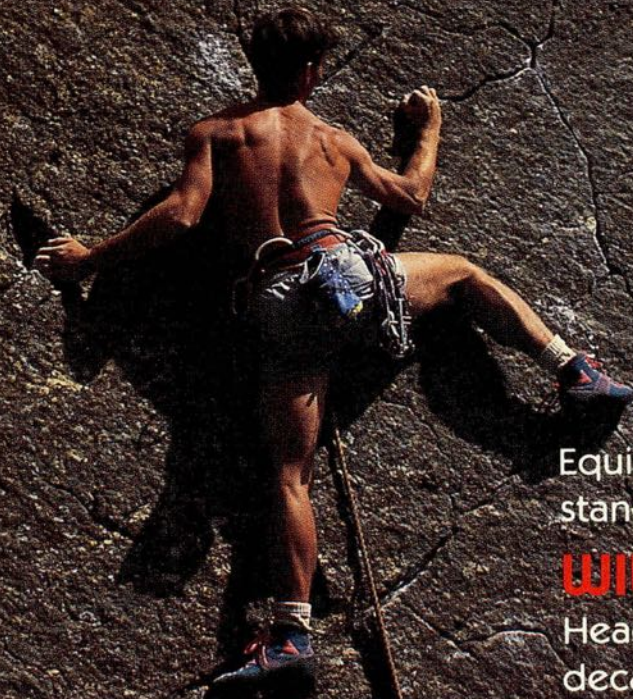
There is an exception: the Overlook. This area offers climbing on nearly a mile of 20 to 80 foot basalt cliffs, within a stone's throw of a major highway.

The Overlook gets its name due to its perch above the spectacular convergence of Oak Creek and Pump-house Wash. When the rest of the state is either sweltering in heat or buried in snow, the Overlook can be relied on for great climbing weather, owing to a combination of its moderate elevation and southerly exposure. One local expert claims the Overlook has more climbable days than any other crag in the state — for the uninitiated to Arizona climbing, that is saying something.

But it's not just good temperatures that attract more climbers to the Overlook than any other crag in northern Arizona; it also boasts excellent climbing on over a hundred routes. And unlike other, steeper basalt cliffs in the region, such as Paradise Forks, the Overlook has a broad range of moderate climbs. In fact, nearly two-thirds of the routes are under 5.10, making the area a haven to climbers of all abilities.

The Overlook lies only 20 minutes from Flagstaff. To get there, drive ten miles south of town on Highway 89a toward Sedona. The Overlook is just off the road to the left; look for the sign. In the summer, the main parking lot is

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Charlie Fowler on "Rip this Joint" (5.10)
Fern Canyon, CO Photo: Kyle Copeland

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John Steiger

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Office Manager
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Subscriptions
Barbara Allen

Design Consultant
R. Given Jones

Advertising
Julie Kennedy

Contributors (no. 107)

Neil Cannon, Henry Dallal, Lou Dawson, Mike Engle, Charlie Fowler, Mari Gingery, Christian Griffith, Dan Hare, Bill Hatcher, Michael Jimmerson, Mark Lewis, Keith Lockwood, James Martin, John Martin, John McCall, John Middendorf IV, Ralph Munn, Alison Osius, Jon Popowich, Stuart Pregnell, Glenn Randall, Melly Reuling, John Sherman, Marlin Stum, Don Theisen, Jim Vermeulen, Ed Webster.

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often crowded with tourists. In the winter, it is closed, requiring visitors to park across the road in a pullout. The cliff is easy to spot by looking down from the fence. There are toilets, but no drinking water and no camping; the Forest Service office in Flagstaff can give directions to local camping areas.

A Cheap Way To Fly (1986) by Tim Toula is a guidebook to the area. Although it's out-of-print, check at the mountain shops in Flagstaff for one of the remaining copies.

—Bill Hatcher

MOUNT LEMMON

What An Ass (5.12c/d), Windy Ridge, Ripple Wall. 15' L of *The Mule*. Steep face to horizontal bands, R to bulge and steep groove, L over another bulge at obvious crack. 5 bolts. (FA: Craig Smith, 1/88.)

Emotional Rescue (5.7 or 5.8), Windy Ridge. 15' L of *19th Nervous Breakdown*. Either chimney straight up (5.7) or go R at hand rail and up past two bolts (5.8). (FA: Bob Kerry, John Hayes, Josh Tofield, 1/88.)

Nasty Habits (5.12a tr), Windy Ridge. W end of *19th Nervous Breakdown* wall. Thin seam over bulge. (FA: Hayes, Kerry, 1/88.)

Second Sight (5.8+) Windy Point, North Fin. Across from *96° in the Shade* just L of pine tree. Up 15' into shallow, R-facing corner, L and up out of corner to short fist crack. Up SW buttress of highest tower, 5.6 runout. Rappel. (FA: Kerry, Bill Scheffer, 8/87.)

Billionaire Boys Club (5.10), Windy Point, North Fin. 40' R of direct start to *Slippery When Wet* at pine tree. Rotten rock for 20' past pin to bolt. Straight up to shallow chimney. (FA: Kerry, Tofield, 1/88.)

SUPERSTITIONS

The Far Side (5.12a), Obscurity Wall. Direct finish to *Dark Side of the Moon*. 3 bolts. (FA: Jim Waugh, Tim Toula 2/88.)

The Trident (5.11b R), Obscurity Wall. 1st major wall S. Obvious 3-tiered pinnacle. NW side. Thin cracks to offwidth and roof. Bolt, 130'. (FA: Waugh, Eric Johnson, 2/88.)

Winter Solstice (5.11d R), Carney Springs Wall. R of *De Grazia*. 1) Indistinct crack and face past bolt to obvious white rock and 2-bolt belay. 2) Obvious corner. 3) Loose flake and crack. 4) Superb corner system. (FA: Waugh, Dave Gunn, 1/88.)

Simmer Til Done (5.10b), Bark Canyon Wall. Face 20' R of *Erection Direct*. 6 bolts to 2-bolt belay under small overhang. (FA: Todd Swain, Peggy Buckley, 2/88.)

Fettucini Alfredo (5.11b), Bark Canyon Wall. R of *Simmer Til Done* past 4 bolts to thin crack, R to belay. (FA: Swain, Chris Raypole, 2/88.)

Tuesday Afternoon (5.9), Bark Canyon Wall. 1) 1st pitch of *Stroke It Gently*. 2) Up and R to L side of *Glory Road* overhang. Crack to face. Crux. 3) From S end of belay ledge, up L past 3 bolts to *Stroke It Gently* at 3rd bolt. 4) *Stroke It Gently*. (FA: Raypole, rope solo, 2/88.)

A Fistful of Pockets (5.9+/5.10-), Fortress. Face L of *Freely Freaking*. Rappel from 2-bolt anchor. (FA: Swain, Raypole, Greg Bender, 2/88.)

For a Few Pockets More (5.10+/5.11-), Fortress. Thin crack and blunt arete 10' R of *A Fistful of Pockets*. Tied-off hook used for pro before bolt. (FA: Swain, Raypole, Bender, 2/88.)

Pocket of Rainbows (5.10+), Fortress. Overhanging wall 10' R of *Bypass* past 4 bolts. Classic. (FA: Swain, Bender, 1/88.)

OTHER AREAS

Unnamed (5.9), Pinnacle Peak, Cactus Flower East. 20' L of *King of Pain*. Short groove to zenolith (knob) and top. (FA: Swain, rope solo, 2/88.)

Unnamed (5.8), Little Granite Mountain, Bobcat Boulder. 8' R of *Snakes Are Poodles* and just R of crack. Thin crack and face to ledge, up arete past 2 bolts. (FA: Swain, rope solo, 2/88.)

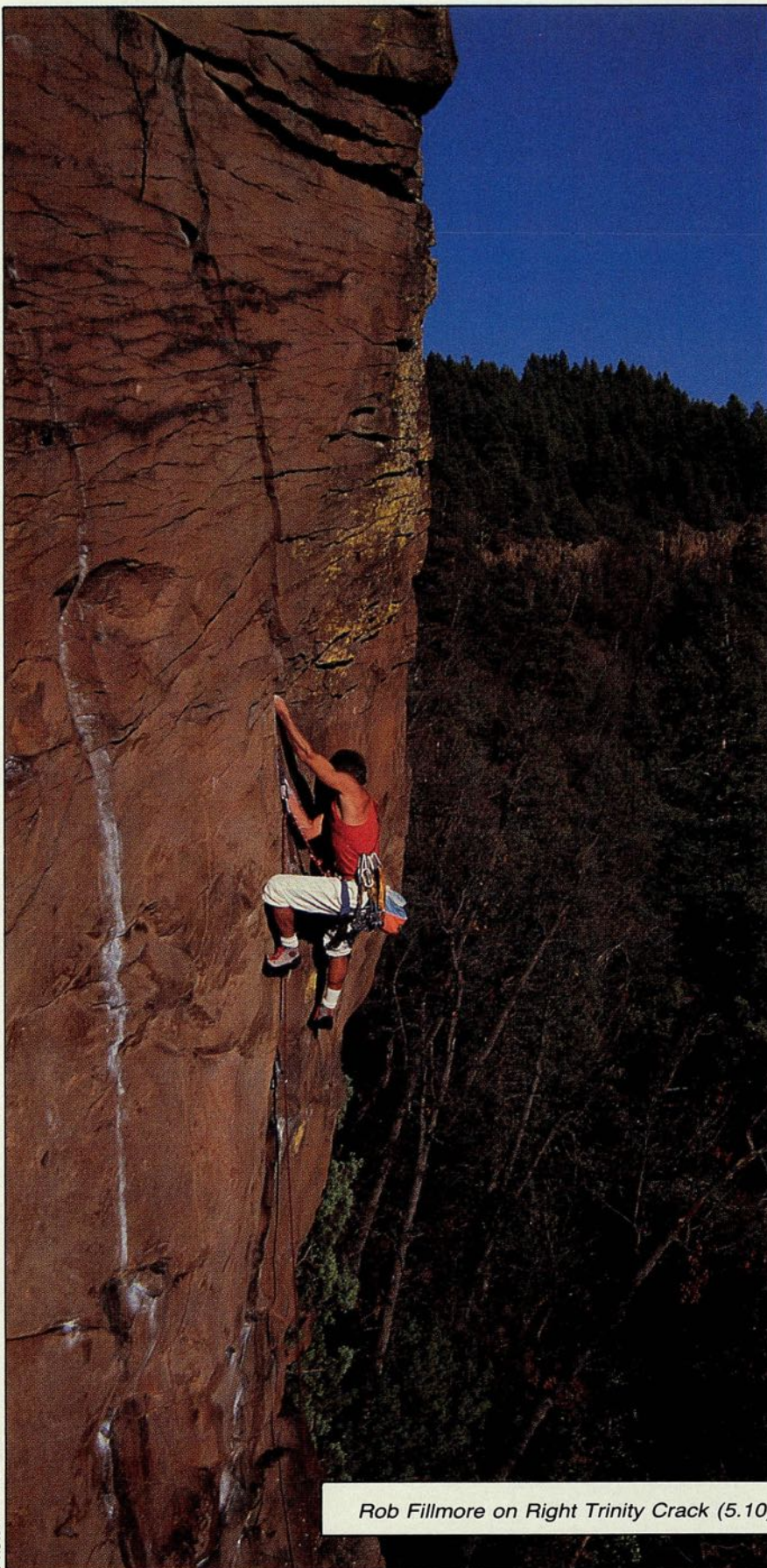
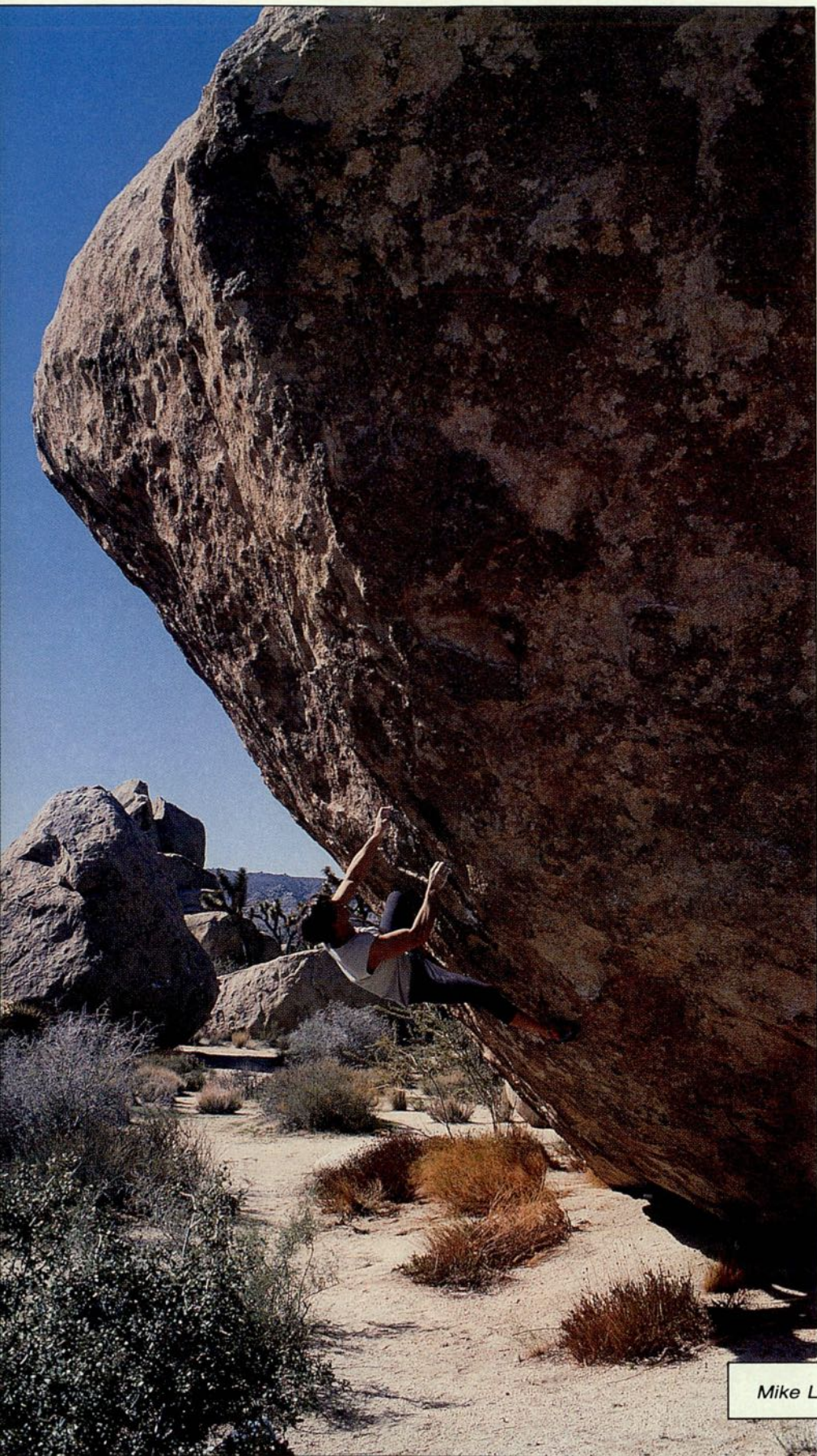


Photo: Bill Hatcher

Rob Fillmore on Right Trinity Crack (5.10).



CALIFORNIA

JOSHUA TREE

Leave Your Rope at Home

Nestled in the foothills of the Little San Bernardino Mountains, on the edge of the Southern California high desert, lies the broad, open Lost Horse Valley. A small part of Joshua Tree National Monument, this wind-swept and unique valley provides the setting for an outstanding collection of difficult boulder problems.

Joshua Tree is a magical place, possessing a supernatural beauty which makes climbing here a one-of-a-kind experience. Imagine a landscape *à la* Flintstone-land, and you'll get an inkling of the area's primitive beauty. Joshua Trees, the cactus from which the Monument got its name, rise to 20 feet or more in gnarled, twisted shapes. Canyons, narrow passages, cactus flowers, and wildlife make exploring this high desert a treat in itself, but the widely scattered and unusually shaped outcrops of coarse, grainy quartz monzonite offer a plethora of climbing opportunities.

Tremendous variety is *the* trademark of Joshua Tree bouldering. Cracks, edges, aretes, dikes, roofs, and huecos provide infinite possibilities on low-angle to overhanging boulders. Although much of it may be too crumbly, the rock that's good offers great friction, which can also mean easily trashed fingertips and shoes.

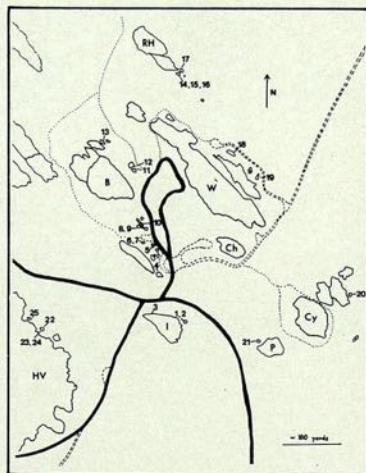
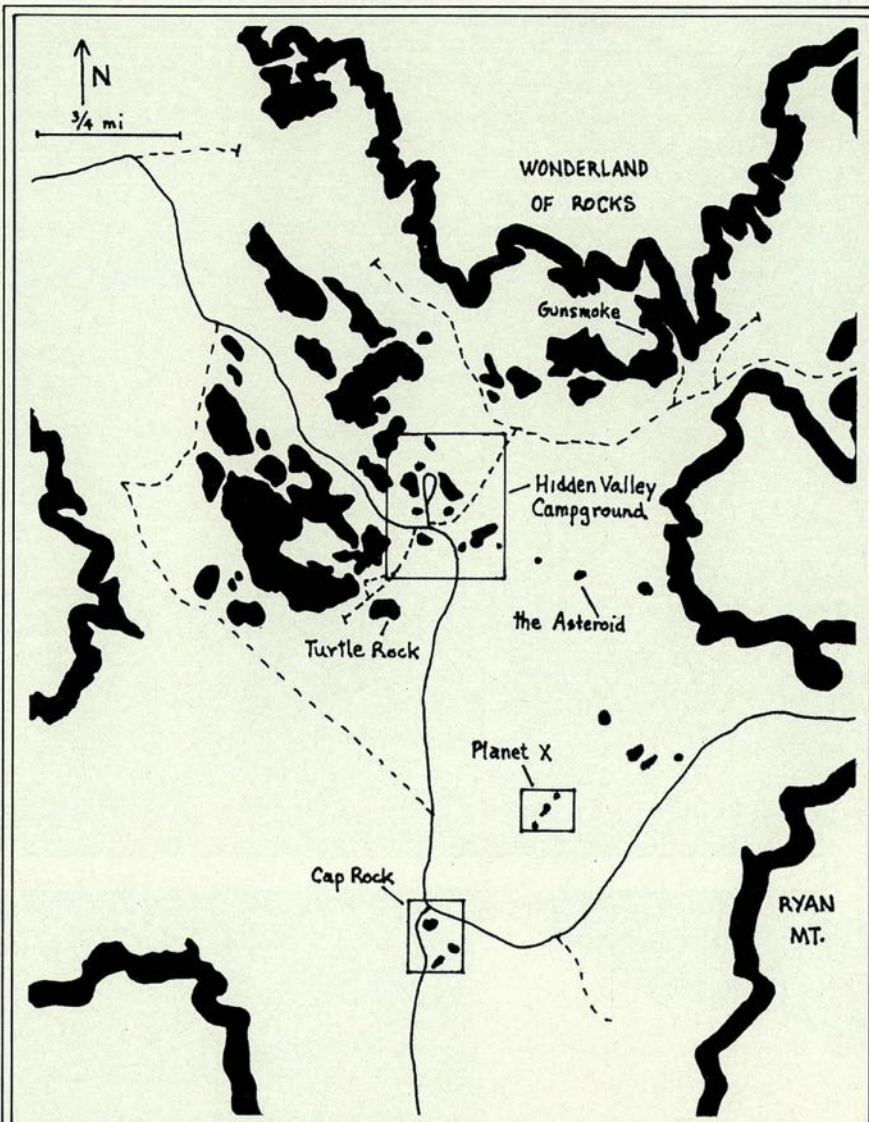
Following is a list of 52 classic problems, exemplary of the diversity of bouldering in the Lost Horse Valley. The common denominator among them is difficulty, which varies from 5.10 to 5.13. However, individual ratings are not included because of the lack of a consistent rating system for bouldering. Height, location, and general nature of the problem are given. Although most have good, flat landings, a few do not; some problems are very high, so keep in mind that bruised heels and sprained ankles are often the results of overambition.

This compilation gives only a fraction of the interesting problems available in the Monument — it is a vast climbing area. The desert is a fragile place; climbers need to minimize their impact. Respect for the environment and for the rock will keep climbing and bouldering in Joshua Tree as exceptional as it has always been.

—Mari Gingery

Photo: Mari Gingery

Mike Lechlinski on *So High*.



**HIDDEN VALLEY
CAMPGROUND AND VICINITY**

RH - Rock Hudson
 B - The Blob
 W - The Wall
 Ch - Chimney Rock
 Cy - Cyclops
 P - Peewee
 I - Intersection Rock
 HV - Hidden Valley

1. **Anglo-saxophone** (14'), Intersection boulder. Center of W face. Vertical face, usually begun off large cheatstone.
2. **Sweet Spot** (11'), Intersection boulder. 5' L of *Anglo-saxophone*. Steep face w/long reach.
3. **Reider Problem** (15'), Intersection Rock. 50' R of *Flight Ski Track*. Steep face, over bulge to ledge.
4. **Caveman** (25' traverse). Campsite 21, inside a "cave" boulder. Overhanging face traverse from R to L through cave, entrance to overhanging huecos.
5. **Triangle Classic** (15'), The Triangle, campsite 19. L end of W face.
6. **Largonaut** (15'), Powell boulder, campsite 18. L end of E face. Undercut face w/L-diagonal, sloping rib at lip.
7. **Powell Face** (15'), Powell boulder, campsite 18. L end of S face. Vertical face, beginning at L arete.
8. **Stem Gem** (15'). Boulder between campsites 16 and 17. Center of S face. Stemming/smearing on concave face.
9. **Stem Gem Mantle** (8'). 10' R of *Stem Gem*. Power mantle on sloping, undercut shelf, leading to last moves of *Stem Gem*.
10. **Yabolator** (14'). Behind (W of) campsite 15. Center of E face. Steep face through "scoop."
11. **Scatterbrain** (17'). The Wedge, campsite 10/11. L side of N face. Overhanging face/arete.
12. **The Function** (25'). The Cube, campsite 10/11. Center of S face. Long, edging face, begun off low boulder, usually w/cheatstone. Very high problem w/diccy descent.

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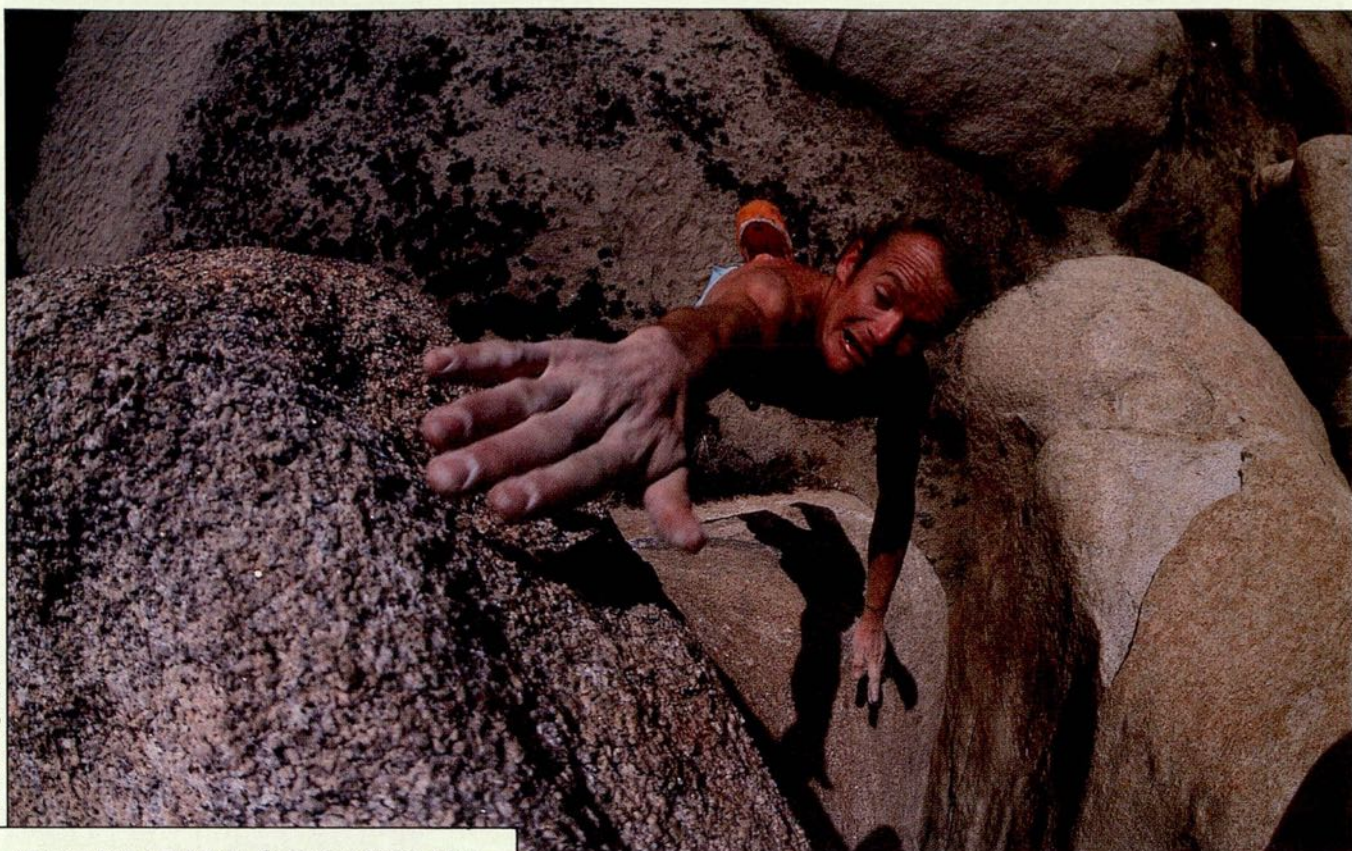
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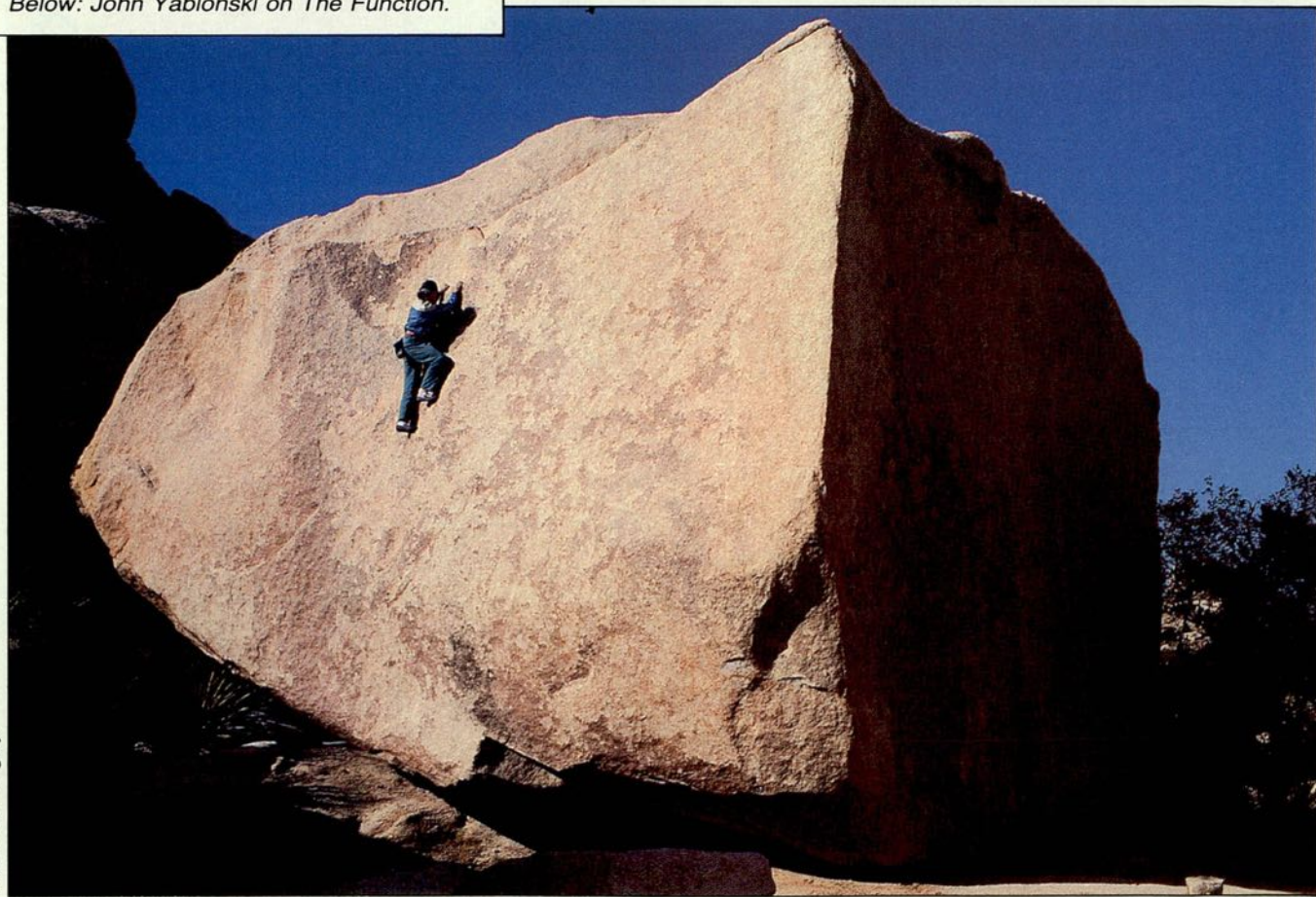
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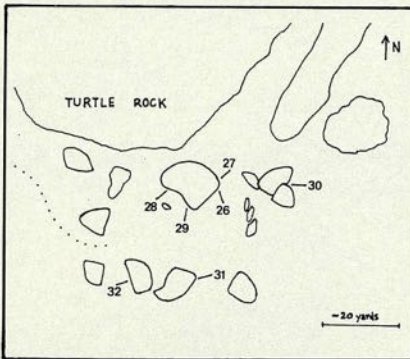


Above: Mike Paul on Saturday Night Live.
Below: John Yablonski on The Function.

Photo: Mari Gingery



- 13. The Central Scrutinizer** (18'), The Blob, N side. Overhanging finger crack w/bad landing.
- 14. How's Your Mama?** (15'), The Family boulder. L center of E face. Vertical face, R of arching, thin crack.
- 15. How's Your Papa?** (15'), The Family boulder. 5' L of *How's Your Mama?* Dynamic face L of arching, thin crack.
- 16. How's Your Granny?** (15'), The Family boulder. 5' R of *How's Your Mama?* Thin, steep face w/long reach.
- 17. White Rastafarian** (24'), Rasta boulder. R side of N face. Layback crack w/long reach to hand traverse. High altitude.
- 18. Orange Julius** (18'). Campsite 45. L side of N face. Overhanging orange dike.
- 19. Fireaaa or Retiray** (15'). 50' N of campsite 41. Center of E face. Marginal smearing on less-than-vertical face.
- 20. Pigpen** (aka *Bachar Cracker of the Desert*) (13'), Potato Head. NE corner on E-facing cave boulder. 15' roof crack to overhanging fingers/hands.
- 21. Chip Flakey** (15'), Peewee boulder. NW of *Peewee* on W face. Undercling/layback flake, beginning off cheatstone.
- 22. JBMFP** (16'), JBMF boulder. Center of N face. Vertical face directly under apex of boulder and tops out a few feet L of same. Variation beginning 5' R is *Razarium*.
- 23. Pinch Arete** (13'), JBMF boulder. R end of NW face. Overhanging arete, approach from L.
- 24. Hensel Face** (15'), JBMF boulder. L of S face. Less-than-vertical edging/smearing face, go L off low boulder.
- 25. Terminator** (22'). 100' NW of JBMF boulder, center of E face. Vertical face w/edges, flakes. Several entry possibilities.



TURTLE ROCK AND THE REAL HIDDEN VALLEY

Approach by hiking to S side of Turtle Rock from the Turtle Rock picnic areas.

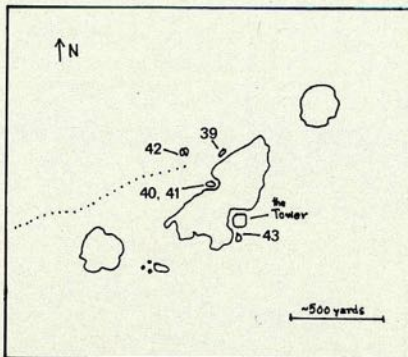
- 26. So High** (25'), High boulder. R of radically overhanging SE face. Overhanging face/crack. Commonly topoped.
- 27. Crank City** (15-30'), 5' R of *So High*. Overhanging thin face to large ear (15'). Jump off, traverse to *So High*, or continue straight up (topoped only).

- 28. Sorta High** (25'), High boulder. L of SW face. Friction face w/2 entries. Thin face on L or mantle on R leading to low-angle, high-altitude finish.
- 29. Button High** (25'), High boulder. 20' R of *Sorta High*. Undercut layback flake to face traverse L into *Sorta High*.
- 30. Fistful of Walnuts** (15'), Split boulder. Alcove on E face. Handcrack in back of overhanging flared chimney.
- 31. Accomazzo Face** (21'), Morning Glory boulder. R of SE face. Smearing/edging on less-than-vertical face.
- 32. Turtle Face** (17'), Turtle Triangle. Center of W face. Steep smearing/edging.
- 33. Saturday Night Live** (13'). 50yds SW of Real Hidden Valley parking lot, SW facing. Full-flying dynamic from lower L to upper R of concave face.
- 34. Betty Jo Yablonski** (25'). N-facing wall at entrance to Real Hidden Valley. Face climb over small roof to horizontal cracks, layback flake. High altitude.
- 35. Kirkatron** (30' traverse), Sports Challenge Rock. Between *Leave It To Beaver* and *Championship Wrestling*. Traverse.

ASTEROID BOULDER

50' R of *Asteroid Crack*.

- 36. Peabrain** (14'), Asteroid boulder. R center of S face. Fingertip layback.
- 37. Optigrip** (14'), Asteroid boulder. 5' R of *Peabrain*. Thin crack w/2 possible entries; traverse from *Peabrain*, or climb straight up crack.
- 38. Underdog** (14'), Asteroid boulder. 15' R of *Peabrain*. Thin holds over undercut face, usually off cheatstone.

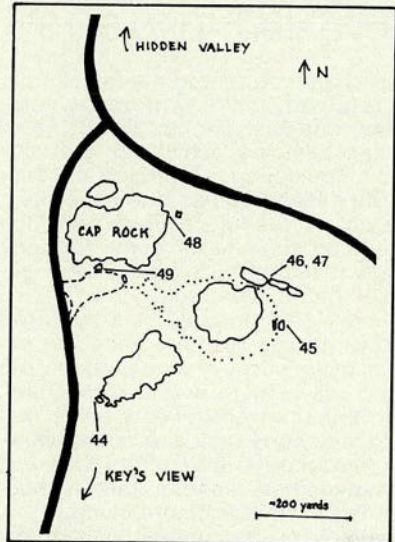


PLANET X AREA

Approach by hiking 1/2mi E from Quail Springs Road.

- 39. Planet X** (23'), Planet X boulder. Center of NW face. Steep face w/long reaches. High altitude.
- 40. Left Side of the Satellite** (18'), The Satellite. 100yds S of *Planet X*, center of N face. Huecos up, L to face moves.
- 41. Right Side of the Satellite** (18'), The Satel-

- lite. Center of N face. Huecos up, R to face/mantle.
- 42. Jerry's Kids** (18'), 100yds W of *Planet X*, R side of W face. Vertical face beginning at chest-high bulge.
- 43. Turbolator** (18'), S of the Tower (tallest formation of the group). N-facing arete. Face climbing on indistinct overhanging arete.



CAP ROCK AREA

- 44. Up 40** (30'), The Molar. S face. Face traverse from L to finger crack in corner. Highest of high boulders. Simplest descent requires running jump across 10' abyss.
- 45. Pumping Monzonite** (15'), Bench boulder. R of E face. Overhanging face/crack.
- 46. All Washed Up** (18'), The Wash. L of E face. Overhanging thin face w/deep sandy landing.
- 47. Soar Eagle** (18'). The Wash. 8' R of *All Washed Up*. Overhanging dynamic face.
- 48. High Heeled Sneakers** (18'), Cap Rock. E face. 50' R of *Catch A Falling Star*. L-leaning crack to face.
- 49. Parking Lot Problem** (13'), Cap Rock. S side. 100' L of *Slim Pickens*. Crack through undercut bulge.

GUNSMOKE AREA

Approach from Barker Dam parking lot; see *Joshua Tree* by Randy Vogel.

- 50. Gunsmoke** (70'), NW of Barker Dam parking lot. Traverse on horizontal crack system.
- 51. High Noon** (16'), 15' from L end of *Gunsmoke*. Overhanging horizontal cracks to layback flake.
- 52. A Streetcar Named Desire** (13'), 50yds S of *Gunsmoke*. On boulder w/NW-facing open book. Wide stemming in steep corner. First ascended with running jump, then bouncing between walls.



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BOULDER AREA

Flatirons Exploits Revealed: Two 5.13's

In sharp contrast to the last couple of relatively mild winters, a cold, snowy one this year has slowed Front Range climbing activity to a snail's pace. Bouldering at Morrison and trips to Shelf Road's limestone have been the only cures for cabin fever, which may also account for some formerly reticent sources divulging their exploits from last season.

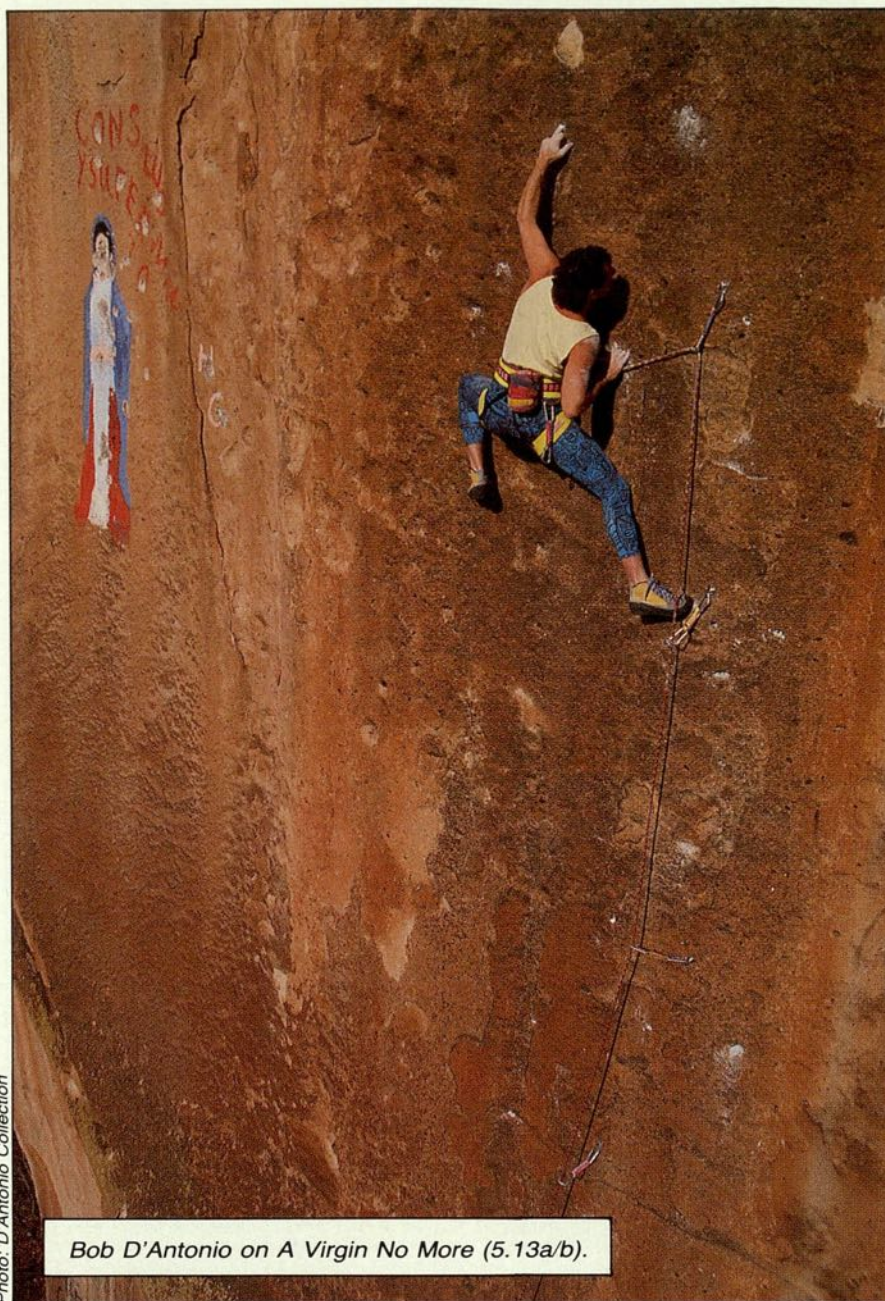
The rather loosely defined area known as The Flatirons received the brunt of their activity. And probably the most active there was Dan Michael, who found several quality faces that held the shade until afternoon, allowing him to climb straight through last summer's heat wave. In fact, he succeeded on the wildest looking of his creations on the hottest day of the year. On his sixth attempt, he completed *The Fiend* (5.13b/c), a severely leaning and overhanging stemming and palming corner on The Jellystone, the third ridge on Bear Canyon's north side. It is not recommended to those who can't touch their toes.

Down the ridge, Brian Hanssen and Michael climbed a beautiful face coming right out of the creek to give *Thought Control* (5.9+), an instant classic. Just around the corner, Michael teamed with Dave Rice and put up another superb face climb, *Auspice* (5.11c).

Nearby, several other mini-classics were established. On a huge overhanging pocketed boulder, Paul Piana and Eric Johnson did *Hot Spit* (5.11c/d). Just a stone's throw away, Mike Dowling and Dan Hare bolted a steep wall with a colorful water streak, calling it *Sneak Preview* (5.11b). Across the canyon on Overhang Rock, Michael and Pianas' featured attraction was *The Big Picture* (5.12a), an excellent bolted climb on the left edge of the large green face.

On Poot Ridge, Hank Caylor climbed the dynamic *Shoot To Thrill* (5.12a). Just uphill on a large boulder, Downing was in on *The Stone Operation* (5.11a/b). Wrapping up this tour of Bear Canyon's new classics is the pebbly *Megasaurus* (5.10+) by Hare and Downing.

In the heart of The Flatirons, the Ironing Boards saw some interesting developments last year as well. Again, Dan Michael came away with a prize line, *Slave To The Rhythm* (5.13b/c), after ten days of effort. Located on the severely overhanging west face of the first Ironing Board, it features gymnastic moves past peb-



Bob D'Antonio on A Virgin No More (5.13a/b).

bles, with names such as "Skinhead" and "Neil." Nearby lies another excellent creation which features an attention getting pocket traverse over a large void. *Velvet Elvis* (5.11a/b) was put up by Paul Piana and Brett Ruckman. The two-pitch route is reported to be well worth the hefty approach.

In Eldorado Canyon last fall, the prominent face between *Rincon* and *Center Route* on the Rincon Wall was climbed by Michael, Piana, and Bill Myers. *Camouflage* has sustained balance climbing and an awkward arete. Another often-looked-at wall is the one left of the heart-stopping fourth pitch of *Jules Verne*. Chip Chace and Michael did more than look, establishing *Green Willow Wall* (5.11+), a long curving arch that

eventually breaks out onto a thin face.

The long cold winter has made for an especially good Front Range ice season. A rarely formed ice hose on the east face of the Mickey Mouse Wall was climbed by Dave Fortner, Phil Gothard and Bob Rotert. Fortner had been watching this rather obvious formation for several years waiting for the right combination of snow melt and cold weather. Part of its 200' of ice was free standing and only a foot wide. They called it *Mouse-Ka-Tears* (WI5 5.8).

In the South Platte, a very fine route on Sunshine Dome was done last fall by Noel Childs and Kirk Miller. *Heart Of Darkness* (5.12) lies right of *French Curve* and left of *Shining Path*. It follows thin cracks for two

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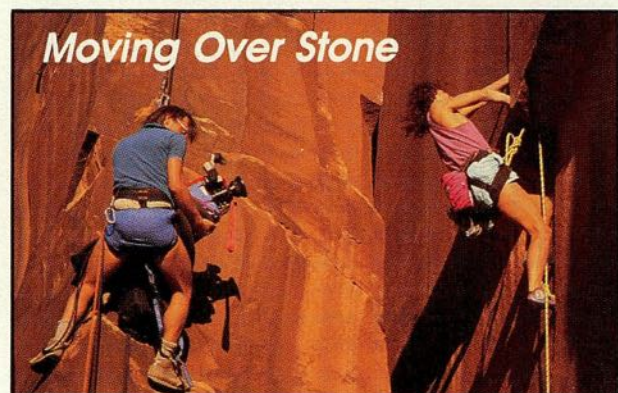
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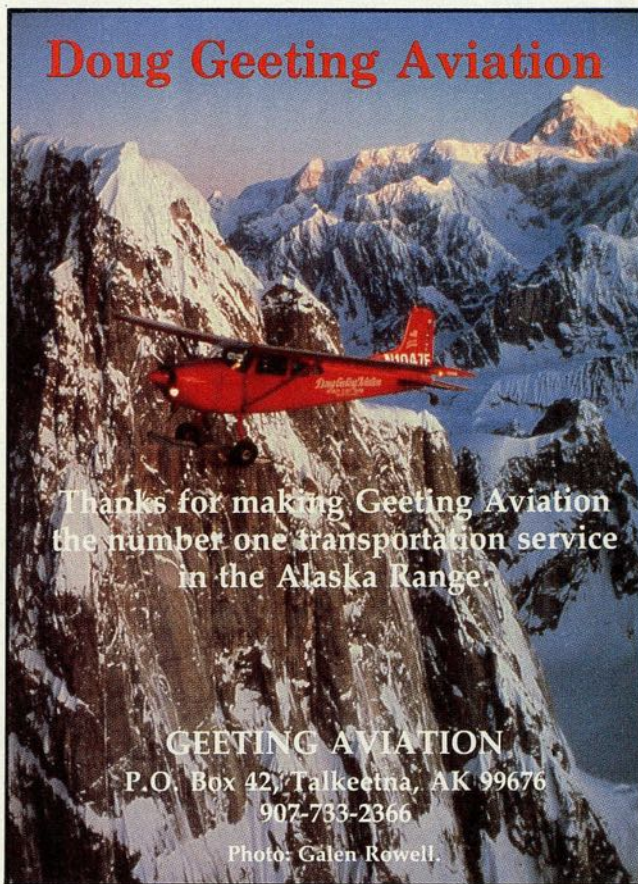
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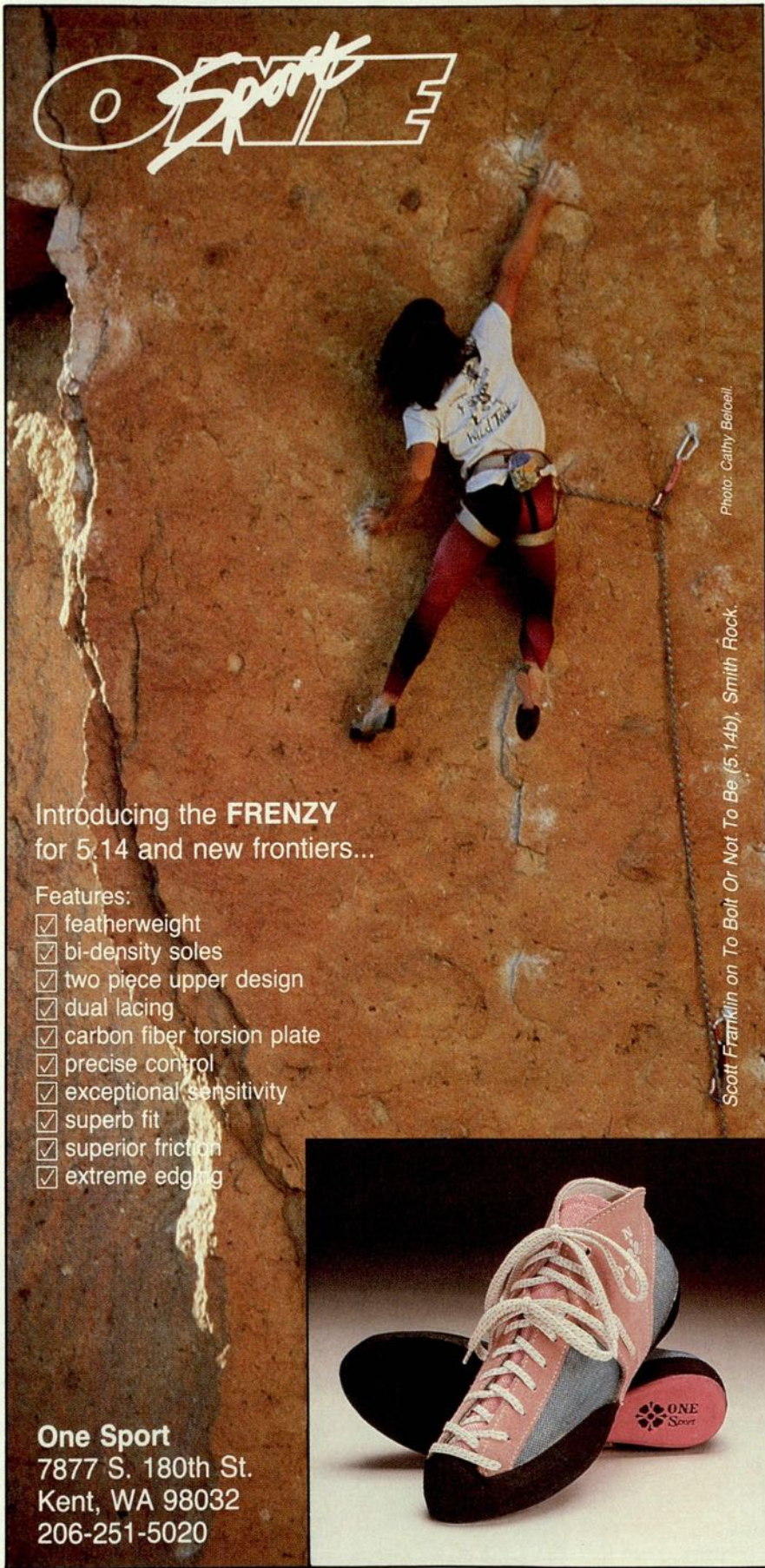



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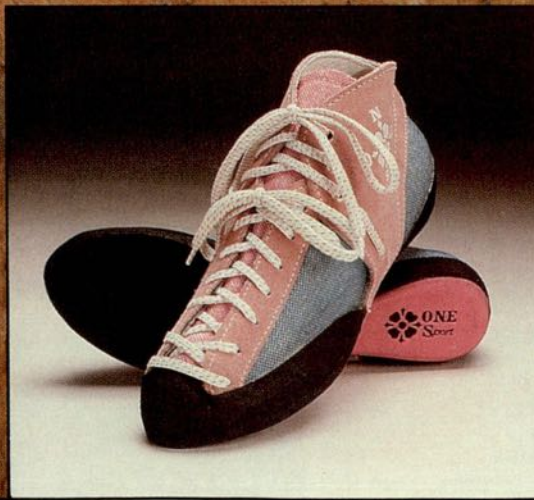
Scott Franklin on To Bolt Or Not To Be (5.14b), Smith Rock.

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itches, then face climbing for two more, and is said to be one of the best routes in the entire South Platte.

In the San Luis Valley, Bob D'Antonio climbed the blank-looking wall right of the painting of Virgin Mary in Penitente Canyon. A *Virgin No More* (5.13a/b) is now the area testpiece, requiring sustained pulls on thin edges and small pockets.

— Dan Hare

THE FLATIRONS AND ELDORADO CANYON

The Fiend (5.13b/c), Bear Canyon, The Jellystone (3rd ridge on N side of canyon). Overhanging, leaning, R-facing corner w/bolts. (FA: Dan Michael, 7/87.)

Auspice (5.11c), Bear Canyon, The Jellystone. SW face, down from *Fiend*. Crosses *Old Man Of Hoy*. 4 bolts. (FA: Michael, Dave Rice, 6/87.)

Thought Control (5.9+), Bear Canyon, The Jellystone. Face w/4 bolts R of *Auspice*. (FA: Brian Hanssen, Michael, 6/87.)

Hot Spit (5.11c/d), Bear Canyon, The Bubble (large boulder between 2nd and 3rd ridges). SW face. Overhanging pockets. (FA: Paul Piana, Eric Johnson, 8/87.)

Sneak Preview (5.11b), Bear Canyon. Near bottom of 2nd ridge. S-facing wall w/prominent water streak w/bolts. (FA: Mike Downing, Dan Hare, 11/87.)

The Big Picture (5.12a), Bear Canyon, Overhang Rock. W face. Bolts where green and red rock meet. (FA: Michael, Piana, 8/87.)

Shoot To Thrill (5.12a), Bear Canyon, Poot Ridge. Short face behind trees at bottom of 1st ridge W of Overhang Rock. (FA: Hank Caylor, summer/87.)

The Stone Operation (5.11a/b), Bear Canyon, Poot Ridge. Uphill from *Shoot To Thrill*. Large boulder w/roof to thin face. (FA: Downing, 9/87.)

Megasaurus (5.11b), Bear Canyon, Dinosaur Mountain. N side of canyon on 4th ridge. Pebbly wall w/4 bolts. (FA: Hare, Downing, 11/87.)

Castles Made Of Sand (5.11d), Fern Canyon. 1st major ridge on N side of canyon. Bolted face and arete L of *Fertile Crescent*. (FA: Michael, Jim Michael, Rice, 6/87.)

Slave To The Rhythm (5.13b/c), The Flatirons, Ironing Boards. Backside of 1st Ironing Board. Bolted, overhanging face R of *Hyperpolysyllabic*. (FA: Michael, 9/87.)

Velvet Elvis (5.11a/b), The Flatirons, Ironing Boards. Center of W face of Ironing Board. Start w/traverse over roof. 2 pitches. (FA: Piana, Brett Ruckman, 9/87.)

Camouflage (5.12b/c), Eldorado Canyon, Rincon Wall. Bolted face between 1st pitches of *Center Route* and *Rincon*, then up short arete. (FA: Michael, Piana, Bill Myers, 8/87.)

Green Willow Wall (5.11d), Eldorado Canyon, Redgarden Wall. L-leaning arch L of 4th pitch of *Jules Verne*, then up wall to horizontal break. (FA: Chip Chace, Michael, 2/87.)

Mouse-Ka-Tears (WI5 5.8), Mickey Mouse Wall. Ice hose on E face of Mickey Mouse Wall to gully. Visible from Highway 93. Difficult mixed climbing w/bulges, free standing pillar. (FA: Dave Fortner, Phil Gothard, Bob Rotter, 1/88.)

SOUTH PLATTE

Heart Of Darkness (5.12), Sunshine Dome. Thin cracks, face between *French Curve* and *Shining Path*. Take small nuts. (FA: Noel Childs, Kirk Miller, 10/87.)

SAN LUIS VALLEY

A Virgin No More (5.13a/b), Penitente Canyon. Face w/5 bolts L of *Not My Cross To Bear*. (FA: Bob D'Antonio, 10/87.)

Tanks for the Hueco (5.11b), Penitente Canyon. Pocket-riddled face R of *Bullet the Blue Sky*. 6 bolts. (FA: D'Antonio, Brian Mullen, Charles Walters, 10/87.)

A Sort of Homecoming (5.12d/5.13a), Rock Garden. Down and R of *Pickpocket*. Seam over roof to face. (FA: D'Antonio.)

Unnamed (5.12c tr), Rock Garden. Down and L of *Lycraphobia*. Overhanging face. (FA: Bob Murray.)

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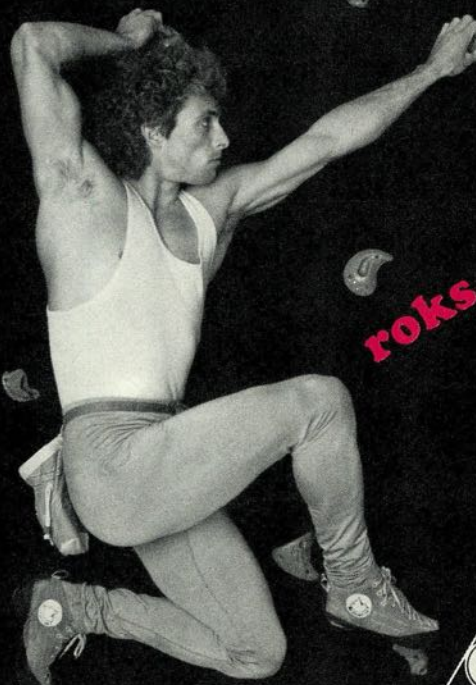


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BOISE

Shelter From The Storm

I didn't know what to think on my first trip to the cliffs. Tedd had tied one on the night before and was driving ridiculously fast over the gravel road; the Dead Kennedys were blaring from the stereo and a visiting Austrian was yelling broken English at me, every other word an obscenity. Frankly, it was hard to take their ravings about the crag seriously. Besides, who ever heard of rock climbing near Boise?

I was a refugee, escaping the ethical debates that raged in Boulder. On a pilgrimage to Smith Rock, I had decided to stop in Boise for a bouldering contest. To my delight, the area was the Mecca I was searching for.

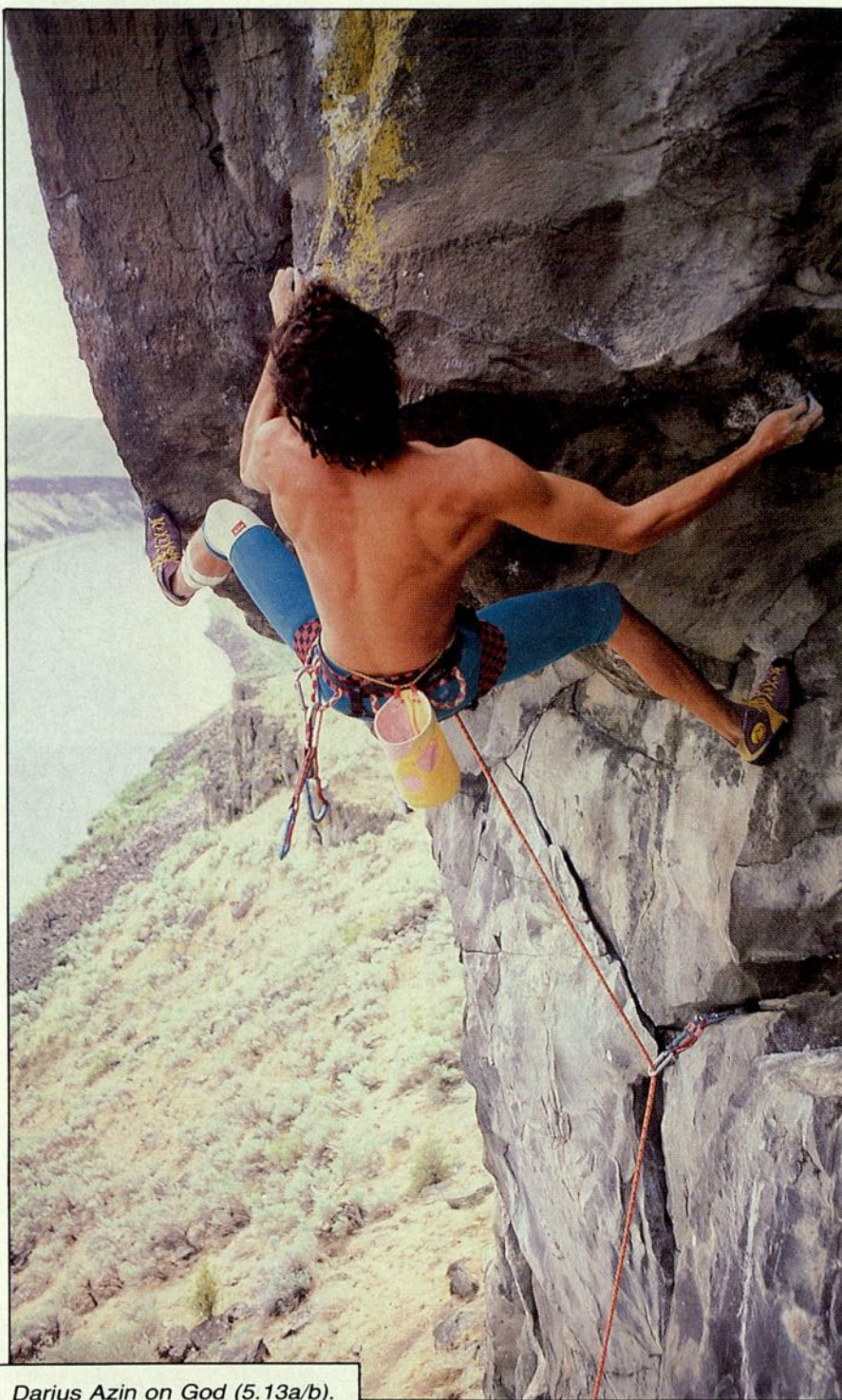
The climbing is safe, clean, and challenging, and European tactics have helped raise the area's standards into the mainstream of modern free climbing. First ascents are established in impeccable style; routes are top roped first to determine the best bolt placements, drilled on rappel, and then redpointed. Consequently, the basalt cliffs above the Boise River now possess the largest concentration of hard free climbs in Idaho.

The Black Cliffs offer two distinct types of basalt, depending on which side of the river you're on. The columnar basalt on the north side provides mainly crack climbs, but when columns butt tightly together, face climbing technique comes into play.

Free climbing in Boise was born on these cliffs. Many classic lines, such as *The Spear* (5.10a), *Doug Scott Crack* (5.9), and *Copperhead Overhang* (5.10a), were done in the 1960's by local pioneers. One of these early hardmen, Tom McLeod, still climbs at a high level.

The 1970's were a period of stagnation in Boise. The Black Cliffs saw renewed enthusiasm in 1982, but it wasn't until 1985 that 5.11 became well established. With a mild winter, new camming protection, and growing competition among locals, many improbable lines began to fall. The first was *Cool For Cats* (5.11c), a delicate layback. Other notable routes include *Wimp Roof* (5.11a), *Neon Nazi* (5.10d), *Hexbreaker* (5.11b), *Boogers* (5.12a), and *Nemesis* (5.11c).

Climbing activity on the south side



Darius Azin on *God* (5.13a/b).

of the river intensified in the fall of 1986. The basalt here is different from any I've climbed on, more like the sandstone of Eldorado than the basalt in Oregon or Arizona. Bulging faces with few cracks are the norm.

After my hair-raising drive, it was on these crags that I got my introduction to the area. Local activist Tedd "Shredd" Thompson and Michael Stoger (the Austrian) had already established many classics, such as *Wire-*

brush Haircut (5.11d), and *Chasin' A Snake* (5.11d). Their new testpiece, *T.V.O.D.* (5.12c), offered unbelievably steep and intellectual climbing. Several 5.11 face sections led to a devious crux layback capped by more 5.11. It is truly the area's classic for its grade.

I quickly realized the area's potential, and began work on my own creation; *God* (5.13a/b) has a short but steep crux section involving wild

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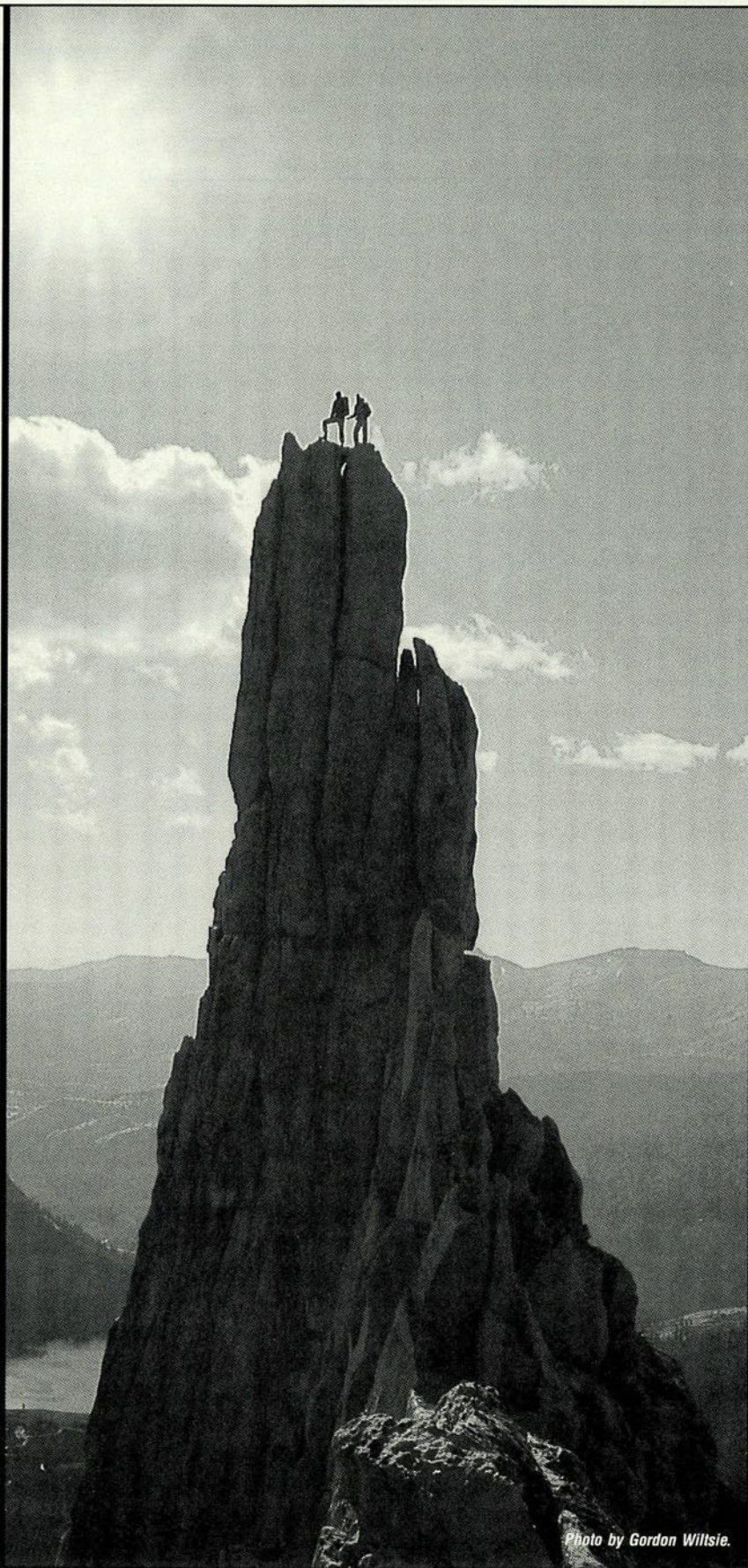


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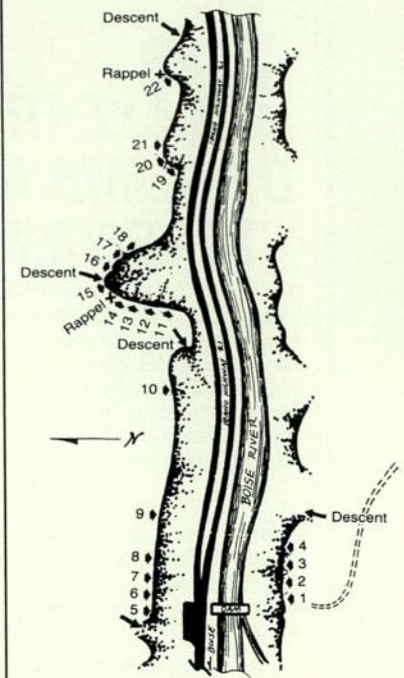
calf locks, toe hooks, and a strenuous layback. As far as I know, it's the first 5.13 in the state. Other new ascents were soon to follow. *Drugs* (5.12b) and *Shriekback* (5.12b) are good examples of Boise's superb overhanging face climbs.

The Boise area also holds fine bouldering and top roping at a nearby sandstone quarry, Table Rock, where the first Southwestern Idaho Bouldering Contest was held. There are many difficult 30' topropes. Recommended routes include: *Burning Bush* (5.10a), *Propeller* (5.11c), *Hakenkruez* (5.12a), *Vertikal Slur* (5.12c), *Nuclear Sunset* (5.12b), *29 Potatoes*

(5.11a), *I Stone* (5.11c), and *Roadrunner* (5.12c).

Boise is a convenient stopover for the touring crag climber, lying almost dead-center between Smith Rock and Little Cottonwood Canyon, and only ten minutes from I-84. The approaches are short, and the routes are easy to find — the name and rating are painted at the base of each. A guide to the area will be available soon.

The climbing season begins in the early spring and lasts through late fall. Summers in Idaho are usually hot, making climbing on the north side next to impossible. The south side, howev-



THE BLACK CLIFFS

1. *God* (5.13a)
2. *Wirebrush Haircut* (5.11d)
3. *Virgin* (5.11a)
4. *TVOD* (5.12b)
5. *Desperate Indulgence* (5.11a)
6. *Bologna Pony* (5.10d)
7. *Lost Arrow* (5.10a)
8. *Hexbreaker* (5.11b)
9. *Spear* (5.10c)
10. *Horrible Human History* (5.10c)
11. *Round Table* (5.7)
12. *Pabst Smear* (5.9)
13. *Boogers* (5.12b)
14. *Throb* (5.10d)
15. *Kaopectate* (5.12b/c)
16. *Temporary Insanity* (5.9)
17. *Macabre* (5.9+)
18. *Whimp Roof* (5.11a)
19. *Surfs Up* (5.9+)
20. *Cool For Cats* (5.11c)
21. *Lights Out* (5.11a)
22. *Flight 1713* (5.11c)

er, remains in the shade and is very climbable on all but the hottest days.

Boise rock promises to be the new Eurodog stopping point on the way to Smith Rock — I know I won't pass it by again.

—Darius Azin

Directions

To get to the north side, take the Highway 21 exit off I-84. Follow this for 7 miles; the cliffs will be on the left. Most of the climbs are above the dam in the obvious canyon 1/2 mile east. To access the south side, exit I-84 at the Highway 21 exit. Take a right on Federal Way and drive about three miles. Turn left on Columbia Road (just before Micron Technology), which turns into dirt. Follow it for about two miles until it dead ends, where an obscure dirt road on the left leads to the top of the cliffs.

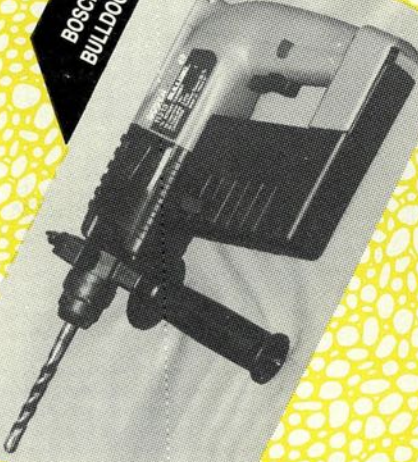
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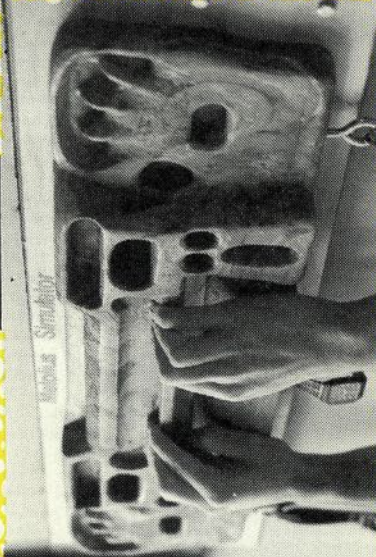
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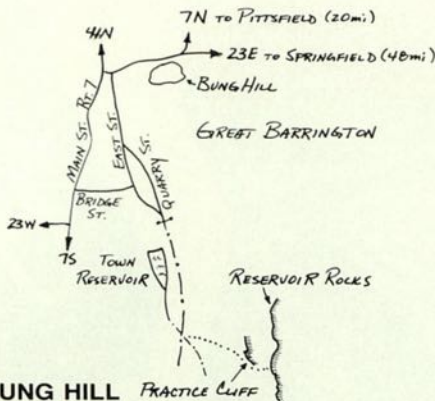
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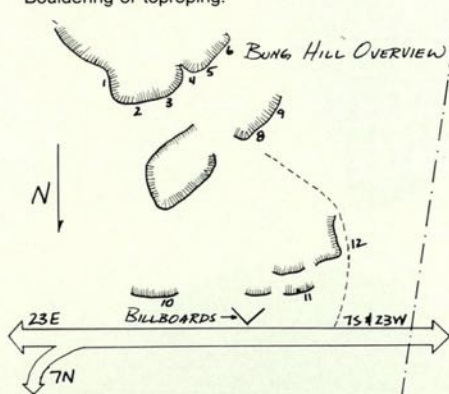
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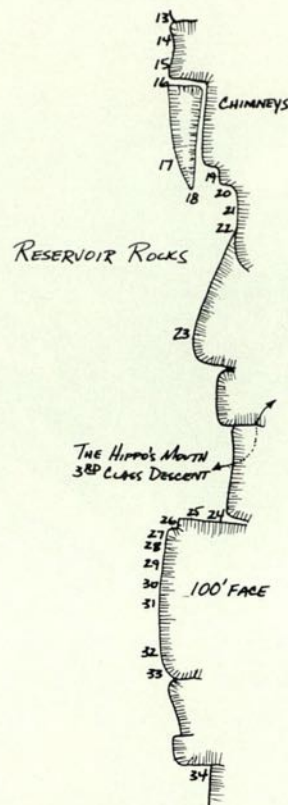
- 1. King of Pain** (5.11). Triple roofs. (FA: Ralph Munn, 5/86.)
- 2. Elephant Crack** (5.9+). Obvious curving offwidth. (FA: lead, Munn, Ed Keller, 4/86.)
- 3. The Flake** (5.7). R-facing flakes to shallow corner. (FA: unknown.)
- 4. The Chimney Route** (5.6). (FA: John Kussek, Ray Kidwell, Luke Sollitt, 5/86.)
- 5. Mr. Clean** (5.10 tr). Thin face above large roof. Pass roof on R or climb straight through (harder). (FA: Keller, Munn, 4/86.)
- 6. The Right Route** (5.10a tr). Face R of tree. (FA: Munn, 5/86.)
- 7. Green Achers** (5.8). Diagonal hand crack. Best moderate route. (FA: Munn, Nick Broad, 6/86.)
- 8. The Berkshire Sampler** (5.10d). Balance up, L to start of diagonal crack to stance below bush, angle L (5.9 R). One of South Berkshire's best climbs. (FA: Munn, Steve Link, 11/87.)
- 9. Down East** (5.7). Flake at R edge of wall. (FA: unknown.)
- 10. Beginners' Wall** (5.4-5.9). Several routes. Avoid this and other roadside climbs when leaves are off the trees. (FA: unknown.)
- 11. Stupid Music** (5.10d). A-shaped roof to thin crack. RP's useful. (FA: Keller, Web Crittenden, spring/86.)
- 12. Sunnyside Wall** (5.7-5.11). Thin face. Bouldering or top roping.



RESERVOIR ROCKS

Park on Quarry St. near East St. Hike S along power lines to pole 52. Follow faint trail L into woods, then uphill and slightly R to Practice Cliff. Continue around R end and up to main wall.

- 13. Itchy Crack** (5.6). Chimney to L-leaning ramp. (FA: Munn, Cathy Coley, Chuck Wiesner, 4/87.)
- 14. Liar** (5.9 tr). Shallow groove to small roof. (FA: Ned Harding, Marnie Tollerton, fall/87.)
- 15. Killer Quartz** (5.8 tr). Face past L end of shallow roof, then slightly R, up. (FA: Wiesner, 4/87.)
- 16. Sunset Boulevard** (5.5). Prominent chimney. (FA: Munn, Link, 4/87.)
- 17. Praying Mantis** (5.10c). Obvious offwidth to 10' hand traverse L; up flakes and ramp to overhanging wall. Pass bush on L. (FA: offwidth, Mark Abbott, summer/87; complete, Scott Kimball, Munn, summer/87.)
- 18. Wall Street** (5.0). Descent chimney.



- 19. The Marlizer** (5.10 tr). Face R of chimney. (FA: Link, summer/87.)
- 20. Spitting Tongue** (5.10 tr). Face to projecting flake, then up, R. (FA: Link, summer/87.)
- 21. The Cave Route** (5.2). Chimney to top of cliff, exit L. (FA: Link, 3/87.)
- 22. The Black Tower** (5.9 R). R of cave. Up to roof, traverse R to shallow crack, then past tied-off pin. Over capstone to top. Bring double ropes, HB nuts, Tri-cams .5-2.0. (FA: Munn, Link, 6/87.)
- 23. Redemption** (5.7). Flakes, crack up front of buttress. (FA: Munn, Link, 4/87.)
- 24. Out of Africa** (5.9). Diagonal crack to R-facing corner. (FA: Munn, Kimball, 6/87.)
- 25. Congo Crack** (5.9+). Start w/ Out of Africa, R to ledge on main face, straight up 5.7 face (no pro). (FA: Munn, Kimball, 6/87.)
- 26. Inside Out** (5.10+). Inside corner past bolt, 2 pins. Strenuous. (FA: Kimball, Munn, 7/87.)
- 27. Convergence** (5.11 R). Inside Out to bolt, then R (fixed nut) around corner to 2nd bolt. Straight up past crack'n'ups or bad RP's. 5.7 face to top, no pro. (FA: Link, Munn, 7/87.)
- 28. The Big** (5.7). Wide crack past roof, trees. (FA: Munn, Link, 3/87.)
- 29. Bloody Hand** (5.10d R). 10' R of The Big. Up, L through bulge, R to vertical seam to bushes. Join The Big. No pro til after crux (20'); sliders helpful. (FA: lead, Eric Sutton, 6/87.)
- 30. Endeavor to Persevere** (5.10b/c). Beautiful thin crack in center of face, R to tree belay. Step L, continue easily to top (no pro) or rap from tree (165'). Bring many small wired nuts, 2 Tri-cam for exit moves. (FA: Link, Munn, fall/86.)
- 31. Koyaanisqatsi** (5.10b R). 10' R of Endeavor. Past 2 bolts, join Endeavor. (FA: Brian Delaney, 4/87.)
- 32. The Dike Route** (5.10d R). Short crack near R edge of face, R to obvious dike. Move up, L to disjointed seams. Pass smooth band on L. Double ropes helpful. (FA: Delaney, Sutton, 6/87.)
- 33. Poindexter Arete** (5.10 R). Nose to pine tree. Pass smooth band on R (crux). Nose to top. (FA: Delaney, Munn, 7/87.)
- 34. Kitty Litter** (5.7). Large R-facing corner past trees to top. (FA: Kimball, Paul Kasputis, fall/87.)

References

A guide to South Berkshire crags is being compiled; for more information or to report new routes, contact Ralph Munn, Simon's Rock College, Great Barrington, MA 01230.

DON'T Buy A Paraglider!

Without learning to fly. Even though it is the easiest and safest of all recreational aircraft you still cannot teach yourself how to fly. You must attend a flight school. You cannot spend a few hours with a friend and learn enough to avoid a bad injury. Although paragliders are the climbing tool of the future, they are far more complex than rappel devices. You will need many hours of practice flights before you can take them on climbs.

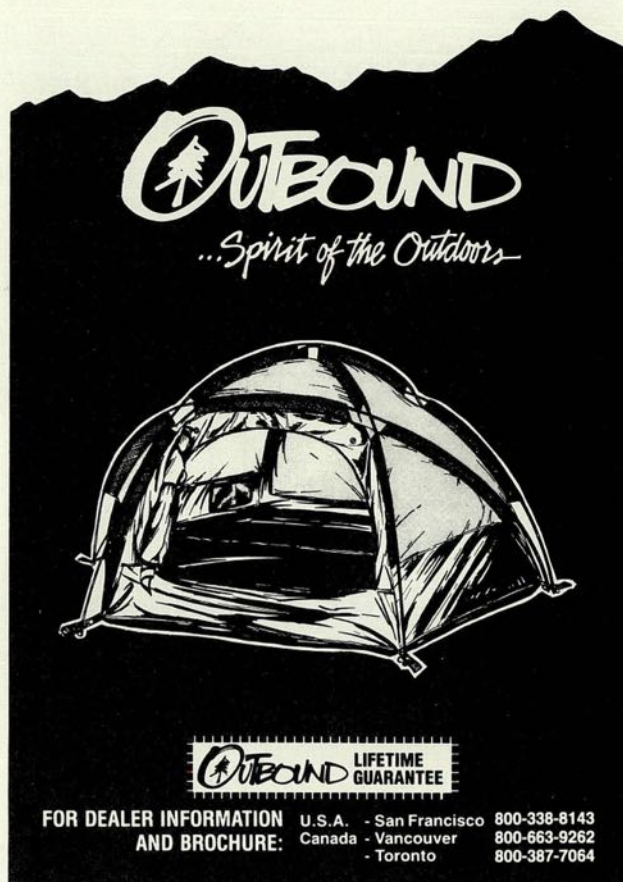
At the World Championships in Switzerland last summer it was quite obvious that information like square footage, aspect ratio, and the planform type is useless without knowing the airfoil shape — and no manufacturer will give that away! A manufacturer's stated Glide Ratio is just about meaningless; you have to fly canopies side by side to compare. Terms like "Stability in Turbulence" are misleading since paragliders should *not* be flown in turbulence. So, the only real way to decide which to buy is to try the canopy yourself or fly with someone who has flown all the others. It would be foolish to spend \$1500.00-\$2000.00 and find out you did not get the one you need. It would be even more senseless to spend \$2500.00 on a European model and find the same performance on our new \$1200.00 9 cell. We also have a selection of air worthy used canopies with prices ranging from \$600.00 to \$900.00. Availability is limited.

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NEW MEXICO

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Laid-Back State Jumps Into Mainstream

New Mexico has joined the climbing vanguard as Cochiti Mesa, a playground for practitioners of Eurostyle, ceded the first high-desert 5.13's. The state had seemingly been the last bastion of the laid-back climbing scene, where climbers non-competitively clambered up the crags in traditional style. (Cochiti Mesa should not be confused with Bland Canyon aka Cochiti Canyon, which was recently closed to climbing. See Access this issue.)

Cochiti Mesa, an escarpment of welded tuff on the Pajarito Plateau, saw a boom of new-route activity after its rediscovery in late 1985, by Doug Pandorf and French expatriate Jean de Lataillade. Although rumors of earlier climbs crop up from time to time, the legacy amounts to a few fragmented tales and corroded nuts. One bit of history which has survived is the ascent of a two-pitch crack, *The Apprentice* (5.11c), by Mark Roybal and Mark Hesse in the late 1970's.

One of Pandorf and de Lataillade's first routes at the Mesa was *Dreamscape* (5.12a/b), a demanding overhanging face and thin-crack climb. Soon after, word of activity spread to long-time New Mexico climbers Lee Sheffel and Doug Couleur, who, on their first visit, discovered an untouched cliff as a result of getting lost. They established *Let It Bleed* (5.12a/b), an instant classic that soon received a flash ascent by Todd Skinner.

Tom Kalakay, another Mesa activist, turned his attention to the "blank" faces, putting up many imaginative lines, including *Path of the Doughnut Man* (5.12a) and the unlikely looking *Gunning for the Buddha* (5.12b). Indeed, face climbs here often require creationists to clean out the sometimes dirty pockets and to knock off loose flakes, making for more enjoyable routes. One of the most difficult in this genre is the overhanging, pocketed *Shadowdancer* (5.13a), a 50' testpiece put up by de Lataillade and fellow Frenchman Bertrand Gramont.

Although geologically similar to Smith Rock, the rock at Cochiti Mesa holds natural pocket lines rather than edges, and, in that respect, is more like European limestone. The best rock is glazed with a dark-brown veneer, commonly referred to as desert varnish.

Over on Sandia Mountain, east of Albuquerque where wool knickers compete with lycra as the apparel of choice, the traditional climbing experi-

ence is still available. The abundance of tall rock faces and long, technical approaches assure ample opportunity for those seeking a ground-up ascent.

Echo Canyon, in particular, was the focus of a flurry of activity during the past year. Expect to hear more about this area in upcoming seasons, as it has one of the shortest approaches in the Sandias and extensive faces offering routes several hundred feet long. *Rawhide* (5.10) and *Yucca Flower Tower, Standard Route* (5.10) are both four-pitch crack climbs of high quality.

On Muralla Grande, the most accessible face in the Sandias, Brian Komen and company established several superb new climbs and variations. One of the best was *Excitable Boys* (5.10b/c), a four-pitch route that ascends dihedrals, cracks, and flakes right of *Second Coming*.

The discovery of a new climbing/bouldering area within the Albuquerque city limits has created a stir. Located on the West Mesa, this basalt cliff can be reached by taking the 98th Street exit and following dirt roads two miles northwest, eventually leading to the top of the escarpment. The cliffs are visible to the north of I-40 and just west of a city water tank. A few short leads exist, but it is primarily a superb bouldering and top roping area.

Just outside of Socorro in the center of the state, the efforts of energetic locals yielded many new high-standard routes on the rhyolite of Box Canyon. Once virtually a private playground for developer Bertrand Gramont, it has now attracted other first ascensionists. Eric "Mr. Roof" Hufnagel clung to thin inverted holds to create *Gravity Boots* (5.12a); this roof problem has so far rebuffed all attempts at a second ascent. *Rocket Ramp* (5.10b), another roof problem, saw its first ascent by Phil Simon and Hufnagel. In an impressive display of "huevos," Simon soloed the radically overhanging *Mataté Karaté* (5.12a). *Arm Alarm* (5.12a) received a solo first ascent as the *piece de resistance* of a Todd Skinner visit. And a Box Canyon classic, *The Luge* (5.12c), received a flash ascent when Jim Karn visited.

Excellent rock has been discovered around this dusty New Mexico town on a regular basis. Explorer Gramont has been tight-lipped about the locations of newly found crags, but did recently comment, "I have found ziss new area zat make Smith Rock look like Monday Morning Slab."

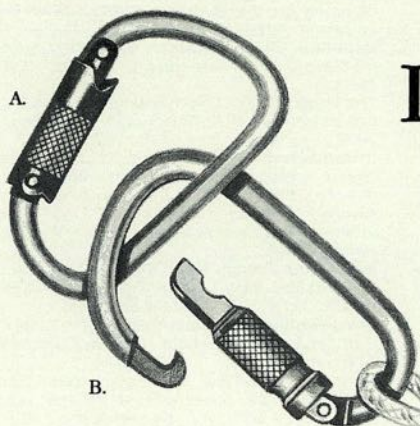
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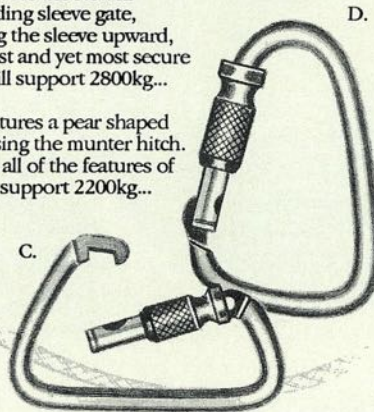
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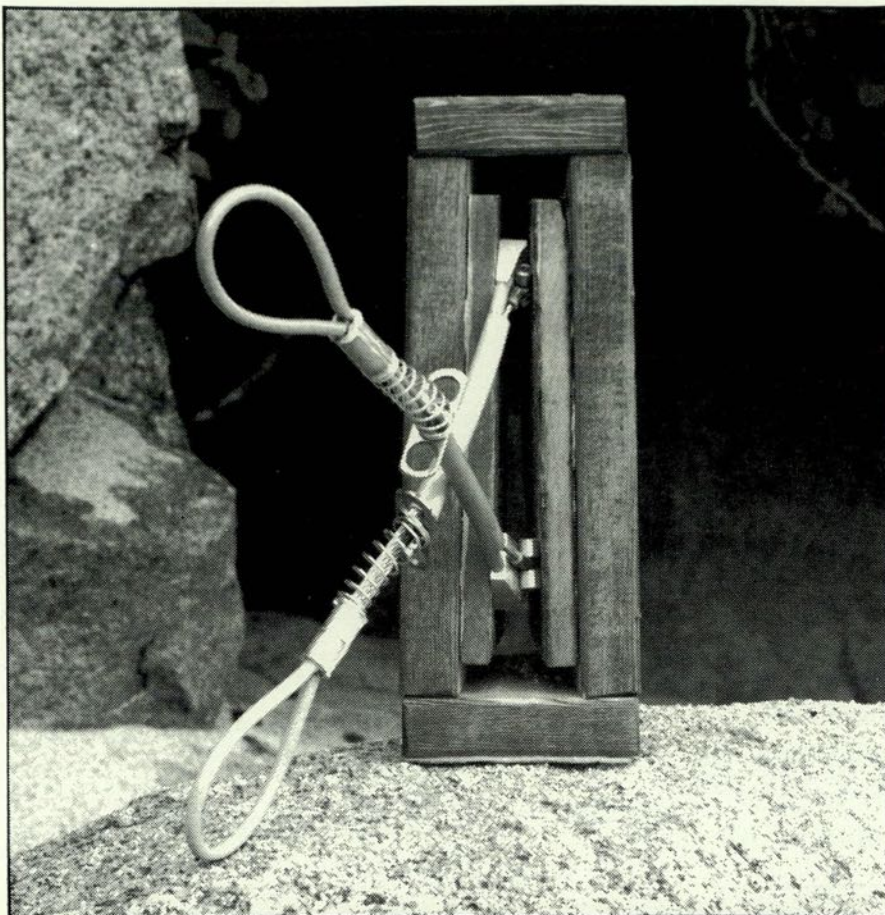
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—Mark Lewis

COCHITI MESA

Stridex (5.11d). Top band, 100' SW of Vista Point. Thin face w/5 bolts. (FA: Tom Kalakay, Jean de Lataillade, Dave Batten, 9/86.)
Path of the Doughnut Man (5.12a). Top band near the Indian Shrine. Thin face w/5 bolts. (FA: Lee Sheftel, de Lataillade, Kalakay, 10/86.)
The Boya From La Jolla (Who Stepped on a Cholla) (5.11a). Top band above O.M.S. 7 bolts. (FA: Kalakay, Peter Boveng, 10/86.)
O.M.S. (5.11c). On W side of pinnacle between

Dreamscape area and Vista Point cliff. 7 bolts. (FA: de Lataillade, Kalakay, 11/86.)

Pickpocket (5.11d). Face on E side of pinnacle. 3 bolts. (FA: Bill Dockins, Kristin Drumheller, 11/86.)

La Espina (5.12b). Face w/pockets on E end of pinnacle area. 7 bolts. (FA: Kalakay, Dockins, Drumheller, 11/86.)

Back to Montana (5.11c). Pinnacle area. R of *La Espina*. Face w/4 bolts. (FA: Sheftel, Doug Couleur, 10/86.)

Holey Wars (5.11a). R of *Back to Montana*. Face w/3 bolts. (FA: Drumheller, Dockins, 10/86.)

Lainbo (5.12a/b). R of *Holey Wars*. Face w/5 bolts. (FA: Sheftel, Couleur, 5/87.)

Gunning for the Buddha (5.12b; direct above 1st bolt, 5.12d). On nose of pinnacle, just W of walkdown. Face w/3 bolts. (FA: Bertrand Gramont, Kalakay, 5/87.)

Praise the Lunge (5.11c/d). Face w/4 bolts R of *Gunning for the Buddha*. (FA: Kalakay, de Lataillade, 6/87.)

Napoleon Blown-Apart (5.11b). Short face immediately W of walkdown. 2 bolts. (FA: Kalakay.)

The Prow (5.11d). Overhanging arete just E of walkdown, Pin. (FA: Paul Horak, Dave Baltz, 1986.)

Dreamscape (5.12a/b). Thin, arching crack where approach trail intersects escarpment. (FA: de Lataillade, Pandorf, 11/85.)

Another Lichen Nightmare (5.11b). Face route, 15' L of *Dreamscape*. 4 bolts. (FA: Doug Pandorf, 6/86.)

End of the French Revolution (5.11c). Face w/OW crack at top L of *Another Lichen Nightmare*. 2 bolts. (FA: de Lataillade, 6/86.)

Shadowdancer (5.13a). Overhanging face 7' R of *Dreamscape*. 6 bolts. (FA: de Lataillade, Gramont, 9/87.)

Terminal Ferocity (5.11d). Face w/same start as *Dreamscape*, traverse R around arete onto other face. 7 bolts. (FA: de Lataillade, 7/86.)

Eternal Spring (5.10a). Lower band, below *Path of the Doughnut Man*. Finger crack. 1 pitch, rap off. (FA: Pandorf, Kate Massie.)

Wyoming Saw (5.10c). Lower band, E of dead car, R of *Eternal Spring*. (FA: Pandorf, spring/86.)

The Apprentice (5.11c). Obvious E-facing crack on E end of lower band. 2 pitches. (FA: Mike Roybal, Mark Hesse.)

Let It Bleed (5.12a/b). Obvious thin crack on Jimmy Cliff. (FA: Sheftel, Couleur, spring/86.)

The Harder They Fall (5.11a). Crack next to *Let It Bleed*. (FA: Sheftel, Couleur, spring/1986.)

Fainting Imam (5.13a). Crack on E end of *Dreamscape* area. (FA: Todd Skinner, Beth Wald, 8/86.)

Crackerjack (5.10a). Finger crack L of *End of the French Revolution*. (FA: de Lataillade, Pandorf, 10/85.)

SANDIA MOUNTAIN, ECHO CANYON

Rawhide (5.10). Yucca Flower Tower. Center crack. 4 pitches. High quality. (FA: M. Leonard, P. Horak, 7/87.)

Chair in The Sky (5.10c). Yucca Flower Tower, S face. 3 pitches. (FA: Doug Couleur, Horak, Leonard, K. Kocon, 8/87.)

Frontier Justice (5.10 AO), upper Yucca Flower Tower, S side. 1-2 pitches. (FA: Leonard, D. Drumheller, 9/87.)

The Stranger (5.8), upper Yucca Flower Tower near corner of S side. 1 pitch. (FA: Kocon, Leonard, 8/87.)

The Great Escape (5.10+). Crack/roof system leading directly from summit of Yucca Flower Tower to rim of Echo Canyon. Prominent zig-zag crack. 1 pitch. (FA: Drumheller, Doug Teague, 8/87.)

Yucca Flower Tower, Standard Route (5.10). R-most crack on W face. 4 pitches. (FA: Leonard, Drumheller, Horak, Teague, 5/86.)

SANDIA MOUNTAIN, MURALLA GRANDE AREA

Lawyers, Guns, and Money (5.9+). Large dihedral adjacent to walkdown. 1) Flakes. 2) Dihedral. (FA: Brian Komen, Randy Faulk, 8/87.)

Current Fantasy (5.10b/c). Between *Second Coming* and *Lawyers, Guns, and Money*. 2 pitches, rap. 3 bolts on 2nd pitch. (FA: Komen, Faulk, Mark Thomas, 9/87.)

Excitable Boys (5.10b/c). Small, obvious dihedral/crack system between *Second Coming* and *Clark's Cramps*. 4 pitches to Football Ledge to *Clark's Cramps* to summit. 7 pitches. (FA: Komen, Faulk, 8/87.)

SANDIA MOUNTAIN, OTHER AREAS

Surf Naked (5.7), La Cueva Canyon. Water streak L of *Emerald Road*. 2 pitches. (FA: Leonard, M. Darrah, 6/87.)

Clean Sweep (5.9), La Cueva Canyon. Face up small pinnacle 40' N of *Estrellita*. 1 pitch. (FA: Jerry Peach, Jim Lyon, 87.)

Nooner (5.10a), The Pulpit, NE corner. 1 pitch. (FA: Leonard.)

BOX CANYON

Mickey Mouse (5.12a). L of *Resurrection*. Face w/2 bolts, 2 pins. Belay at *Resurrection*. (FA: Gramont, Don Goodhew, 5/87.)

One A Day (5.11d). L of *The Luge*. Start on *The Luge*. After 2 bolts, climb crack. Excellent. (FA: Gramont, Tim Janss, 1/87.)

Date With Hell (5.12a). R of *The Luge*. 1) Crack, 5.8. 2) Face w/2 bolts. Excellent. (FA: Gramont, Goodhew, 6/87.)

Bladder Pressure (5.10 X). Direct start to *The Luge*, just below chain belay. Face, dihedral. (FA: Gramont, Erik Hufnagel, 7/87.)

Ou Oui (5.10R). R of *Titanic*. Face w/2 bolts. (FA: Mike Carvill, Steve Giotfelty, 11/86.)

Lay Away Plan (5.10a). Short wall below *Ou Oui*. Face w/bolt to crack. (FA: Phil Simon, Hufnagel, 6/87.)

Line Of Credit (5.10a). L of *Lay Away Plan*. Face w/bolt, 2 pins. Excellent. (FA: Gramont, Hufnagel, 6/87.)

Rocket Ramp (5.10b). Between E Wall and *Stream Bed Traverse*. Roof. Excellent. (FA: Hufnagel, Simon.)

Nicor (5.11d). On wall above *Stream Bed Traverse*. Face w/3 bolts. Small nuts for top. (FA: Hufnagel, Simon, Gramont, 10/87.)

Monkey Business (5.11a). L of *Spiderman*. Face w/2 pins, fixed nuts. (FA: Gramont, Paul Horak, 2/87.)

Spanish Spinach (5.12a). Above *Waterfall* area. Very overhanging face. Excellent. (FA: Gramont, Kalakay, de Lataillade, 11/86.)

Finishing Touch (5.12b/c). Behind E Wall. Very overhanging face w/2 bolts. (FA: Gramont, Hufnagel, 2/87.)

Gravity Boots (5.12a) Roof next to *Finishing Touch*. Excellent. (FA: Hufnagel, 3/87.)

Mystery Roof (5.11d). Roof R of *Gravity Boots*. (FA: The Fish, 3/87.)

Bikini (5.11c/d tr). Above *Stream Bed Traverse*. Overhanging pocketed wall. (FA: Gramont, Goodhew, 9/87.)

Little Pea (5.11d tr). On boulder below North Wall. Excellent. (FA: Gramont, Goodhew, 8/87.)

Matateaaa Karateaaa (5.12a tr). R of *Nicor*. Overhanging face. Excellent. (FA: Simon, Gramont, 10/87.)

MINOR WALL

Chingadera (5.10d). Overhanging bulge on L side of wall facing parking area. (FA: Gramont, Adam Read, 9/87.)

Pocket Change (5.11c). Alcohol Wall, W side. Face w/4 bolts. Excellent. (FA: Gramont, Kalakay, de Lataillade, 11/86.)

Liquid Diet (5.11d). Alcohol Wall. Face w/2 bolts. Excellent. (FA: Gramont, Craig Smith, Skinner, 3/87.)

B-52 (5.11c/d). R of *Liquid Diet*. Face w/3 bolts. Excellent. (FA: Gramont, de Lataillade, Read, 9/87.)

Bottoms Up (5.10d). R of *B-52*. Face w/3 bolts. (FA: Gramont, Goodhew, 10/87.)

Crack Of The Bullwhip (5.10c). Major Wall Area. (FA: Hufnagel, Gramont, 10/86.)

SPOOK CANYON

Mandatory Orientation (5.7). Crack on far L side of wall. (FA: Janss, 10/86.)

Language Barrier (5.8). L-arching crack to R of *Mandatory Orientation*. (FA: Hufnagel, Serge Benoliel, 10/86.)

Corporate Ladder (5.12a/b). Face w/4 bolts R of *Language Barrier*. Excellent. (FA: Gramont, Hufnagel, 7/86.)

Samba Of Frogs (5.12b/c). Face w/4 bolts R of *Corporate Ladder*. (FA: Gramont, de Lataillade, 10/86.)

Last Call For Alcohol (5.11a/b). Overhanging face w/3 bolts. (FA: Gramont, Eliot Boyle, 9/87.)

WARM SPRING WALL

Graduation Route (5.10c). Wall on W side of Highway 60 just outside of Socorro. Face, crack. 3 pitches. (FA: Gramont, Hufnagel, 5/86.)

Bongo Board (5.10c). Crack, face. 3 pitches. (FA: Gramont, Simon, Hufnagel, 5/87.)

Brick Wall (5.10b). Wall N of Warm Spring Wall. Face protected by nuts. (FA: Gramont, Hufnagel, 8/86.)

Navajo Chant (5.8). R of *Brick Wall*. (FA: Hufnagel, Geof Mason, 8/86.)

Photo: Mark Lewis

Jim Duran on *Shadowdancer* (5.13a).

SOUTH DAKOTA

MOUNT RUSHMORE

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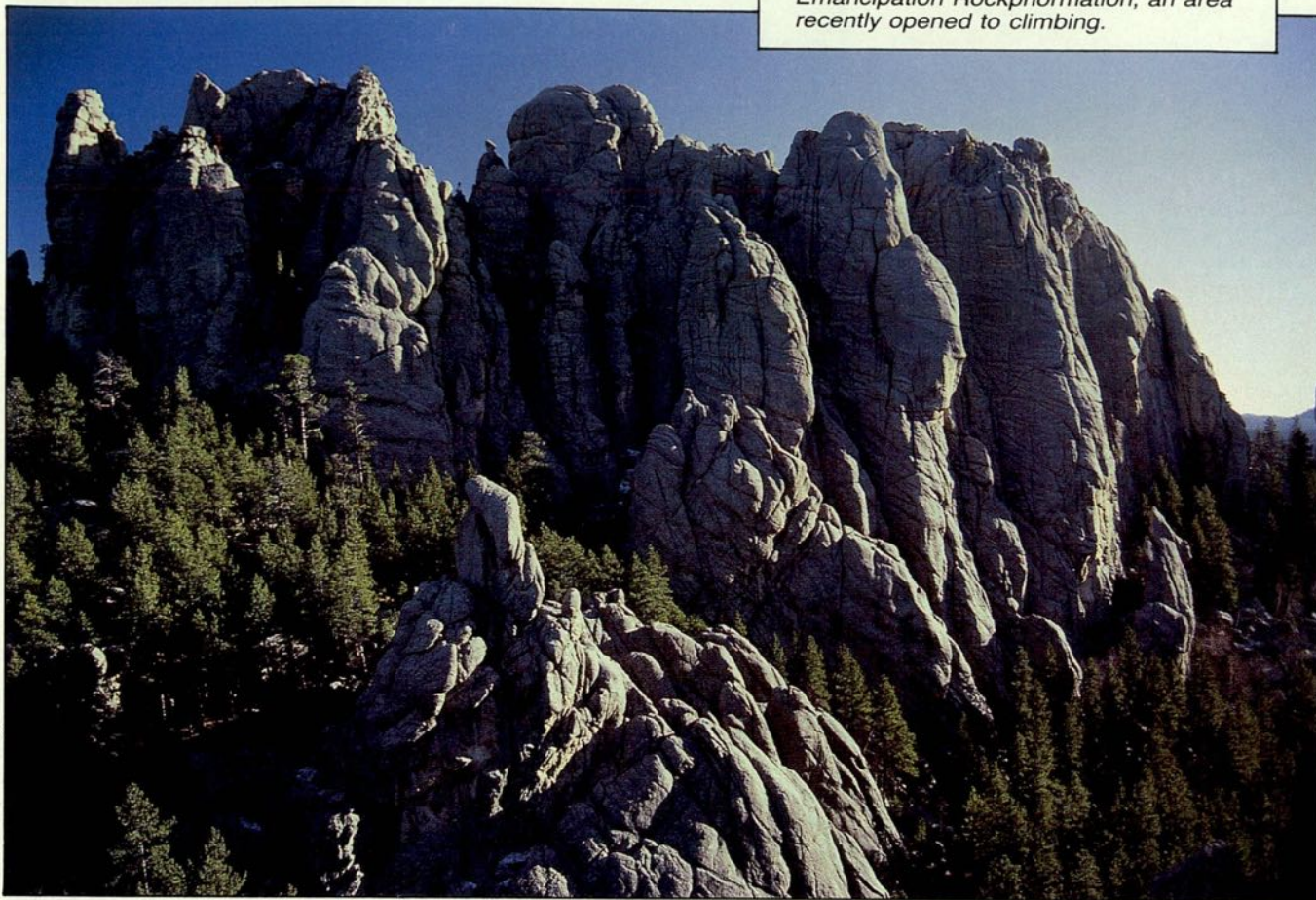


Photo: Vern Phinney

For years, local and visiting climbers alike have driven right past Mt. Rushmore's roadside climbing on their way to the better-known Needles. But this may soon change — activists absorbed by the vast potential of the area are putting up more and more high-quality routes.

Much of Mt. Rushmore's rock is similar to that at the nearby Needles, and face climbing on pegmatite studded with quartz and feldspar crystals is the main fare. But Rushmore also has areas of fine-grained granite which offer steep slab and crack climbs.

Most activists here come from the Needles, which remain a strictly traditional playground. Although the prevailing attitude had been to establish new routes traditionally, hooking on the lead and bolting on rappel are now accepted, especially on harder lines where drilling from stance is impossible. The result has been the establishment of safe, enjoyable routes free from dangerous runouts that characterize routes at the Needles.

Nonetheless, a few 5.11's and most 5.10 and easier face climbs have been bolted on the lead from natural stances; strained calves and much hard work have resulted in many hard, safe climbs. The quality of the end product has been stressed regardless of climbing style.

The area's first 5.12 was bolted on rappel by Mark Jacobs. *Ladies in Love* (5.12c) aka *Lesbian Lovers* is wildly overhanging, ascending a pair of dikes via strenuous pinching and sequential laybacking; many days were required before Jacobs put together a one-fall yoyo ascent. The climb awaits a redpoint.

Another brilliant climb engineered by Jacobs is *The Birds* (5.11d), an overhanging face with very small edges. On the north side of Hornet's Nest, an incredibly beautiful face was bolted on rappel by Vern Phinney, author of the soon-to-be-published guidebook to Mt. Rushmore. While the climb sat idle, visiting climber Andy Petefish inadvertently snagged the first redpoint ascent of *Anaphylactic*

Shock (5.11c) — an unadvertised hazard of bolting on rappel? This climb follows a steep wall through bulges, its 150' well-protected by 11 bolts. Jacobs resurrected a forgotten climb, freeing an old aid line on Indian Rocks near Keystone. *Blast From The Past* (5.11c) climbs an overhanging wall protected by 15 ancient bolts.

Several steep, thin slabs have also been bolted on rappel. Most notable of these are Mike Engle's *Shady Proposition* (5.11b) on Java and Mike Lewis' *Nutrasweet* (5.11b) on Shipyard Rock.

Among the most difficult of the routes bolted from hooks is Engle's *Wishbone* (5.11d); a wild dyno gains an overhanging crack that leads to a vertical face. At an easier grade, Engle's interesting *Ethical Decay* (5.10c) on Child's Molar requires thin crack, layback, and thin face techniques.

Long-time Needles local Bob Archbold collaborated with Phinney to produce a very enjoyable climb up a thin face on a blade of rock near Mons-

ter. Several bolts were placed from hooks, creating *Corruption is Contagious* (5.10b).

Although new ethics have been embraced at Mt. Rushmore, most routes have still been established traditionally. The most difficult have ascended cracks. Two recent additions are Jacobs' *Hydracrack* (5.11d) and *The Birds* (5.11c). On Half Dome, he added *Watching the Wild Things* (5.11b), an exceptional stemming corner with a thin crack. A desperate in the traditional genre is Engle's classic on Middle Marker, *Raisins in the Sun* (5.11a R), which follows a thin crack, then launches across a face into a water groove characterized by sustained 5.10 climbing and serious run-outs.

Among the many fine lines done traditionally at the 5.10 level are two classics crafted by Phinney. *Receding Fall Line* (5.10c) on Old Baldy ascends a bulging line of chicken-heads. And using a delicate touch, he climbed a slender 150' spire, producing *Moonstone* (5.10a R). Engle teamed up with Linda Schneider to produce several traditional three-star routes. A hailstorm interrupted superb climbing on Java, but returning the next day, the pair completed *Climbus Interruptus* (5.10a). On the nearby Hornet's Nest, they established a fun, continuous face climb, *W.A.S.P.* (5.9).

Through friendly negotiations with Mt. Rushmore National Monument rangers, a large area of previously off-limits rock was opened to climbing (see Access). Dubbed Emancipation Rockphormation, it contains some of the largest and most accessible walls and spires in the Black Hills: 200- to 500-foot cliffs less than 100 yards from the highway. Having done less than a dozen new lines, locals have only scratched at the potential.

Engle and Phinney immediately joined forces to snag some obvious classics, resulting in the two longest routes in the Black Hills. The northwest prow of the Whitehouse Wall yielded an exciting four-pitch thin crack and face climb, *Political Pro-wess* (5.10c). Just north of the Whitehouse Wall, the pair climbed the gigantic free-standing spire, Truman Tower, via the northwest face; *The Buck Stops Here* (5.11a) is five pitches, the longest route in the Black Hills. Both routes are excellent.

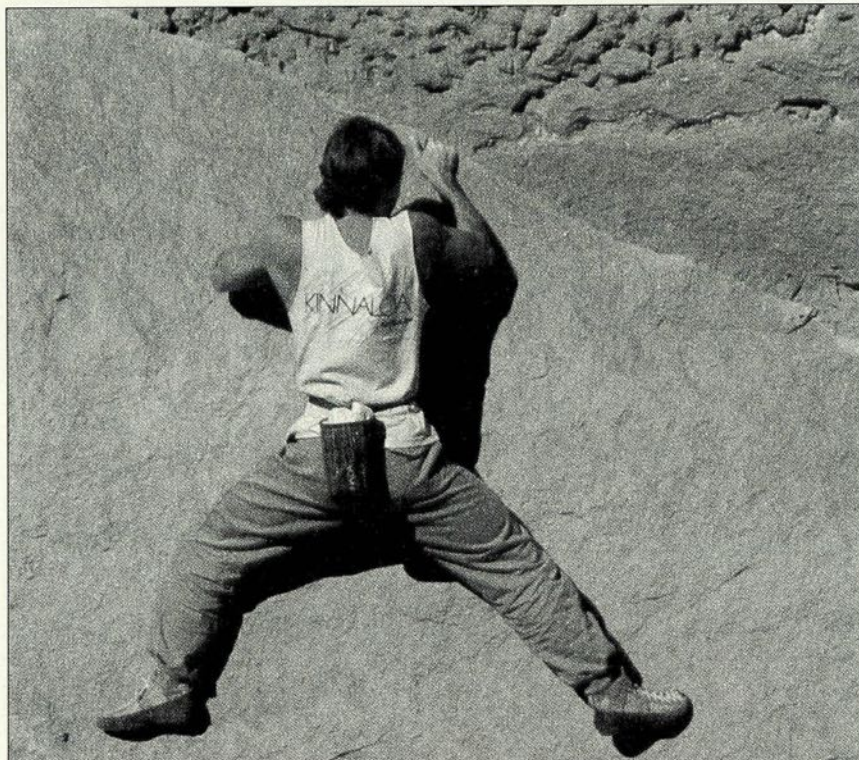
—Mike Engle

MOUNT RUSHMORE NATIONAL MONUMENT

Shipyard Rock, Hornet's Nest, South Seas Areas lie E of the highway, just N of the park boundary.

Captain Hook (5.9+ R), Shark's Fin (attached blade on S side of Shipyard Rock). S face, shallow water groove w/4 bolts. (FA: Mike Engle, Vern Phinney, 11/87.)

Captain Hook, Direct Start (5.11a). Bolt. (FA: Engle.)



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Shark's Breath Arete (5.7), Shark's Fin. E arete. 3 bolts. (FA: Engle, Phinney, 10/87.)

Waves, Direct Start (5.8), Shipyard Rock. NE corner. Face past 4 bolts to *East Face Route*. (FA: Phinney, Bob Bowman, summer/86.)

Nutrasweet (5.11b), Shipyard Rock. NW face. 5 bolts. (FA: Mike Lewis, Phinney, 8/87.)

Not So Sweet (5.6), Shipyard Rock. Crack/flake system just L of *Nutrasweet*. (FA: Phinney, Lewis, 8/87.)

Critical Arete (5.4), Hornet's Nest. Arete on W face R of *Mr. Critical*. (FA: Phinney, solo, summer/86.)

Vespidae (5.8), Hornet's Nest. SW corner, 2 bolts. (FA: Phinney, Engle, 8/87.)

W.A.S.P. (5.9), Hornet's Nest. SE corner. Stacked blocks to face w/7 bolts. (FA: Engle, Linda Schneider, 5/87.)

Bee Line (5.9), Hornet's Nest. Crack on S face. Join *W.A.S.P.* after 100'. (FA: Engle, Schneider, 5/87.)

Anaphylactic Shock, Hornet's Nest. Steep face w/11 bolts on N side. 150'. (FA: Andy Petefish, 9/87.)

Critical View (5.8). On W face of 1st rock mass N of Hornet's Nest. Face w/4 bolts. (FA: Phinney, Bowman, summer/86.)

Bee's Wax (5.6). Crack S of *Critical View*. (FA: Bowman, Dick Bowman, summer/86.)

Ladies In Love aka *Lesbian Lovers* (5.12c), Bird's Nest (2nd rock mass N of Hornet's Nest). S face. Pair of overhanging dikes past 7 bolts. 70'. (FA: Mark Jacobs, Engle, 10/87.)

Skin To Win (5.10b), Reef #1 (blade just NE of *Ladies In Love*). W face. Dike past 3 bolts. (FA: M. Lewis, Rusty Lewis, 8/87.)

Old Number 8 (5.8). L of *Skin To Win*. Crack to face w/3 bolts to summit. (FA: M. Lewis, R. Lewis, 8/87.)

Short Rib (5.6), Reef #2 (blade E of Reef #1). N rib past bolt. (FA: Jacobs, Ian Pressler, summer/86.)

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X Marks The Spot (5.10a). Prominent thin spire E of Hornet's Nest. Thin crack in W face to "X" and bolt, then L to arete (5.9) or direct (recommended) to summit past fixed pin (5.10a). (FA: 5.9, B. Bowman, D. Bowman, The Spot, summer/86; 5.10a, M. Lewis, R. Lewis, 7/87.)

Ankles Away (5.10b). X Marks The Spot spire, E face. Crack to overhanging arete w/2 bolts. (FA: Phinney, 8/86.)

Handcrack (5.9). Ridge N of X Marks The Spot for 100' to handcrack on W face. (FA: Jacobs, Phinney, summer/86.)

Coral Reef (5.9). 50' R of Ankles Away. Pass bolt to shallow grooves to bolt on S arete of blade. (FA: Phinney, Engle, 8/87.)

Climbus Interruptus (5.10a). Java (prominent blade directly E of Ankles Away). Face w/bolt to crack to arete w/3 bolts. (FA: Engle, Schneider, 5/87.)

Walk The Plank (5.2). Java. N rib. (FA: Engle, solo, 8/87.)

Shady Proposition (5.11b). Java. L of Climbus Interruptus. Face past bolt, flake, to face w/6 bolts. (FA: Engle, Phinney, 8/87.)

Cranka-toe-a (5.11d). In gully on E side of Short Rib. Wild move w/bolt into short overhanging crack in W-facing wall. (FA: Jacobs, Pressler, summer/86.)

Solitaire (5.7). Blade just E of Climbus Interruptus. S rib past bolts. (FA: Phinney, solo, self-belay, 11/87.)

Ethical Decay (5.10c). Child's Molar. Blunt SE arete. Overhanging crack/flake through bulge to face. 6 bolts. (FA: Engle, Phinney, 11/87.)

Monster Area E of highway, wander up gully N of Monster massif to routes.

Igor (5.9 R). 1st major group of rocks off road on Monster mass. Short hand crack to crease in N face. (FA: Enlge, Phinney, 9/86.)

Daydreamer (5.10a). Kindergarten Rock (N of Monster and Dark Tower). S face. Face/cracks. 6 bolts. (FA: Phinney, B. Bowman, summer/86.)

Teacher's Pet (5.8). Kindergarten Rock. E face. 7 bolts. (FA: Phinney, B. Bowman, summer/86.)

Little Gremlin (5.7). In gully on NE side of Monster is small ridge of rocks. Short finger crack to face w/2 bolts. (FA: Engle, Schneider, 6/87.)

Corruption Is Contagious (5.10a). NW corner. L of Too Easy for Hardmen. 11 bolts. (FA: Phinney, Bob Archbold, summer/86.)

Piranha Crack (5.9). The Abominable Snowman. Crack on N side. (FA: Paul Meyers, Phinney, 9/86.)

MIDDLE MARKER AREA

E of highway. Routes are on or adjacent to the Marker formations.

Raisins In The Sun (5.11a R), Middle Marker. S side. Thin crack, traverse into prominent black water groove w/5 bolts. (FA: Engle, Jacobs, Phinney, 5/86.)

Weird Water, Direct Start (5.10a), Middle Marker. NW corner. 2 bolts. (FA: Engle, Archbold, 9/86.)

Little Dripper (5.8). Middle Marker. L of Weird Water. 7 bolts. (FA: Phinney, Engle, 7/87.)

Big Dripper (5.9+), Middle Marker. N face. R of Conn Chimney. 7 bolts. (FA: Phinney, Archbold, summer/86.)

Lost In The Mire (5.9), Middle Marker. N face. 3 seams through bulge to 80' runout on 5.3. (FA: Engle, Phinney, 10/86.)

Morning Ecstasy (5.8), Middle Marker. L of Lost In The Mire. 5 bolts to 80' runout on 5.2. (FA: Engle, Schneider, 9/86.)

Moonstone (5.10a R). Far W spire on ridge of blades N of Middle Marker. NW corner. Face w/9 bolts. (FA: Phinney, Tim Henry, summer/86.)

Saturn Boogie (5.9). Ridge of blades with Stardancer. N face of 1st blade to R. 5 bolts. (FA: Archbold, Phinney, summer/86.)

Borealis Strut (5.9). Blade R of Saturn Boogie. 4 bolts to summit. (FA: Phinney, Duane Lorenzen, summer/86.)

Fireworks (5.10a). Across gully, slightly uphill from Stardancer. L-facing, overhanging dihedral. (FA: Paul Duval, Phinney, Archbold, Beverly ?, 7/86.)

Wishbone (5.11d). Directly across gully to N of Stardancer. Overhanging Y-crack. Crux is getting into crack. 2 bolts. (FA: Engle, Phinney, 10/86.)

OLD BALDY AREA

In NE corner of Monument. The twenty minute hike is worth the excellent routes and new route potential. Park at Hornet's Nest turnout and hike directly to the prominent 400' dome.

Receding Fall Line (5.10c), Old Baldy. R side of W face. Overhanging face w/chicken heads, jugs. 2 pitches, 6 bolts. (FA: Phinney, Bowman, summer/86.)

Pigeon Roof (5.10a), Old Baldy. S side. Thin face (crux) to R-leaning, R-facing dihedral to huge roof. Bolt. (FA: Jacobs, Engle, 5/86.)

Watching The Wild Things (5.11b), Half Dome (100' rock S of Old Baldy). NE side. Overhanging dihedral capped w/roof. Thin crack, stem, face. (FA: Jacobs, Phinney, 4/86.)

This Is Ridiculous (5.10d), Half Dome. W face. Thin crack through bulge. (FA: Enlge, Phinney, 4/86.)

Hydra-crack (5.11d), Half Dome. On SE side is 40' boulder. Thin seam/finger crack on E face. Strenuous. (FA: Jacobs, Engle, 5/86.)

Solo Crack (5.8). N of Hydra-crack. Short handcrack. (FA: Engle, solo, 5/86.)

Woose Factor (5.6). SE across meadow from Hydra-crack is 70' wall w/seam/crack. (FA: Phinney, solo, 5/86.)

EMANCIPATION ROCKPHORMATION

This newly opened, previously off-limits rock includes the 400' White House Wall and 500' Truman Tower. The area boundary can be roughly defined as the rock N of a line between Five Card Draw Spire and Dire Spire.

Congressional Override (5.9+), Separation of Power Tower (S of Dire Spire). W face. Finger crack to R-facing dihedral through 2 bulges to summit. (FA: Engle, Schneider, 6/87.)

Presidential Veto (5.10a), Separation of Power Tower. Just R of Congressional Override. Shallow L-facing corner to face through bulge into R-facing corner. 2 bolts. (FA: Engle, Schneider, 6/87.)

Direct Start (5.7). Thin crack/face to start Congressional Override or Presidential Veto. (FA: Schneider, Engle, 6/87.)

Impeachable Offense (5.10a), Dire Spire. Short overhanging dihedral on NE corner. Step R to perfect handcrack to bulge. Join the regular route to summit, 5.7 R. (FA: Engle, Schneider, 5/87.)

Garfield Goes To Washington (5.8), White House Wall. R side. 1,2) Prominent L-facing dihedral. 3) Pitch below gigantic rotten looking roof, traverse R on shelf to headwall. (FA: Engle, Schneider, 5/87.)

Political Prowess (5.10c), White House Wall. L-hand corner, L of prominent prow marked w/ deep gash. 1,2) Crack, seam, face climbing. 3) Step R to gain gash to shallow corner to face to exposed RP seam. 4) Angle R below steep headwall to bolted face to summit. 10 bolts. (FA: Engle, Phinney, 5/87.)

The Buck Stops Here (5.11a), Truman Tower. Lowest point of NW face. 1) Face w/bolts (5.10d) to crack system. 2,3) Discontinuous crack to wide ledge. Over bulge (5.11a) to thin face. 4) Easy to summit. 10 bolts. (FA: Engle, Phinney, Archbold, 6/87.)

5.6 Chimney (5.6), White House Wall. R of Political Prowess. Wide crack to chimney. 3 pitches. (FA: Jeff Brown, Rich ?, 8/87.)

Royal Flush (5.10a), Five Card Draw. Dihedral on SE side. Classic. (FA: Engle, Jacobs, 5/86.)

Reardon Rock this is the dome just left of the visitor center. All routes are on south side.

Orang-a-hang (5.11a). On main highway 100' L of ranger's quarters turnout. Climb through section of roadcut to R-leaning, R-facing, overhanging dihedral. (FA: Carl Coy, Jacobs, 8/87.)

The Birds (5.11c). 400' L of Orang-a-hang. R-leaning finger to handcrack. (FA: Jacobs, M. Lewis, Engle, 8/87.)

The Bees (5.11d). Start on The Birds, then slightly L to overhanging face w/4 bolts. (FA: Jacobs, Engle, 8/87.)

TENNESSEE

CUMBERLAND PLATEAU

Locals Have It To Themselves, For Now

With more and more people climbing year-round, the Southeast is sure to see more traffic, especially when word gets out on the steep sandstone of the Cumberland Plateau. So far, although activity has steadily increased since 1981, a handful of locals have had it to themselves, ticking off the best lines at will.

Several good lines were found on a previously known yet undeveloped cliff dubbed Spider Rock. The crag sports typical Plateau sandstone: steep, crackless faces capped by roofs. After two ascents, *Retro Vex* (5.11d) was declared an area classic, with clean, steep face climbing to an overhanging dihedral.

Most activity continued on the two most popular cliffs, Bee Rock and Hidden Rock. On the Lower Cliff at Bee Rock, Mark and Arno Ilgner along with Eddie Whittemore overpowered *Love Monster* (5.11d), claiming that it rivals the extraordinary *Brothers In Arms* in quality. On the Headwall, the Ilgners again went to work, producing the frightening *One for the Sun* (5.11d), a steep face on characteristic Bee Rock slopers. On the arete right of *Mother Wall*, the Ilgners ran it out before placing the first bolt on *Mark Cartwright Don't Wear Lycra* (5.11b R). The reward for daring here is superb position.

Across the ridge at Hidden Rock, many fine routes were established. The most difficult was the Ilgner's *Future Shock* (5.12b), a demanding thin crack that had seen numerous attempts. *Blankenstein* (5.12a), an old aid route, went free to the Ilgners and Whittemore after a bolt was drilled on rappel. Whittemore climbed *Paris is Burning* (5.11b) from the ground, placing two pins along the way. Above, the Ilgner's freed the scary second pitch of *Like Pretty Girls Wearing Spectacles*; surprisingly, its 7' roof rated a modest 5.10b. Another aid route to go at 5.10 was the outstanding *Spread Your Wings*. And for leaders needing to clear their heads, the fiendish *Clinical Attitude* (5.10c R) is the answer.

— Eddie Whittemore

SPIDER ROCK

Retro Vex (5.11d). Steep face to overhanging dihedral. (FA: Eddie Whittemore, 2/87.)

Stratosphere (5.11d). Thin corner to overlapping roofs. (FA: S. Chapin, S. Green, 3/87.)

Retribution (5.10a). Pocketed face to rounded bulges. (FA: Whittemore, Chapin, Green, 5/87.)

BEE ROCK

Death as a Challenger (5.11a). Lower Cliff. Free version of aid line R of *Brothers in Arms*. Blunt arete w/bolt. (FFA: A. Ilgner, M. Ilgner, 4/87.)

Sail Rabbit (A3), Lower Cliff. Discontinuous

copperhead seams. (FA: Whittemore, M. Ilgner, 1/86.)

Mark Cartwright Don't Wear Lycra (5.11a/b R), Lower Cliff. Clean arete between *Mother Wall* and *Original Sin*. Bolt. (FA: M. Ilgner, A. Ilgner, 4/87.)

Tuff Enuff (A2), Lower Cliff. Thin cracks L of *Judy's World*. (FA: solo, M. Cartwright, 2/86.)

Two Cam Sam (A3), Lower Cliff. Grooves, flakes R of *Hueco Monkey*. (FA: Whittemore, Cartwright, 3/86.)

Love Monster (5.11d), Lower Cliff. Starts on prominent flake between *Water Route* and *Roof Top O'Toole*. 1 bolt. (FA: A. Ilgner, Whittemore, M. Ilgner, 10/87.)

Bad to the Bone (5.11b), Headwall. Direct start and finish to *Lichen Magic*. (FA: A. Ilgner, M. Ilgner, 5/87.)

One for the Sun (5.11d), Headwall. Orange and white face L of *Summit Attempt*. (FA: A. Ilgner, M. Ilgner, 5/87.)

Rock Me Amadeus (5.10d R), Headwall. Sloping holds between *Trolls Handshake* and *Carpal Circus*. (FA: M. Ilgner, A. Ilgner, 4/87.)

HIDDEN ROCK

Tears for Smears (5.10b R). Face L of *Iron Fingers*. Sling tree. (FA: Cartwright, Whittemore, 10/85.)

Future Mettle (A3). Above *Iron Fingers*, R of *Tears for Smears*. (FA: Cartwright, Whittemore, 11/85.)

In America's Veins (5.10a). Blocky corner L of *Kitty Litter* to short, flared finger crack. (FA: Whittemore, Bruce Cole, Jeff Gedcke, 5/86.)

The Queen's English (5.10c). Free version of *Talk British To Me*. (FFA: Whittemore, Robert Piper, 3/87.)

Clinical Attitude (5.10c R). Clean, white buttress R of *In Sickness and in Stealth*. (FA: Whittemore, Stuart Chapin, Sean Green, 4/87.)

Paris is Burning (5.11b). R of *Pretty Girls*. Pebbly face to 8' roof. 2 pins. (FA: Whittemore, 5/87.)

Like Pretty Girls Wearing Spectacles (5.10b). Free version of 2nd pitch. Finger crack through 7' roof. (FFA: M. Ilgner, A. Ilgner, 4/87.)

Radial Buttress (5.6). Two-pitch arete R of *Radial Extension*. (FA: Cartwright, Piper, 5/87.)

Spread Your Wings (5.10c). Free version of *Wisdom Tooth*. Overhanging flake to shallow dihedral. Pin. (FFA: Whittemore, M. Ilgner, 7/87.)

Blankenstein (5.12a). Free version. Pebbly, pocketed face. 2 bolts. (FFA: A. Ilgner, Whittemore, M. Ilgner, 10/87.)

Future Shock (5.12b). Free version of *Underexposed*. Thin, overhanging crack below *Hungover* roof. (FA: A. Ilgner, M. Ilgner, 9/87.)

Chickenhead Make Lousy Housepet (5.9X). Knobby arete R of *Blankenstein*. No pro. (FA: Whittemore, Cartwright, 10/87.)

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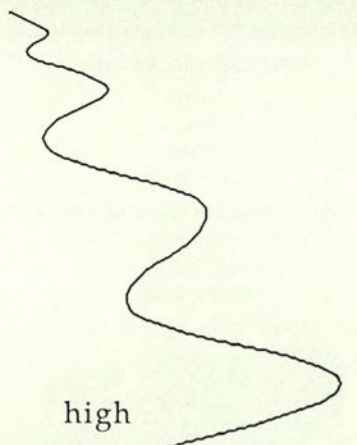
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UTAH
SNOWBIRD

White Wilderness Proposed

Snowbird Resort, in the heart of the Utah's Wasatch Range, was the site of the second Mountain Summit, held January 21-24, 1988. (The first Mountain Summit, held last May at Mt. Rainier, was reported in *Climbing* no. 103.) Dick Bass, owner of the ski area and its affiliated mountaineering center, hosted this influential event, which drew climbers from all over the world. Participants included Reinhold Messner, Chris Bonington, Bob Craig, Jeff Lowe, Yuichiro Miura, Glenn Porzak, John Roskelley, Jean-Claude Droyer, Phil Ershler, Sharon Wood, Galen Rowell, Jim Wickwire, and Lou Whitaker.

With untouched areas of the world rapidly disappearing, protection of the mountain environment was the dominant theme of the weekend. Reinhold Messner introduced the concept of "White Wilderness," expressing the hope that those few wild regions not yet altered by modern man be preserved for future generations. The idea sparked considerable interest among those present, and it was proposed that Messner become the honorary head of an international White Wilderness movement; its aims will be to increase the environmental awareness of those who enter such areas, and to enhance their sense of adventure and personal freedom.

Reinhold Messner, Jeff Lowe, and Chris Bonington were interviewed during the symposium; following are some highlights of our discussion.

We all agree on the need to preserve the remaining virgin areas of the world. Reinhold, perhaps you could tell us a bit more about your ideas on White Wilderness.

For me, White Wilderness is a place where human beings haven't changed anything, where there is no influence of man whatsoever. People go there as guests, to have experiences in nature, where their instinctive abilities are measured against the elements. And, when they leave, the environment should not be changed in any way. We should not make maps or conduct scientific research in the White Wilderness, because that makes it too easy to go in and find everything.

The unique thing about White Wilderness is that you know nothing about it, and explore it step-by-step as you go in. You need your instincts, you need your senses, otherwise you cannot survive. We must have the right to go to White Wilderness areas to expand ourselves, but we should leave them completely unchanged, unpolluted, and unaltered for future generations.

Chris, what do you think about the idea?

Messner's concept is an excellent one — preservation of the Himalaya and other wild areas is extremely important. But this can only take place through the governments involved, because only they can create wilderness areas and help stabilize econo-

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mies of mountain areas. Local people need to be able to live and prosper, and at the same time not damage their own environment. But that is a government thing. And therefore it is essential that climbing and environmental organizations coordinate in order to pressure governments into doing this.

What about White Wilderness in America, Jeff?

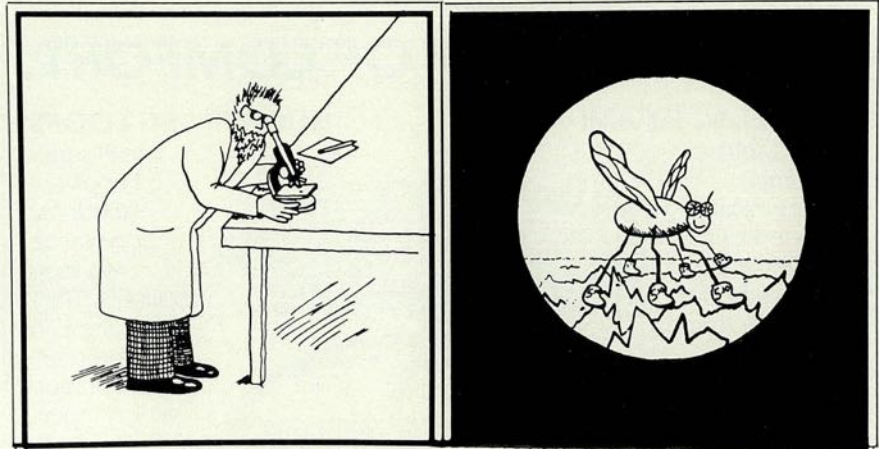
There are lots of areas here that are designated as wilderness, although as soon as a place becomes a national park, it's destroyed as a wilderness. The Park Service policy of improving access and providing facilities makes the national parks more accessible to everyone, but I don't think wilderness should necessarily be democratic.

The idea of White Wilderness is a great one, but it's only an idea unless we can actually have some effect on the areas we've been talking about.

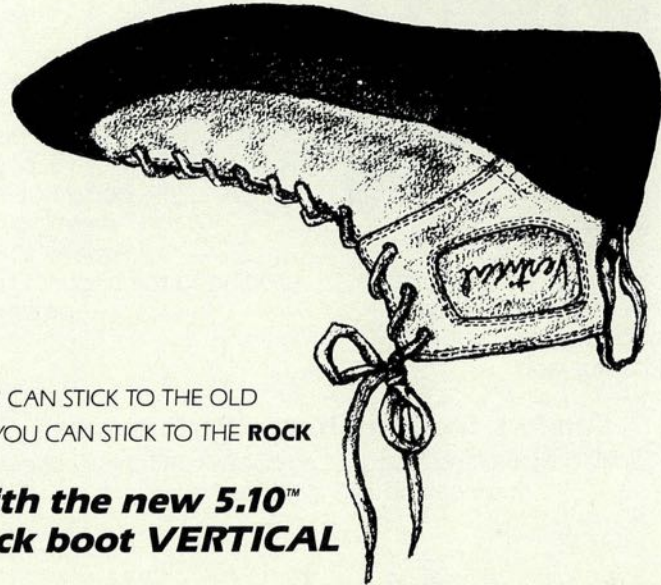
Chris, you have been on the forefront of Himalayan climbing for many years. What do you see for the future?

Since the major peaks and most of the major ridges have been climbed, one direction is towards big traverses. I think that is the healthiest and most exciting way that 8000-meter mountain climbing can go. Of course, larger expeditions will continue using a fair amount of fixed rope and so on. There will be a natural movement away from large expeditions in the next 5-10 years as small expeditions prove that they can do more and more.

Another direction will be towards more exploratory climbing on the thousands of unclimbed peaks under 7000 meters. There are lots of unexplored areas, and these lend themselves to smaller expeditions which have a minimum impact on the en-



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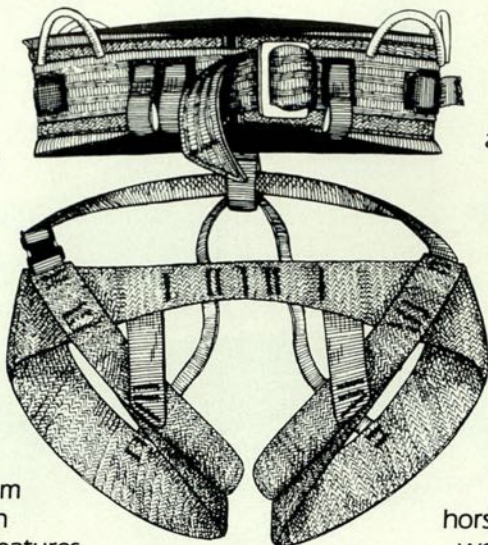
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vironment. At the same time, they are a load of fun and don't need massive sponsorship.

Jeff, do you have any thoughts on the direction of Himalayan climbing?

Everybody is overlooking the fact that the biggest challenges still remaining in the Himalaya are technical alpine climbs on the highest, hardest, and most beautiful faces in the world. Many of these have not yet been accomplished, even using siege tactics, and only a few big Himalayan faces have been done in alpine style.

The south pillar of Nuptse, the west face of Makalu, the north face of Janu, the southwest face direct on Everest — these are the types of

things that should be done in alpine style in the next 10 years. That's really the big challenge for a technically oriented alpine climber, as far as I'm concerned.

Long traverses are interesting, but they won't require the same technical effort that an alpine climb of one of these big faces will. But that's a difference of personal opinion. As you see, Chris is not so interested in the technical difficulties as I am. So you have different visions of what the future is and that's the beautiful thing. That's what Messner has pointed out all along — as he progressed in his Himalayan climbing, he came up with different ideas of what the potential was.

And what are your future climbing plans, Reinhold?

I am working on some adventures in wild places, but I won't say more. I will use the same approach that I have in the mountains. I will make my own routes, I will go from A to B alone, not using a helicopter, but under my own power.

When I announced my plans to climb all 8000-meter peaks, it became a competition involving other climbers, and a few people got foolishly killed in trying. But since I had the idea, I wanted to see it through.

Competition has always been an element in climbing, but in the past few years formalized rock climbing competitions have become very popular in Europe. Jeff, you've been involved in the planning for such an event in the U.S. How is that shaping up?

The International Climbing Championship will be held here in Snowbird on June 11 and 12. It looks like we have a television time slot with CBS, and we're close to having the sponsorship — although I don't have the check yet.

It will be an invitational meet, and it will be held on an artificial climbing wall we're building on the side of the Cliff Lodge. Artificial walls allow you to design a climb which much more fairly tests a climber's ability than a natural wall does; they give you a chance to run a better contest without any environmental damage. That's why I think competitions will move more and more towards artificial walls.

I'd like to see competitions held in some beautiful settings, so they have some relation to the traditional roots of the sport. If we hold a competition at Snowbird, at least there is some real climbing down the road in Little Cottonwood Canyon, so it could be a part of the overall scene. An artificial wall surrounded by mountain scenery will be a lot nicer than being downtown in a gymnasium.

I grew up in Utah, and this canyon is my old stomping ground. It's amazing that it's coming around in a full circle — this canyon was important to me as a young climber, and now it might be important to other young climbers in a slightly different way.

Jeff, what do you think is the greatest thing that has come out of this conference?

There seems to be a real willingness to embrace the concept of White Wilderness, to push it further and translate it into action. The pace of development of wilderness areas is incredibly rapid, and now is the time to start working to preserve them, not next year or two years from now.

Chris, do you have any final thoughts?

The main thing is, climbing should be fun, so make it fun!

— Henry Dallal

CANADA

ALBERTA

The Long And Short Of It

Last summer, unsettled weather prevented the expected crop of long new routes from materializing; nevertheless, some major projects were completed.

Steve De Maio seemed undeterred by the weather, climbing several new multi-pitch routes: *Remembrance Wall* (5.11 A3) on the north face of Chinaman's Peak with Jeff Marshall, *Trapline* (5.11 A1) between *Kahl Wall* and *Forbidden Corner* on Yamnuska with Ward Robinson, *The Gambler* (5.10c) on the Rimwall with Choc Quinn and Jim Seigny, and *Wild Colonial Boys* (5.10b) on the easternmost wall of Goat Mountain, also with Quinn.

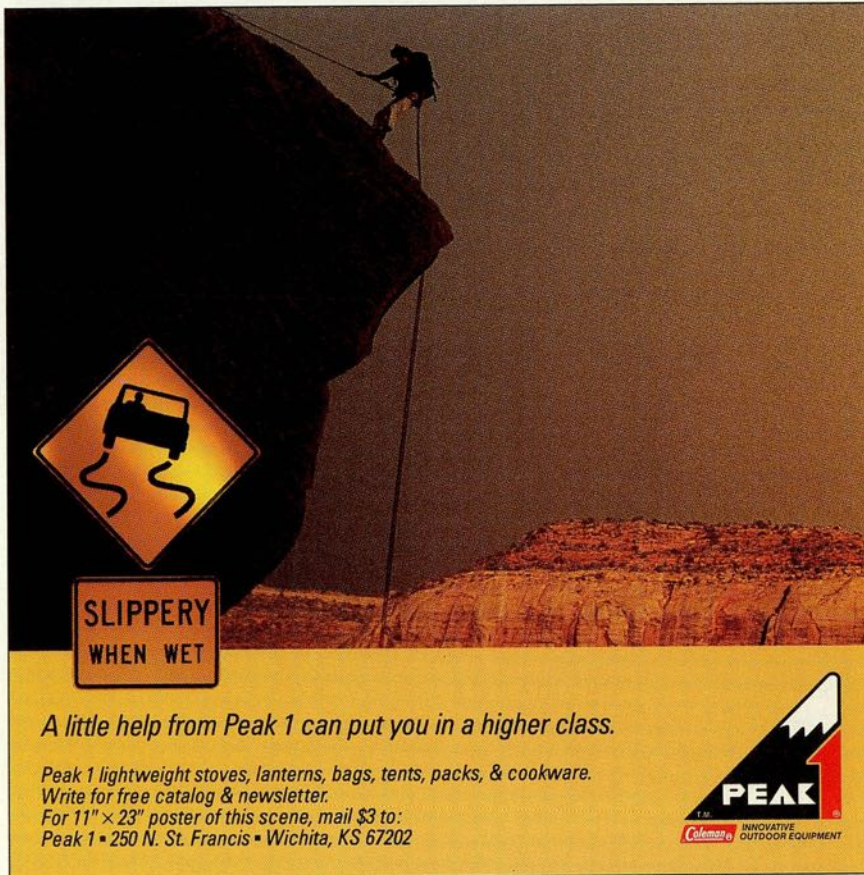
On nearby Nanny Goat Crag, Geoff Powter and Blob Wyville solved a long-standing problem, *The Great White Hope* (5.10c). With a 40' 5.10a runout, the climb is not likely to attract a lot of traffic. Across the valley from Rimwall, Sean Dougherty, Chas Yonge, and Seigny made the second overall and first free ascent of the *North Face* (5.10a) of Windtower, adding a variation start.

In the Ghost River area, Brian Gross and Quinn climbed *Creamed Cheese* (5.10c), a 7-pitch route between *Rattling Corner* and *The Wraith*. Early reports indicate that the route, with five pitches of 5.10, is destined to become a classic. Several other new multi-pitch climbs were established in the Ghost River area and in neighboring Waiparous Creek Valley, but details were not available at presstime.

In Kananaskis Country near Mt. Sir Douglas, several routes were added at the outstanding Burstall Slab. Most notable are *Scary Monsters* (5.11c), a desperate friction/face climb by Andy Genereux and Jon Jones, and *Moonraker* (5.8), a 5-pitch classic by Jones and Denny Poley.

On the cragging scene, Bruce Howatt created something of a stir by climbing one of the "last great problems" in Grotto Canyon, *Tropicana* (5.12c). The first route harder than 5.12a on local limestone, it is unrepeated. Other good new routes in Grotto Canyon included *Crossroad* (5.11d), a pumpy face climb in The Alley by Marc Dubé, *Mighty Mite* (5.12a), a short, technical arete in The Narrows by Mark DeLeeuw, and *End Game* (5.11d), an excruciatingly thin face climb above Grotto Falls by Tom Faile and Grant Statham.

DeLeeuw and Faile were also active at a new area near Banff called



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Rules

- 1) All photos must be unpublished and the property of the entrant.
- 2) A maximum of 40 entries will be accepted from each photographer.
- 3) Entries must be original color slides or reproduction quality b&w prints; no duplicate slides will be accepted.
- 4) Package entries to avoid damage; slides must be submitted in plastic slide sheets.
- 5) Each entry should be clearly identified with location, route name, and climber's name(s), as well as photographer's name, address, and telephone number.
- 6) All entries should be accompanied by a return label and postage; although all possible care will be taken, *Climbing* can take no responsibility for lost or damaged entries.
- 7) Entries must be postmarked no later than **May 15, 1988**.
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Sundance Slabs, which features smooth, 80° bedding planes of immaculate limestone. Climbing exclusively on lead, the pair established three routes, two of which are in the 5.11b/c range.

On the other side of Banff, Carrot Creek Canyon received serious attention for the first time; several good climbs on steep, water-worn rock were established, mainly by Genereux and Jones. The sustained and overhanging nature of the climbing here is best exemplified by Genereux's *The Wizard* (5.11d), a pitch that is already gaining a reputation as one of the area's finest.

Elsewhere in the Bow Valley, the most significant additions were at Kid Goat Crag, where Dougherty and John Martin established four entertaining routes, the best being the sequence *Wave Goodbye* (5.11a) and *Max Headroom* (5.10d).

In the Kananaskis Valley, short route activity was, as usual, concentrated at Barrier Mountain. In the main area, *Naked Teenage Girls* was confirmed at 5.12a after repeats; *Double Clutch* is now thought to be 5.12a as well after several attempts at a red-point ascent all failed. Several routes were established further uphill on a previously undeveloped cliff left of Amadeus Cliff. Brian Balazs and David Dancer were the chief activists; their better contributions include *The Trial* (5.11a), *Surf The Earth* (5.11a), and *Grasping At The Wind* (5.11b), all technical edging climbs.

Probably the most unusual venue to attract attention this year was Cowbell Crag, a 150' roadside conglomerate cliff south of the Kananaskis Lakes in the Highwood Valley. Martin and Steve Stahl unearthed over a dozen interesting crack climbs and pebbly face routes during an unusually warm autumn. *Isis* (5.10b), a thought-provoking face climb, is the best route so far.

—John Martin

GOAT MOUNTAIN

Wild Colonial Boys (5.10b). Face on E-most wall near Yamnuska col. 6 pitches. (FA: Steve DeMaio, Choc Quinn, 7/87.)

Great White Hope (5.10c). Nanny Goat Crag. 600' face R of main water streak. Run out. (FA: Geoff Powter, Blob Wyville, 9/87.)

Breakdown (5.11a). Kid Goat Crag. Unusual roof problem above normal route. (FA: John Martin, Sean Dougherty, 7/87.)

New Hope For The Dead (5.10a). Kid Goat Crag. Face L of *Talk Dirty To Me*. (FA: Martin, Ostrander, 6/87.)

Max Headroom (5.10d). Face through bulges L of *New Hope For The Dead*. (FA: Dougherty, Martin, 7/87.)

Wave Goodbye (5.11a). Stepped overhangs L of *Max Headroom*. (FA: Martin, Dougherty, 8/87.)

BURSTALL SLAB

The Hornet (5.10d). Near middle of Sickle Slab (central of 3 main slabs). Discontinuous cracks, runnels. 3 pitches. (FA: Jones, Chas Yonge, 9/87.)

Dancing With Myself (5.10b). Grooves near R edge of Sickle Slab. 3 pitches. (FA: Jones, 10/87.)

Moon Shadow (5.10c). L of *Moondance*. 5 pitches. (FA: Andy Genereux, Jones, 9/87.)

Scary Monsters (5.11c). R of *Moondance*. 3 pitches. Sustained. (FA: Genereux, Jones, 8/86.)

Moonraker (5.8). Runnels, corners, w/arete at R end of slabs. Optional direct finish; 5.9. 5 pitches. Classic. (FA: Jones, Denny Poley, 8/87.)

GROTTO CANYON

Crossroads (5.11d). Face R of *Submission*. (FA: Marc Dubé, 6/87.)

Hollow Victory (5.10c). Crack, face L of *Barchetta*, ending at last move of *Barchetta*. (FA: Genereux, Jones, Rennie, 6/87.)

Knight Moves (5.10c). Groove, face L of *Hollow Victory*. (FA: Jones, Genereux, Skuce, 6/87.)

Tropicana (5.12c/d). Technical face between *Farewell To Arms* and *Walk On The Wild Side*. (FA: Bruce Howatt, 8/87.)

Mighty Mite (5.12). Short, technical buttress at entrance to The Narrows. (FA: Mark DeLeeuw, 8/87.)

Bogus (5.10c). Face L of *Mighty Mite*. (FA: Tom Fayle, 8/87.)

End Game (5.11d). Thin face climb at L end of cliff above Grotto Falls. (FA: Fayle, Grant Statham, 10/87.)

HEART CANYON

Heart Of Darkness (5.11a). Jupiter Rock. Face between *Puppet On A Chain* and *Heart Of Gold*. (FA: Jones, Rennie, 9/87.)

Blackheart Direct (5.11a). Lower Heart Crag. L end.

Direct version of *Blackheart*. (FA: Martin, Ostrander, 6/87.)

SUNDANCE SLABS

Sweet Marie (5.10a). Face, crack, corner at L end of slab. (FA: DeLeeuw, Fayle, 7/87.)

Sundancing (5.11b). Center water streak. (FA: DeLeeuw, Fayle, 8/87.)

I Can Breathe Again (5.11b/c). Crack/face R of *Sundancing*. (FA: Fayle, DeLeeuw, 8/87.)

CARROT CREEK CANYON

The Wizard (5.11d). Raven's Nest Buttress. Overhanging wall immediately L of dirty cleft on R side on SE side of creek. (FA: Genereux, 7/87.)

The Prince Of Darkness (5.11a). 2 short pitches above *The Wizard*. (FA: Genereux, Jones, 8/87.)

Coprophobia (5.10b). Raven's Nest Buttress. Arete in R-center. (FA: Jones, D. Bartle, 6/87.)

Merlin's Laugh (5.10c). Raven's Nest Buttress. L end. (FA: Jones, Andy Skuce, 6/87.)

Sorcerer's Apprentice (5.10d). Steep face near L end of gully around corner from *Merlin's Laugh*. (FA: Genereux, Jones, 8/87.)

Summertime Blues (5.10c). West Side Buttress. Overlaps, steep pillar in center on NW side of creek. (FA: Jones, Genereux, 8/87.)

Painted Lady (5.10d). West Side Buttress. L side. (FA: Jones, Genereux, Skuce, 7/87.)

BARRIER MOUNTAIN

Double Clutch (5.12a). Arete R of *Koyaanisqatsi*. (FA: Larry Ostrander, David Dancer, 5/87.)

2+25 (5.10c). Face R of *Ideal For Living*. (FA: Ostrander, Dancer, 4/87.)

Brain Of Wood (5.11a). Face L of *Nuts Of Steel*. (FA: Geoff Powter, Blob Wyville, 8/87.)

Temptation To Exist (5.10c). Face R, up from *Nuts Of Steel*. (FA: Ostrander, John Martin, 4/87.)

Cost Of Living (5.11a). Overhanging corner L of *Age Of Reason*. (FA: Ostrander, Dancer, 4/87.)

Age Of Reason Direct (5.10d). Steep corner leading to *Age Of Reason*. (FA: Brian Balazs, Mike Carlson, 6/87.)

Naked Teenage Girls (5.12a). Smooth face L of *Rainbow Bridge*. (FA: Todd Guyn, Keith Haberl, 6/87.)

Sisyphus Goes To Hollywood (5.11b). Overhanging wall L of *In Us Under Us*. (FA: Dancer, Ostrander, 4/87.)

Big Dark Dreams (5.10d). Amadeus Wall. Crack, leaning corner at L end. (FA: Ostrander, Balazs, 6/87.)

This Is The Real World (5.11a). Steep crack L of Amadeus Waterfall. (FA: Ostrander, Glenn Reisenhoffer, 5/87.)

Men Without Shadows (5.10c). Face leading to *This Is The Real World*. (FA: Ostrander, Reisenhoffer, 5/87.)

A Means To An End (5.10). Alternate approach to *This Is The Real World*. (FA: Ostrander, Dancer, 5/87.)

Unknown Pleasures (5.10c). Face R of Amadeus Waterfall. (FA: Dancer, Ostrander, 5/87.)

Surf The Earth (5.11a). Face near L end of Middle Barrier (new area on cliff down, L from Amadeus Wall). (FA: Dancer, Balazs, 8/87.)

Grasping At The Wind (5.11b). Face R of *Surf The Earth*. (FA: Dancer, 8/87.)

Throbbing Gristle (5.10d). Face R of *Grasping At The Wind*. (FA: Balazs, Dancer, Guyn, Hilary Vaughan, 8/87.)

Wild Turkey Surprise (5.11b). Face R of *Throbbing Gristle*. (FA: Balazs, Carlson, Brian Webster, 8/87.)

Moe And Larry Go To France (5.10d). Overhanging groove near R end of Middle Barrier. (FA: Webster, Balazs, 9/87.)

Squid Crack (5.10a). Steep corner R of *Moe And Larry Go to France*. (FA: Balazs, Doug Iverson, 8/87.)

The Trial (5.11a). Technical face R of *Squid Crack*. (FA: Balazs, Carlson, Dancer, 8/87.)

Albedo (5.10b). Face in center of Slogger's Dream Wall. (FA: Martin, Dancer, 9/87.)

Vugs For Jugs (5.10b). Overhanging pocketed wall in Prospector's Canyon (new area 1 1/2mi S of Main Barrier Cliffs). (FA: Balazs, Guyn, 5/87.)

Pumping For Jill (5.11). Radically overhanging arete near *Vugs For Jugs*. (FA: Balazs, Guyn, Matt Lumley, 6/87.)

COWBELL CRAG

Jugs For Thugs (5.10a). Crack through roof R of *Guano Roof*. (FA: Martin, Steve Stahl, 11/87.)

Osiris (5.10b). Face R of *Jugs For Thugs*. (FA: Martin, Stahl, 11/87.)

Isis (5.10b). Face R of *Right Ski Track*. (FA: Martin, Stahl, 10/87.)

Semi-Honed (5.10a). Face in center of cliff. (FA: Martin, Howard, Stahl, 10/87.)

DB's Route (5.10a). Discontinuous thin cracks L of *Agent Orange*. (FA: Martin, Stahl, 10/87.)

STEVE CANYON

Pumpkin Smasher (5.10b). Short face at entrance to canyon, L of *Where's The Beef?* (FA: Martin, Ostrander, 6/87.)

Bermuda Triangle (5.11a). Face R of *Where's The Beef?* (FA: Martin, Ostrander, 6/87.)

Tickicide (5.10c). Face R of *Bermuda Triangle*. (FA: Martin, Ostrander, 6/87.)

The Devil Drives (5.10a). Face L of lower waterfall. (FA: Martin, Ostrander, 6/87.)

Take Five (5.10c). Upper Canyon. Face R of *Dream Weaver*. (FA: Stahl, Martin, 8/87.)

WASOOTCH CREEK

Synchrotron (5.10d). Four Pines Rock. Flake/crack, face on S side. (FA: Martin, Sean Dougherty, 4/87.)

Stone Talk (5.10c). Face R of *Synchrotron*. (FA: Martin, Dougherty, 4/87.)

OTHER AREAS

Arcturus (5.10a). McDougall Slab. Beside *Aldebaran*. (FA: Martin, Lynda Howard, 5/87.)

Nineveh (5.10d). Lorette Slab. L of *Boardwalk*. (FA: Martin, Jon Jones, 3/87.)

Creamed Cheese (5.10c). Ghost River area. Between *Fattling Corner* and *The Wraith*. 7 pitches. Classic. (FA: Brian Gross, Choc Quinn, 8/87.)

Homer/Jones Route (5.10a). Windtower. New start. (FFA: Dougherty, Yonge, Sevigny, 7/87.)

The Gambler (5.10c). Rimwall. Corner system in mid-face. (FA: Steve De Maio, Quinn, 7/87.)

Remembrance Wall (5.11b A3). Chinaman's Peak. Starts R of *North Face Route*. Traverse L to join it at 2/3 height. (FA: Jeff Marshall, De Maio, 7/87.)

Trampoline (5.11 A1). Yamnuska. Face between *Kahl Wall* and *Forbidden Corner*. Join *Kahl Wall* at 3/4 height. (FA: De Maio, Ward Robinson, 8/87.)

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Lynn Hill in the finals.

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FRANCE

PARIS

Round Two

in Hill/Destivelle Bout

Heralded by subway posters and European climbing publications, and covered by television stations seen in 40 countries, the "Bercy 88" indoor climbing competition at the Palais Omnisport in Paris was touted as the grand face-off between rivals Catherine Destivelle (France) and Lynn Hill (USA). And while Hill's victory — by one crucial move — was the most thrilling aspect of the event, a midnight tie-breaker that gave Didier Raboutou (France) a win over fellow countryman Robert Cortijo was the long day's most inspirational moment.

It had been doubtful whether Destivelle would even come; she held off her confirmation until less than two weeks before the event. When I asked about her reluctance, she said that, after her disqualification during a recent contest in Grenoble (*Climbing* no. 106), "I thought I was finished with competitions, I was very disappointed. The regulations are not good." As to why she decided to compete, she said, "Everybody wanted me to come."

"She has pressure coming from other things: commercialism, nationalism," Hill commented. "I have pressure coming from myself."

The contest took place from 2pm to 1am in Bercy, Paris on January 30, two months after the controversial Grenoble competition. However, the Destivelle/Hill duel, mired in disputes over vague, inconsistently applied competition rules, and charges of favoritism by European judges, dates back to the outdoor Sportroccia competition held in Arco, Italy in September 1986 (*Climbing* no. 98).

There, the pair were tied after the final, and, according to the rules, expected a tie-breaker. But at the last minute, the judges dispensed with the slated super-final, giving Destivelle the win based on points. Subsequently, Destivelle stayed home from the next several competitions, while Hill either won or tied every contest she entered (*Climbing* nos. 99, 105).

Last autumn, Destivelle arrived at the World Indoor Rock Climbing Premier in Grenoble as its major promotional image. During the contest's first round, she stepped out of bounds repeatedly, but was only disqualified at the top of the route. Nevertheless, her performance qualified her to continue. Destivelle, Andrea Eisenhut of Germany, and Hill all flashed the quarter-final, semi-final, and final routes.

RESULTS

Women

1. Lynn Hill (USA)
2. Catherine Destivelle (France)
3. Isabelle Patissier (France)
4. Andrea Eisenhut (W. Germany)
5. Luisa Jovane (Italy)

Men

1. Didier Raboutou (France)
2. Robert Cortijo (France)
3. Gerhard Horhager (Austria)
4. Alexandre Duboc (France)
5. Jean-Baptiste Tribout (France)
6. Ben Masterson (UK)

(Both Hill and Eisenhut had finished the qualifying route with no falls as well.) Since the rules stated that in the case of a tied final, falls in earlier rounds would count against a competitor, it should have been curtains for Destivelle.

But at that point, two judges went backstage and asked Hill and Eisenhut whether they would allow Destivelle to join them in the super-final. Hill vacillated, saying she felt competitors should not be asked to make such a decision; Eisenhut answered with a firm no. Seeing no hope, Destivelle made an emotional speech to the crowd refusing to accept third, and withdrew from the contest. Hill went on to win the super-final.

Jolted by climbing competitions' popularity and concerned with fair play, the Union Internationale des Associations d'Alpinisme (UIAA) recently interceded. At three meetings held over the past several months, the UIAA delineated guidelines for international competitions (*Climbing* nos. 105, 106).

However, organizers in Paris ignored one such directive, to Hill's vexation. Although the UIAA had stated that speed should have no bearing in a difficulty contest, "Bercy 88" rules said speed was to determine the winner in the case of a tied super-final. Such a rule would favor the speed-demon Destivelle. Since the competition was private — presented by L'Association Competition Montagne et Escalade — and not officially sanctioned by the UIAA, nothing could be done.

In keeping with a growing trend, "Bercy 88" took place on an artificial wall, built at a cost upwards of \$60,000. Over a month's time, leading French climber Antoine LeMénéstrel had designed routes on the stunning, 60' wall, which, dotted with imprints, fiberglass edges and pockets, presented a fantastic variety of face problems ranging from overhanging to very overhanging. Prize money was big: the first place finisher won \$6000.

Routes for the 17 male contestants were given as 7c, 8a, and 8a+ (5.12c/



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d, 5.13a, 5.13b); for the 14 women, who required no super-final, routes were 7a+ and 7b+ (5.12a, 5.12c). All competitors were kept in isolation until just before climbing, so they had no knowledge of the route or how their cohorts had fared.

Emotion and tension ran high as the competition hour arrived. Twelve thousand people had bought tickets, with up to 8000 in the stadium at a given time. They screamed and cheered as, one by one, the contestants were paraded before an arsenal of TV cameras. But as the first contestant, Monique Dalmasso (France), emerged from a stage door with wet eyes and a tear sliding down her face, the crowd fell absolutely silent. As she started up the wall, the twittering of flute music was the only thing audible. And when she fell, it was with a small cry.

Shrieks from the crowd preceded the appearance of certain favorites, especially Destivelle and her fellow countrywoman Isabelle Patissier, whose gentle nature and sweet face lend her an exceptional stage presence. Patissier moved up the 7a+ qualifying route with almost exaggerated smoothness. She swooped through barn-door layback moves, the first woman to make it over the route's roof. However, a conical bulge above stymied her. She slapped twice, and dropped. Patissier, the fairy princess of the contest, screamed and kicked the wall.

Only two other women got so high: Hill and Destiville both flashed the route. At times shaking and climbing pigeon-toed, Destivelle was no ballerina, but she was fast and powerful, her feet arcing in a zoom up the overhang. Above, she bridged off the left side of the bulging cone, and wisely reached far right to better holds, then smoked

to the top. At the overhang, Hill, the smallest contestant at 5'1", could reach only a poor intermediate hold. She matched hands on it. The audience couldn't believe she would pull up on it, but she did. Both feet swung free as she popped for the next hold. At the bulge above, she palmed far right, committing herself to a horrendous, awkward two-handed mantle, which she pulled off for the flash.

Andrea Eisenhut (West Germany) and Louisa Jovane (Italy) filled out the group of five finalists. Jovane, because of editing work on a film and a wrist injury, hadn't climbed seriously since September, and burned out midway on the final, as did Eisenhut. The placid Patissier seemed on a roll, dancing beautifully along the rounded 10' undercling, but tired at its end. Too pumped to make a clip, she dropped the rope, tried to climb, and was off for a 25-footer that whooshed her beneath a roof.

Hill came out and launched into a show of strength and tenacity. Looking for possible hidden holds, she began to pump out, then was seduced into a tiring detour by an adjacent route's edges. After an agonizing delay, she committed to and cruised the undercling, but got into dire straits on the final crux move. Dropping into a deep frogging plié, she shot up and clamped onto a faraway hold, her head jerking back with the force of the catch. A full second passed, then she popped off.

Out came Destivelle, looking alarmingly good. She made her way up to the undercling resolutely, more quickly than Hill had, but got into trouble in the same place. She made a bold, bursting move, but crossing her left knee in front of her body and firing with her left arm, went over backwards, giving Hill another win.

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In contrast to the women's division, in the absence of a few key players (particularly Stefan Glowacz), the men's contest seemed wide open. Jacky Godoffe (France) was the general favorite, but predictions for top finishers included Raboutou, Jean-Baptiste Tribout (France), Cortijo, Alec Duboc (France), Alain Gheron (France), Chris Gore (UK), Marc LeMénestrel (France), Martin Atkinson (UK), and Gerard Horhager (Austria).

Stomps and rhythmic chants heralded the appearance of the thin-limbed Alec "The Dandy" Duboc, who had the broad square smile of a movie star — a likable one. Climbing with studied smoothness, he managed the first crux on the men's qualifier, a cranky face move, then fell with a kick and a tantrum. Atkinson, appearing casual and relaxed, climbed gracefully but fell unexpectedly, tearing an enormous flapper in his finger.

The tall, thin Godoffe, a powerful boulderer as well as high performer in competitions, was an especially good bet considering that the steep indoor walls favor power climbers. He climbed with silky flicks of his wrists, but on the first crux dropped off abruptly. With rueful clownishness, he dropped his head in his hands.

Raboutou and Tribout were the only competitors to finish the route. Tribout lived up to his reputation for being ultra-strong, and was also the first competitor to conclude his performance with a victory parade around the stage. The others who qualified for the final were Cortijo, Horhager, Duboc, and Ben Masterson (UK).

Masterson, whom the French press had given only a glancing mention as a replacement for an absent climber, had walked out of the wings to become the competition's dark horse. He wore shorts, and his super-serious face broke into a sheepish smile when a wolf whistle shrilled out from the crowd.

He was the first to attempt the final, which began with a roof featuring an undercling that led to a hole. Hanging upside down with a foot in the hole, he was told he'd neglected to clip a bolt — grounds for disqualification. Committed, though, he continued for 10' before falling off. After a conference, the jury allowed his performance to stand, bending a rule. Subsequently, three of the six finalists, including Raboutou, missed the same hard-to-see bolt.

The real battle was between Raboutou and Cortijo. It appeared to me and many other spectators that Raboutou had won the final outright, but video analysis by the judges determined that he and Cortijo touched the same height. Cortijo, however, slapped the high point out of control, while Raboutou calmly clasped the same

hold. Had Raboutou slapped higher, he would have won handily.

So it was down to the super-final. Cortijo came on stage smiling with suppressed excitement, then moved nimbly and neatly up the start of the 8a+ route, from which a 6' roof loomed. Midway up the face below the roof, his movements stuttered, and with a Banshee wail, he dropped.

It was late, and the crowd had been restive at the prospect of a super-final, but Raboutou's performance made it all worthwhile. With gorgeous precision, he moved serenely up the face to the roof, and dangled one-handed for a showy clip. As he continued, there was a flurry above. Antoine LeMénestrel was quickly clipping a quickdraw on the last bolt. The clip had been forgotten, perhaps because it seemed unlikely that anyone would top out. Raboutou smiled up, then moved left around a corner to make the same nasty mantle Hill had. He reached the top hold, clipped, and lowered off to the sound of a crowd gone wild. "It was hard 7c+," he said modestly afterwards. "It was brilliant," said other climbers of his feat.

The contest had lasted nearly nine hours, but I agreed with the American Alpine Club's president Jim McCarthy, who said, "I expected to enjoy it. I didn't know I'd be riveted." As we saw the climbers' struggles, the audience came to know the routes, their cruxes, and possible pitfalls, making watching ever more compelling.

Said a pleased Hill later of herself and the slight Raboutou, "The short people won!" And another observer, the compact Yvon Chouinard, noted with satisfaction, "Bad day for basketball."

—Alison Osius

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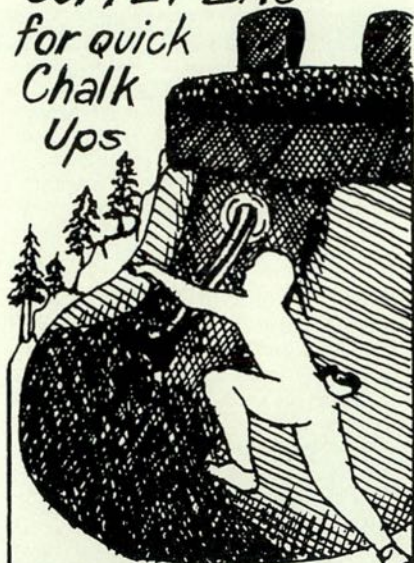
British Mountaineering Council Youth Meet. Climbers 14-18 years old who lead at least 5.6 are invited. \$25 fee covers transportation from Manchester, camping fees. Participants provide tents, food, transport to England. Contact: American Alpine Club, 113 East 90th St., New York, NY 10128. (212) 722-1628.

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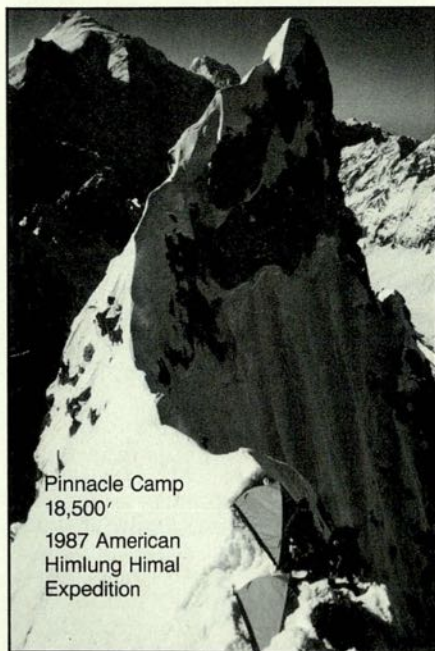
Mountain Medicine and Safety in Alpinism Symposium. An overview of medical problems at high altitude, with an emphasis on safety for climbers, skiers, guides, trekkers, and trainers. Organized by: Forum Davos, c/o Tourist Office Davos, Promenade 67, 7270 Davos Platz, Switzerland. (tel.) 083-3 84 10.

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UIAA COMPETITIONS MEETING Agenda Superseded by Speed Question

Key topics on the agenda of the Paris meeting of the Comité International des Compétitions d'Escalade (CICE), an arm of the Union Internationale des Associations d'Alpinisme (UIAA), were World Cup schedules and the appointment of judges. However, the three-hour meeting was delayed for an hour of argument over "the speed question."

One UIAA guideline states that speed should have no bearing in a difficulty competition; however, at the "Bercy 88" event across town, organizers had initiated a rule that would make speed the deciding factor if two competitors tied in a super-final. The three Americans attending the meeting objected strenuously.

"The problems in these competitions have not been with the judges, but the changing of rules by organizers," said Russ Raffa of the America Alpine Club (AAC). "Why aren't we following the rules hammered out at Chalaine?," he demanded, referring to a previous UIAA meeting in France in which competition guidelines were first set up.

"If the UIAA does not serve as an advisory board, somewhere down the road (in other competitions) the situation could be chaotic," said AAC president Jim McCarthy.

The Americans pressed the committee to issue a statement of protest to media and competitors, but the CICE declined to intervene in the Bercy contest on the grounds that it was a privately-run, rather than a UIAA-sanctioned event. Paul Brassset, CICE president, stated conclusively, "Without a quorum of the Rock Commission, we cannot act."

The Rock Commission, known the Commission de l'Escalade de Competition (CEC), is another arm of the UIAA. Brassset proceeded to introduce CEC president Jeff Lemoin, as well as Claude Albrand, head of arbitration for the CICE. Albrand, chosen to study training and certification of UIAA-

appointed judges, outlined a tentative plan to appoint a jury president to oversee the judges.

Brassset, who is also vice-president of the Federation Francaise de la Montagne et de L'Escalade (FFME), presided over the January 29 meeting. The conference was third in a series set up by the UIAA to create climbing competition rules, organize a World Cup series, and prepare for the possibility of climbing as an Olympic sport (*Climbing* nos. 105, 106).

Other business announcements included one that, in UIAA contests, a technical officials group run by Jean-Marc Troussier of the FFME will design routes and supervise forerunners. Additionally, the USSR, a long-time proponent of speed climbing competitions, has decided to join difficulty competitions.

Regarding schedules, the UIAA views 1989 as the first real year of international competition, with eight to ten UIAA sanctioned World Cup events planned. The rest of 1988 will be a test of UIAA rules. "If necessary, we can make final amendments at the end of the year, but then we must stick to those rules through the entire Olympiad," said Brassset.

The UIAA has already received contest proposals this year from France, the United States, Italy, Spain, the USSR, Bulgaria, Austria, and Yugoslavia. The Soviets have scheduled a competition October 7-14, and Bulgaria one September 25-October 2.

The CICE and CEC are to meet in Vienna on March 19 to finalize guidelines, approve a 1988 World Cup Tour, and plan arbitration.

I realize that all these organization initials — UIAA, CIC, CICE, FFME, AAC — are out of control (OOC). Please bear with us. However, when you climb, all you have to remember is CYA (cover your ass).

—Alison Osius

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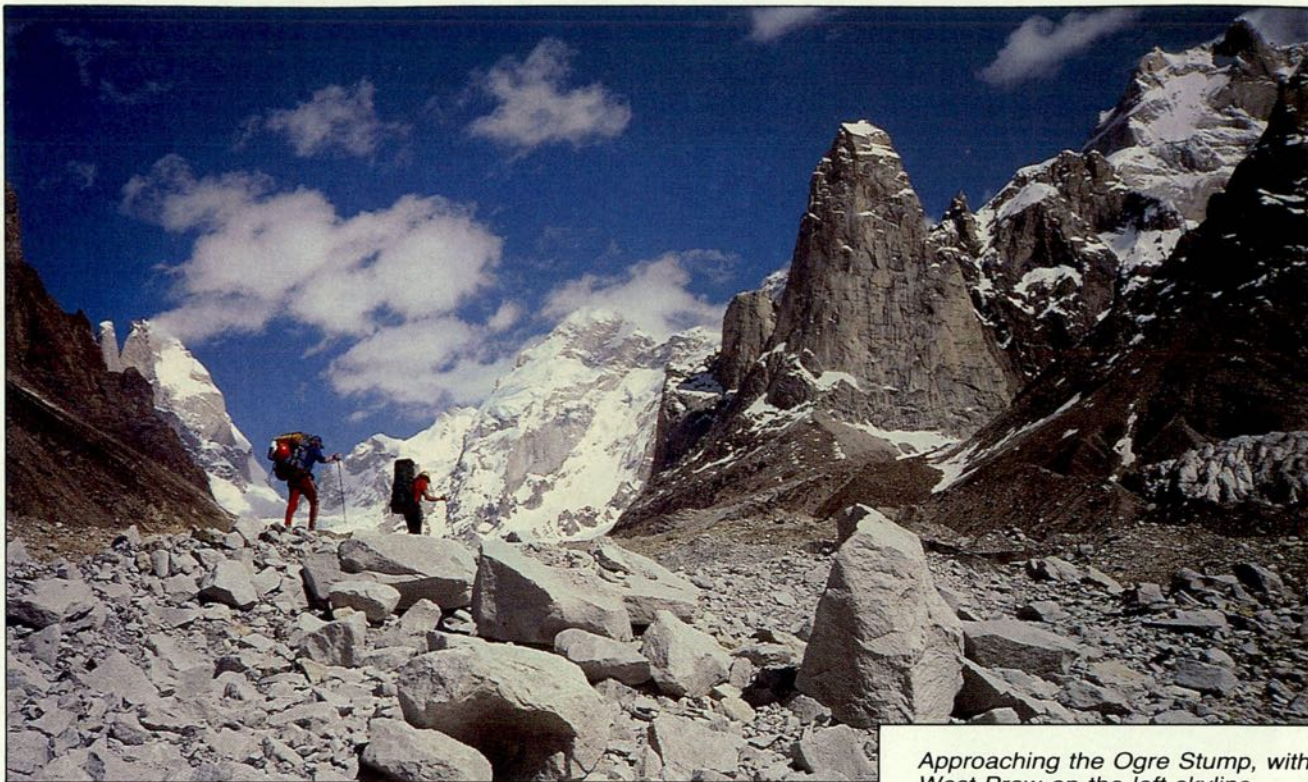
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Approaching the Ogre Stump, with West Prow on the left skyline.

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PAKISTAN

Most Himalayan climbers opt for large-budget extravaganzas on the big peaks. However, during early August in the Karakoram, one economy-minded group of Americans journeyed to the Biafo Glacier, where no permits or peak fees are required for mountains under 6000 meters. They succeeded on two of the area's seldom-visited granite spires.

Phil Powers, fresh from Gasherbrum II (*Climbing* no. 104), and Greg Collins made the first ascent of Lukpila Brakk's West Prow (VI 5.11 A3); the 5380-meter peak's only other ascent was in 1984 (*AAJ* 1985). Powers and Collins climbed the 24-pitch route and returned to the glacier in four days round-trip. On the Uzun Brakk Glacier, below the Ogre and Latok II, Tony Jewell and Tom Walter made the first ascent of the Ogre Stump (5592m) also by its West Prow (VI 5.10 A2); the 21-pitch route took them three days. Jewell commented, "These were the cleanest and most obvious rock climbing lines we saw in the area."

Walter and Jewell also climbed Gama Sokha Lumbu by its Northwest Ridge, while Collins and Sue Miller did the second ascent of a mixed route on Peak 5531.

Otherwise, 49 peaks were attempt-

ed in Pakistan by 47 expeditions (320 climbers) from 16 different countries. In marked contrast to the toll of 1986 (12 on K2), only three foreign climbers were killed in Pakistan; four soldiers from the Pakistani Army were killed in an avalanche on Gasherbrum I, and in the southern Karakoram, gunfire continues to claim casualties in the war between India and Pakistan (*Climbing* no. 106). On the 8000-meter peaks, the success rate was a low 30%, due to continuous strong winds at the higher elevations; consequently, most successful climbs were on the lower peaks. A British team found "tremendous potential" for virgin peaks and granite spires in the K6 and K7 region.

NEPAL

Atrocious winds and dangerous snow conditions characterized the postmonsoon season. There were 11 climbing-related deaths, and only 16 of the 58 teams tagged summits. Despite this, a small, low-budget American team succeeded on the Northeast Ridge of Dhaulagiri (8167m).

Kitty Calhoun, John and Matt Culberson, and Colin Grissom arrived at the base of the mountain in September, sharing porters with four Spanish climbers. A Japanese team had ar-

rived previously, and all three teams ended up sharing the same route.

Both the Spanish and Japanese were eventually foiled by high winds; the Spanish reached 8000 meters via the East Face. The Americans were caught in a slab avalanche at 6800 meters and as the Japanese fixed line anchors pulled, they began sliding down the North Face; the final picket held and checked a 1000-meter fall to the glacier. After retreating to base-camp and recuperating from minor injuries, John Culberson, Calhoun, and Grissom reached the summit on October 16 (Calhoun is profiled in this issue).

On Everest, all attempts were checkmated by poor weather and the early arrival of the winter jetstream. Two American expeditions attempted the mountain from the Chinese side, by the Great Couloir and the North Col routes; both came with 325 meters of the summit before retreating in the grip of high winds.

Climbers on the Nepalese side fared no better. The 12-member, \$400,000 Snowbird Expedition, which was trying to put the first American woman on the summit of Everest, turned back at the South Col. Several other parties, all sharing an Austrian team's South Col permit, were unable to climb any higher. One noteworthy attempt was made by Americans Steve Boyer, M.D. and Murray Rice, with a total budget of \$16,000 for Everest and Lhotse! Boyer turned back with pulmonary edema at 7500

meters, while Rice continued with two Frenchmen to the South Col.

Boyer was later enlisted by the Polish Lhotse South Face expedition after their doctor was killed. The doctor and his partner had been arguing with an Italian about how to take shelter from a huge airborne avalanche; the Italian jumped in a crevasse, while the two Poles ran for it and were blown 150 meters by a blast of wind. The doctor died instantly, his partner sustained a fractured femur, and the Italian emerged from the crevasse unscathed. The avalanche debris had completely dissipated before it hit the climbers.

Another avalanche destroyed several tents at basecamp. The Poles continued to persevere through dangerous conditions which would have sent most Western expeditions packing. Finally, on October 29, Krzysztoch Wielicki and Artur Hajzer got within 200 meters of the summit, virtually completing the technical difficulties, before they were forced back by a storm. The South Face of Lhotse, despite several very strong attempts in recent years, remains unclimbed.

On the Southeast Face of Lhotse Shar (8400m), four Spaniards were killed after falling over 1000 meters; the rest of the team abandoned the mountain. Two weeks later, Dick Jackson, Adrian and Al Burgess, and Joe Frank reached 7100 meters on the Southeast Ridge before being turned back by avalanches. Had they summited, they hoped to traverse to Lhotse's main peak, which would involve more time at the 8000-meter level than any other climb yet attempted. No one has yet come to grips with this project.

The South Pillar of Nuptse (7855m) has borne several attempts since 1986 (*Climbing* nos. 98, 105). In early October, Italians Enrico Rosso and Fabrizio Manoni reached a highpoint of 6700 meters on the route, declaring it "difficult and dangerous." Two Americans later arrived at basecamp, but sickness and heavy snowfalls prevented them from getting started.

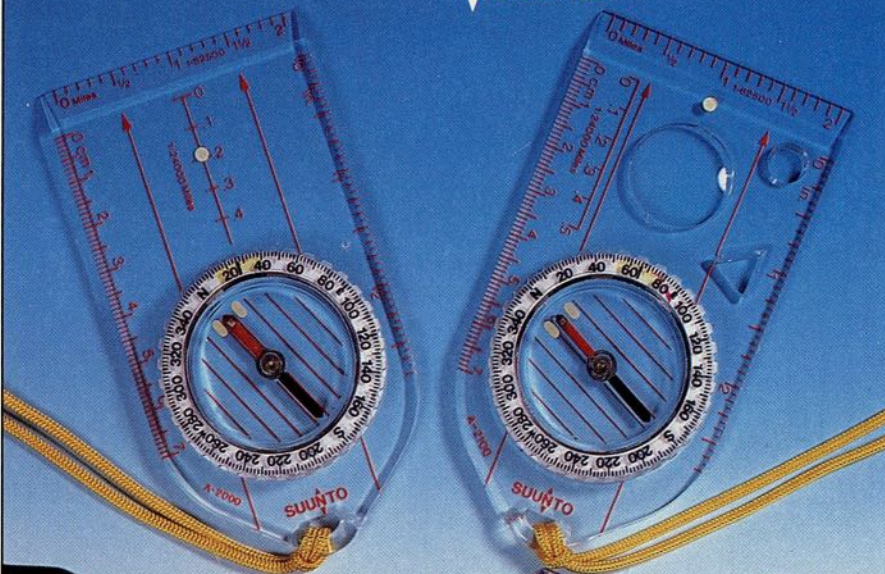
A seven-member team, supported by Sherpas, made the first American ascent of Annapurna IV (7525m) via its previously unclimbed Northwest Rib. After fixing several thousand feet of fixed ropes, Pemba Norbu and Tim Schinhofen reached the summit on October 10. Schinhofen was frostbitten during the descent. Shortly afterward, Eric Simonson attempted to lead his 14-member group up the North Ridge, but was stopped by high winds at 7000 meters; the ensuing snowstorm plagued Nepal. Simonson said it was the most epic, avalanche-ridden descent of his life.

Michael Groom and John Coulton, members of a six-man Australian team, reached the summit of Kanchenjunga (8593m) on October 10.

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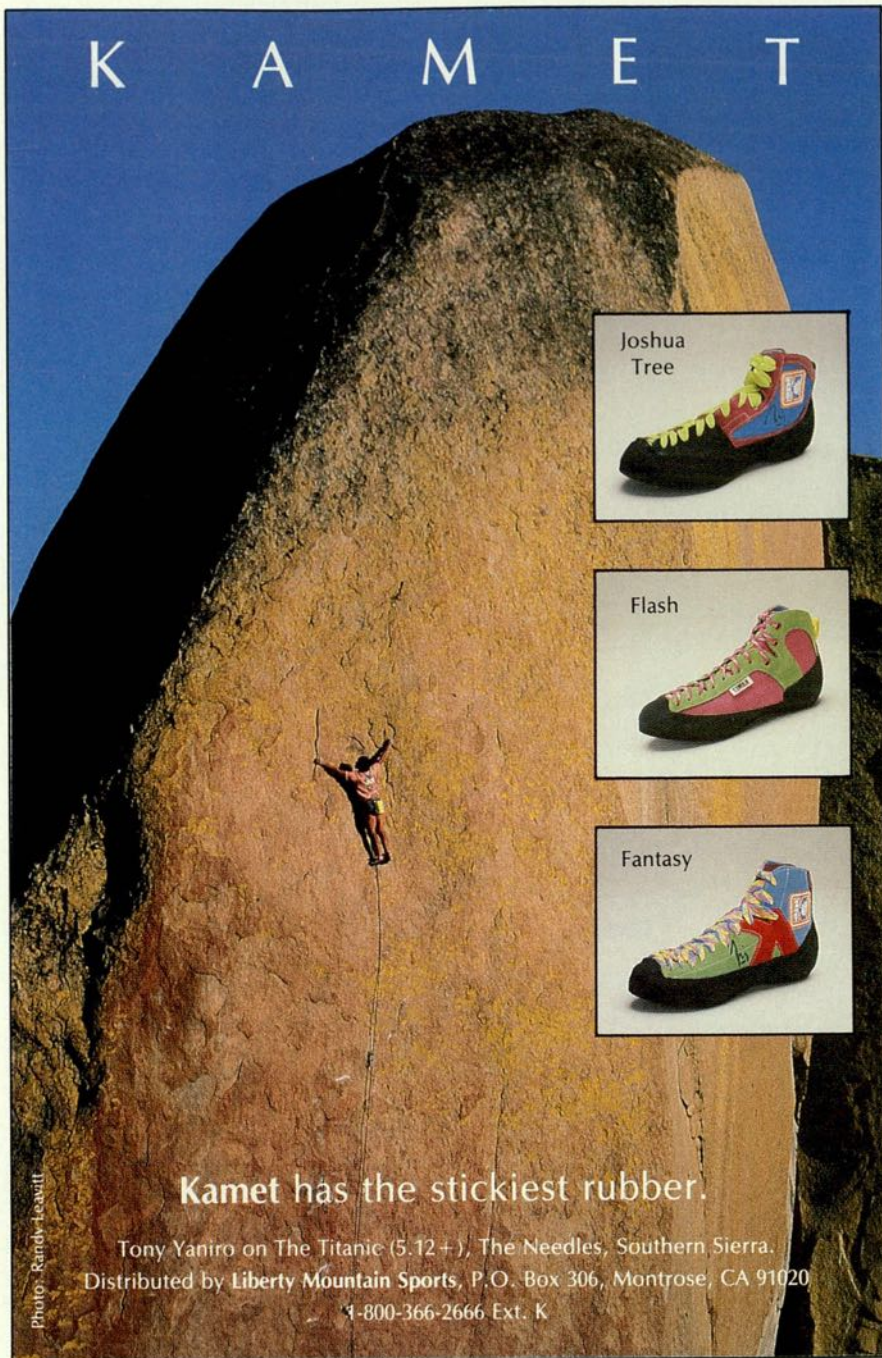
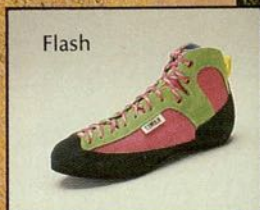


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They were forced to bivouac at 8000 meters, sustaining severe frostbite. Just after this, three Belgians reached 8000 meters on the South Face, but were turned back by a heavy snowfall. In contrast to these small teams was the premonsoon assault by the 60-member Indian Army expedition. They succeeded in climbing the Northeast Ridge without oxygen, but suffered two fatalities and numerous cases of frostbite in the process. One can only speculate how much rubbish the Army left in its wake.

Americans Magda King and Jim Farkas attempted Yalung Kang (8505m), a sub-peak of Kanchenjunga. King reached 8100 meters during a solo attempt; another attempt was precluded when she dropped her parka. Farkas' feet were badly frostbitten after his boots fell off, then a storm confined them to their tent for six days with no food. By the time they arrived back in basecamp, everyone had left, assuming they were dead. Farkas was evacuated by helicopter.

Ten American climbers attempted Cho Oyo (8201m) by the controversial Southeast Ridge, which violates the Tibetan border (*Climbing* no. 104). Three of the members reached an official high point of 6800 meters, then retreated. They reported, "The Tichy Route, with the Messner and Polish variations, is no longer an option from the Nepalese side." Otherwise, three Swiss reached 7600 meters on the South Face and were repulsed by heavy snow.

A ten-man Dutch team fixed ropes up a new route on the North Face of Jannu (7710m). One member commented, "It was sustained, with mixed terrain, at the limit of the reasonable." Three climbers reached the summit on October 11, and 14, but two were killed in an avalanche while descending. Two weeks later, the route was repeated by two French climbers. Another French team summited via the Southwest Face on November 6.

The elegant Ama Dablam (6856m) remains a much sought-after peak. There were American teams on the North and South Ridges, a British team on the Southwest Ridge, and a Bulgarian team on the Northwest Ridge; all were compelled to turn back by deep snow.

Later, an American team with a winter permit had better luck with the weather. On November 23, Eric Reynolds and Sandy Stewart reached the summit of Ama Dablam via the South Ridge in three days. They found little fixed line and simul-climbed most of the way. Their ascent was followed by Annie Whitehouse, Clay Wadman, and Todd Bibler on the 26th; Bibler soloed to the top and back in 35 hours. So, November is colder, but in 1987, it was the only respite to Nepal's tempestuous autumn.

— Jonathan Waterman

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H U M O R

Satisfaction Guaranteed

by John Sherman

After all these decades you'd think I'd be a better writer. Just check out this stack of rejection notices next to me. Looks like the Sears Tower. I guess my heart just isn't in it, even if my soul is. It's Hell writing when you don't want to, but I've got my end of the deal to live up to, so here goes.

I'm at the Lodge when I first meet the Big Guy. In the men's room in fact. I'm returning the beer I just rented with the last of my cash. He's watering the porcelain right of me. I feel these eyes burning into me, but as custom dictates I concentrate on the blank wall in front of me as if I'm taking my driver's license eye test. Finally I can't take it any longer and I look him in the eye and he smiles at me. I'm thinking, "God, they're everywhere."

He says, "How'd you like to free El Cap this week?"

"I'd like it just fine," I say.

"I can help."

"Don't reckon I'll need your help." I return to my eye test.

"As you like. Just remember my offer and have a few on me."

"Hmm?"

"Left front pocket."

With my free hand I check my pocket and there's a crisp new sawbuck in it. I look to my right and nobody's there. Just another Valley waterfall.

I'm feeling kinda creepy thinking some queer just slipped a tenner in my front pocket without me feeling it. Let me tell you, it didn't last long.

Next day, my hangover lasts most of the Free Blast, but I'm feeling good by Hollow Flake Ledge and in top form on the Twin Cracks, freeing the thin sections on my first try.

On the Spire that night I'm too jacked-up to sleep. Next day I blast to the roof with ease. A quick traverse right, haul out to the lip, and what do I find there but this Stetsoned joker trying to dog the moves out on a top-roped.

"Hang a left, Todd," I say and he swings out of my way. The tendon popping details are boring. Of course I whip over the lip and Todd barks with delight. It feels like there's a hatchet sunk in my shoulder and by the time we reach the base my index finger looks like a Jimmy Dean pork sausage.

The docs all say I'll never climb again and this time I believe them. I spend my days opening and closing the Mountain Room bar.

"Remember me?"

I leave the eye chart and look right. It's him again. Same funny hat. Same close cropped beard. Same funny-looking spare tire on what otherwise seems to be the buffed body.

"How'd you like to free El Cap this week?"

"Real funny, asshole."

"Don't call me that yet."

I hit the handle and leave, and this time the guy follows me. He talks me out of hitting the bar again. It's noon and I'm broke anyhow. On the walk to Camp IV he comes up with the freakiest proposition.

"Sounds good, but how do I know you're telling the truth?"

"One day free trial. Satisfaction guaranteed. Go on. Give it a go."

I look up at Midnight Lightning.

"In my slaps. Sure thing."

"Go on," he insists.

I pull the sling off my arm and cruise up in a flash. I mean I float the sucker. I scramble down the backside where this girl meets me. Low cut dress, spike heels. She looks like she'd sell me a vowel, but she gives it to me for free.

Next morning I feel like I've wrestled a marlin for twelve hours and it seems doubtful if any of the neighbors copped much sleep either. I'm in no hurry to leave the tent, but she gets out to freshen up so I figure I may as well get up, seeing as it's midday. I'm pulling my clothes on and the shoulder feels great. Well, maybe a little tired. Then, while tying my shoes I watch my finger swell like a dirigible. I glance at my watch and it's hands up. Shoulder aching, I peer through the fly and see my Miss Fortune spotting some jerk from back East. Right then the Big Guy shows up and says, "Mind if I come in?"

I don't like reading anything wordier than Spiderman comics, 'specially no legal mumbo-jumbo, so I just skim the contract and put the ol' John Hancock on the bottom in sticky red ink. Eternal damnation seems a small price to pay for a new body and a first free of the Salathé. Besides, I have him throw in a sponsorship and a cover photo too. Now I sure wish I'd read the fine print. These EB's are killing me and they never come off.

I'm sure you've read that Basecamp report more than once. The headline starts out: "Frank Freeman cranks Salathé. Frees every pitch while mystery second jugs." As usual they didn't print half of the story. Let me tell you how it was.

Just like before I'm cruising towards the roof. The Big Guy, "Meph," is jugging up behind and he is a sight. Looks like he's been lifting weights for centuries; as he says, "Millennia, in fact." That funny spare tire was actually his tail and now it's wrapped around him as a swami. As we blaze past this couple in the Ear the woman yells, "Hey Arnold, drop your sunscreen?"

Anyway, I'm pulling over the lip again and this time I say, "Git along little doggie" and give Todd a shove. He pendulums left and his stubbly jaw drops as I contort my way up to the headwall crack.

Forearms swelling to 80, 90, 100 psi, I pound out the headwall cracks first go. Below I hear Meph giggling. Further down I hear Todd sobbing.

Meph's arranged for champagne on top and I know



you won't believe me if I tell you about the Cowboy cheerleaders. That item never made Basecamp. But now I come to the big bit, the last part of the headline: "Falls to death on descent, anchor pulls." Let me tell you — I didn't fall off. I was sent.

Me and Meph knock off a couple quick raps and I'm way psyched cause it looks like we'll be at the bar before last call and there's this cute waitress working that night. I loop the ropes around this huge tree, clip into my biner brakes and start the last rap. Suddenly I'm tossing back and forth and thinking, "Not another earthquake," but there's no rockfall. Looking up I see Meph, arms wrap-

ped around the trunk, fingers locked, Herculean quads flexing as he yards the tree out of the ledge. My rope is slowly slipping down the angled trunk as dirt shakes from the torn root stubs.

"No fair, dude," I scream. "I never got my sponsorship."

"You're sponsored by me now. Ha, ha, ha."

It figures my cover photo would be posthumous, but Meph brought me a copy and true to his word he's been a loyal sponsor. He gave me this typewriter and an endless supply of paper and whiteout. He says he'll give me back my soul when I win the Climbing Writing Contest.

Illustration: Tad Welch

F I C T I O N

Shangri-La

by Phil Berggren

The lone climber methodically kicked up the untracked slope toward the ridgeline. It was moderate going through a solar-heated cirque, and despite the altitude, he was making good time.

A raven, the biggest he'd ever seen, was plying the air currents on the ridge to his left. Its flight appeared effortless, and it seemingly stayed just ahead and uphill of the climber's route. The bird was the only breathing thing he'd seen since leaving the village behind five days ago. In the past, he had joked with his climbing partners about how a raven's cry sounded like "off route" to human ears, but this one just glided silently.

The trekking party he'd abandoned had been the biggest bunch of hosers he'd met since a fraternity at school had rushed him to join their fun-loving ranks. Whine, whine, whine was all they did. First it was too many miles in a day. Then the trail was too scary. Then some of the walkers got the trots because the stupid natives contaminated their water and they lived like pigs and their stupid food was no good, either. He was depressing himself all over again just thinking about it.

No matter that this was the first time in God knows how long that anyone other than locals had been allowed into this neck of the woods. The surrounding peaks were all virgin, and the vistas were somehow more otherworldly than in other parts of the continent he'd been through.

So, when the group hiked by a hanging valley that joined their path, he said to hell with it. Under a full moon he crept from the camp and somehow scratched his way up the side of the cliff on what, if a person were generous, could be called a faint trail.

That was twelve days ago, and he didn't even care if people were worried or looking for him. He'd had his moments of guilt for just splitting, but then he'd turned a bend in the stream, and there it was: Shangri-La, live and in the flesh.

Unbelievable. Terraced into a steep hillside on the left of the stream was a village of maybe 200 souls. He had become convinced that he'd been walking up an uninhabited valley. The trail was essentially non-existent: no signs of humans anywhere — no cut trees, no prayer flags, no stupas. Then, out of the blue, in a widening of the canyon, here was this self-sufficient center of uncivilization.

Yaks and goats grazed on the hillsides and leveled plots across the stream. Wheat and barley filled the other flat places, squeezed between irrigation ditches. The village was not too far below tree line, and where farm ground and pasture hadn't been hacked out, verdant forests of pine grew.

The wood and daub huts were stacked on each other up and down the slope, many using the rear wall of the dwelling below as their own foundation. The false-fronted buildings were adorned with intricate shutters

and lattice windows, and woodwork which had been colored in various rainbow shades.

At the head of the canyon stood a huge peak, invisible from the main valley he'd left behind. It was a cross between Ama Dablam and Mustagh Tower in the raw energy it imparted. Steep hanging glaciers bracketed a central ridge which rose uninterrupted from the snowline to the lenticular-capped summit. An indigo sky completed the picture.

The climber felt like a holy man at the end of a long pilgrimage. He stopped in his tracks, dumbstruck, then dropped to his knees, his head feeling light. Harrier or Kipling could never have conjured a place like this in their wildest dreams.

As he approached the nearest grazing animals and stands of ripening wheat, the men and women working there looked up at him like he'd just got in from Pluto. He hadn't thought to be apprehensive about his outnumbered situation, because whatever gibberish these folks spoke, it was friendly. Before he knew it, he was in the village eating chapattis, drinking chang, and showing his shiny equipment to every man, woman, and child in the neighborhood. He thought that if he died here it wouldn't be such a bad deal, because here he was, already in Heaven.

After a couple of days of rest, the lure of the canyon and the mountains above became irresistible. Despite a few protestations from his new-found friends, he started uphill one bright, clear morning. He had to admit to himself that he didn't want to leave all that badly, but he felt the pull of high and wild places.

Five days later, he was moving up a small sub-peak of the giant that headed the canyon. The raven, circling above, was his only companion, although he somehow felt the mountains were breathing in time with him as he steadily stepped up the 30-degree slope.

His climber's sense told him he was a fool to be here on a snow-covered glacier alone; but he'd soloed plenty of routes before and never been hurt badly. Besides, the energy of the place gave him strength, and the events of the last two weeks made him feel like a part of the scene instead of a temporary intruder. The sky was blue, the snow was crystalline, the rock was black; he felt great and strong.

The short hairs on the back of his neck told him the slope was moving before he actually sensed the motion. He started down slowly, then accelerated like a shot. Rolling onto his back, he tried to backstroke uphill against the tide, but the ride grew rougher and he started to tumble. Light, dark, light, dark, light, dark... dark, dark, dark. As he slowed, he thrust his right hand out and up in a desperate effort to grasp thin air and pull himself free. His left hand went in front of his nose to make a small breathing space.

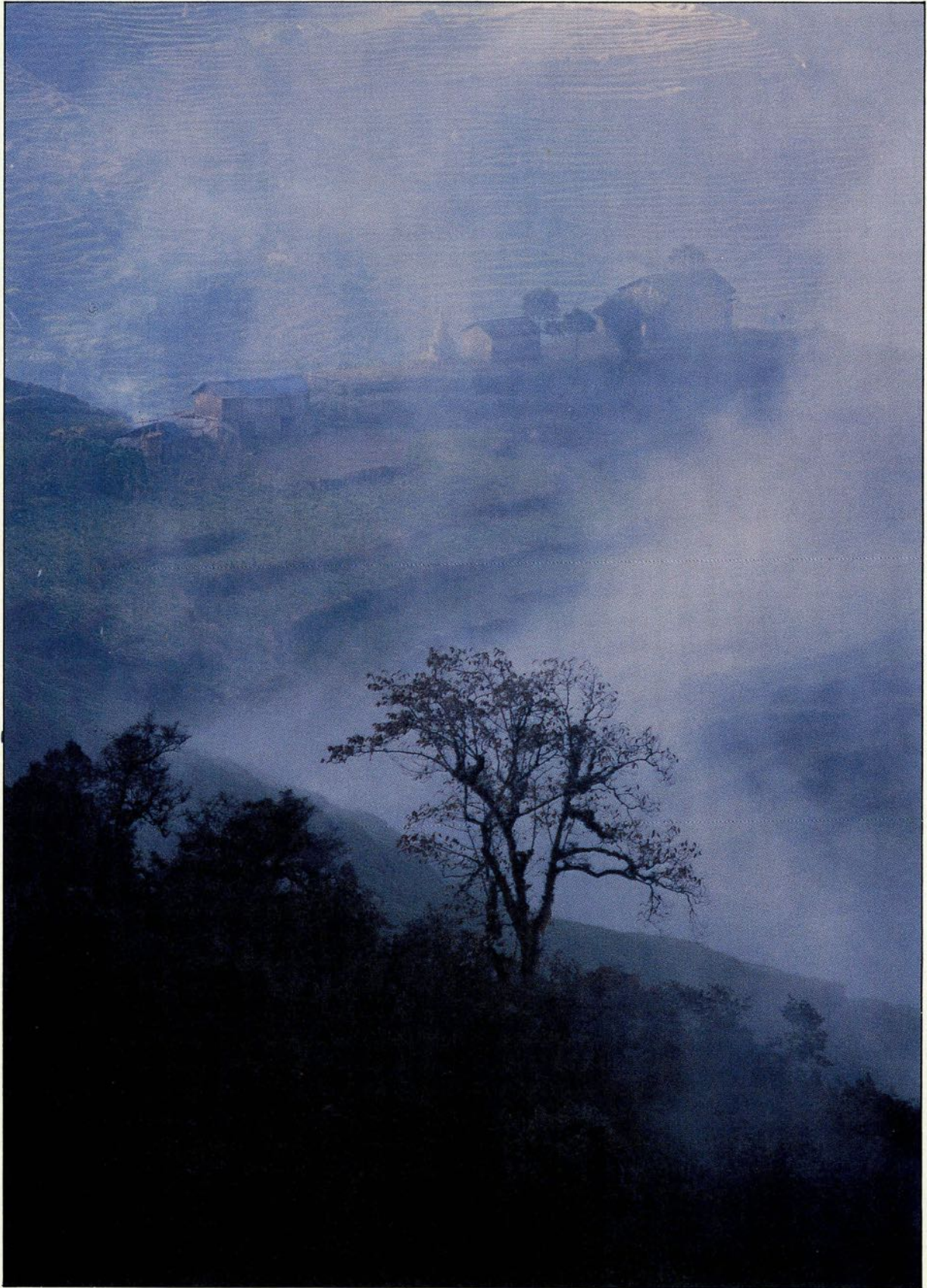


Photo: Michael Kennedy

At least the fall didn't kill him. He didn't know whether or not he should thank God for small favors. It was hard to tell, but it felt like he was lying on his left side, head uphill, with his right arm pointing straight up. There was just the faintest trace of light coming from the direction of his right arm, but he was stuck tight.

The last couple of weeks had instilled in him a feeling of strength and life like he'd never known; but now, deep in the pit of his belly, a different and unpleasant sensation was growing. Something he'd felt touches of before. Something like...

He'd been in tough spots before. No big deal: keep cool, don't lose it, think calm. What to do? There wasn't much. He tried to move. Left leg — no go. Right leg — same thing. He could move his left hand fractionally in front of his face. Right hand — wait a minute. Was his hand moving back and forth? He thought so. All he had to do was keep moving that right hand and arm and pretty soon he'd have a tunnel opened up and he'd be out of here.

A short, violent struggle got him nothing but out of breath. He rested and tried again. No luck. Better take it easy. A little air was percolating down with the light along his right arm, but it was already getting stale-smelling, and he felt tentacles of cold starting to wrap around his toes and crawl up his legs.

Heaven and Hell. How close they could be at times!

He thought of the raven in the sky above. He'd been watching how it had effortlessly floated through the air, free of earthly bonds and dangers. It reminded him of the gulls he'd watched off the Cape just a month and a half ago.

His best friend had tied the knot in a beautiful outdoor ceremony overlooking the bay. It was so warm then.

Before the big day, all the guys in the wedding party had chartered a boat and gone out to sea, the Chatham light just visible in the west. They'd hauled in rock cod like there was no tomorrow, and had a super time. When they started back to shore, hundreds of gulls materialized from nowhere and hovered around the boat. They, like the raven, floated with outstretched wings on invisible air currents, defying gravity, changing direction and altitude with the smallest adjustments of wing and tail set. Beautiful to watch, just feet from the stern of the boat. If only he could have done the same.

Then Captain Hardy started cleaning the catch of the day. As the guts and heads went overboard, the flying creatures transformed into a raucous, fighting army of bloodthirsty scavengers. The fish parts barely hit the water before they were jumped by three or four birds and devoured. Many of the bloody remains were snatched in mid-air. Heaven to Hell.

The cold feeling was stronger now, and he was starting to feel a little dull all over. Another attempt to free his right arm met with the same results.

Maybe his buddy had the right idea, after all. At the time, he'd thought that another good climber was succumbing to the bonds of tranquil domesticity. They'd

never again be together in the Tetons, negotiating the Grand Traverse and cheating death's falling rocks and lightning strikes. No more Grade VI's on Long's, climbing from Mills Glacier up through running water, A5, and snowstorms. They'd almost bailed out on that one, but a powerful psyche and the bond that climbers know through the rope got them up.

Now, one of them was honeymooning on a sloop in the Caribbean, working on his tan, and the other was somewhere in Central Asia, motionless and cold, and growing colder.

Wait a minute — someone was pulling on his free hand! It was impossible; the villagers he'd left behind had shown no inclination to follow him. Nevertheless, his increasingly numb nervous system told him that his hand was being moved. He was sure of it.

This was going to make a great story when he got home. Even if he wouldn't come out and admit it, wasn't that one of the reasons he climbed? Who cared if he told his few non-climbing friends — they all thought climbing was for thrill seekers.

But climbers, ones who knew, would appreciate the adventure in stumbling upon a lost tribe of people in a lost part of the world, spitting in death's face, and coming back to talk about it.

Now he was sure of it: his hand was being moved. He was saved! He'd been through the gates of Heaven, he'd been to the gates of Hell, and he was coming back.

The two Brits worked their way up the tumbled icefall: a dead-end here, another there, then a path to the next house-sized block of ice, and repeat the process.

What a day it was. The sky was blue, the snow was crystalline, and they felt sure they'd get through the maze today and establish an advanced basecamp on the glacier above. They felt great and strong.

They forged ahead in the tradition of Mallory, Irvine, and Young. They were in an uncharted region of an uncharted country, Terra Incognita. The only living thing besides themselves was the raven overhead, describing lazy circles through the sky.

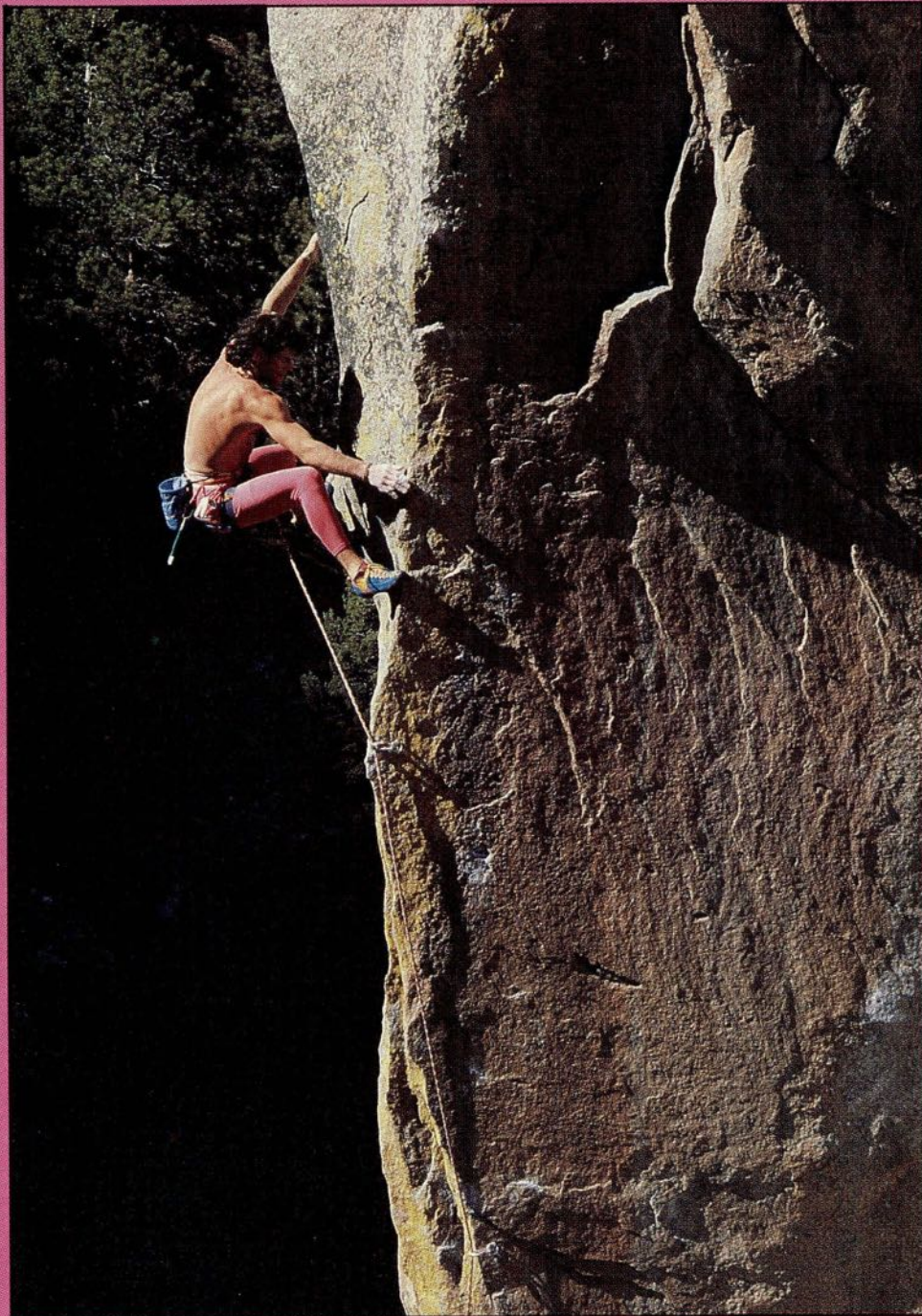
There was the story of a white man passing through the village five days downstream, but it was so sketchy as to be unreliable. After all, these people had no sense of time and no written language. He had gone up, but he hadn't come down. Who knew when it was? It could have been last week, last year, or never. As far as they were concerned, they were the first.

"Bloody hell, look at this!" They'd rounded another corner to find yet another dead end, and stopped cold in their tracks. There, in a semi-lucent slab of ice, was a man. Frozen. His right hand stretched from the icy sarcophagus in a futile grab for the heavens. Whoever he was, he'd been perfectly preserved. But it was his hand that chilled their blood to the temperature of the surrounding ice. It extended from the elastic cuff of his parka, skeletal: only the knobby bones and dried sinew remained, reaching for unreceived salvation.

And the raven circled overhead, silent.

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Christian Griffith on "Verve" (5.13b/c). Photo: Dan Hare.

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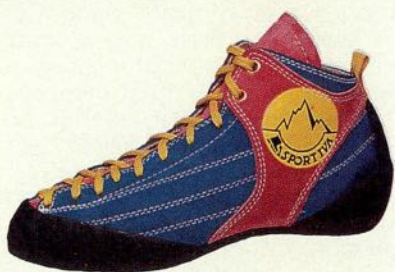
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euroSTONE

by Beth Wald

During the last few years, the extreme routes and virtuoso climbers of Europe have been the talk of the rock climbing community worldwide. "Eurostyle" — drilling on rappel, hangdogging, wild lycra, paisley harnesses, and even hold chipping has, for better or worse, dramatically affected the way rock games are played in the U.S., and has generated everything from bitter derision to unchecked enthusiasm among American climbers.

Curious about the roots of Eurostyle and the mysteries of limestone, increasing numbers of adventurous climbers are crossing the Atlantic, armed with phrasebooks and lists of unpronounceable crags. Despite hearing the top-heavy hype given extreme routes, they're discovering that Europe is a perfect destination for climbers of all abilities.

Europe is uniquely suited to traveling climbers. The amount of gear required is minimal; a rack of quickdraws, a pair of shoes, a harness, a chalkbag, and a 10mm rope will suffice at most areas. Most crags lie near a town or village, where the markets, restaurants, bars, and cafes provide the essentials as well as a special ambience. Camping areas, usually within walking distance of town, have running water, hot showers, and, sometimes, swimming pools and cafes. Public transportation is very reliable, and hitchhiking, though often slow, is safe. On rest days, it's great to enjoy being in a foreign country; numerous entertaining options include exploring castles or monasteries, touring vineyards, roaming markets, or practicing a new language.

FRANCE

Given the raw material — miles of steep, solid limestone cliffs — it's not surprising that France has produced many world-class climbers and extreme routes. But, as noted, France is a mecca for all climbers.

Climbing wears a cloak of respectability in France, trappings left over from its upper-class roots of 19th century mountaineering. The country's general populace has embraced the sport wholeheartedly, and it isn't unusual to see entire families climbing together, a picnic of baguette and wine tucked into a basket with rope and rack. At Paris' bouldering gardens, business people drop by to crank problems alongside devoted rock jocks, older alpinists, and little kids.

The rapid evolution of French rock climbing has come from a solid mountaineering base. Beginning in the "rock garden" of Saussois in the Burgundy

region, this evolution later moved to the massive walls of the Verdon Gorge. The early rock climbers were primarily alpinists, who continued to use mountaineering tactics in these areas, resulting in many steep aid lines. Although many viewed these simply as training for the mountains, things were about to change.

By the late 1970's, young climbers, inspired by the British and the Americans, began freeing old aid routes. Soon, this new game spread to other areas, like Sainte Victoire and Buoux. As the aid lines got used up, new lines were established by the most efficient method possible: rappelling down and placing bolts. The absence of natural protection in limestone certainly influenced the development of these tactics.

With the free climbing boom, Southern France became the destination for winterbound climbers of Northern Europe, and a year-round haven for soggy Brits. The development of the seemingly unlimited cliffs throughout Southern France exploded in the last three years, supplying a burgeoning list of excellent crags. However, for the neophyte visiting the French limestone belt, the classics, Buoux and the Verdon, still offer the widest variety and highest quality routes.

The Verdon

With the clanking of gear and the clinking of empty wine bottles, the campground slowly comes alive on another sunny fall day. Peeking out of the tent past a jumble of colored domes and stumbling, lycra-clad figures, you see that the mist will soon burn off, so you might as well get up.

You opt for a short stroll into LaPalud, a village about 400 meters long and four stories high, with one road just a sidewalk wider than a tour bus. Yet this tiny village has everything needed for a climbing holiday: a gas station, a grocery store, a bakery, a post office, a souvenir shop, a climbing store, and a couple of bars.

There are two campgrounds: a large, plush, but expensive facility 1.5 kilometers east, and a small crowded field, complete with free (but dirty) showers on the west side. Needless to say, most climbers stay at the latter. An eccentric old man, Jean Paul, keeps track of the hordes of tents, more or less cleans up, exacts 6 francs per night when you leave, and maintains peace by firing off a shotgun when evenings get too raucous.

For those with a few more francs, a climber's hos-

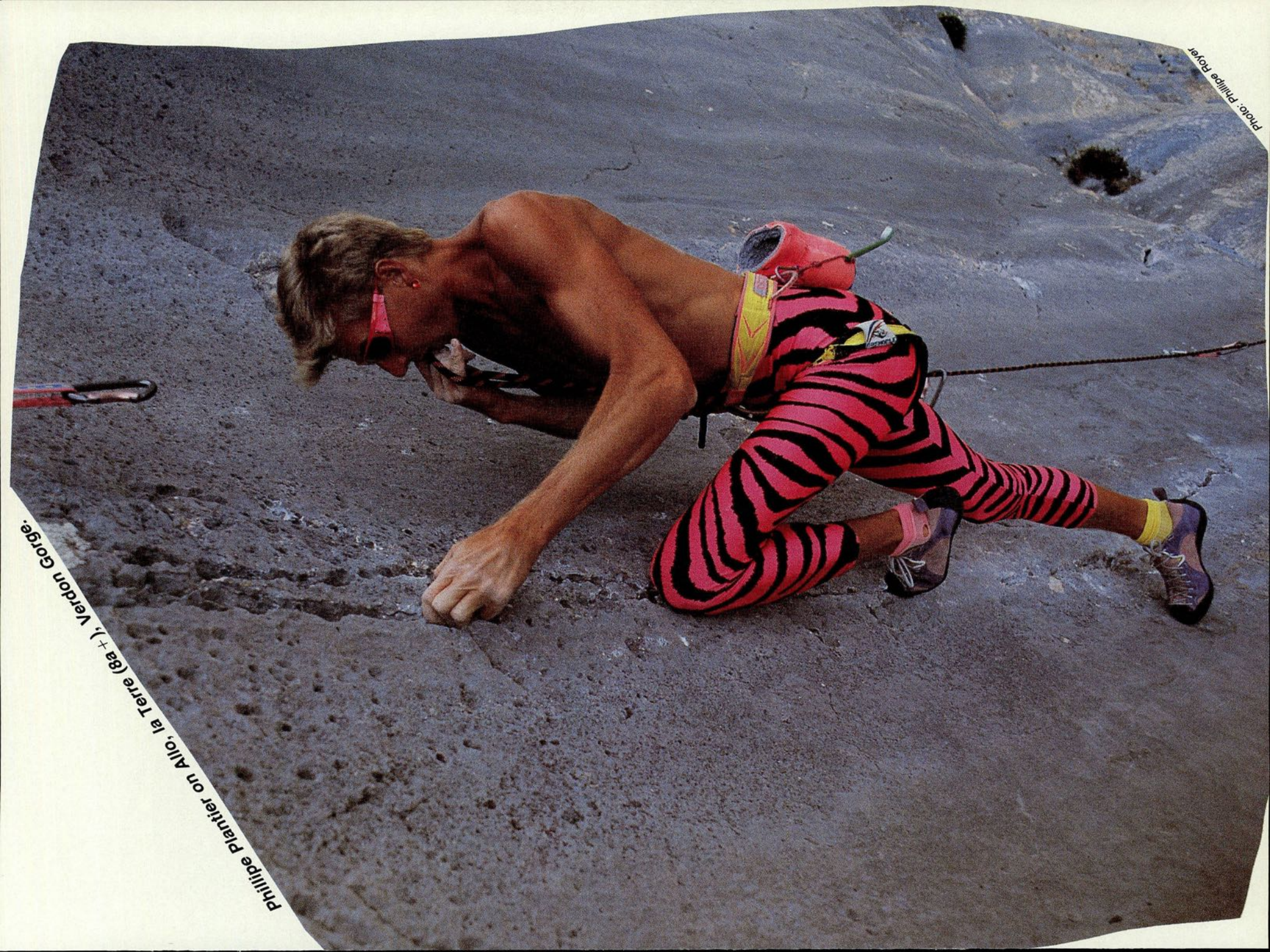


Photo: Philippe Foyer

Philippe Plantier on Allo, la Terre (8a+), Verdon Gorge.

tel or *gite*, operated by Pete and Cherry Harrop, also the English proprietors of the climbing shop, offers bunks, showers, sitting room, and kitchen; cost is 35 francs per night. There is also a youth hostel 1.5 kilometers from town.

Walking through the village, you catch the distinct smell of cappuccino, so you duck into a cafe. Bolstered by a strong cup, you make it to the bakery for fresh baguettes and croissants, buy a block of chalk, head back to rouse your partner from the cluttered campground, and hitch a ride to the cliffs.

One of the most spectacular climbing areas on earth lies five kilometers from LaPalud. The road traverses the north rim of the Verdon Gorge, and, at the first big overlook or belvedere, dozens of climbers dodge through crowds of gawking tourists to peer over the edge. Bulging walls of velvety gray limestone plunge steeply 900 feet to the green river below. Across the Gorge looms a practically unclimbed wall, a dramatic foreground to bands of limestone walls and peaks receding to the horizon.

In 1976, Jean-Claude Droyer freed one of the first modern Verdon routes, *Le Triumphe de Eros*. Conflicts between old and new styles erupted, but, by 1981, the new fashion eventually dominated. The past six years have been devoted to developing increasingly radical routes on the Verdon's blank-looking faces.

Although the vast potential of the Verdon has been tapped by hundreds of climbers, only a few have had significant influence. The routes of the prolific Michel Suhubiette are among the most popular because they are convenient: two to four pitches long, close to the main belvederes, and lots of bolts. Some route "openers" are known for spacing bolts widely; a good example is Patrick Edlinger's *Take It Or Leave It (7c+)*. Bruno Potie is notorious for less aesthetic tactics, like chipping entire routes out of blank walls and roofs.

In general, ethics and style are left up to the individual, who should be aware of what is acceptable at the time. The practice of hold chipping seems to be going out of style among the 5.13 elite, but top roping before a lead is *de rigueur*. An exception to the French *laissez faire* attitude regards the re-equipping of old routes. The task was conceived by the LaPalud Climbing Club, which employs village youth to replace aging bolts and other fixed protection. The project is partly financed by a French government anxious to improve employment in depressed areas. The results can be seen glistening in the sun on classic routes, now undergoing a Renaissance because of the new bolts.

The Verdon is a safe, but committing place to climb. Rapping three pitches to a hanging belay 500 feet off the deck is an exhilarating way to start a climb, and triples the pressure to finish it. Many of the hardest routes ascend the top 150 feet of cliff, so they can be easily top roped, and, for a lead attempt, an escape rope can be left in case of failure. Bad accidents are rare in the Verdon, but wet rescues and dark rappels to the canyon floor with a long walk back to camp are common.

Jean Baptiste Tribout on Les Spécialistes (8c).

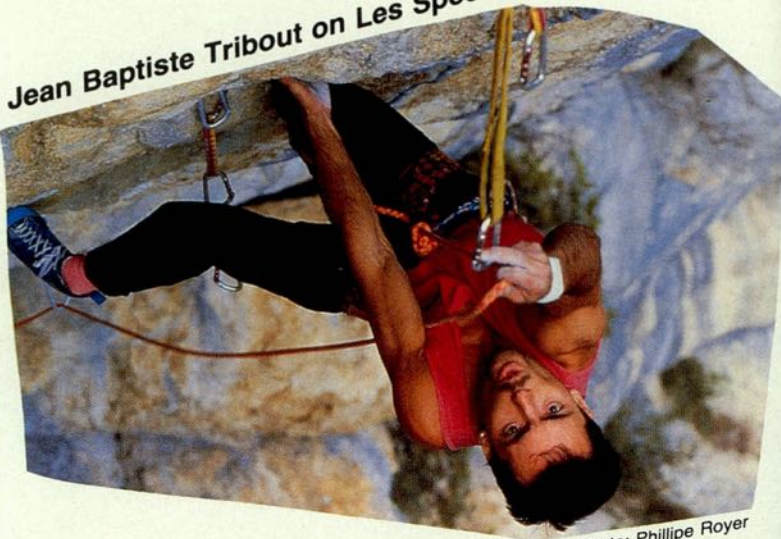


Photo: Philippe Royer

Another problem with starting from the top is locating routes, made easier by guidebooks organized around sections or *secteurs* of the Gorge. Also, the names of classic and landmark climbs are painted on top. Another source of valuable information, especially if you are looking for new or obscure routes, is Pete Harrop at the climbing shop in LaPalud.

Routes in the Verdon range from easy to obscenely difficult, with a high concentration of 5.11's and 5.12's. Many of the long classics, however, are moderate, and often follow crack lines, rare features in the Gorge. The face climbing is superb, with perfect rock the norm.

During July and August, you'll probably have to wait in line for classics, but there are hundreds of other fine routes. Another hazard of the summer season is the hordes of breathless spectators leaning over belvederes, monitoring your every move. Although some climbers enjoy the attention, one English climber I know got so distracted by the gazes of two bikini-clad French girls that he jittered into a 20-foot swandive.

It often gets too hot to climb at certain *secteurs*, although afternoon shade or a windy morning can make a difference. Mornings can be pleasantly whiled away on the beach at Lac de St. Croix, or with heartstopping swings from the railroad bridge over the Gorge, or at a natural water slide east of LaPalud. But, even on a hot day, climbing in the shade can be quite pleasant, making the area more suitable for summer visits than many other areas in southern France.

By mid-September, most tourists are gone, along with many of the climbers — the villagers breathe a sigh of relief. In the fall, the air in the Haute Provence is usually crystal clear and dry, except for picturesque morning fog and the occasional sudden thunderstorm. September and October are the best months for climbing in the Verdon. In November, nice days are possible, but infrequent. March through May are also excellent months, but the weather is less stable.

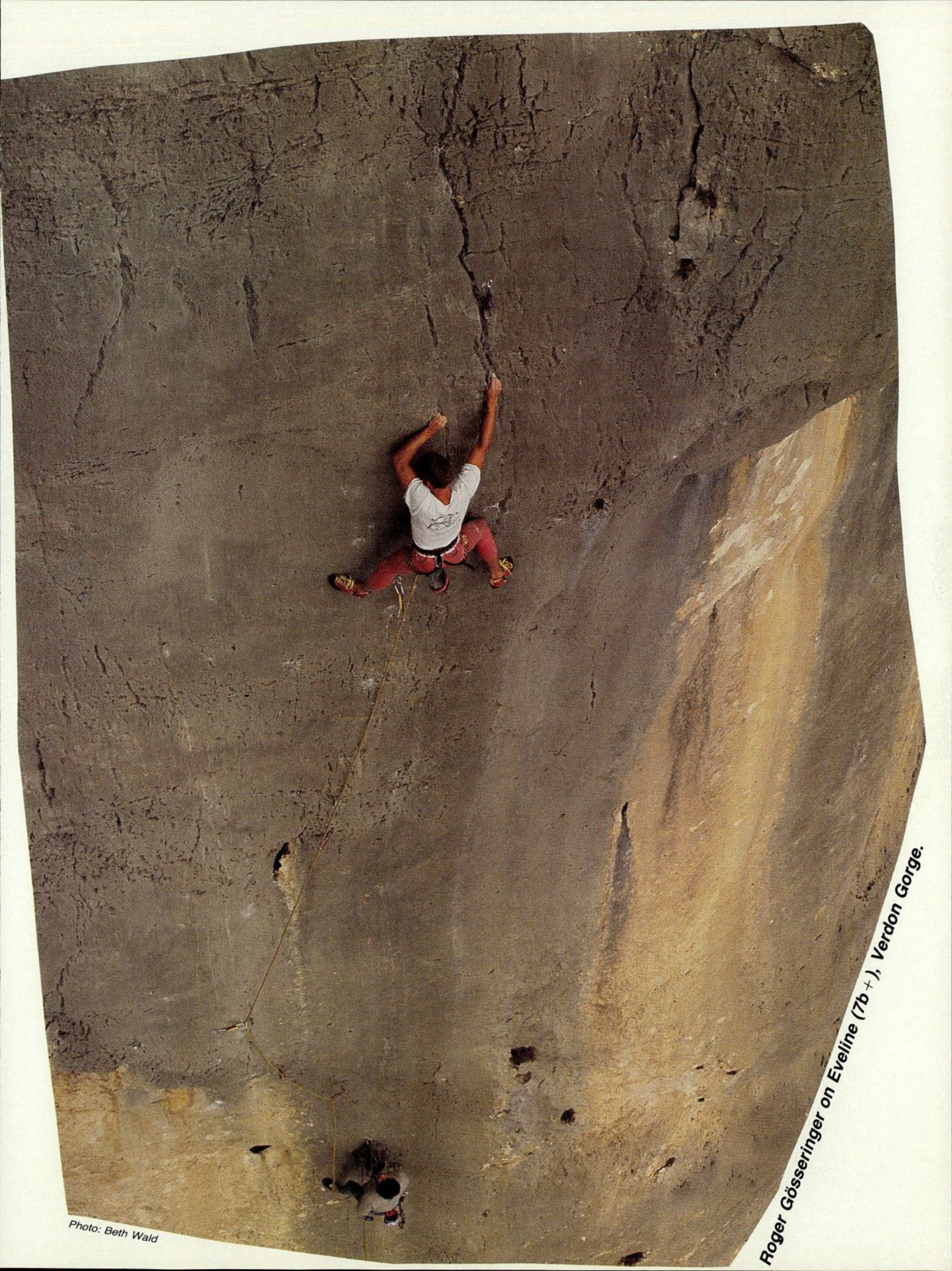


Photo: Beth Wald

Roger Gössering on Eveline (7b+), Verdon Gorge.

Jean Baptiste Tribout on Tabou Zizi (8b), Buoux.

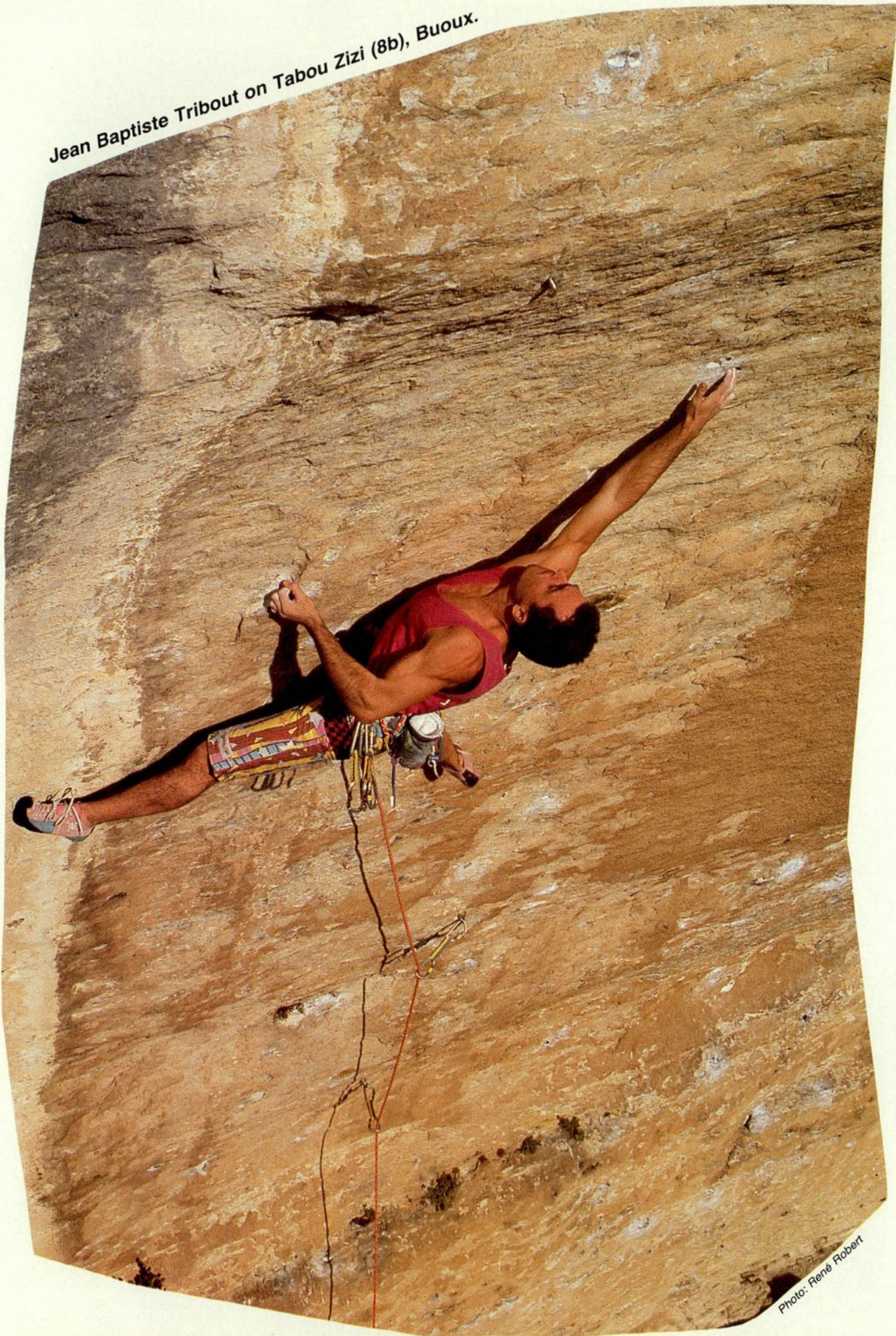


Photo: René Robert

||||| Buoux

Called "The Laboratory" and "The Gymnasium" by the climbing world, Buoux has established a well-deserved reputation as France's cutting edge crag. The Verdon may be aesthetic, but Buoux is efficient.

When I first arrived in Buoux after a two-month climbing odyssey in Eastern Europe, impeccable rock laced with bolted routes was a welcome change from long runouts on brittle sandstone above knotted slings. In between summer heat and winter cold, rock addicts from around the world come to stuff itching fingers into Buoux's famous pockets.

In the early 1980's, the tiny, rocky valley of Buoux was inundated by climbers, especially from northern Europe. But in late 1983, local villagers, frustrated with the crowded, littered campgrounds, and the bumpercar parking on the narrow road at the base of the cliff, closed the entire area to climbing. A year later, about half of the crags were reopened.

Although the perfect rock of the forbidden cliffs is tempting, there are enough routes in-bounds to keep most visitors busy for weeks. Buoux has perhaps the highest density of extreme routes in the world, but anyone can experience the fun and fascinating art of pocket pulling. Although there are several good routes easier than 5.10, the highest concentration is from 5.10 to 5.13.

The Laboratory is located near a cluster of buildings called Buoux. Since camping is still outlawed at the cliff, most climbers camp in Apt, 12 kilometers south. The campground is a short walk across the river from both the town square and the supermarket. It is more luxurious than the bare field in LaPalud, with trees, grass, clean showers, washrooms, a cafe/bar, and a general store. For an extended stay, trailers can be rented. In short, it's a bargain at five or ten francs a night, depending on whether you have a car and/or tent.

Although the crag is several miles from the campground, it is easy to arrange a ride or to hitch one at the campground exit. There is another campground nearer Buoux in Bonnieux, a small village with no store, bar, or cafe. And there is little traffic, making hitchhiking difficult.

Apt is a bustling town with two supermarkets, several bakeries, numerous butcheries, patisseries, fruit and vegetable stands, a hardware store, a climbing store, a bookstore, and several bars complete with foosball tables. Most importantly, a local vintner operates just down the road from the campground; you can fill a liter bottle with Cote de Luberon, his fine red wine, for a mere 10 francs.

Market day is something not to be missed. By 8am every Sunday, an elaborate network of booths emanates from the town square. Dodging among the throng of shoppers, you can find everything from exotic spices to shriveled goat cheeses to leather

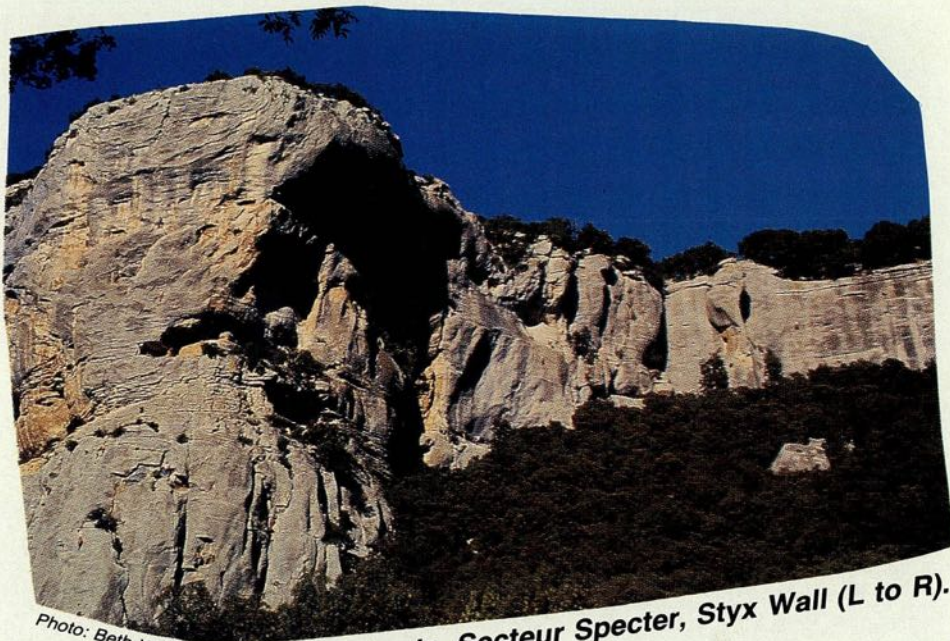


Photo: Beth Wald

Pilier de Formis, Secteur Specter, Styx Wall (L to R).

dresses to magicians. It's also a good place to stock up on fresh foods for the week. But by noon, the frenetic trading is over.

Apt is entertaining, but climbers come for Buoux's limestone. The cliff wraps around a hilltop, varying in height from one to three pitches. *Secteurs* with differing aspects provide a choice of climbing in the sun or in the shade. Grades range from 5 to 8b+, and new routes of every grade are constantly being "opened."

Even if your idea of a one finger pull up is flipping open the pop-top on a beer can, you should visit the eastern *secteur*, *Mur du Bout Monde*, to see the state of the art. On any day, some pencil-legged cragmaster will be swinging over the roof, slippered feet dangling, from one *mono-doight* (one finger pocket) to another. It's enough to make tendons pop in sympathetic anguish. The classic desperates perforating the roof include *Chouca* (8a), *Le Minimum* (8b+), and *Le Rose et Le Vampire* (8b). And at least three more 8's dot the steep wall to the left. There's nonstop activity here with climbers determined to crack the eighth grade at any cost, be it joints or 0% body fat.

Some consider Buoux a year-round crag; however, the optimal months are late September through November, and March through mid-May. Torrential rains occasionally can last up to three days in the fall or spring, and autumn nights are cold. On one bitter, drizzling night in late October, we resorted to pulling a picnic table into the heated shower room, only to be chased away by a shocked Frenchman determined to have a bath. Luckily, warm cafes with espresso and hot chocolate are a short dash away. Campground veterans can direct you to the bar where you can play foosball, write letters, or read for hours without being kicked out.

Spectators at the main belvedere, Verdon Gorge.

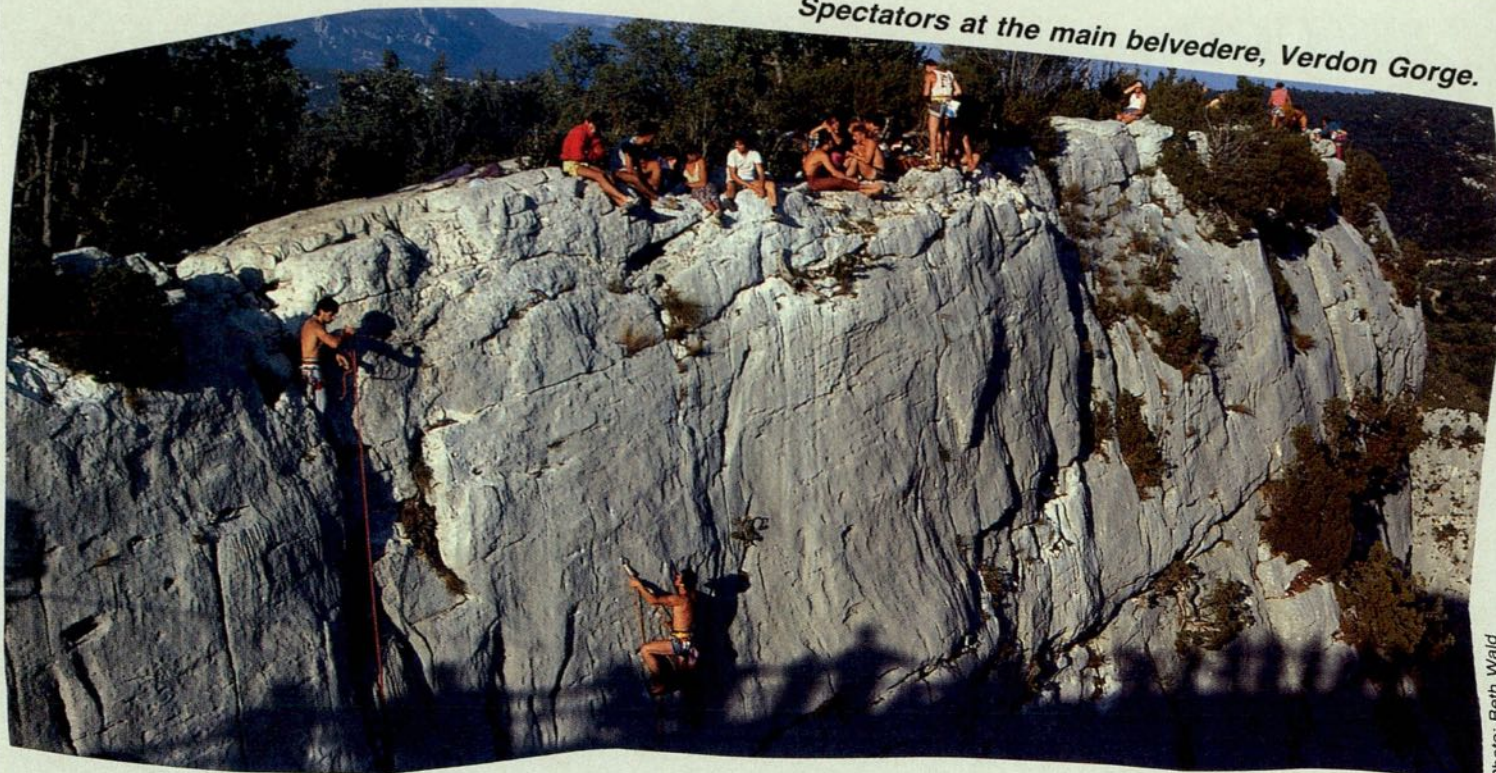


Photo: Beth Wald

French Grades. Grading in France, as anywhere, is at best an approximation of a route's overall difficulty, and at worst a means of soothing overgrown egos. Unless experienced on limestone or particularly adaptable, most climbers experience an "acclimatization" period where routes well below their limit may feel desperate. Be patient; it will fall together after several falls, and you will start to "think" in the French system, instead of always translating to 5-something.

visitors, which includes Americans. It is strongly recommended that you obtain a visa in the U.S. before you leave (through a travel agent, or the French consulate directly), but if you find yourself on the continent *sans* visa, look up the nearest French consulate, found in most major cities. A warning: Consulate offices are only open from 9am until noon, but if you get there first thing, the visa will usually be processed in an hour or less.

Apt with a station. From there, take a bus to Apt. From the Verdon, hitch or arrange a ride east to Moustiers, then continue by bus or thumb east through Balensole and Manosque to Apt.

Recommended routes.

- 5 *Block Note, Initiation Granite, Le Geometrie.*
- 5+ *Nomades.*
- 6a *GVB, La Vertu.*
- 6a+ *Endeavor, Recreativite.*
- 6b *La Roi de la Jungle, Fruits de la Passion, Golot Fou, Melodie Gael, Sourire Hawaii, Pepsicomman.*
- 6c *Souché a Mex, Le Choix de Sophie.*
- 6c+ *L'afrique Physique, Peasenteur au Grace, Devers Pepere, Pilier des Fourmis, Ultime Violence.*
- 7a *Courage Fuyon, Dresden, Le Rose de Sable, Le Rut, Plus de Trois Fois.*
- 7a+ *Gourgousse, No Man's Land.*
- 7b *Exquise Esquisse, Le Hasard, Rambo.*
- 7b+ *Cadeau Empoisonne, Os Court.*
- 7c *Ravi au Lit.*
- 7c+ *Zizi, Reve de Papillon.*
- 8a *La Ouate.*
- 8a+ *Chouca.*
- 8b *The Mission, Taboo Zizi, Le Rose et Le Vampire, Le Mains Salles.*
- 8b+ *Le Minimum, Le Rage de Vivre.*

VERDON

How to get there. To reach LaPalud from the north *sans* car, take the train to Manosque, a bus to Moustiers, and hitch east to LaPalud! Another option is to ride the train to Grenoble, a bus through Gap to Castellane, and hitch west to the village. If coming from the south, take the train along the Riviera to Nice (or car to Grasse), then north to Castellane and east to LaPalud.

Recommended routes.

- 4+ *La Demande, Arete de Belvedere.*
- 5+ *Ula, Eperon Sublime.*
- 6a *TNT, A Finque nul ne Muere, Coere de Verve.*
- 6a+ *L'arabe Dement, Ticket Danger.*
- 6b *A Tout Coeue, Barbapoupon, Reve de Fer, Frimes et Chatiment, Mort a Venise.*
- 6b+ *Tapis Violent, Baisers Sunglant.*
- 6c *Dingomanique, Margoustine Scatophage, Trou Sec, Golem, Pichnebule, Debiloff.*
- 6c+ *Missing, Au de lai du Delire, Miroir de Fou, Ctulah.*
- 7a *Douk Douk, Fenrir, L'ange de Composition.*
- 7a+ *Surveillier et Punir, Les Freres de Caramel Mous, J'suis une Legends, Chrysalis.*
- 7b *Gwendel, La Fete des Nerfs.*
- 7b+ *Eveline, Septieme.*
- 7c *Liquor de Coco, Trois Mousqueteers, Farci Pa La.*
- 7c+ *Sal Temp pour le Quay, Pappy on Sight.*
- 8a *Divan le Terrible, Claudia, Embellez c'est Pese, Take It Or Leave It, Mijo.*
- 8b *Crime Passionale.*
- 8c *The Specialist.*

BUOUX

How to get there. From Paris or the Riviera, it's best to hop the train to Avignon, the closest city to

OTHER CRAGS

If you have the time, a myriad of excellent cliffs dot southern and central France. Choosing one may be the hard part, but a couple are notable because of convenient location, excellent routes, and/or seasonal considerations.

Cimai. Just west of Toulon, near Patrick Edlinger's home town of La Seyne Sur Mer, is Cimai, a precipitous orange-hued limestone crag. Parts of the wall overhang significantly, although routes start around 6a. Cimai faces south, catching sun all winter when the rest of the limestone belt is out of condition. The best months are probably November, early December, February, and March. Although available in Toulon, camping can be chilly at this time of year. Inexpensive *pensions* are a warmer option.

French	American
4	5.7-5.8
5-5+	5.9
6a	5.10a
6a+	5.10b/c
6b	5.10c
6b+	5.10d
6c	5.11a/b
6c+	5.11b/c
7a	5.11d
7a+	5.12a
7b	5.12b
7+	5.12c
7c	5.12d
7c+	5.13a
8a	5.13b
8a+	5.13c
8b	5.13d
8b+	5.14a
8c	5.14b

Transportation. French trains are famous for their speed and efficiency. Check around for fares; slower trains or night coaches are generally cheaper, and if you are under 26, most European countries offer a discount of up to 50%. Buses take you to smaller towns where trains leave off, usually leaving right from the train station. But the last leg to remote areas can be a long, slow hitch. Renting a car is an expensive option, but will give you more flexibility.

Visas. Since fall 1986, the French government has required a visa from all non Common Market

One nice thing about the weather is that it is fairly predictable. You can count on it clouding over and storming in the afternoon, so seasoned Bugaboo climbers adhere to the tradition of pre-dawn alpine starts. And you can usually count on the weather coming out of the west. Of course, these considerations are not much help on routes that can't be completed by noon or those that face east.

Fortunately, unless you're attempting something extremely ambitious, it is possible to rap most of the routes, then run like rabbits to the security of the hut. Rappelling, however, is usually not easy.

Yes, the weather can be brutal up here. Sometimes, it will be off for a week straight, and if that's the week you drove up from way south of the border for your first Bugaboo holiday, it can be discouraging. As pleasant as the Kain Hut is, that's not where you want to spend an entire week.

On occasions, the weather can be miserable for just about the entire season. Take 1978, for example, when only two parties got up the *Beckey-Chouinard* on South Howser Tower, three parties got up Snowpatch, and nobody, apparently, got up anything else worth mentioning. This is according to the climbing register in the hut, for a season in which there were 1300 hut users. No doubt a lot of pinochle was played that summer.

But when the weather is good in the Bugaboos, it's hard to imagine a better place to be. And while it may look like it belongs in Patagonia, this place is surprisingly accessible: an hour's driving off a major road, then two hours on good trail.

Unless you're prepared to pop big bucks for the helicopter ride, you will need a car to get into the Bugs. A few miles north of Radium Hot Springs, at a little place called Brisco, a left turn into the woods leads to good logging roads, which are followed for about 30 miles. The goal is obscured by dense forest and steep hillsides practically until the trailhead. Just past Bugaboo Falls, a turnoff to the right heads toward Bugaboo Park. The main road continues another quarter-mile to Hans Gmoser's nifty CMH lodge (of heliski renown), with its expansive view and expensive beer. The turnoff is meant to keep the climbing *hoi polloi* (read: riff-raff) on track to the trailhead parking lot. From here, Hound's Tooth and Marmolata can be seen rising out of the Bugaboo Glacier.

The Conrad Kain Hut sits on a bench at the foot of the moraine of the Crescent Glacier. The hut can be seen from the parking lot, and the familiar Quonset shape appears to be an easy one-hour hike away. The problem is, what looks like the typical small hut is actually much bigger, hence much farther away.

The trail to the hut was completely overhauled four years ago. What was once a two-hour mini-epic of steep, back-breaking grades and hair-raising stream crossings is now a fairly mellow two-hour grind. It is still a grunt, however, with full climbing paraphernalia, a week's worth of food and beer, and a tent for high camps above the hut, so it sometimes makes sense to do two lighter hauls.

The hut sleeps 50, although you probably wouldn't want to be one of them. It is comfortable with about 25 occupants, but is seldom that full. For a \$6 (Canadian) nightly fee, there is running water, propane stoves and lamps, and a great place to hang out. (Sleeping bags, pads, and cooking gear are not provided.)

All in all, it's quite cozy. During bad weather there is nothing so pleasant as lying around in the upper loft of the Kain Hut, listening to the rain beat a wild staccato on the roof, looking out the window onto a bleak and miserable scene, and feeling oh-so glad you're not up on one of those lightning-rod spires.

As of last year, Kain Hut is run by rangers who are actually climbers. In fact, Chris Atkinson is a solid 5.10 rock climber and an accomplished alpinist. Perhaps more important than his own climbing is his understanding of climbers' needs and concerns. Chris is to be especially commended for his efforts at gathering all the scattered bits of Bugaboo climbing information into the hut notebook.

Prominently displayed on one of the walls is a large and imposing photo of the hut's namesake: the famous Austrian guide Conrad Kain. Old Conrad looks down from the wall at us, with our fancy Gore-Tex and Lycra, and all our tricky high-tech rock gizmos, and he just puffs away placidly on his pipe. He was a tough old bird. You can see it in his photo, in his confident, almost cocky expression and posture. It is amusing to ponder what he would think of all this. After all, he was the first to climb here.

In September 1910, Kain made the first documented trip to the Bugaboos, guiding an expedition led by surveyor Arthur Wheeler and climber Thomas Longstaff. They traveled by packtrain up Bugaboo Creek from the Columbia River, fording rushing tributaries and fighting mosquitoes as they followed a trail used by miners.

Prospecting had gone on in the rugged valley for years, culminating in 1906 with a small mining rush in the area near what is now Bugaboo Falls. Apparently, the Bugaboo name stemmed from the use of "bugaboo" by miners to describe a dead-end mineral lead. J.F. Garden, in *The Selkirks, Nelson's Mountains*, wrote that the name of the range most likely took hold from a large mine at the head of present-day Bugaboo Creek.

The Longstaff-Wheeler Expedition was not looking for minerals. They were seeking passage to the peaks known as the Spillamacheen Spires, and wanted to explore the range on their way to the Duncan River. They were not sure Bugaboo Creek would lead them to their objective, but after a long journey on horseback they were rewarded with a breathtaking view of an immense glacier that fed the north fork of the creek. They named it Harmon's Glacier, although it eventually became known as Bugaboo Glacier.

Six years later, Kain extensively explored the upper nevé of the Bugaboo and Vowell glaciers. He guided clients to the summits of Rock Ridge, Howser peaks, and the North Tower of the Howser Massif. Unlike some guides of the day who were content to take their clients up "milk runs," Kain was interested in difficult climbs. According to Chris Jones in *Climbing in North America*, to Kain, "Mountaineering meant technical climbing."

The North Tower of the Howser Massif was a case in point. The smooth, compact granite was new to Kain's companions, but it reminded him of the Chamoni Aiguilles, which he had seen as a young guide. Up to that point, Kain's experiences in Canada had been solely on the loose, textured sedimentary rock more characteristic of the Rockies. But Kain adapted



Climbers approaching the East Face of Snowpatch Spire.

the Bugaboos

Joe Bensen Randall Green

We return to the Bugaboos, again and again. Since that first visit, seven years ago, we haven't missed a season. It just wouldn't seem right.

To look at this place, you might imagine yourself in the back of the beyond of some sort of fantasy novel. You expect to see giant pterodactyls soaring above the ridgelines or squadrons of screeching, winged monkeys issuing from the blackness of the high dihedrals.

The spires rise monstrosly, individual and dragon-like, out of tremendous fields of snow and blue ice. Seen from different angles, they resemble towering, delicate castles or great, broad ships sailing on a frozen sea.

But there's much more to do here than merely indulge in flights of imagination. These towering walls and elegant ridgelines cry out to be climbed.

Yosemite-style big wall climbers will feel right at home in the Bugaboos, as will veterans of the long, classic rock routes of the western Alps. Indeed, if any place in North America has the potential for becoming another Chamonix, surely this is it. And if France's sport climbing laboratory, Buoux, can be seen as one end of the wonderfully broad spectrum of rockdom, then the Bugs are somewhere near the other. On Bugaboo routes, one has the constant feeling of high solitude, of the Olympian detachment from the world below that drew many of us to climbing in the first place.

All the climbing here, easy or difficult, is superb. The area's crystalline granite is clean and hard, and the lines are steep, long, and everywhere in sight. The vistas are outstanding. From the tops of these spires, the view spreads out below in unsurpassed magnificence: an encapsulated granite paradise, shut off from the rest of the world by range upon range of outlying peaks. This is a very special place.

Indeed, it's the scenery as much as anything that makes Bugaboo climbing such a treat. The *West Ridge* (II 5.4) on Pigeon Spire is a low commitment run-up, something to do when the weather's questionable and you don't want to hang around the hut. Yet it is one of the most beautiful climbs in the entire Bugaboo group, and in its own laid-back way, one of the most enjoyable. The views — out onto the Howsers and back across a seemingly limitless panorama of outlying ranges — are nothing short of spectacular.

That is when you can see them. Perhaps the only drawback to climbing in the Bugaboos is the wretched Canadian weather. Not only is the season very short — from mid-June until the start of September — but there is just no telling whether you'll even get out of the Kain Hut. Nature cuts loose here with unbridled enthusiasm and total disregard for the recreationalist.

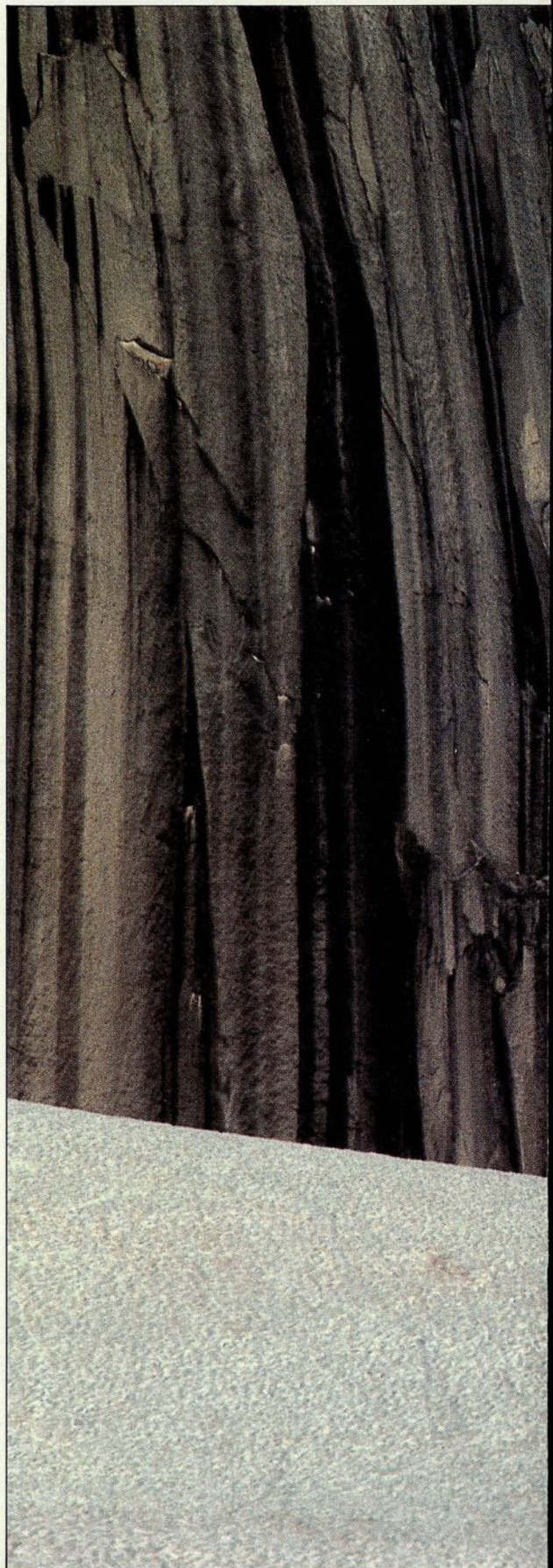
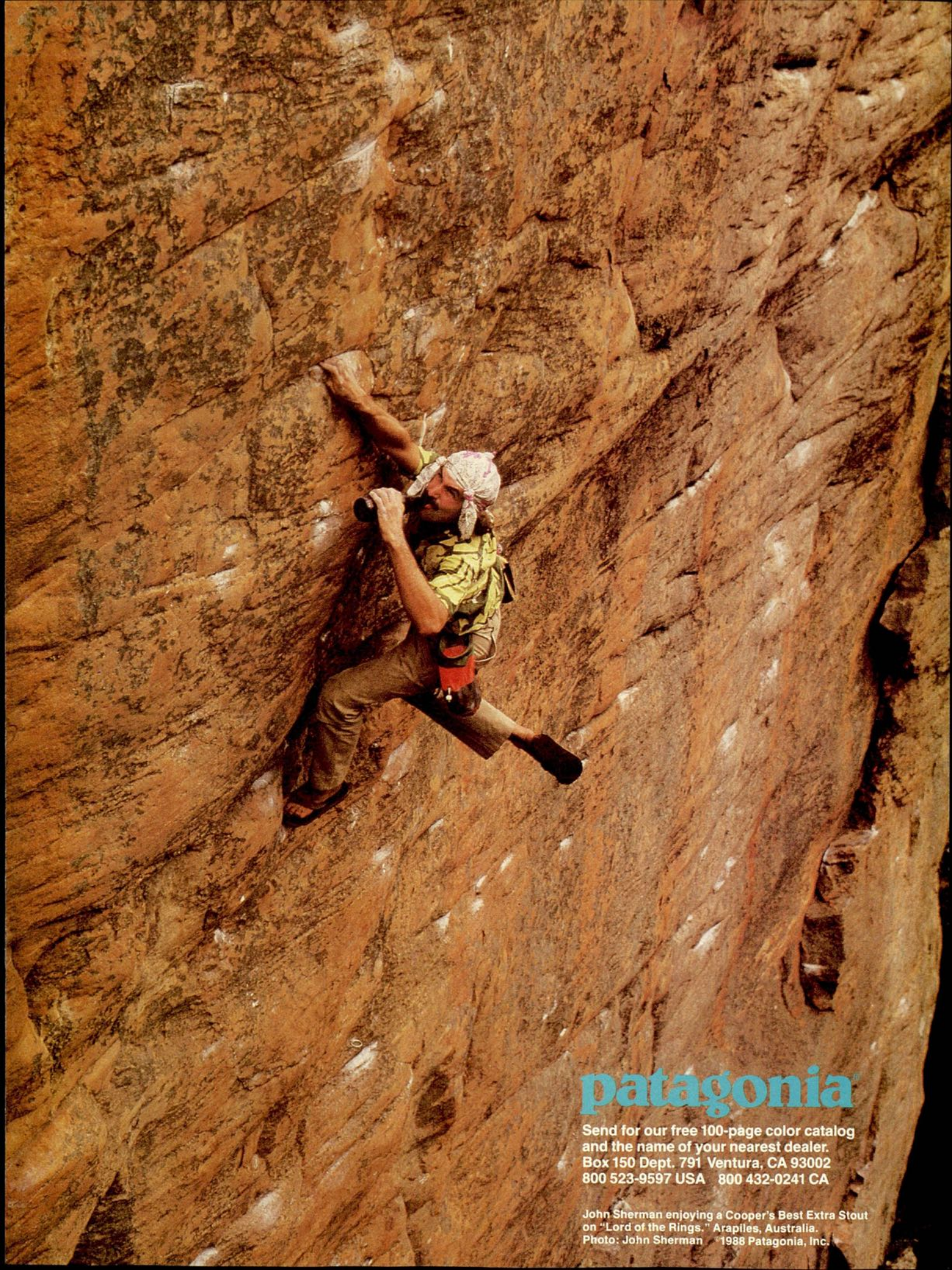


Photo: Peter Cole



patagonia

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John Sherman enjoying a Cooper's Best Extra Stout
on "Lord of the Rings." Arapiles, Australia.
Photo: John Sherman 1988 Patagonia, Inc.

On our first route, *Sortie des Artistes*, I found that those starfish-shaped crack systems made great fingertip holds, and that it didn't take much to stay on this not-quite-vertical rock. Often, I found myself stemming across a flat face, one hand below my feet, the other overhead, my toes curling in bizarre positions to make shoes bite into the sharp little edges. Although it was unusual climbing to me, I later learned that this is standard fare on limestone.

The routes at En Vau demonstrate the full range of French protection technique, from bolts alongside perfect nut cracks to widely spaced rusty pitons. Some French climbers told us the area was still in the process of being "equipped," so, to be on the safe side, we carried a few wired nuts, small Tri-cams, and Friends in addition to 10 quickdraws. And we ended up using all of it.

Unlike those at many French limestone crags, Calanques routes tend to follow natural lines, which made them more satisfying. They also have a lot of features, which break up the monotony of lunging from one *goutte d'eau* (solution pocket) to another. *Sortie des Artistes*, for example, began with a tunnel through a cave, followed by a chimney to a crack, then onto a steep face, which led up through an overhang and onto a tree-shaded ledge. And that was just the first 5.8 pitch!

Another great classic at En Vau is *Super Sirene*, an immaculate three-pitch 5.9 up a fin of white rock, made interesting by the marble-like polish on all the crux holds. *Eperon de Americains* is a fine 5.9 put up by Royal Robbins, Gary Hemming, and John Harlin on a drying-out trip from the Alps. This route climbs hand cracks to a cave, from which you do an incredibly intimidating hand traverse with nothing but the Mediterranean beneath your feet.

Doigt de Dieu is an impressive finger of rock seen from the beach. Hard 5.10 moves at the base give way to beautiful face climbing and an overhanging hand crack to finish. Another great route is the *Pouce Integral*. Several pitches of 5.7 and 5.8 lead to a cave that tunnels through a 30' thumb-like spire. You climb in one side, out the other, then up to the tiny summit. Although there's a bolt at the top for a rappel, the classic way off is to downclimb to the lip of the cave and make a very wide step to a neighboring wall.

Evenings at En Vau were spent near the beach, enjoying the calm water after the crowds were gone, or attempting any of the numerous difficult toprope problems. As at other French crags, the international

crowd is friendly and relaxed, although it's exceptionally low-key here where there is little competition for difficult routes: the hardest free route so far goes at about 7a/b (5.12a), a mere warm-up at most limestone crags.

Not only was this our first time on limestone, it was also our first experience in an area with rappel-placed routes. Indeed, the bolts were abundant and well-placed, and I confess that I liked them.

But the bolts didn't necessarily eliminate the sense of adventure. Because we had no guidebook, other than a few pages Xeroxed from an old Rebuffat book, we had no idea how difficult most of the routes were. We would just pick a likely looking line and try it, knowing that if we failed we could bail. More often than not we succeeded, often on routes harder than we would have tried had we known the grade.

I was leading 5.10 when we went to En Vau, but during the week there I unwittingly flashed a 7a (5.11d). Bolts and ignorance have a way of inspiring confidence.

It was a mysterious bolt ladder that led us to our best climb in the Calanques. Walking down the narrow ridge that separates En Vau from the neighboring calanque called Castleviel, we had spotted a line of bolts snaking down a fantastic white pillar that plunged into the sea. No one on the beach knew anything about the route. It took awhile to get up the courage to try this mystery line, but on our last day we decided to go for it.

The climb was superb. Mia led the first pitch, the hardest either of us had ever done. It started with a corner, then wove up a bulging white wall. The shiny bolts and loose flakes told us this was a brand new route; perhaps ours was the second ascent, maybe even the first — who knew? The second pitch was as good as the first, climbing an arete to an overhanging hand and fist crack. A final pitch up the narrowing arete led to the top and a supreme sense of satisfaction.

We still don't know what this fantastic route was called. To us it will always be *The White Pillar* and the finest climb we did in Southern France.

Les Calanques aren't for everyone. If big numbers turn you on, you won't find them here. Nor is this wilderness. If you arrive during an Italian holiday week (about 50/50 odds during the spring and summer), the climbs will be crowded. But for extremely high-quality routes in a unique setting, and a perfect warm-up for the more difficult French crags further north, this is the place.



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||||| The Calanques

by Dougald MacDonald

Sainte Victoire. Not far from Buoux is Sainte Victoire, an expansive cliff extending for eight kilometers and rising up to 400 meters. The best times are spring and autumn. To reach Sainte Victoire, go 15km from Aix-en-Provence through St. Antonin towards Puyloubier. There is camping 3km outside of Aix-en-Provence.

Le Saussois. Southern France, by no means, has the monopoly on great crags. Le Saussois, 130km from Paris in the Burgundy region, was an influential area in the development of free climbing in France. Gymnastic moves were being practiced here several years before the revolution began in the Verdon. Bouvier's ascent of *Chimpanzadrome* (7c+) helped rocket France into the free climbing race. Because of its long history, Saussois has a better choice of moderate climbs than more modern crags, although some of the popular routes can be polished and slippery.

Saussois is located near Mailly-la-Ville, 32km from Auxerre. From Auxerre, take the N-6, the Chateau road leading past the bottom of the cliffs. There are two main cliffs, La Grand Falaise, 55m high, and the upper cliff of Le Renard above the Yonne River. A few moderate, recommended routes are: *Detournement Majeurs* (5c), *Toufou* (5c), *Loupissima* (6c+), *Super Eschelle* (6c+), *Ventripote* (6c+), *L'ange* (6c+), *Chopinette* (6b), *Troyenne* (6b), *Jardin Suspendu* (6b+), and *Mimosa* (6b+).

Fountainbleau. If you have a day or two to spare in Paris, Fountainbleau is a must visit. Training ground of such stars as J.B. Tribout, Jacky Godoffe, and the Le Ménestrel's, this major sandstone bouldering area has honed the muscle of French climbers for decades.

Guidebooks to this vast "rock garden," available in Paris or in Fountainbleau, describe the wide range of problems, organized into circuits of every difficulty. Each grade has a color code, and individual problems are numbered consecutively to keep boulderers moving efficiently through their workout. Rosin has been used here for many years, so older, popular problems can be quite slick. Bas Cuvier is the most popular of the main areas; it is located on the RN-7, 5km NW of Fountainbleau. Other areas are the Trois Pignons, Puisselet (more isolated) and Gorges d'Apremont (excellent circuits). You can camp at the Buthiers Outdoor Centre, or at the Bas Breau campground near Bas Cuvier. A train leaves from Paris for Fountainbleau several times a day.

References. Below is a partial list of the best guidebooks to French crags. They can be bought in Paris at A Vieux Campeur or at climbing shops in Grenoble, Apt, and LaPalud. The German book *Topos Ala Carte* is an excellent summary of French limestone, with topos of most of the crags, maps of how to get there, lists of routes, and camping information. Even if you don't read German, it is a good resource. It is available in the U.S. at some shops, and throughout Europe.

The Verdon by Bernard Gorgeon, Alexis Lucchesi, the Remmy's, and Patrick Bestagno (French). This is an extensive, new guidebook which should be available this spring in LaPalud.

Verdon by Marco Bernardi (Italian). Routes are grouped by grade, and there are good photos. Published by Edizioni Mediterranee.

Buoux by Jean-Baptiste Tribout (French). Published by *Adventures Extraordinaires*, distributed by Berghaus and Salewa.

Rock Climbing in France by Jean Marc Bouvier. Published by Diadem (English translation available in U.S.). This book lists crags, a little history, and how to get there, but has few photos, no topos, and is rather outdated.

Topos Ala Carte by Martin Lochner (German). An excellent guide which describes most of the French crags, with lots of info about routes, getting there, and camping, with topos, maps, and lists.

After a winter in London, neither Mia or I were in great climbing shape, and we were intimidated by the thought of the tendon-searing walls at Buoux or in the Verdon. We weren't up to the pocket-pulling 5.11's I had read about, but we wanted to experience France's infamous limestone.

A few queries to friends in London convinced us that Les Calanques was the place for the spring warm-up that weekend warriors like us needed. Every climbing photograph I'd ever seen showed smiling faces, and that alone was enough to warrant a visit to these sunny crags on the French Riviera.

It sounded great. Most routes fall in the 5.8 to 5.10 range, and are just off vertical, making balance as important as finger strength. And like most French crags, ample fixed protection would allow us to push our limits if we wanted to. So, we decided to hop the train to Marseille.

Les Calanques is a series of fjords spanning ten miles of the Cote D'Azur, between Marseille and Cassis. En Vau, perhaps the best-known of the calanques and the one closest to Cassis, epitomizes the area. Laced with solid one- to three-pitch routes, its dramatic white limestone spires and buttresses rise from the green Mediterranean, sailboats floating in and out.

Unfortunately, the spectacular setting also draws hordes of nude sunbathers to the tiny beach, which becomes littered as a result. The French seem less conscious of the environment than do Americans.

Mia and I had hoped to avoid the scene at En Vau by hiring a boat to take us to more remote calanques, like Morgiou or Sormiou. But to our dismay, the boats only go as far as En Vau in the spring, ferrying sunburned Parisiennes back and forth between the beach and the bars in Cassis. Reluctantly, we joined the crowd.

Climbers with cars usually hike in each day from a parking lot west of Cassis; cars are frequently broken into here, so caution is warranted. Most climbers stay at the city campground, Les Cigales, which means "the cicadas," but may be loosely translated as "700 Italian and German schoolchildren holding a soccer match in your tentsite at seven o'clock in the morning."

We opted to camp right at En Vau, and, since we had no car, took the boat out of Cassis. The boat ride costs about \$3.00 per person, avoids a 45-minute hike, is very scenic, and allows you to carry plenty of food and water, which are unavailable at the beach. We were happy to find the tourists less of a distraction that we'd feared; during the day we were off climbing, and they were gone at night, leaving this beautiful place to us.

Camping is illegal at En Vau, but bivying seems to be tolerated. Most evenings, a jeep full of the local gendarmes would bounce down to the beach, but they didn't seem too enthused about rousting out campers. They'd just stand around chatting for about 20 minutes, immaculately outfitted in freshly pressed uniforms, before piling back into the jeep and driving away.

We felt safe anyway, nestled in a shallow cave 50 feet above the beach. It was a limestone palace, complete with a flat floor, shelves for cooking and stowing gear, close-up views of the climbing action, and a private toilet in another cave nearby. I had bought "holiday insurance" in London after hearing all the theft stories, but the only thief we encountered was a marauding seagull that ate one of our apples.

I had never climbed on limestone before, and at first glance I wasn't sure I was going to like it. Much of the rock at En Vau looks like vertical mud, split by occasional cracks and corners. But I discovered a unique new world of climbing, and soon realized why limestone can be so addictive.

Cathy Dunlop on the Southeast Corner of Snowpatch Spire.

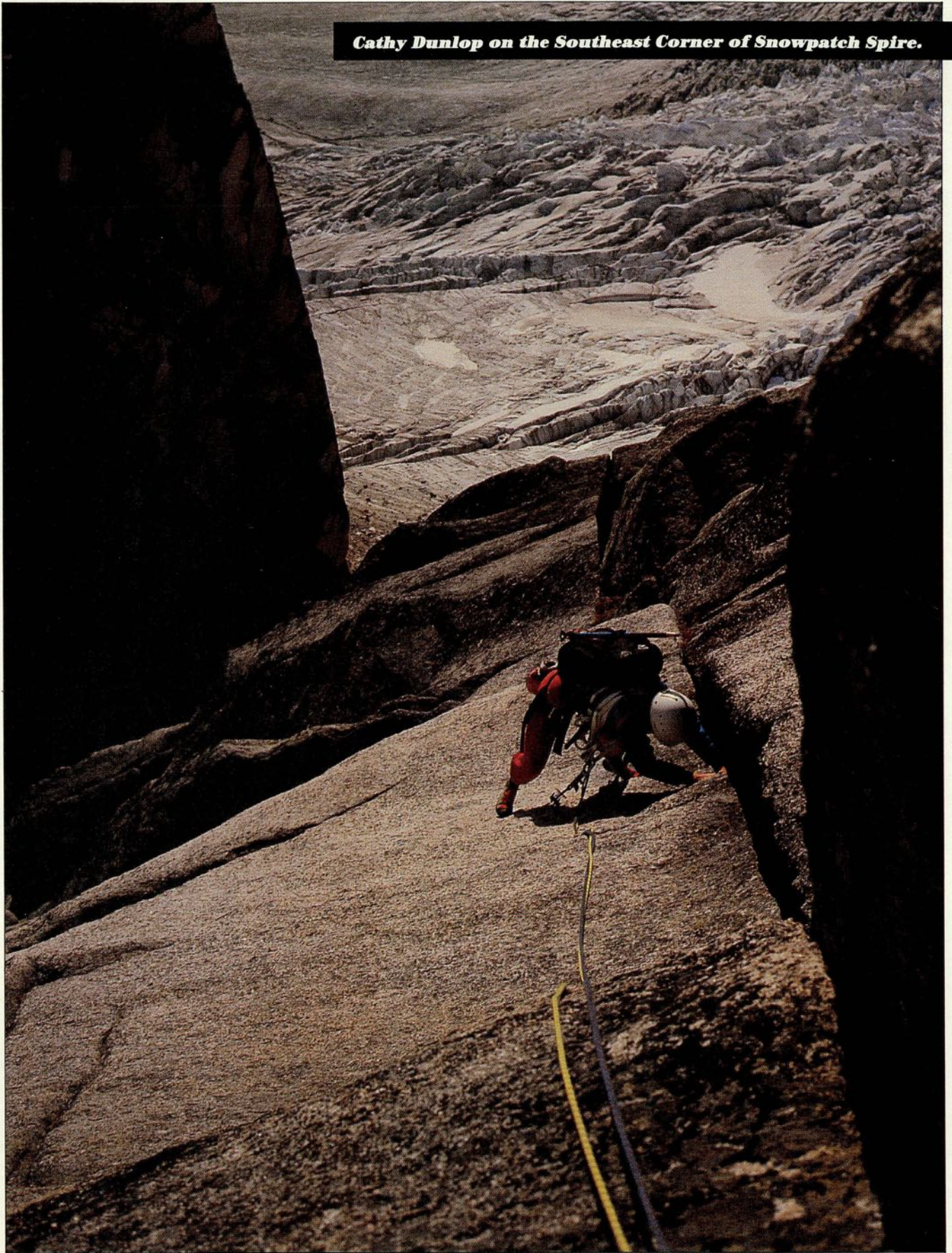
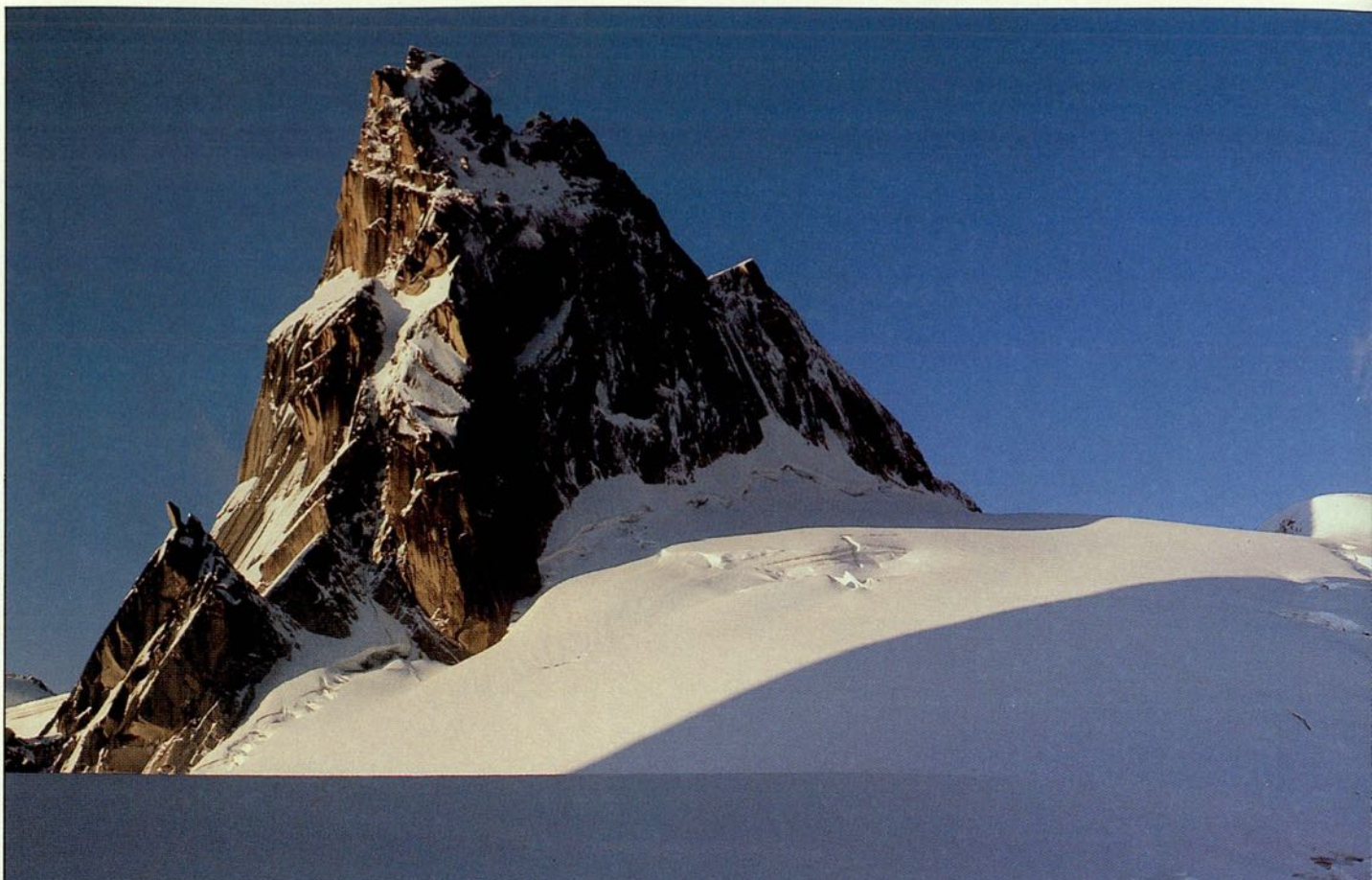


Photo: Chris Atkinson



Pigeon Spire and the Howser Spires.

quickly, giving the team the first ascent of the highest tower in the area.

After Howser, the most appealing summit was Snowpatch Spire, but since Kain deemed it unclimbable, attention was turned to Bugaboo Spire. With Albert MacCarthy, Bess MacCarthy, and J. Vincent, Kain set his sights on the South Ridge. They found it relatively easy until a final obstacle blocked their passage only a few hundred feet from the summit. A sharp gendarme with sheer 1000-foot drop-offs on either side seemed to be a "veritable bugaboo," as MacCarthy later referred to it.

Amazing his friends, Kain attacked it directly, boldly leading a steep friction slab without protection. Easier climbing led to the South Summit. For years, the Gendarme Pitch, at 5.5, was considered the hardest rock pitch in North America, and Kain referred to Bugaboo Spire as his most difficult Canadian ascent. (Today, with modern equipment, many climbers consider the *Kain Route* a pleasant rock scramble compared to Kain's snow and ice route on Mount Robson.) It is possible that the common use of the name Bugaboo Spire came from this epic first ascent.

No other new routes were established in the Bugs until 1930 when Kain returned with Eaton Cromwell and fellow guide Peter Kaufmann to climb Center Peak (Marmolata) by its East Ridge. That same summer Kaufmann led Cromwell to the unexplored summit of Pigeon Spire via the West Ridge (III 5.4). This dramatic granite peak stands between Snowpatch and the Howser Massif on the upper northwestern reaches of the Bugaboo and Vowell glaciers. When

viewed from the Vowell Glacier, it looks like the profile of a bird facing east with its tail feathers extending west toward Howser's South Tower; its beak forms a pronounced sharp summit.

These ascents marked the end of the Bugs' early non-technical exploration. Although class five ratings have since been given to some of their routes, the leader was usually third classing, dragging a rope to belay the rest of the party. The use of pitons was disdained, and anchored belays and lead protection were uncommon. "The leader must never fall" was the unspoken rule, so virtually no one ventured onto the steep, smooth faces of the spires.

As the 1930's ended, Snowpatch Spire became the coveted prize. Its reputation grew from Kain's belief that it was "flatly impossible" to climb, and at least nine unsuccessful attempts were made on the formidable spire prior to 1938.

During that summer, Fritz Weissner and Dartmouth undergraduate Chappel Cranmer made the most concerted effort. By mid-afternoon on their first day they were almost at a level adjacent to the distinctive snowpatch on the spire's southeast shoulder. Feeling they hadn't enough light left and reluctant to bivouac on the seemingly featureless wall, the two retreated. Weissner knew the spire could be climbed, but felt the final headwall looming above the snowpatch would be predominantly aid. Weissner later wrote about his misgivings at doing a climb which was "merely an affair of driving iron in virgin rock."

The traditional aversion to piton use was yielding

Photo: Ed Cooper



to new ethics, introduced by climbers who were using pitons in major rock climbing centers in the United States. Weissner had removed some of the Snowpatch's psychological barriers after his reconnaissance of the lower half of its southeast shoulder. Two years later, Californian Raffi Bedayn and Canadian Jack Arnold erased what remained.

In the summer of 1940, Bedayn and Arnold led a party past Weissner's high point until they viewed the discouraging headwall. There, the others descended, leaving the pair with bivouac gear and food. In the *American Alpine Journal*, Bedayn recounted a rodent pilfering their foodsack during the night. The two awoke in the morning to discover the "well fed thief" escaping up what turned out to be the key to the headwall, the "vein pitch." The climbing required piton protection but was done mostly free. Snowpatch Spire had finally been climbed, leaving us with the now classic *Southeast Corner* (IV 5.6).

Although many climbers visited the region in the 1940's and early 1950's, most were satisfied with repeating established routes. One notable exception was the first ascent of the North Face of Pigeon Spire in 1948 by Fred Beckey, Joe Hieb, and Ralph Widrig. Rated IV 5.7 A2, the route was a significant jump in Bugaboo standards.

Things began to heat up in 1955 when Shawan-gunks activist Jim McCarthy teamed up with John Rupley, George Austin, and David Bernays to ascend the virgin summit of the Central Tower of the Howser Massif. The following summer, McCarthy returned with fellow Gunks ace Hans Kraus to estab-

lish routes on the West Face of Snowpatch (at 5.8+, the hardest free climb in the area at the time) and the South Face of Pigeon. In 1958, Bugaboo Spire yielded another plum, this time to Dave Craft, David Isles, Dick Sykes, and John Turner when they ascended the *Northeast Ridge* (IV 5.7).

The summer of 1959 saw interest in alpine rock climbing surge to new heights. The Bugs' growing reputation for virgin rock, offering new routes with continuous difficulty, and reasonable access (due to improvements on an old logging road built in the early 1940's) attracted a growing number of "heavies" from all over North America. As Chris Jones wrote, "The race was on."

A seasoned and experienced Fred Beckey returned 11 years after his first visit, for a tour-de-force that would not be eclipsed for years. Sparked in part by competition (Ed Cooper was hot on his heels), Beckey's first project was the prized East Face of Snowpatch. He quickly teamed up with German Hank Mather, but after four days of difficult nailing using homemade pitons and prusiks, the pair had only climbed four pitches, leaving fixed ropes and returning to the ground every day. Finally, they cut their umbilical cord and reached the summit in an intense 2 1/2 day push. Jones commented that their route, initially rated V 5.7 A2, was the "most impressive alpine rock wall yet climbed on the continent."

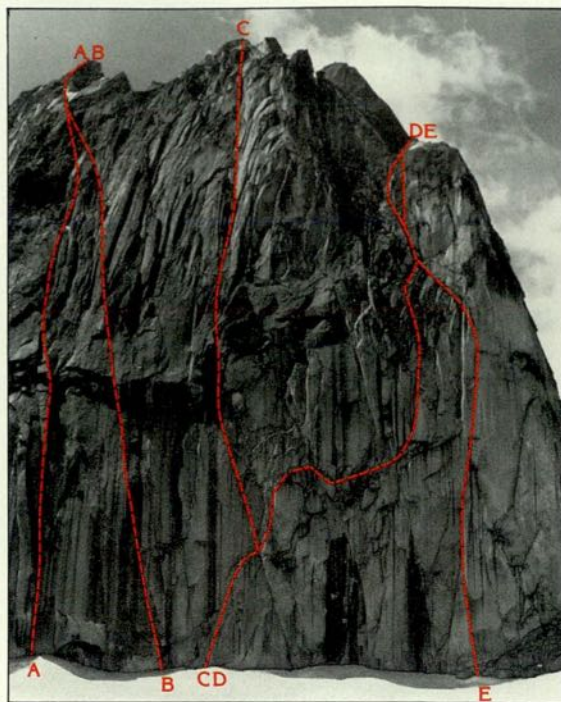
While Beckey was busy with the East Face of Snowpatch, Cooper was attempting the expansive 2000-foot East Face of Bugaboo with Art Gran, but was turned back 500 feet from the summit. The next



Climbers on Sunshine (5.10c), Snowpatch Spire.

Photo: Chris Atkinson

Snowpatch Spire

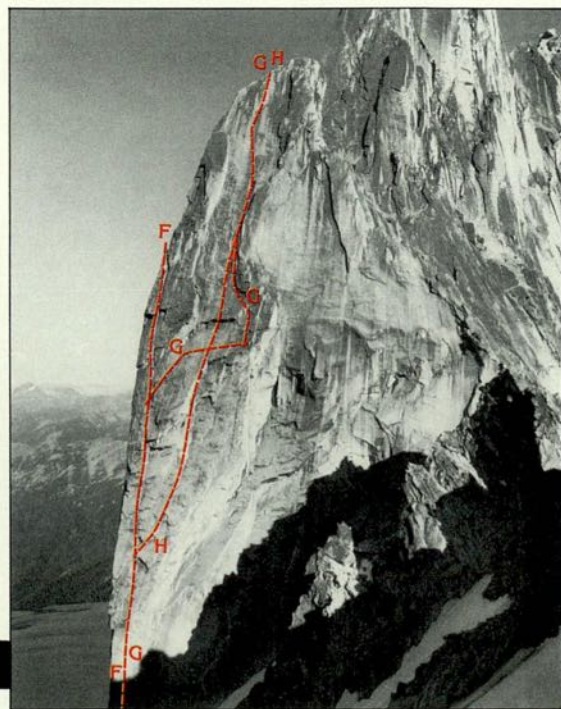


East Face

- A. Beckey-Mather (VI 5.7/A2)
- B. Chouinard-East Face Diagonal (VI 5.7/A3)
- C. Dues ex Machine (VI 5.9/A3)
- D. Sunshine Wall (IV 5.9+)
- E. Tom Eagon Memorial (V 5.9/A3)

North Face

- F. Bugaboo Corner (IV 5.9+)
- G. Banshee (IV 5.9+)
- H. Sunshine (IV 5.10c)



summer, the determined Cooper worked on the route mostly by himself — almost unheard of on alpine walls — until his hammer broke and he was forced to give up once again. When the now discouraged Cooper dragged back to Boulder Camp, the central tenting area, he was relieved to find that Gran also couldn't resist another season in the Bugs. They returned to their nemesis and soon upped the Bugaboo ante to V 5.8 A2.

But Beckey wasn't finished. He ticked off a new line on the West Face of Snowpatch with Brian Greenwood, then teamed up with P. Geiser and R. Sadowy to climb the first route on the West Face of Bugaboo Spire. Cooper didn't stay on the sidelines long, and soon joined up with the legendary Layton Kor for the East Face of Pigeon Spire (V 5.7 A2). Kor, who was making his first appearance in the Bugaboos, also popped off two other fast first ascents, the North Face of Bugaboo Spire (V 5.7 A1) and the East Face of East Post Spire.

Kor's most notable effort, however, was that of the East Face of Pigeon Spire with Cooper. The route is dominated by a large, low-angle slab on the lower half of the face, above which a steep broken headwall leads to the summit. The easy-looking slab enticed the two to venture up for a look at the upper headwall. They found the climbing hard, but within their abilities, and as they topped out it started to snow. In Randy Morse's *Mountains of Canada*, Kor is quoted as saying, "The rock on the face is excellent, a real joy to climb, and (it) is bound to become a classic route." He was right; the route has seen many ascents since going free at moderate 5.10.

In 1961, Beckey was back on the scene, this time teaming up with a young Yosemite hotshot named Yvon Chouinard. They added a new route on Pigeon Spire and another on the remote West Buttress of South Howser Tower. The latter has since become known as a landmark achievement and one of Bugs' most famous climbs, the *Beckey-Chouinard*. The pair cruised the 22-pitch climb in 1 1/2 days, finding continuously difficult crack climbing, and rated the route V 5.8 A1. Beckey felt that Chouinard's Yosemite experience was the decisive factor. The route has since gone free at moderate 5.10, and its popularity is second only to the Bugaboo Spire's *Northeast Ridge*.

Beckey, of course, was not through. In 1963, he climbed two more major new lines, one on Pigeon with Steve Marts and another on the West Buttress of the North Howser Tower with Greenwood. And in 1967, 19 years after he first visited the range, he established yet another new line on Snowpatch with Galen Rowell.

During the latter half of the 1960's, very little new activity was recorded in the area. Besides Beckey's 1967 climb, the only other first ascent of note during this period was that of the 2000-foot South Face of Snowpatch (IV 5.7 A4) in 1966 by John Hudson, Ants Leemets, and Richard Williams. A notable event of a different sort did take place in 1965, when the Alpine Club of Canada erected two fiberglass shelters at Boulder Camp. The 12-foot hemispheres of white plastic capped with red ventilators were disdained by many visitors. Galen Rowell commented in the *AAJ*, "In my humble estimation it would be better to donate them to a construction company for use as out-houses."

In 1969, the British Columbia Parks Service set

aside an area which included the immediate area around Boulder Camp and the access trail, calling it Bugaboo Glacier Provincial Park. Meanwhile, all the major glaciers and spires became part of the Bugaboo Alpine Recreation Area. Three years later, the Conrad Kain Hut (built by the American Alpine Club at a cost of \$20,000) replaced the fiberglass huts, and tent camping was restricted to designated areas.

The establishment of the Bugaboos as a Provincial Park and Recreation Area, and the building of the new hut coincided with the period of greatest expansion in North American rock climbing. The impact on the Bugaboos was such that the 1970's saw the area's most intense push of standards.

The decade was kicked off by Chris Jones, Archie Simpson, and Oliver Woolcock's ascent of the Southwest Face of North Howser (V 5.7 A.2). But the real standard-pushing started when Jones, Rowell, and Tony Qamar added another route on the same tower that was considerably longer. Called the *Seventh Rifle* (VI 5.9 A2), the route was the first Grade VI in the Bugaboos. Within a few years, it became a prized goal for free climbers, as knowledge of its superb cracks became widespread.

Most of 1971's efforts, however, were firmly fixed on Snowpatch, and the season produced four new routes. Edward Davies and Pat Derouin climbed an obvious crack line splitting the northeast corner and facing Bugaboo Spire. This classic crack, which they named *Bugaboo Corner*, starts as thin-hands and gradually widens to a squeeze chimney; its striking appearance and the fact that it remained to be freed would tantalize visiting Yosemite climbers a few years later. Elsewhere, Jones and Jeff Lowe put up a new line on the South Face (V 5.8 A3), Chouinard, Pete Carman, and Doug Tompkins climbed an obvious diagonal crack system splitting the East Face (V 5.7 A3), and a moderate line was added to the Southwest Ridge (III 5.8).

The following year brought the Bugs' second Grade VI, with Jon Jones and Gerry Rogan's ascent of the minaret-like Southwest Pillar of the South Howser Tower (VI 5.8 A3). Although the route is only 19 pitches, the lower 60 percent was difficult nailing. After a day of working on the lower pitches, two bivouacs were required to complete the route.

A third Grade VI was added in 1973 when Hugh Burton, Mike Irvine, and Steve Sutton bagged another quality climb on the West Face of North Howser Tower, *The Warrior* (VI 5.9 A3). Of its 20 pitches, nearly half were difficult aid. Big aid walls weren't attracting the only attention. During that same summer, Jon Jones and Sybille Hechtel added *Degringolade* (IV 5.9) to the West Face of Snowpatch.

In 1974, two more routes on Snowpatch were recorded. Another Grade VI, *Deus ex Machina* was established on the East Face by Mike Jefferson, Dennis Sanders, and John Shervais, the West Face was climbed by Boulder activist Art Higbee and Bill Dougherty at a surprisingly easy 5.7.

Higbee, fresh from a spring in Yosemite, was keen to free *Bugaboo Corner*. His interest and ensuing success would eventually kick off a new direction in Bugaboo climbing: freeing long aid routes. He teamed up with Mike Kosterlitz for the free ascent of *Bugaboo Corner* via a slight variation and renamed it *Banshee* (IV 5.9+).

The latter half of the 1970's was an explosive time in the Bugs, especially in wake of the new free climbing standards rippling across North America. Unfortunately, much of the new route information from this period was lost when the hut route book disappeared prior to 1980. From here the story relies on personal accounts and hearsay.

In 1975, excited about the free climbing possibilities on Snowpatch after his success with *Banshee*, Higbee returned with David Breashears for an attempt to free the East Face. After attempts to free Half Dome's *Northwest Face* with Jim Erickson, Higbee was well primed to try a major rock face in similar style in the mountains.

On Higbee's previous visit, he had scoped a line that was actually part of the giant flake forming the upper part of *Bugaboo Corner* on the North Face. He and Breashears found the first few pitches to be moderate cracks that had apparently been nailed by other parties (evidently, they were on *Deus ex Machina*), but soon they were on new ground, traversing on ledges to gain the upper crack systems.

Higbee recalls the upper chimney pitches:

"Part of the route followed the opposite side of the huge *Bugaboo Corner* flake. You could see through it. We were at least a hundred feet back inside of the flake. I offwidthed and squeezed up until I saw an opening I thought I could tunnel through. If I could do it, I knew we had the route in the bag.

"Well, my shoulders fit but my hips wouldn't. So, I had the great idea that if I ditched all my extra gear and took off my pants I might fit through the small opening. I can still remember being on the edge of panic thinking I was going to get stuck. I slipped down several times, skinning my knees and ass, all the while thinking how silly it would be to die here with my pants down."

Unable to fit through the opening, Higbee found another way. Remarkably, it only took the pair ten hours for the complete climb, which then was the fastest ascent of any route on the East Face—a notable achievement that was virtually ignored in the climbing world. They named it *Sunshine Wall* and conservatively graded it 5.9+.

It's not known if the entire route has ever seen a second ascent. Although Daryl Hatton and John Simpson's 1978 climb, *Tom Eagon Memorial Route*, finishes in the same chimney system, it starts directly below with difficult nailing similar to *The Shield* on El Cap!

During the late 1970's, the cliff in the Bugaboo-Crescent cirque was explored, giving the Bugs a less-committing free climbing testing ground. Rumor has it that Pat McNerthney was first to climb one of the striking cracks in the cliff's huge dihedrals, dubbing it the *McTech Arete*, which has since become the area's nickname. Today, the cliff is a popular off-day crag for those wanting to do some rock jocking without the seriousness of the higher peaks.

At a distance, the two distinct dihedrals that characterize the *McTech Arete* area are dwarfed by Bugaboo and Crescent Spires. But the cliff was large enough to draw attention, and by the turn of the decade, several high-quality 600-foot routes had been established. With a top standard of 5.10, they were the hardest free climbs in the Bugs.

In 1980, Bugaboo free climbing standards continued to surge forward, the biggest jump coming at the hands of Hugh Herr on *Energy Crisis* (5.11) in

the *McTech* area. On the East Face of Bugaboo Spire, Mike Tschipper and Tom Gibson free climbed the *Cooper-Gran* at 5.10+, avoiding a bolt ladder by adding a two-bolt face variation to the right. To the left of the *Cooper-Gran*, Herr, accompanied by his brother Tony, added yet another free line to Bugaboo, this one at 5.10.

Meanwhile, Alex Lowe and S. Scott straightened out Higbee's *Banshee*, climbing the sensational roof cracks on the North Face of Snowpatch. Although their variant rarely receives sun, they named it *Sunshine* (5.10+). Rappel anchors have since been installed on this nine-pitch crack system, so the crag rat can cavort on impeccable Bugaboo granite, then rap the route.

Despite the early jump of Americans such as Herr and Lowe, the rise in standards in the 1980's has been dominated by Canadians. Ward Robinson and John Walseth gave the big wall scene a push in 1981 with another new route on North Howser Tower, *All Along The Watchtower* (VI 5.10 A2). Reportedly, Robinson returned and freed the route Tschipper at 5.11, and later freed all but a few feet of *The Seventh Rifle*, but exact dates and ratings are unclear. Rob Rohn and Tom Gibson further jostled the Bugs' free climbing standards during their first ascent of the *Direct North Summit* (5.11+) on the West Face of Snowpatch; it is still the area's hardest free route. Rohn and Gibson also freed the upper wall of Snowpatch's *South Face* (5.11), and Peter Croft and Greg Foweraker added another fine Canadian effort with *Furry Pink* (5.10+) on the West Face of Snowpatch.

Croft has since gone on to produce a one-day solo effort that has become a true *cause celebre*. He started with the *Beckey-Chouinard* on South Howser, did a quick jaunt up the *Kraus-McCarthy* on Snowpatch, cruised *McTech Arete*, and then finished on the *Northeast Ridge* of Bugaboo Spire with daylight to spare. This is most likely the greatest single-day accomplishment in the history of Canadian climbing: 40+ pitches of technical climbing on four different peaks!

This brings us pretty much up to date. As for the future, it seems fairly unlimited. There is just so much to do here, both new routes and classics of all difficulties.

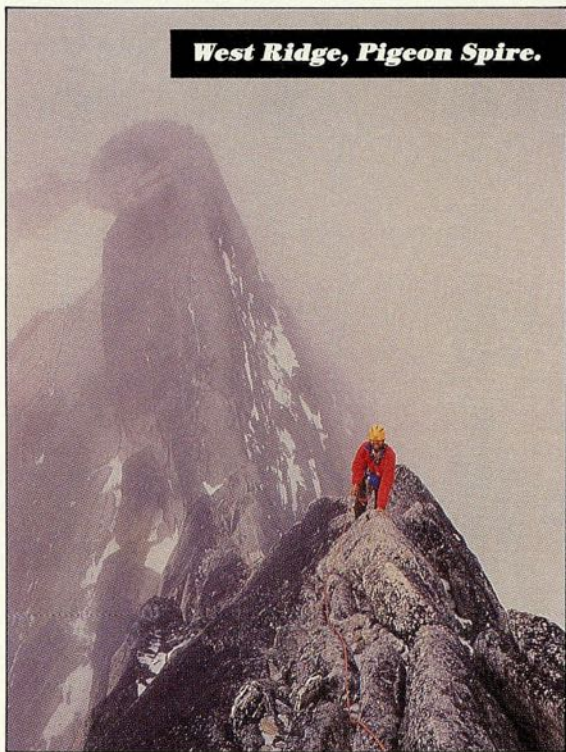
It is doubtful that overcrowding will ever become much of an issue in the Bugaboos. There is plenty of rock, and as more routes are established there should be ample amusement for anyone who might find their way up here. This is far enough away from any major city that it will never have a truly "local" crowd of climbers. And with a stiff approach and uncooperative weather, visits to the Bugaboos will continue to be relatively serious undertakings.

The Canadian climbers we spoke with in the Bugs and in Banff, folks who might feel a bit territorial about the place, did not express either fear or resentment regarding the encroachment of "outsiders." This is still very much ground to pioneer.

In fact, some people feel the Bugs need more activity. The Parks Canada folks are a little disappointed in what has been an actual decline in park usage. Atkinson claims there are about a dozen routes on Snowpatch alone that have not had an ascent since 1976. He also expresses some concern over his position as hut ranger if the numbers cannot justify maintaining the facility.

Pigeon Spire

West Ridge, Pigeon Spire.



East/Northeast Face

- A. Cleopatra's Alley (IV 5.10/A2)
- B. East Face (V 5.10-)
- C. Northwest Face (III 5.7/A3)
- D. Wingtip (IV 5.10-)

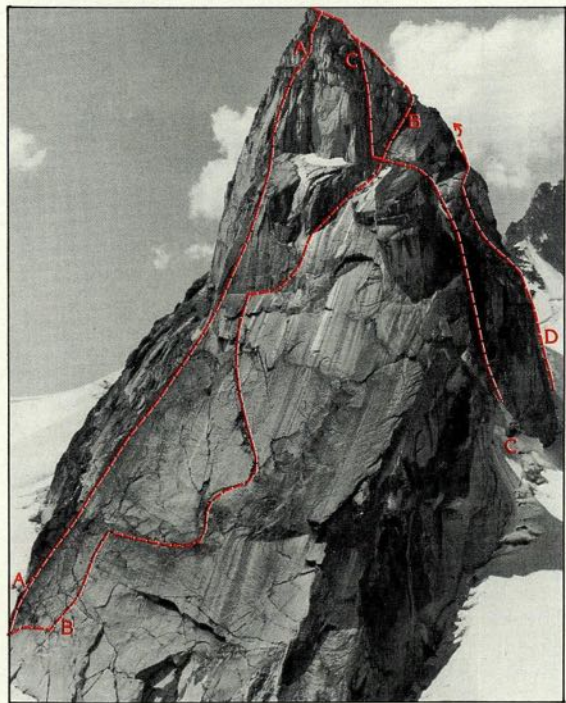


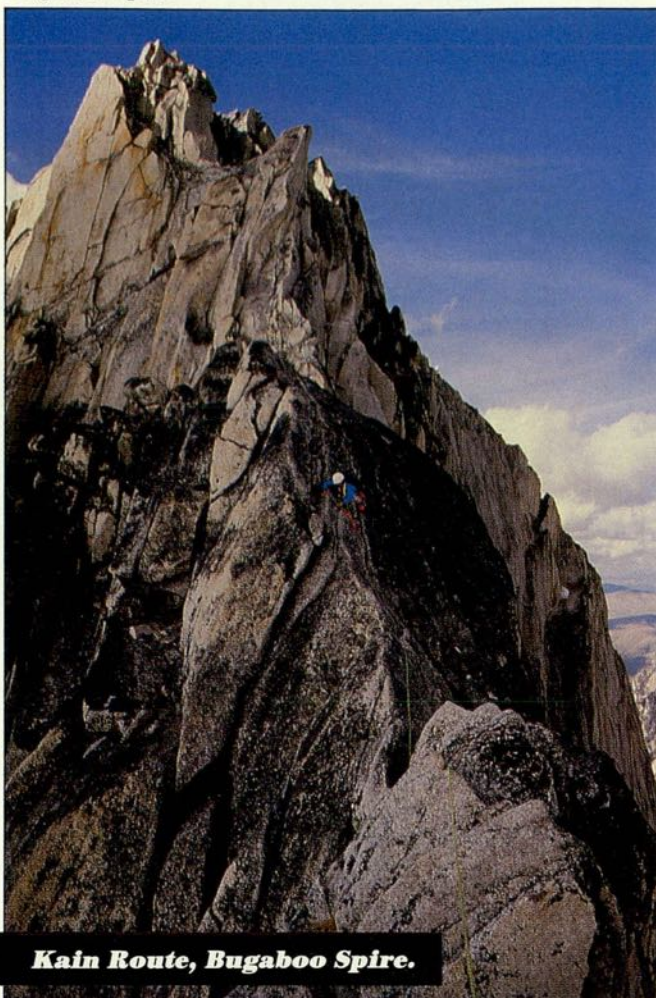
Photo: Chris Atkinson



East/Northeast Face of Pigeon Spire.

Photo: John Garden

Bugaboo Spire



Kain Route, Bugaboo Spire.

East Face

- A. South Ridge (III 5.5)
- B. East Face Left (IV 5.10)
- C. East Face (V 5.10+)
- D. Pretty Vacant (IV 5.9/A2)
- E. Northeast Ridge (IV 5.7)

ss - south summit
ns - north summit

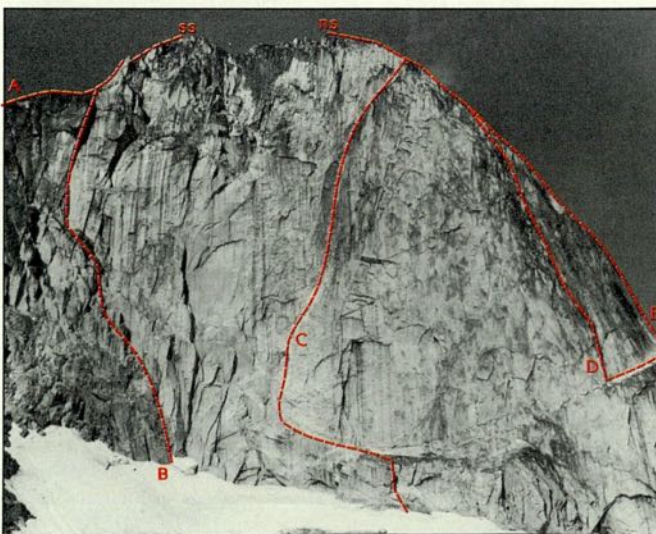


Photo: Chris Atkinson

Apparently, the reason for the slowdown has to do with the general shift in interest from alpine climbing toward sport climbing. But really, climbing in the Bugs is not classic alpine climbing so much as it is rock climbing in a classic alpine setting.

If you come up to the Bugs, leave your technical ice tools behind. If you need to place an ice screw, you must be doing something very weird. You will want an ice axe and mountain boots for some of the approaches and returns, but even crampons are of debatable value. There is one technical ice route in the Bugs, the *Ice Hose* on South Howser Tower, but it is almost never in condition.

Some routes, such as the Bugaboo Spire's *North-east Ridge*, can be done hut-to-hut in a pair of lightweight boots, but sticky shoes are standard Bugaboo footwear. You will also want a fairly substantial rack, including two sets of Friends, two ropes, helmets, and plenty of clothing.

The dimensions of the area dictate that climbers must commit to multi-pitch routes. In other words, these spires are big suckers and once you get started you just have to keep rolling. Indeed, there are no established sites for the hard-core crag rat. The McTech area is as close as you'll find; there are slightly more than a half-dozen established climbs there, but only one is more difficult than 5.10. Of course, there is plenty of potential.

As for longer routes, few of the harder ones go completely free. It is fairly common for a route to go free to 5.10+, then have some aid. There is an obvious reason for this: it's tough to climb 5.11 on 12-pitch routes in the mountains, worrying about the weather and schlepping heavy racks. However, there are a bunch of tremendous 5.10-plus-a-little-aid lines that will go free at 5.11 or 5.12.

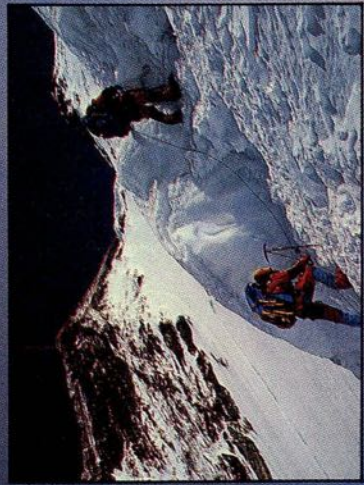
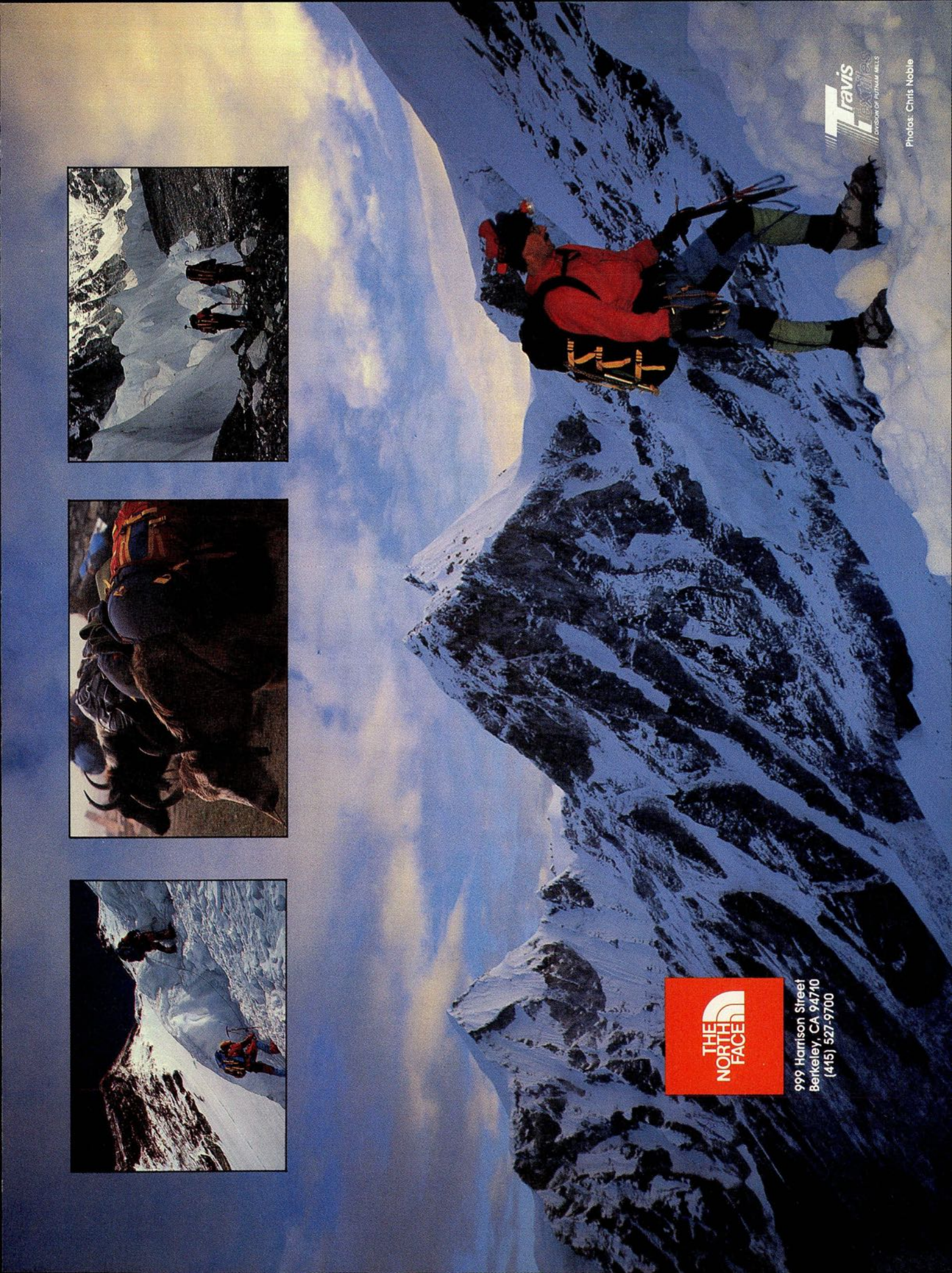
The few established 5.11's will usually consist of a pitch or two at that grade mixed in among six to 16 pitches of 5.7 to 5.10. This may not set well with the true hardman; all those 5.8 pitches may seem like a painful waste of time. But that's often the case with long alpine rock routes — and that's the name of the Bugaboo game.

It is probably both unrealistic and unwise to suggest that the solo-speed-climbing extravaganza of Peter Croft could serve as a model for the Bugaboos. If that sort of activity became fashionable, there just wouldn't be enough rescue resources available. But the "super-alpine" two-day first ascent of the *Italian Pillar* (V 5.10 A4) on South Howser (Basecamp, *Climbing* no. 105) and the first free ascent of *All Along The Watchtower* (VI 5.11) on North Howser should stand as sterling examples of what can be done more reasonably.

The Europeans have been putting up long 5.11's and 5.12's above Chamonix for several seasons now. It could happen just as easily in the Bugs. The vision of ultra-conditioned 5.13 rock lizards powering up pitch after pitch of Bugaboo granite is intriguing. We believe it will happen; it is hard to look at spires like these, especially when the weather is fine, and not envision a new wave of extreme free climbing.

Whatever the future holds, a real kick can always be had on one of those easy ridge routes. No kidding, do that 5.4 stroll up Pigeon's *West Ridge* — if you can't enjoy it, then you just plain don't like being in the mountains.

The authors of this article are compiling a guidebook to the Bugaboos. Any information should be sent to: Randall Green, Box 1023, Sandpoint, ID 83864.

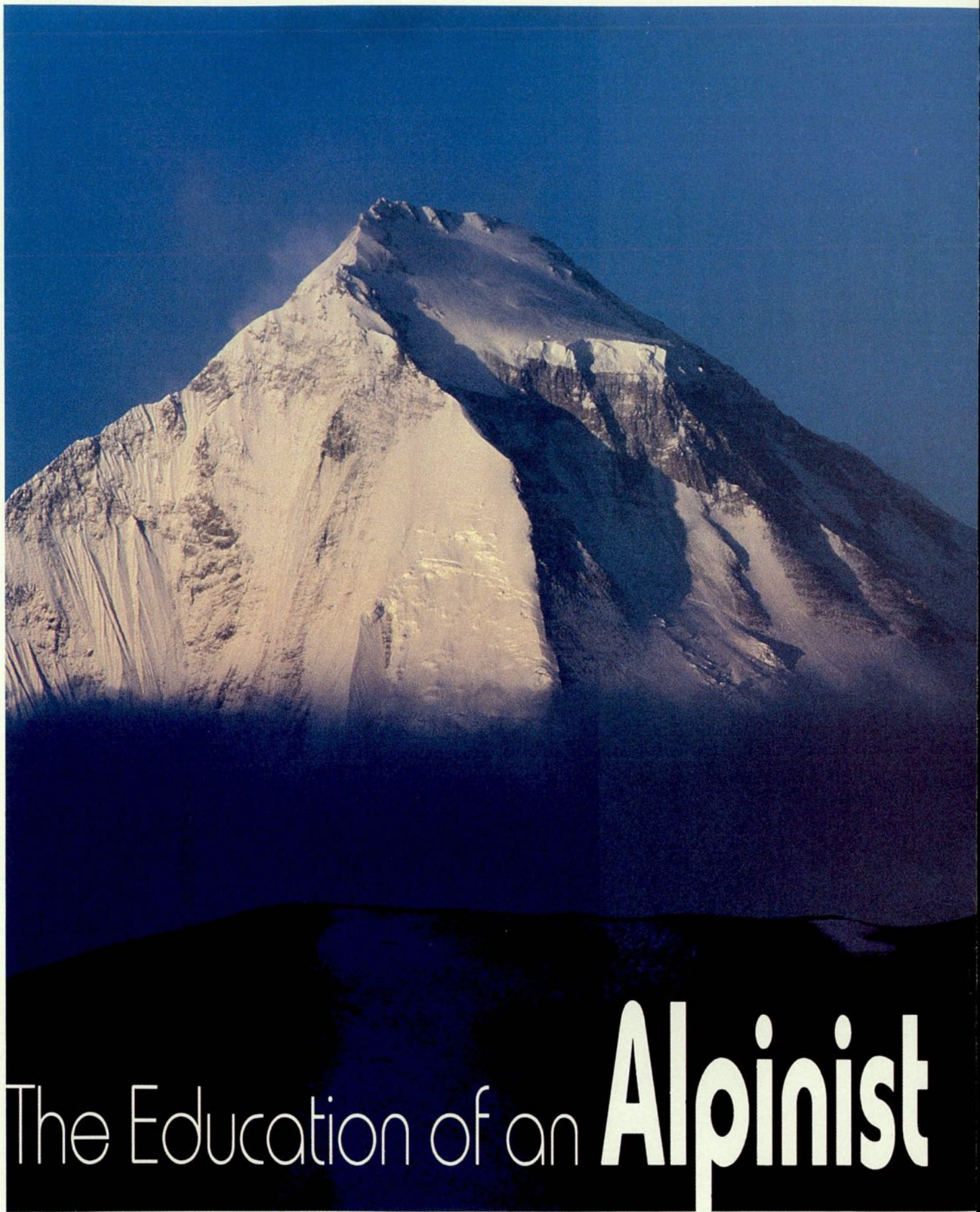


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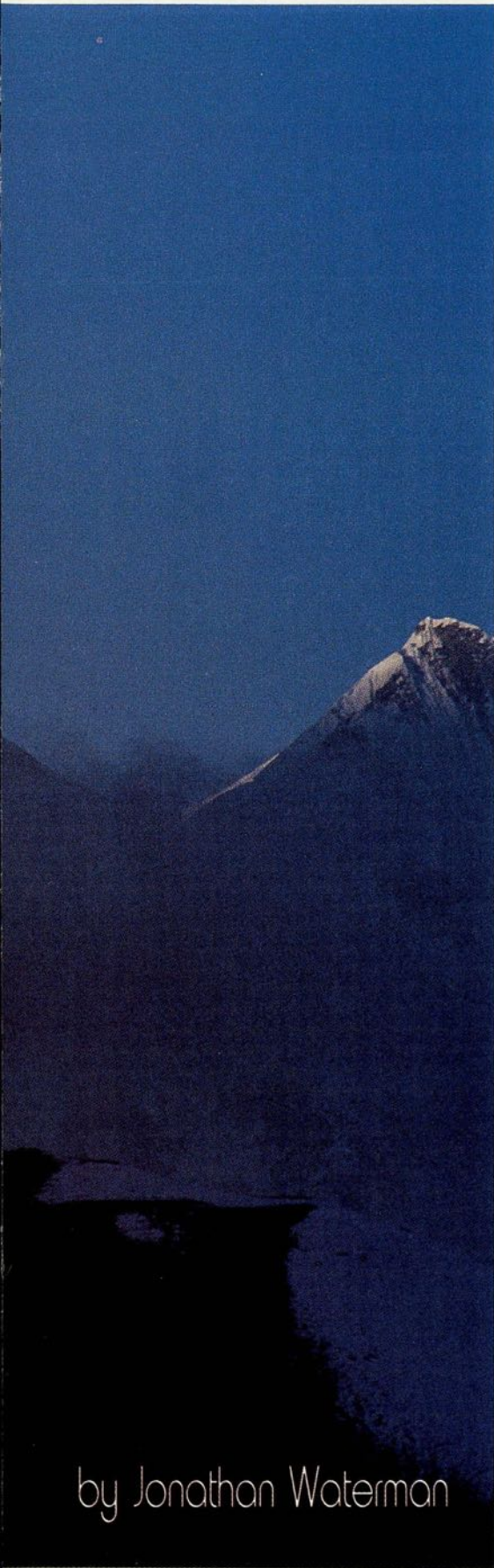
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The Education of an **Alpinist**



by Jonathan Waterman

In Kathmandu last fall, the leader of a large German expedition to Manaslu wondered about the young-looking American. She was petite, alluring, with none of the hardness which most alpinists wear like a badge on their sleeves. Moreover, she had a self-effacing manner and a distinctive Carolina drawl as she helped her three male companions sort gear for Dhaulagiri.

The burly German approached one of the American men and gestured toward Kitty Calhoun, "Is *that* your basecamp manager?" Colin Grissom smiled. "No, she's the leader of our climb."

In 1987, there was much ballyhoo about several Himalayan expeditions. *Outside* magazine touted "The Women of Everest," all members of lavishly outfitted and heavily sponsored expeditions. Neither of these two teams summited. Then the keynote presentation at the AAC annual meeting was on the American conquest of Makalu, replete with an army of porters, high altitude Sherpas, oxygen, and fixed ropes. Meanwhile, scarcely anyone had heard of Calhoun and her friends on Dhaulagiri; beating the media drums is not her style.

The foursome went to the mountain on a shoestring budget of \$14,000 round-trip from Seattle, and shared 20 porters with a Spanish team. These tactics were partly due to the inherent frugality of most full-time climbing nomads, but a prized philosophical thread of simplicity — which eludes many Himalayan expeditions — was deliberately woven into the Dhaulagiri climb. Calhoun had vetoed basecamp lawnchairs, fixed ropes, and oxygen. A friend had given her a high altitude suit, but otherwise, she had sewn her own clothing.

Catherine Howell Calhoun, 27, is a spartan, a gypsy, and a doer. At first meeting, she appears to be shy, but this is only a veneer which adds to her enigmatic presence. She rides a tight rein over her emotions, and is an intensely private, yet gracious soul. She is also decidedly reticent, and if she has done any good climbs, or suffered an epic, she would be the last one to spin the traditional climbing yarn. In fact, she would much sooner listen to someone else's story than tell her own.

Her climbing experiences are similar to those of a spirited boxer, returning to the fray again and again to go ten rounds against stronger opponents. Jim Gilchrist described one of her early leads in the Gunks. "She fell off the crux and knocked me from my hanging stance, then insisted on going right back up, saying 'I'm gonna do this climb!', then pendulumed back into me again. If I didn't take the lead, she would've continued bashing me off."

When pressed, she will concede to knockouts: snow blindness and mountain sickness, a partner with frostbite in the Tetons, bivouacs with no gear (one partner dubbed her the "bivi queen"), a ride in an avalanche — which she described as "delightful, like falling into a bed of feathers."

Since she started climbing, Calhoun wanted to guide, so she began working for Outward Bound. Then she told Dunham Gooding of the American Alpine Institute that she wanted to guide in South America — Gooding replied that her Spanish-speaking ability was weak. Calhoun immediately found a tutor, and spent every available moment of the next few weeks learning the language. Gooding hired her.

Her fellow guides and past partners agree that drive and determination are the Calhoun trademark. Perhaps lacking the natural gifts of some climbers, she has always climbed by narrowing her focus, gritting her teeth, and sweating out the object of her desire until it was won. Over the past several years, in spring, summer, and fall, she has guided more than two dozen big peaks in South America and Nepal. Because of this, and her penchant for snow and ice, the bulk of Calhoun's personal climbing is performed in the dead of winter.

Dhaulagiri with Northeast Ridge prominent.



Calhoun on the North Face of Theloy Sagar.

Despite Calhoun's motivation, she has no idols. She is also innocently oblivious to many big-name peaks and routes, and has read only a few mountaineering books. However, she often carries *The New Testament* in her pack, which she has read several times, seeking the answers to what kind of existence might lay beyond that of arctic winds, cold stone and sweeping ice faces. Eventually, after numerous scrapes in the mountains with mentors like Lyle Dean, Alan Kearney, Bobby Knight, Andy Selters, and Peter Athans, she has become a formidable climber. But it has been a long apprenticeship.

So Calhoun has logged an incredible amount of time in storms and high bivouacs, times when your life story comes tumbling out and there are no longer any secrets. Regardless of these epics, her various partners still feel that they really don't know her; the talk has never flowed.

While guiding in the Himalaya, according to a client, Calhoun spends as much time with the yak herders as she does with anyone else. The yak herders don't speak English, but apparently, her broad smile and outgoing manner are all the communication they need.

When asked why she loves the mountains so much, she replies, "Because they're *purty*." And as you wait for further elaboration, she abruptly concludes with her patented full smile and piercing eyes, as if the rest of the answer is either none of your business, or so obvious that you shouldn't have asked in the first place.

Those who haven't climbed with her might interpret such long smiles and short conversations as vacuous. But this misses the target. Calhoun is impassioned about mountaineering to the exclusion of almost anything else in her life, including relationships and a "normal" career; such passion and focus resonates with genius.

For instance, her first ice climbing lead was on New Hampshire's serious *Black Dike*. Or on a winter climbing trip with Bobby Knight that ranged from Colorado, to the Tetons, to Canada, Knight said if one day went by without climbing, Calhoun was happy, as long as they were skiing. But if two days went by without climbing, she would be devastated.

Indeed, this winter, while walking up Aspen Mountain (she couldn't afford the lift tickets) on beat-up skis and mountaineering bindings, her long baleful looks indicated she was elsewhere, maybe ice climbing, or perhaps weighing a recent Everest invitation against a possible Makalu trip. At the end of a long day of chasing strong skiers,

Calhoun insisted we finish on the steepest bump run. "Otherwise," she said, "how will I ever get any better?"

And at Glenwood Icefall, after leading the second pitch without protection, she took over the final lead of a rotten pillar, which I gladly relinquished. She swung up onto it, left leg bridged out on a tenuous icicle, and began knocking off huge dinner plates, finally calling it quits after three tries. Predictably, Calhoun went back the next day, but failed again. A month later, she soloed the easier right side.

Of course, Calhoun is not the only North American woman active in the mountains. Sharon Wood's accomplishments on Everest and Huascarán Sur speak for themselves, and before Catherine Freer's death, she was on the cutting edge of alpine climbing (*Climbing* nos. 100, 103). Vera Komarkova and Arlene Blum also inspired a large following of expedition style protégées. And one could easily count off another dozen experienced alpine climbers.

Nonetheless, the US does not have a Wanda Rutkiewicz knocking off 8000-meter peaks, and there are few women who climb big and technically difficult peaks alpine style. So, why is there such a dearth of *las alpinistas* in this country? Calhoun speculates that women have bought the premise that the typically male attributes of strength and size are essential to mountaineering; she feels that good judgment fills out her

Photo: Andy Selters

115 pounds and 5'3" frame.

There are countless women rock climbers; a few excel by exceptional strength, most others through grace and delicacy. Calhoun believes this could explain many women's disinterest in alpine climbing, for it is hard to find grace in a cold arena where anything goes, where you curse and smash in your tools and scrape your knees onto holds.

"There's a lot more to mountaineering than rock climbing," Calhoun said. "You not only have to climb rock, but you have to route-find, climb quickly on lousy pro, know the weather, understand how to stay warm, coordinate logistics, and deal with foreign cultures. It's sustained too, like you can't just go back down to the bar at the end of the day."

On Dhaulagiri, the nearest bar was many days away, and the climb would be Calhoun's most sustained effort. Initially, she wanted to muster a team of women. At one point, she opened up the Women's Issue of *Climbing*, hoping to discover some alpine partners, but was disappointed that many of the women in those pages climbed only rock. As the countdown for Dhaulagiri ticked closer, Calhoun decided she wouldn't be able to find female partners for the East Face.

In the final analysis, the climbing itself is paramount to Calhoun, and it makes little difference whom she climbs with; when she finds other women partners, she sees it simply as "opening up more opportunities." Accordingly, just before the trip, she recruited Matt and John Culberson, and Colin Grissom.

"There's no pride involved when I turn around and say, 'Kitty will you break trail now because I can't do it for a while,'" Grissom says. "I can't do that with a guy." Her strengths on Dhaulagiri, he commented, were tremendous patience and an ability to hang in there until the job was done.

When they arrived at the talus-strewn, 15,000-foot basecamp, Calhoun discovered that the East Face had become a nightmare.

While guiding in the area a year before, Calhoun had seen ice arcing 5000 feet to the summit; now there was only sodden, rotten rock. Her dream faded, but only momentarily.

Calhoun had already learned how to adapt to the ever-evolving agendas of big climbs.

To objectively gauge the potential of a high altitude climber, it is one thing to count successful climbs, blessed with luck, blue skies, and good conditions. However, those who are uncommitted to mountain craft will falter once the plans change or the epics begin. So the real assessment of an alpinist can only begin after they have confronted injury, storm, and failure, and finally, the possibility of death. Such is the fabric of Kitty Calhoun's career.

The year before Dhaulagiri, she had set off with Andy Selters up the awe-inspiring North Face of Thelay Sagar in the Garwhal Himalaya. Pondering their broken Portaledge, Selters asked, "Where are we going to sleep?"

Calhoun was unfazed and replied, "We'll fix it."

At 20,000 feet, a storm moved in and pummeled them with avalanches for eight days. They retreated, adding their names to this route's impressive scorecard of broken, would-be suitors. It was the hardest climb that she'd ever kicked her frontpoints into.

"We were *scairt*. There was an awful lot of time to think about things during that storm. It was just like when I was on the Cassin. I thought, why is this happening, it doesn't seem fair."

In 1985, Calhoun had learned the meaning of commitment at 18,000 feet on Denali's Cassin Ridge. Having run out of food, she and Grissom worried about their position as the storm tore a hole in the tent. When the gale ended five days later, they finished the route, but Calhoun was fatigued from lack of food and had to count steps to keep her concentration. She nearly blacked out.

And during the summer of 1983 in Peru, Calhoun started up the Bouchard Route on the South Face of Chacaraju, but turned around at 18,000 feet with a bad stomachache. She tasted this bile-raising defeat until she came back three years later and stepped into the ring for another round. At the crux, she was tired, so her partner started up, then confessed he had never led ice. Calhoun took over and ended up leading most of the steep, 3000-foot face.

The descent took 21 rappels. During a bivouac on the way down, they were knocked off their ledge by spindrift avalanches. The next day, Calhoun reached the end of the ropes and dangled on a vertical cliff with no rock protection for a rappel anchor; she cammed a snowflake into a horizontal crack and prepared for the next rappel.

Two mornings later in Huaras, the *arriero* for Calhoun's next trip knocked on her hotel room door. She woke up, then hiked back into her dreamworld, back up into the mountains, where she guided her clients up Huascaran and Pisco.

Grissom, Calhoun, and Culberson on Dhaulagiri.



Photo: Kitty Calhoun Collection

At the Dhaulagiri basecamp, Calhoun pushed her latest dream into focus, abandoning the East Face and laying out a strategy for the Northeast Ridge. The Japanese agreed to let the Americans on their route, provided they help fix ropes through the icefall and onto the ridge. Calhoun and company moved quickly to a 19,500-foot col and watched the Japanese trigger an avalanche above. Fortunately, no one was hurt.

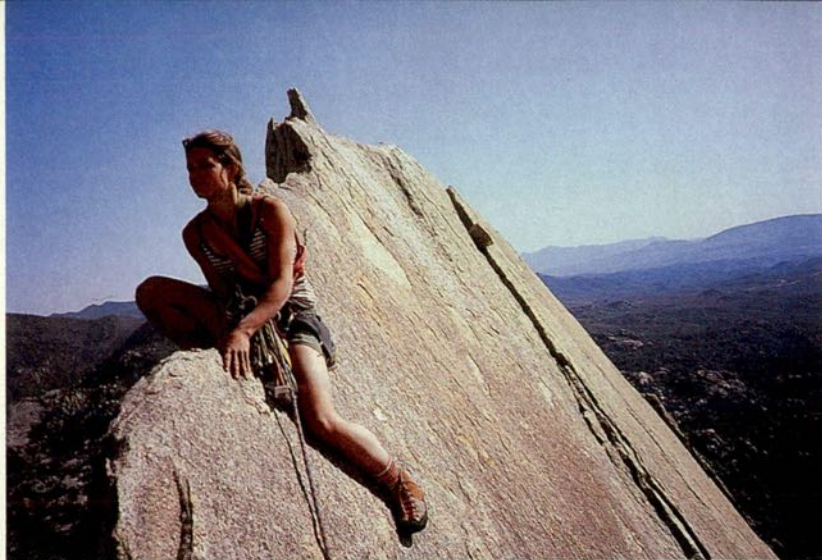
The following day, Calhoun, Grissom, and the Culbertsons were climbing above 22,000 feet while clipped into some Japanese fixed line. Suddenly, a slab of wind-deposited snow released under their weight, and they began plunging down the North Face. The pickets zippered out, one by one. Grissom's harness carabiner unclipped from the fixed line and hooked into John Culbertson's harness just as the last picket held, checking a 3000-foot ride to the glacier.

They traversed off the North Face and back down to the col. Grissom had hurt his knee, while John had a black eye and a sore ankle. Calhoun suggested a rest day. Then, her arm felt wet, so she took a look: the rope had burned through three layers of clothing and down into the muscle tissue. They descended to basecamp and licked their wounds, reading magazine articles about rock climbing in the sun. Resolve weakened.

The Spaniards made an alpine-style attempt, then the Japanese collapsed a crevasse bridge and declared the mountain unsafe. But Calhoun had tasted this sort of thing before on Thelay Sagar, on Chacaraju, and on numerous other peaks. Retreat was bitter; it meant unequivocal failure, a knockdown punch which would follow her everywhere. She had to duck back under the ropes.

Calhoun pulled on her gloves, had the cook fire up 100 more chapattis, then she and Grissom and John started back up. For ten days, their universe consisted of fighting back nausea, breaking trail, sucking thin air into hungry lungs, sliding frozen poles into tent sleeves, and melting snow into water. Finally, on October 16, 1987, they reached the top.

They descended in the teeth of a storm which punished climbers throughout Nepal. It had snowed several feet at basecamp and they



Calhoun on Granite Mountain.

trudged out through the unrecognizable lowlands, losing their way several times in cul-de-sacs. Matt poked in a collapsed tent for food and uncovered the body of a trekker.

In Marpha, they drank sweet tea and filled their bellies with real food. They had every reason to be happy, for they had climbed Dhaulagiri as a small team, completely self-sufficient, and they had come away from the mountain as closer friends. But, with her intrinsic focus, which some might label obsession, Calhoun began considering another project.

"When I finished Dhaulagiri, I was thinking I wouldn't do any more 8000-meter peaks because of the avalanche danger," Calhoun said. "But as time goes by, I start forgetting how awful it was. Even rock climbers trying hard climbs say 'I'm not going to put myself in this situation again,' then the next day they're back on the same climb."

When asked what's next, Calhoun says her fantasy route would involve just one partner, preferably Grissom, for they have established a rapport, the indelible and unspoken communication that is the nucleus of an accomplished rope team. "It would have to be something big with a lot of varied climbing, at altitude. Something that would take a lot of days," she drawled, "so that *Ah* can concentrate and forget about everything else." It might be the French Pillar on Makalu. Or it wouldn't be surprising to see her back trading blows with the heavy-weight champion, the North Face of Thelay Sagar.

To begin to understand this woman, you have to examine the mountains first. But who is Kitty Calhoun? She climbs all of these enormous peaks, yet she is barely over five feet tall; she learned how to speak fluent Spanish in only three weeks, although she has forgotten her partner's name from Chacaraju; she is certainly an inspired and self-directed climber, but found Dhaulagiri by asking Selters what peak to do; she wants to settle down and have a family, yet says she gets too much out of alpine climbing to quit; she roams the far-flung corners of the earth with a fiercely independent style, then spends nearly a month at home during Christmas with her parents and sisters; she was nervous and distracted about being photographed at Glenwood Icefall, but returned to the climb several weeks later and nonchalantly soloed it.

She is a mystery.

Yes, she is a rare bird, soaring on her dreams like the chough, which is sometimes seen above 7000 meters in the Himalaya, balanced on an updraft, where there is no nest or food or logical words to explain its presence in such high places.

In Seattle last fall, Calhoun flew back from Dhaulagiri on the same plane with Mimi Stone, one of the women who had attempted Everest. After they passed through customs, Stone was stopped by reporters. They didn't ask about the diminutive girl with the shy smile, for she didn't look like a Himalayan hardwoman, nor would anything but Everest catch the news. Calhoun sidestepped the gathering throng, happy to avoid what she calls "the fashion show," and went off to find some ice cream.

Photo: Kitty Calhoun Collection

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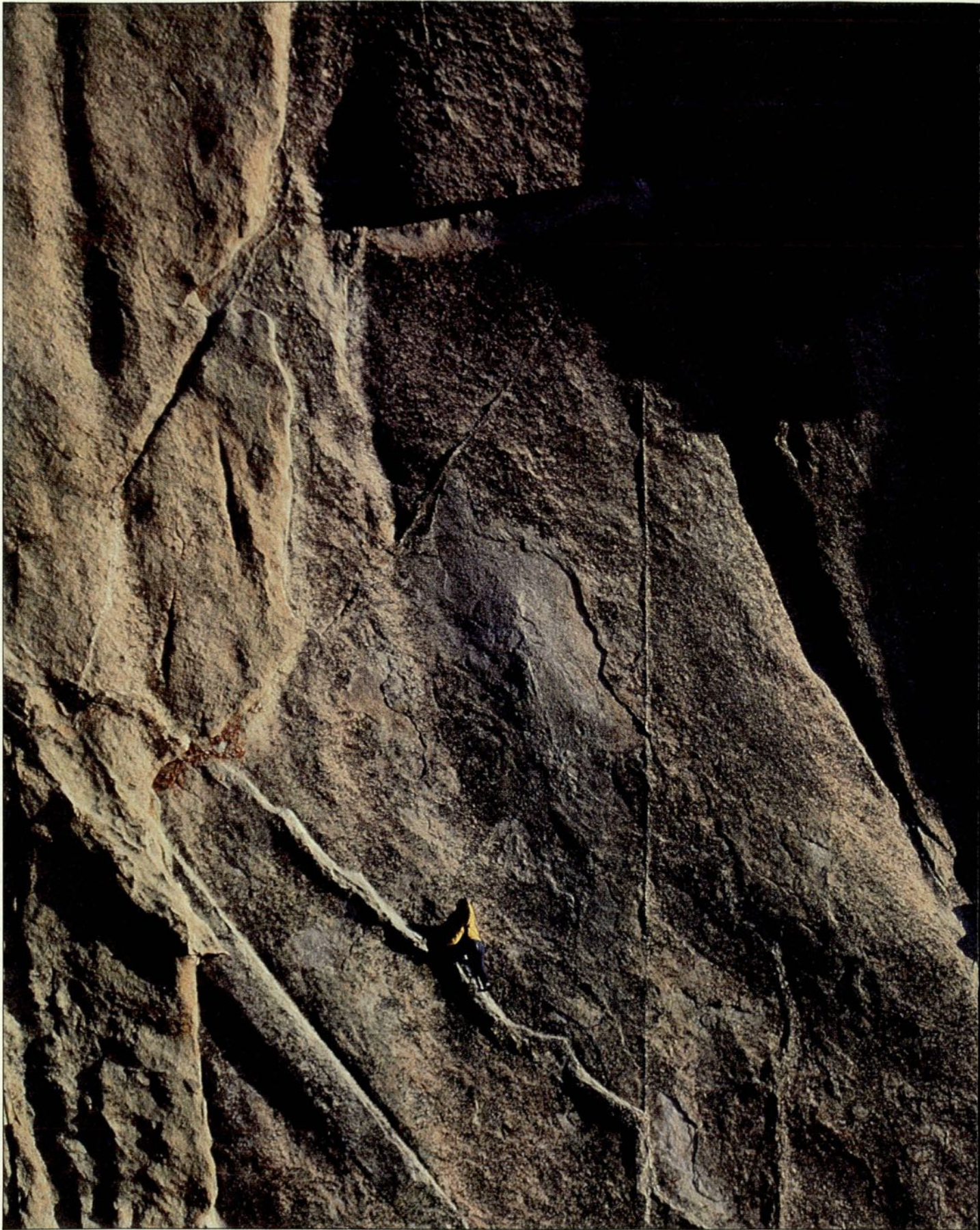
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Cañon Tajo

In the lingering twilight, Alan and I rushed to set a top rope on *Buena Crack*. The evening air was warm and still, with the western sky going grey, the last pink traces of sunset fading.

When we finally tossed the rope over the edge, the first stars could be made out through high clouds to the east. Hurriedly, we moved around the back of the boulder and down into a grotto-like clearing at the foot of the crack, where it was markedly darker. The crack was scarcely visible in the suspended half-darkness, and the fingerlocks, saturated with chalk, appeared luminescent against the smooth grey rock. We were tired, and neither of us made a motion to tie in. Instead, we hung out, talking of routes we'd done and those we'd do, and of other things. The rope dangled, forgotten. The darkness deepened.

We settled into a meditative state, the afterglow of a great day of climbing, each of us silently, simultaneously coming to the realization it was time to relax — to drink in the coming night. As I bent down to loosen my tightly laced shoes, a dark shape slithered from the crack just above us and quickly vanished into the gloom; seconds later, two more did the same. We were startled.

Leaning into the rockface, we strained to see what was happening. We witnessed a most remarkable thing: bats, dozens of them, some with wingspans of pigeons, poured out of the crack, squirming head first through fingertip-sized pin scars, and pushing themselves away from the rock and into the night, evanescent. Then, as suddenly as they had come, they were gone.

That night, I dreamt of bats, and of time passing, of bolt hangers grown relic with age.

by Bob Van Belle
Photos by Greg Epperson

Previous page: Jeff Almodovar on *The Diagonal* (5.10). Right: Almodovar and Brad Huys on *The Final Touch* (5.9).

We were in Cañon Tajo, a remote area in the northern reaches of Baja's Sierra Juarez mountains. Imagine Joshua Tree and its granite domes as it must have been 250 years ago — an untended, unregulated wilderness — and you might glean a rough understanding of the complex charm of Cañon Tajo. But the resemblance is only superficial.

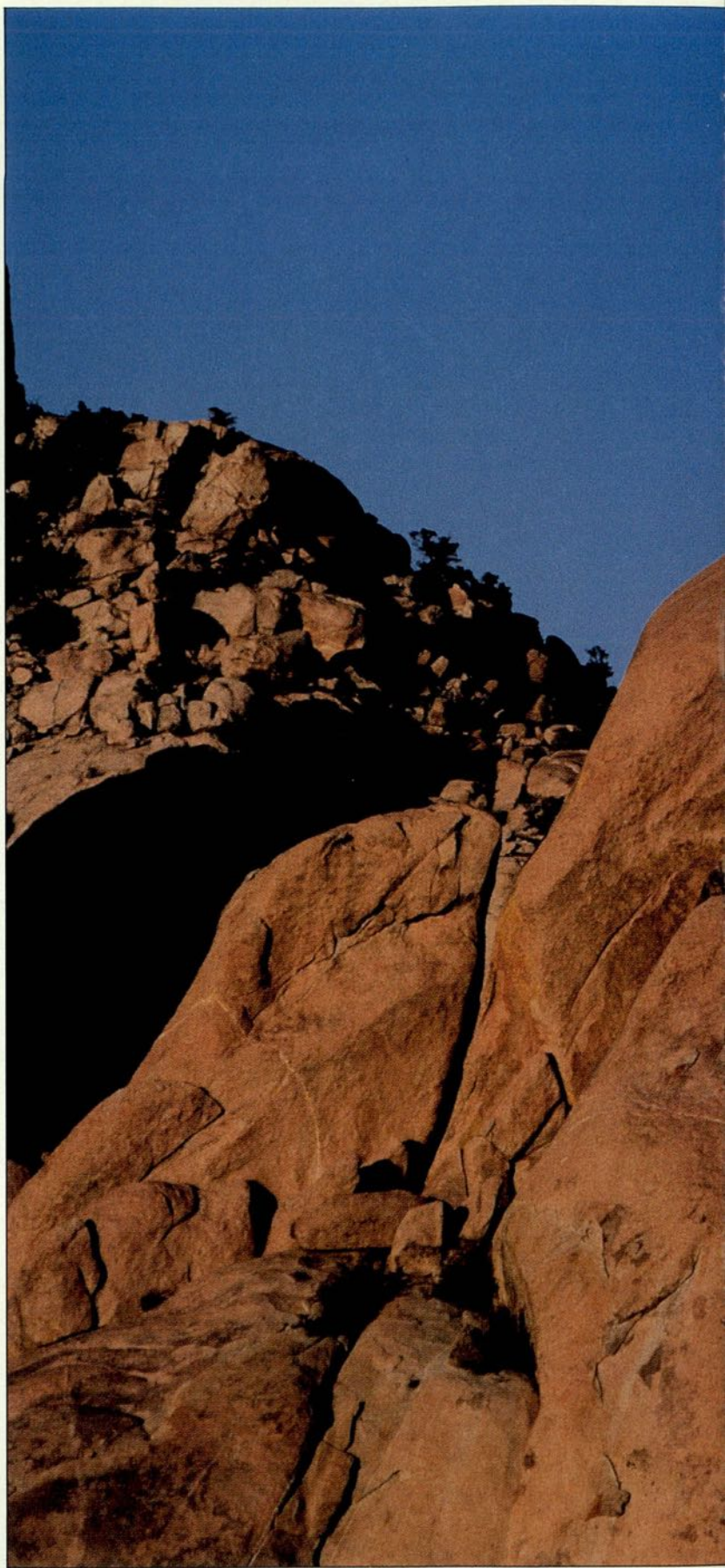
Cañon Tajo lies 40 miles from the nearest paved road and many more from the nearest Interstate or espresso bar. The brutal dirt-track approach is distinctly Baja, threading a labyrinthian passage through a vast, inscrutable pinon forest. Drawn down identical-looking, dead-end paths that snake out in all directions, even seasoned veterans get lost, sweating as the gas gauge approaches "E" in the middle of the night.

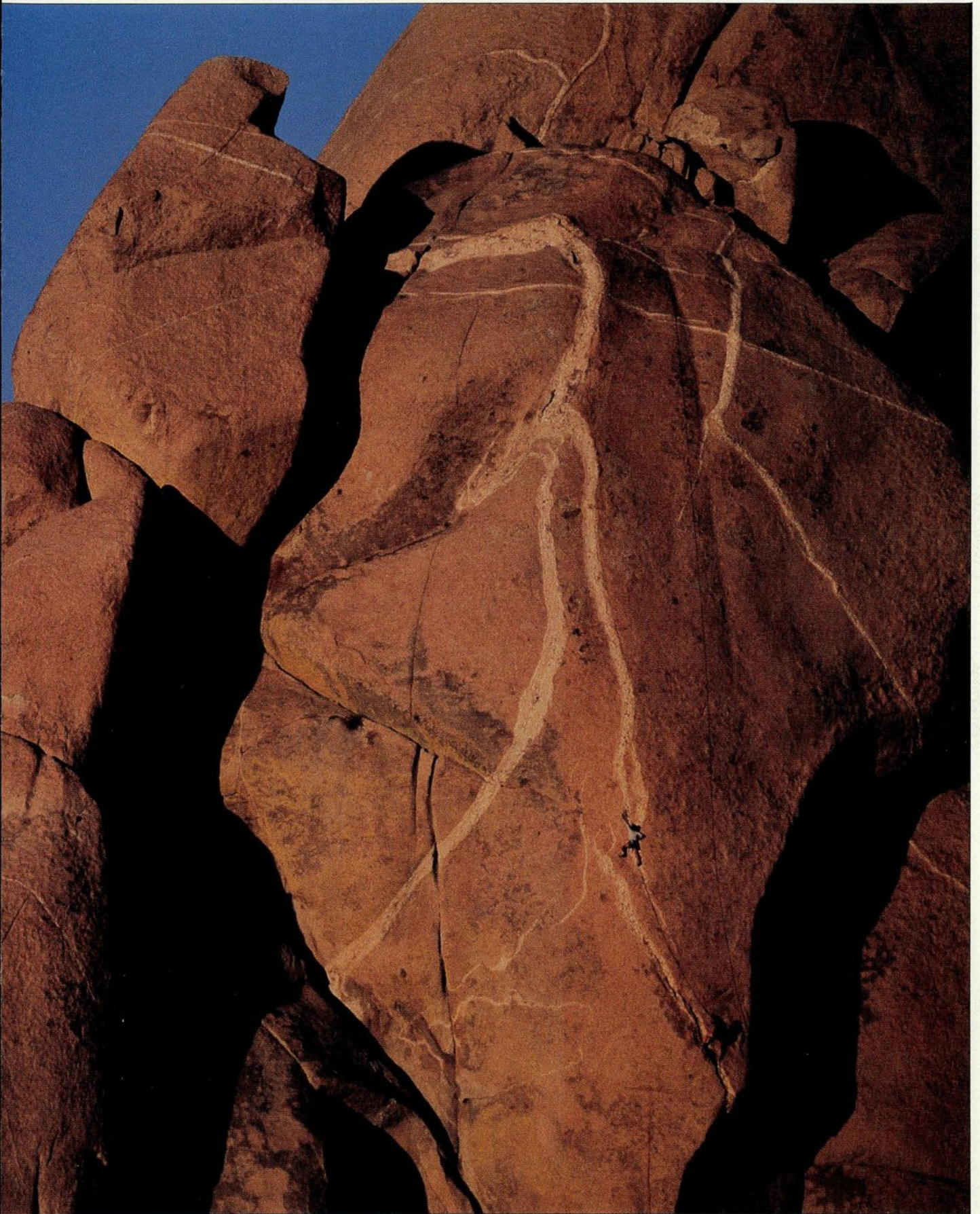
Tajo's remoteness is a big part of its magnetism. There are no rules to follow and none to break. (However, active climbers here have always adhered to a strict ground-up policy.) It's a great place to go when you need a quick escape from the mainstream. And, unlike Joshua Tree, the summer climate allows comfortable climbing, making Tajo an appealing alternative for Southern California climbers.

The granite of Cañon Tajo will strike the first-time visitor as unusual, even strange. The most unique aspect of the rock is its dikes. But they're not the delicate threads that lace Tuolumne's domes like spider webs; these are lumbering bruisers — thick, grinding veins, sometimes three feet wide, often tracing a fearsome path across a steep, otherwise unclimbable wall. Climbing on them can be frightening.

The dikes are different, but variety is the trademark of Tajo climbing. It's like a sampler of Western U.S. climbing areas. From friction on pale-colored, ball-bearing rock like Joshua Tree's, to Tuolumne-like steep knobs and crystals, to Tucson-style funky face, and back to a meat-grinder JT crack, locals like to think of it as going "around the world in 80 gobies." After a day on the rock, it's back to probably the finest camping/hang scene imaginable. I've had some of my best times as a sleezeball amongst the warm folds of Cañon Tajo's domes.

It all starts on the drive in, where the road goes right by the Tecate brewery. Popping in for a quick rave-it-up tour almost always leaves the visiting climber with a sixer of gratis brews to finish the rutted drive on the paved road.





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Once camping deep in the Baja wilderness, there are no rangers around to tell you to turn the music down or that your camping limit is up. In other words, anything goes. And with this type of mentality, people tend to be more friendly, often joining together for pagan celebrations that may rival the renowned Arizona Beanfests, if on a smaller scale. But, on the other hand, the quiet solitude of staring into the campfire with low-spoken conversation can instill a hypnotic peace, leaving one a little sad, reluctant to have the day end.

Above all, Cañon Tajo's most delightfully distinguishing characteristic is a slippery thing — something that doesn't easily lend itself to words, something that must be experienced. Being here, one can imagine having stumbled onto the edge of the world. The air is hot and dry, the sky cloudless, the landscape dotted with lost-world domes ripped through by primeval contortions of white quartz. Invisibly, the sun has its way with the slings swinging in the wind, bleaching them pale in a season or less. Spooky even in broad daylight, the place has a frozen, tombish feel that can send a chill through anyone.

The overriding sense of an ominous presence is perhaps due to the Throne, a squat, 1600-foot bulk — unseen but always felt. Hiking to the typically short free climbs, you sometimes catch a glimpse of it, guarded, its steep sides dropping away into immense, desperate gullies.

Luckily, you're here for the cragging, not to suffer the pain of that nameless, existential big-wall dread, dragging a haulbag up some half-baked aid pitch. Not that wall bashing on the Throne is all that lame — the East Face has two good routes, and the setting is outlandish. The vast desert cauldron of the canyon proper sweeps away beneath your feet, surrounded on all sides by mile-high bluffs of scrub and colorful desert stone; far, far below are the streambed palm oases, deep rock pools, and weathered petroglyphs. The long free routes on the South Face are also worthwhile, particularly the brilliant *South Face Route*. Blessed with the shortest approach of any Throne climb, it has many steep yet moderate pitches, and is easily the most popular outing on the cliff.

Cañon Tajo may not be the place for everyone. No food, no water, long approaches, and an axle-smashing drive in are enough to discourage all but the most smitten, and it may even be an acquired appreciation then. The lack of a guidebook — and believe me, this lack is permanent — only compounds the difficulties of learning the ropes of Cañon Tajo, but for those willing to plan and commit, Tajo's desert domes will be forever waiting, blasted with wind and sun, almost always deserted, and with something hidden. Go and find it.



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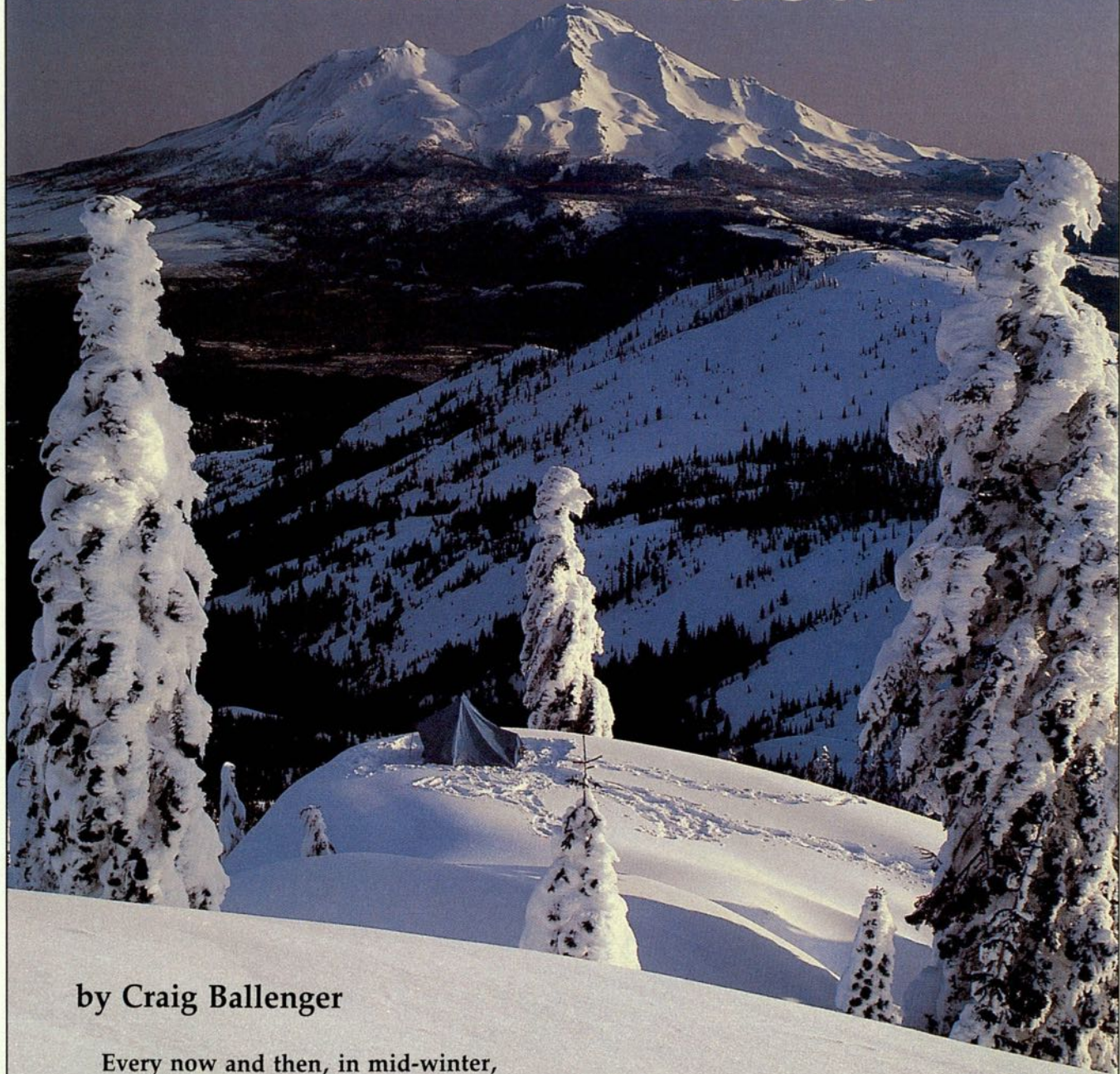
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Mount Shasta



by Craig Ballenger

Every now and then, in mid-winter, a soaring bank of high pressure strays off the Pacific and balances languidly above the summit of Mount Shasta, sometimes remaining for days. A short time before, foul wind and bitter storms had probably dumped prodigious amounts of snow high on the mountain.

On a day like this a few years ago, I climbed up Casaval Ridge on January 2nd and sat on the summit in shirt sleeves. The air was so still that I could have lit a candle.

Photo: Kevin Lahey

Mount Shasta dominates the northern California landscape like few other mountains, rising to 14,162 feet at the end of the Cascade chain, "solitary and lonely as God," as Juaquine Miller said over 100 years ago.

A dormant volcano, Mount Shasta creates its own weather with nearly 10,000 feet of vertical relief and five glaciers.

Although climbed a lot, Shasta isn't known as a skier's mountain because of inconsistent snowfall. At resort elevations it seems to be feast or famine, with seasons of very little snow followed by seasons of massive snows. At the old Ski Bowl Resort, the Green Butte chair used to go up above timberline to 9600 feet, but up to 25 feet of snow per season, staggering winds, and low visibility usually kept skiers in the lodge, or down in the trees. Now the Ski Bowl is gone; in 1978 an avalanche thundered down off Green Butte and destroyed the main chair and the already deeply mired operation.

On the West Coast, we don't have the famous powder of the Rubies or the Monashees, but we do have great weather, and corn snow to match. Of course, exceptional winter days are rare, but in spring they are to be expected, with long runs of good-condition corn snow, day after balmy day.

For the mountaineer with proper gear, strong legs, and big lungs, Mount Shasta is a skier's mountain. Those big winter storms make it possible to ski 5000-foot-plus runs in the spring and summer. And there are lots of runs that offer superb winter skiing; you simply ski in the trees, or up high when conditions allow.

During periods of good winter weather, random groups of skiers can be seen wandering up the mountain toward Avalanche Gulch and Bunny Flats. Beneath the turrets of Casaval Ridge, above 10,000 feet in the flats around Lake Helen, scattered skiers begin to collect.

If you were one of the skiers, you would peel the skins off your skis, sit down, relax, and wait. Down and across the horizon, the view is pristine: a vast, clear, blue sky, the Trinity Alps stretching out in the distance, and below in Mount Shasta City, people working. As the winter sun climbs higher, the air warms and you keep an eye on the snow conditions. Slowly it corns up, and finally, at what seems to be the optimum moment, you stretch, clip into your skis, and glide away on a euphoric run down to the base, effortlessly linking turns through perfect snow.

MOUNT SHASTA: Recommended Routes, Access, and Information.

For current snow information, contact Fifth Season Outdoor Shop (916) 926-3606, or Shasta Mountain Guides (916) 926-3117. Fifth Season also sells posters with map, route, and weather information for Mount Shasta.

Routes are listed clockwise from the southwest; keep in mind that some of the higher routes can be linked with the lower ones. Symbols denote the best season for each route: ★ winter; □ spring; ■ summer (also good in spring, but they last longer).

Routes South of Avalanche Gulch.

The Everett Memorial Highway (EMH) was built to access the old Ski Bowl. It is plowed in winter to the Bunny Flats parking lot (6800'). EMH is the starting point for all southside routes, except Dillar Canyon.

Grey Butte, West Face (★). Located at timberline, this is a good, steep 600-foot route when all the boulders are covered up. However, it does have a low-angle runout into the trees. Approach by skiing up the unplowed roadbed to Panther Meadows, then angling right across some flats. There are two Buttes: Red is the upper, and Grey is the lower. Look for the radio antennas on top.

Grey Butte, Red Butte Col (★). This is lower-angle than Grey Butte and can be in condition earlier in the season. It can be combined with Wagon Camp for a fine winter tree run.

East Bowl (□ ★). Snowcat skiing is available here. The route is consistent in spring and sometimes good for above-timberline winter skiing. Follow the unplowed road bench past Panther Meadow to the old Ski Bowl Lodge, then work right and into the prominent bowl beneath the lower end of Sargents Ridge, which forms the right skyline.

Green Butte area (□ ★). The precipitous south face of Green Butte used to be skied a lot in the days of the old Ski Bowl. The chair lift line down from 9600' is a moderate line with the same characteristics and approach as the East Bowl.

Powder Bowl and Sun Bowl (□ ★). From Kilimanjaro Corner on the EMH, across from the second Sand Flat turnout, and looking toward the mountain, two bowls are visible between Avalanche Gulch and Green Butte. In winter, when the other above-timberline routes are out of condition, these two bowls will often have good powder deposits. Powder Bowl is to the right and Sun Bowl is to the left.

Wagon Camp (★). This is a tree route, worth skiing in a storm. Climbing skins aren't needed. Park at Bunny Flats parking lot and keep right to avoid going too high for the traverse exit onto the Wagon Camp road bench and back to the EMH.

Northern and Eastern Routes.

There are two access points for the north and east sides: from Highway 97 east of Weed, turn south on Military Pass Rd. and follow dirt roads to North Gate trailhead; or, from Highway 89 east of McCloud, turn north on Pilgrim Creek road, and follow signs to Brewer Creek trailhead. Both of these are logging roads, closed in winter, but they open up as the snow melts.

The usual postcard views of Mt. Shasta, as seen from town or along I-5, are immediately forgotten when the "wild" side of the mountain is first seen. The north side is a vast area of uninhabited forest in the process of being removed by logging companies. Up high, the soaring permanent snowfields of the north side represent some of the finest spring and early summer skiing to be found anywhere.

It is possible to ski all day on corn snow, from 14,000' to timberline. Simply continue skiing, then traversing north onto another route as the day progresses and the snow corns up.

North and East faces of Shastina (□). This side of Shastina looks unrelentingly steep, but interesting for an extreme skier. There are only rumors as to whether anyone has ever skied this side.

Whitney Glacier (□ ■). This is the longest glacier in the state, at nearly two miles. It is a nice climbing route, but the skiing is marginal, due to numerous crevasses. Of course, the glacier is always changing and there is some good skiing up high above the Shastina Saddle. This part of the glacier can be combined with the Cascade Gulch route described earlier. Access for this route and the northeast side of Shastina, part of which empties onto the glacier, is via a 4-wheel drive road leading toward Coquett Falls.

Bolam Glacier (□ ■). This seldom-visited glacier is the most northerly facing route on the mountain and can be skied from 13,000'. There are several variations and few crevasses. The best access is via Northgate trailhead, with a rightward traverse to the glacier.

Northgate Route (□ ■). This moderate route is becoming quite popular. It can be skied from the two obvious gendarmes above a triangular snowfield near the summit. Beneath the 12,000-foot "heli-pad," avoid the hidden crevasses at the bottom of the run by traversing north on the left-hand rocks, then ski a long, clean run to the campsites above Northgate.

Hotlum Glacier (□ ■). This glacier is the widest on the mountain; three icefalls and two headwalls intimidate a lot of people. However, there is a long, sweeping "S"-route that skirts all these obstacles and makes Hotlum Glacier one of the lowest-angled routes on the mountain.

In late spring, the few crevasses that cut across the glacier usually have good snow bridges. For the adventurous skier, this can be a very aesthetic, although airy avenue to ski, with seracs piled all around like so many pulled teeth. Access is via the Brewer Creek trailhead, but head straight up from the parking lot, then angle right into a steepening gully above Gravel Creek to the base of the glacier.

Hotlum Snowfield (□ ■). Like the more popular Wintun Glacier next door, this route offers acres of ski terrain. After a steep headwall, the slope kicks back to a gentle angle near the bottom. Last June, the end of all the skiing



Photo: Brad Lamson

was foretold when this route developed sun-cups; but an unseasonal snowstorm leveled them off nicely and allowed good mid-summer runs of up to 4000'. Access this route via the Brewer Creek trailhead.

Wintun Glacier (□ ■). This is a popular route, formerly used with a rope tow for summer ski team practice. It is often possible to ski from 14,000' to here. The crevasses on the south are easily avoided and the steepest section is around the 13,000-foot rock island called the "tooth." This route is also approached from the Brewer Creek trailhead.

Clear Creek (□ ■). Moderate terrain and easy access combine for an overlooked, yet great skiing area. This route can be done in early spring because of its southeastern aspect. The approach starts from the new trailhead signs on Highway 89.

Circumnavigation (□ ■ ★). This adventurous trip can be done in winter and spring. The quality of the snow, as well as avalanche conditions, will dictate the elevation of the traverse. It is usually done at timberline, counterclock-wise, beginning at Panther Meadows from the EMH. Plan about four days.

Routes between Sierra Club Alpine Lodge and Shastina Peak.

The hub of the following routes is Horse Camp, a stone cabin maintained through the generosity of the Sierra Club. Horse Camp is about a 30-minute ski up from the Bunny Flat parking lot over easy terrain. It is set off to the side of Avalanche Gulch's base, at timberline, which is around 7900'. There is nearly always a trail broken up to the cabin, so route finding is no problem.

McBride Run (★). This route is seldom in prime condition, but it can be the best tree run on the mountain, with close to 3000' of vertical. Start at Horse Camp and ski to the West Rain Gauge, then ski a series of hills and gullies west off Sand Flat. This can be finished by following an old logging road to EMH, just above the McBride Spring Campground.

Avalanche Gulch (□). This is the only south side route that can be skied from near the summit. The best conditions are most likely to occur in early- to mid-spring, but avoid dangerous avalanche conditions during the winter. This area is a vast bowl sweeping up to Red Banks at 12,000'. The Gulch is bordered by two fairly steep ridges; down below it is divided into two gullies separated by a series of rolling moraines.

The variations for skiing here are almost unlimited. The gullies, the moraines, and the steep ridges of either side are all popular. Lake Helen, at 10,400', is the usual campsite for those wishing to go on up to the summit.

Giddy Giddy Gulch and Anaconda Bowl (□). These two highly recommended runs are west of the Horse Camp cabin, past the obvious Casaval Ridge, which is prone to rock-fall in the summer. They are tighter and uniformly steeper than Avalanche Gulch, but on a much smaller scale. Giddy Giddy Gulch is often in condition in June.

Cascade Gulch and Hidden Valley (□). This is an interesting, seldom-visited area, with good access, even in winter. Cascade Gulch divides the peaks of Shasta and Shastina. Hidden Valley is a large flat at 9600' with a sheltered campsite. To approach this area, continue past Giddy Giddy Gulch and Anaconda Bowl in an angled traverse up to an obvious notch, which accesses Hidden Valley. The most popular ski is a long, moderate route down from the 12,000-foot saddle near the summit of Shastina (12,330'). The saddle also accesses the upper Whitney Glacier and Shasta's summit. There's room here for a lot of routes, including the west side of Casaval Ridge.

Dillar Canyon (□). This route is arguably one of the finest ski mountaineering runs in North America; the canyon can be skied from the summit of Shastina. A clean plumb-line connects the gully, at the edge of the crater, through a deep volcanic canyon, to the parking lot at the Hi-Lo Cafe in the town of Weed, 5000' below. The approach is not so good; 3.6 miles from town, turn left onto a series of logging roads. A 4-wheel drive truck would help, but you still may want to walk.

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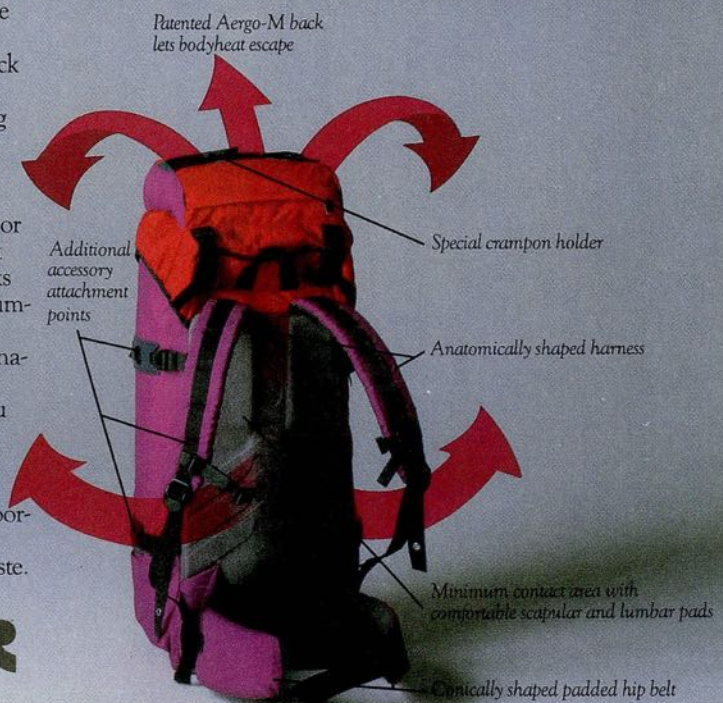
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STARTING OUT

CLIMBING INSTRUCTION

How Do They Get The Ropes Up There?

You want to climb. A slide show on an ascent of Nanda Devi piqued your curiosity initially. Since then, you've devoured mountaineering books from the library and all the tattered *Climbing* magazines stacked on a friend's coffee table. But you're feeling frustrated; who's going to take the time and patience to show you the ropes, take you into the alluring realm of the vertical, where senses are altered, self-knowledge transformed?

From trial-and-error to outings with a friend to classes with a local club or climbing school/guide service, many options exist for learning how to climb. However, the choice is an important one and will have a lasting bearing not only on how safely you climb, but on your perspective and appreciation of the sport.

Going out with a friend is probably the most common way beginners start climbing, yet it can be an uncertain path to safety and expertise on the heights. This type of introduction, in most cases, lacks depth, the "teacher" glossing over important safety procedures he/she takes for granted. Sure, the situation is informal and relaxed, but that doesn't mean you're going to learn what you need to.

Although there are occasional exceptions, learning through a climbing club is, in my opinion, also dubious. A professional approach is generally absent here, too. If you have been exposed to climbing this way, the key is to expand on the basics outside of the club, keeping an open mind to different techniques and attitudes.

Positive aspects of learning to climb with an organized club are a friendly social atmosphere and supportive network with other club members of like ability. Another important benefit is a potentially wide selection of ropemates for the future. Clubs can, nevertheless, take on an arrogant attitude, frequently perpetuating "our way is the only way."

But the methodology of teaching climbing is as multi-faceted as the people who teach it. There is no single "true way" of learning to climb; rather, each instructor (or climbing school) brings his/her own unique talents and perspectives to bear when teaching. There are, however, certain accepted practices and techniques which are, in my opinion, sometimes skimmed over in club or military settings. Examples of poor teaching principles include an over-reliance upon the single bowline, not using a secure safety hitch like the grapevine, attaching the end of the rope into a carabiner at the waist

(even when leading), and a poor working knowledge of nut protection and multi-directional belay anchors. Other trademarks of a club-taught climber are poor rope handling (i.e., repeatedly letting go with the brake hand) and confusion over belay signals.

Climbing is not the same as mastering a computer program where rote memory is fundamental, or like assembling a jigsaw puzzle where each piece must fit precisely. Climbing constantly presents unique problems, which require ingenuity and spontaneous reaction, backed up by a working knowledge of the sport. As a result, climbing is more akin to artistic forms such as dance or music. Basic routines must occasionally be followed, but there is still plenty of room for individual interpretation. The line must be drawn sharply, however, when the safety of the climbing team is jeopardized by a poor hands-on knowledge of safe climbing principles and techniques.

A proper understanding of safety as well as a rounded perception of the sport is probably best attained through instruction by a reputable climbing school/guide service. Choose a climbing school (or private mountain guide) that has fully accredited member status within the American Mountain Guides Association (AMGA), the representative organization of professional climbing instructors in the United States. For information on the nearest member school or guide, contact the AMGA, P.O. Box 4473, Bellingham, WA 98227; (306) 647-1167.

Nearly all climbing schools and guide services in the United States now belong to the AMGA. During the past year most members have received "accredited status"; this requires passing a certification conducted by two AMGA reviewers of the instructional practices of the school or individual guide.

If you are contemplating attending a climbing school or guide service which does not advertise AMGA accreditation, inquire carefully because, as of the end of 1987, the AMGA hadn't fully reviewed all member schools. If, on the other hand, the school you are considering is not a member of the AMGA, think again. How much is your initiation into the sport of climbing really worth?

Even if a climbing school or guide service is certified as competent, shop around for an instructor who will best fit your needs.

Qualities to look for include a true

affection for the sport (both in teaching others and in his/her own climbing), a professional attitude, great patience, the skills of a caring communicator, and a hands-on, step-by-step approach. Being a well-known climber or a 5.13 leader is certainly not integral to being a good instructor, but having climbed seriously for a number of years in a variety of areas on rock, ice, and in the mountains is a good recommendation.

Once you have learned the basics, you need a partner to share the rope with. Take the names and addresses of other students in your climbing class, join a local outing or climbing club, or make climbing acquaintances at work or school. Last, but not least, go bouldering at the local cliffs. Show your face a few times, and chances are, you'll strike up a conversation with a potential partner. But be selective. Some careful listening and observing goes a long way when looking for a prospective climbing partner. For example, don't be impressed with the person who's really into rappelling, belays with leather gloves, boulders in work boots, or carries antique gear on their rack.

And don't forget, if you're pressed for free time, there is always the option of hiring a guide for private instruction; it's probably the fastest way to accelerate your climbing skills. One day of organized climbing instruction is worth months, or even years, of hit-or-miss learning.

The ideal climbing partner is not only well-versed in safety and accepted climbing techniques, but has many other harder-to-find qualities. Patience, friendliness, and trustworthiness are vital. A valued partner is someone who enjoys being outdoors, loves climbing, doesn't mind suffering once in a while, and can pull off a hard pitch when you would prefer not to lead. Grace under pressure is key. Look for someone who places secure protection and sturdy belay anchors and has good route-finding ability. And finally, find a partner who smiles and shakes hands when you get to the top, a person you can share dinner and a beer with after the climb.

Should you compete with your climbing partner? A little competition is healthy in building a solid climbing relationship. It urges each of you on to more challenging and rewarding climbs. Competition can help foster a shared feeling of success between partners. But carried to excess, it can also ruin a partnership. Don't get too heavy. The game is supposed to be fun, remember? It's only climbing.

The rest is up to you.

—Ed Webster

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JASON STERN

Gunks Upstart Says Time Out

Last fall, Russ Raffa, who has an eye for the significant, told me about a sixteen-year-old in the Gunks who, with just over a year's experience, had already become a top climber. "Jason is pure talent," said Russ. "He is another Hugh Herr." I was curious, so I made plans for a day of climbing with Jason Stern.

Living in New Paltz supplied Stern with an incredible backyard for developing his climbing skills. From his first climb in April 1986, he has advanced to an almost unbelievable level — he was leading 5.11 at the end of his first year and is now climbing 5.13.

Stern's rapid learning is a result of excellent physical skill, and, more important, high intelligence nurtured by a diverse upbringing. He lived on a commune in upstate New York until he was 10, and is now attending the State University of New York instead of his senior year of high school. Stern is surprisingly introspective and mature for a 17-year-old, says Raffa.

In addition, he has excellent courage and motivation. He is not fascinated by drugs or by the pedestrian French climbing scene; he could care less about putting in bolts, or smoking and growing his hair long to look like Edlinger. According to Raffa, he has "the quiet intensity, the burning desire to be good, of a Yvon Chouinard or a John Stannard."

In summer 1987, he went to England and France on an American Alpine Club youth exchange. He excelled, flashing up to 5.12b and redpointing a 5.13a R on his second day after top-rope rehearsal. Jason's application letter for the exchange is enlightening insofar as it indicates how well he understands his own skills:

"I have only been engaged in technical rock climbing for a year, but have quickly become enamored by its challenges and adventures. I have progressed from the easier grades to flashing 5.12's in a relatively short time, but feel that I have skipped no stages in the acquisition of climbing skills, technically and psychologically. At the beginning of this season I succeeded on *Survival of the Fittest*

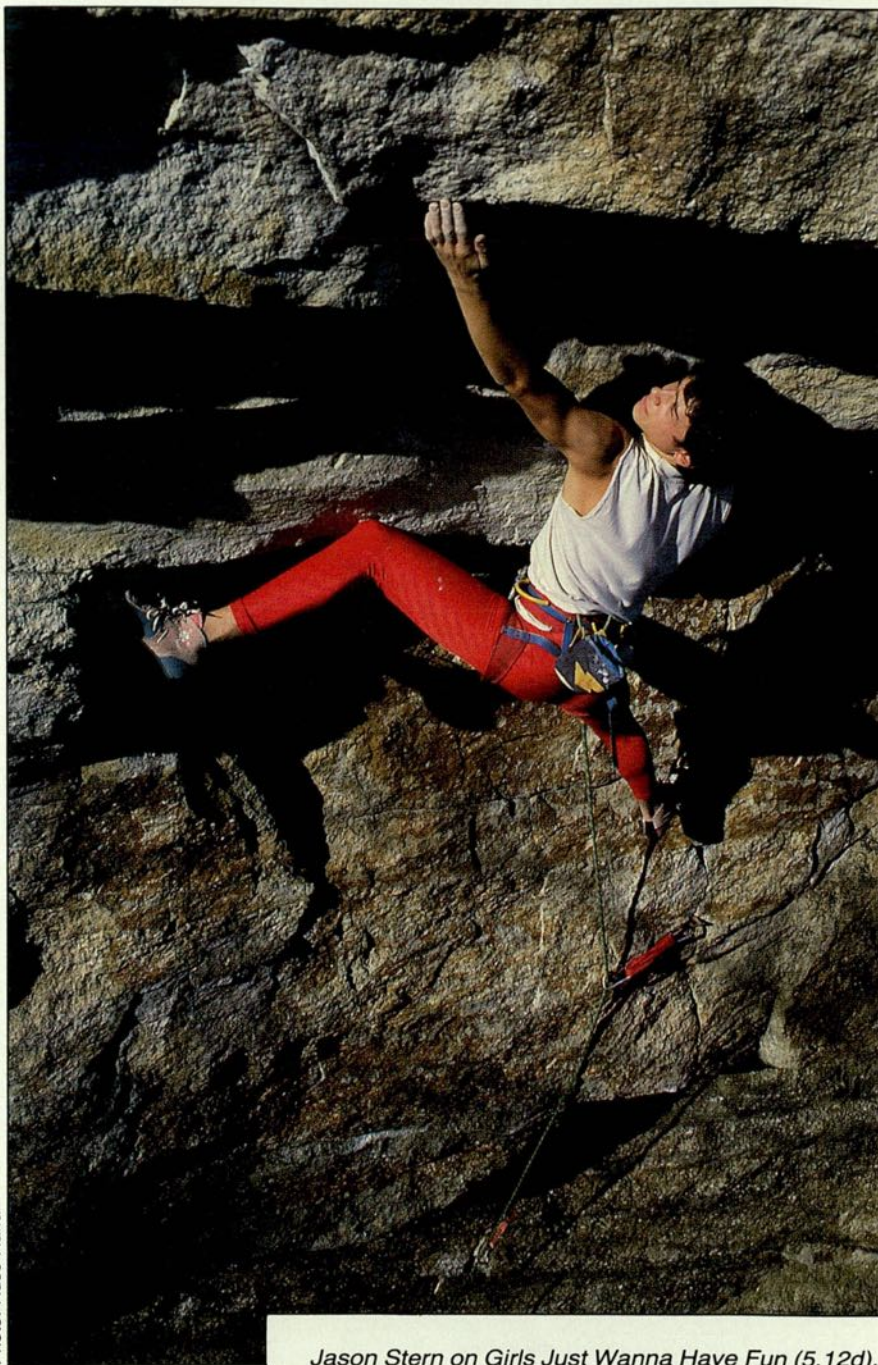


Photo: Russ Raffa

Jason Stern on *Girls Just Wanna Have Fun* (5.12d).

(5.13a) and have recently done *Twilight Zone* (5.12d). Both were ... top-rope ascents."

As usual, there is no way for a person of his caliber to express his talents modestly. Many climbers will not like his lack of humility, but he is as good as he says.

Stern also made the pilgrimage to Yosemite last summer. In six days, he and partner Bob Palaise cruised

West Face of El Capitan, *Astroman* on Washington Column, and *Chouinard-Herbert* on Sentinel. They were training climbs, Stern says, for short routes requiring gymnastic moves.

After his return from Europe, Stern continued climbing at a breakneck pace, amassing a very impressive list of leads and solos in the Gunks. Among his accomplishments were a

solo of *Resisto Flex* (5.12a), the first ascent of *Death's Head Mask* (5.12d R), the third ascent of *To Be Or Not To Be* (5.11d/5.12a X), and an on-sight solo first ascent of a 5.10.

A cold, snowy fall in the East gave Stern time for introspection and reevaluation of his climbing ambitions. He intends to take a year off from school to travel throughout the West on a motorcycle, although, he says, climbing will not be the priority. Influenced by his early upbringing, he plans to visit self-sufficient communal institutions to learn more about himself and human relationships. He feels they are "like a sociological laboratory" — they don't have a lot of society's distractions — and, therefore, interactions are purer with more emphasis on spirituality. To attain a high level of spirituality, he thinks these institutions need focus and a strong leader.

By stepping back from his two-year climbing binge, Stern has a new perspective on the sport: "I was channeling energies that would have been better placed elsewhere... in helping other people. Climbing has been a mirror of my inner self, but not on an articulate level. Climbing is very self-serving; climbers are materially oriented and can use it almost like a drug to escape from emotions and realities." He saw this developing in himself, and consciously decided to redirect his energies.

Although he has soloed at high levels, he now feels there are other ways of achieving that "in-the-moment" feeling that aren't so potentially self-destructive. Climbers would be more productive, he feels, if they'd take that type of focus into other aspects of their lives.

Obsession, he says, is not necessarily the path to higher performance. He feels that by resting, one's energies retool to higher levels.

For example, he progressed to climbing 5.13 by taking the winter off! He knows climbers who "work out constantly, and can't break into 5.12's." Obviously, they're strong enough, but aren't mentally or spiritually together, Stern says.

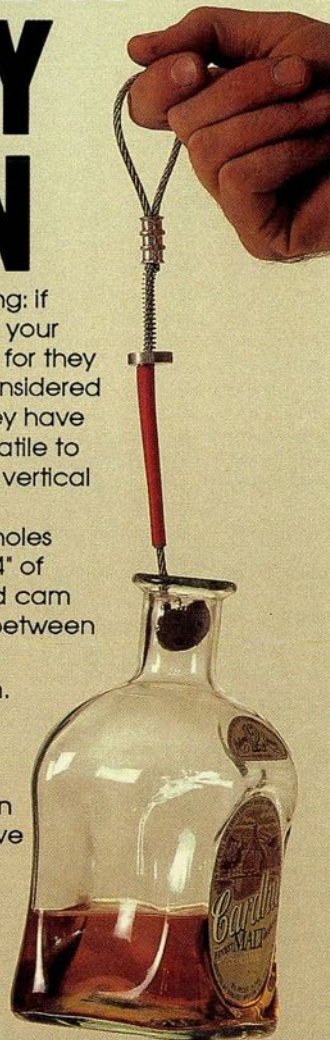
Six pairs of worn-out Sportiva Megas lay strewn across the back of Stern's Dasher, indicating a great deal of work and practice, but watching him climb that day in the Gunks instilled an overwhelming impression of untapped skill on the rock. Between pitches, it became obvious that his skill is deep-seated in personal strength and maturity. He never mentioned specific moves or belabored a particular ascent like many young climbers do.

Despite his already amazing accomplishments, says Raffa, "Jason is not a mature climber." When he does grow up, look out!

— Neil Cannon

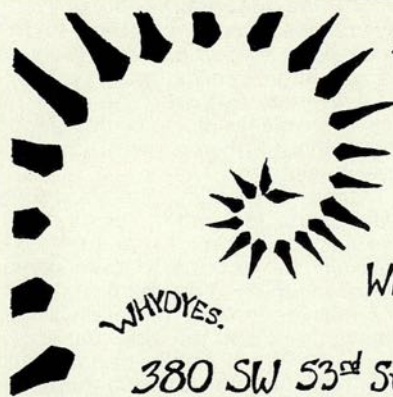
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EAST AFRICA

Climbing Safari: Kenya's Mixed Bag

Mt. Kenya (17,032') is a beautiful and varied peak with many classic climbs. The mountain also has numerous subsidiary rock peaks that are seldom climbed.

What few people realize is that there are many other excellent rock climbing areas throughout Kenya, most of which are surrounded by interesting cultures. Just outside of Nairobi, the Leukenya climbing area offers a wide variety of rock climbs and great views of game from the cliffs. For the more adventuresome, remote northern Kenya has scores of mountains and volcanic rock towers with plenty of room for new routes.

Kenya was occupied by the British for the first half of the century and as a result is the most developed country in East Africa. English is spoken almost everywhere, making travel easier.

Kenya lies on the African equator, and it is a relatively dry, tropical country. The landscape varies from vast savanna plains in the south to semi-arid mountains riddled with volcanic extrusions in the north. Mt. Kenya is in the central part of the country, surrounded by lush highland forest. The Indian Ocean coast, although extremely hot and humid, is laced with beautiful, white sand beaches.

The climate in Kenya is comfortable most of the year, if you can find a few hours of afternoon shade. The uplands (Nairobi and Mt. Kenya area) are at 5000' where the nights are cool and the daytime sun is very hot. There are two rainy seasons in Kenya caused by the same monsoon that drenches the Himalaya. The long rains occur from early April to early June, bringing the country to a halt with torrential downpours and floods. The short rains are significantly lighter and usually scattered through late November and December.

Climbing is less than ideal during the long rains, but some of the best climbing is just after these rains during the summer months. Days are a bit cooler, and if you are interested in ice routes on Mt. Kenya, they are usually well formed from June to October. Rock routes throughout Kenya are usually dry during the summer months, as well as January through March. Nevertheless, while on Mt. Kenya always be prepared for rock and ice climbing due to the mountain's unpredictable weather.

General Health. Before traveling to East Africa you will have to take certain health precautions. The World

Health Organization advises inoculations for about six diseases, most of which are not a great threat in Kenya. The inoculations are only about 50% effective. The only required inoculation is for yellow fever, and you should carry a health card as proof that you've received shots.

You will also need to take malaria prophylaxis for your entire stay in Africa. Malaria pills are readily available in pharmacies around Nairobi, and they cost much less in Kenya than they do in America.

Although Kenya is a very clean third-world country, the flora of the water is different than that in our world, so it is wise to purify any suspect water. Iodine tablets are the only reliable method of killing both giardia and amoebas.

Getting There. Traveling to East Africa takes two days from America. Nairobi, the capital, has a large international airport with daily flights. Prices range from \$1100 for Apex tickets, to \$2500 for full fare. East Africa has become extremely popular with Northerners, so it is essential to book early.

Kenya visas can be obtained from the Kenya Embassy in America for \$20, or when entering Kenya for \$10. Getting a visa when entering the country can mean an extra hour at the airport, and you will have to show your return plane ticket, or that you have enough money to purchase one.

Travel in Kenya. Nairobi is the center from which most trips in Kenya are organized. It is a large modern city with ample accommodations, ranging in price from \$5 to \$150 per night. You can stock up on food and supplies here.

If you are in town on a Tuesday night, the Mountain Club of Kenya welcomes visiting climbers to their weekly, 8pm meeting. The clubhouse is about three miles out of Nairobi at the Wilson Airport. The club has several guidebooks to climbing areas throughout Kenya as well as one for Mt. Kenya.

Once in the country there are several options for getting around. The easiest is to rent a car in Nairobi, allowing the freedom to travel on your own schedule. The many rental car companies in town generally charge upwards of \$50 per day. Otherwise, there is ample public transportation via buses and/or Matatus (small, privately owned buses). Although public

transportation is slow and a bit of a hassle, the cost is practically nothing and your journey will not lack adventure. Some areas of Kenya also have Peugeot service, which is a bit more expensive, but faster and more reliable.

Mount Kenya. Naro Moru, a small town on the west side of Mt. Kenya, is the common jumping off point for most routes on the mountain. Nanyuki, about ten miles north of Naro Moru, gives access to the more northern entrances to the mountain. Transport to either town takes about three hours with the Mambasa Peugeot Service and costs less than \$10.

In Naro Moru, you can organize a local mountain guide, porters, and transport up to the roadhead. Guides are not required on Mt. Kenya but they are very helpful if you don't know your way around. Guides do not actually climb technical routes, but they will sometimes carry some of your gear, take you to the base of the climb, and watch your belongings while you are climbing. Guides and their park entrance fees will cost you about \$5 per day.

Porters are strictly load carriers. They will carry up to 45 lbs in a backpack that must be provided by you (rentals are available). Porters cost about \$3 per day. Both guides and porters will provide their own food, clothing, and equipment, but you are expected to arrange their transport to the roadhead.

If you don't have your own car, getting to the roadhead can be expensive. Sometimes it is possible to hire a private car. The Naro Moru River Lodge in Naro Moru provides reliable transport to all roadheads, but it can cost as much as \$100. Other options are to hitchhike, which is unreliable, or walk 15 miles uphill on the hot, dusty road to the Naro Moru Track roadhead. Walking is only advisable if you have light packs or porters.

The Naro Moru River Lodge can also help you organize guides and porters, and has limited equipment rentals. The Lodge has rooms, a campground, inexpensive bunkhouses, and climber's cabins.

If you have transportation, there are many interesting approaches to the mountain other than the commonly used and direct Naro Moru track. The Sirimon Track on the north side of the mountain has fascinating equatorial montane forests and a wide variety of wildlife. The Chagoria Track on the northeast side is more difficult to reach, but is considered by many locals to be the most beautiful approach. These less-direct approaches not

only offer hiking through unique terrain, but also give climbers valuable acclimatization time. The many approaches are described in detail in the *Guide to Mt. Kenya and Kilimanjaro* by Iain Allen.

At the park gate, you will have to pay entrance fees. Currently, it costs \$4 per person, plus \$1.50 per night. There are huts on the mountain that have separate fees. The huts provide shelter and bunks, but are often crowded and usually not very clean, particularly on the Naro Moru Track.

If you choose an approach through one of the less-traveled forests, there are certain precautions you should take with the wildlife. Buffalo are the predominant large-game species you will see. Like most animals in East Africa, buffalo are not aggressive unless provoked or frightened. As you are hiking through dense woods or bamboo stands, make plenty of noise so animals know you are coming and have an opportunity to clear out.

Aside from buffalo, it is not uncommon to see elephants, zebras, several species of antelope, colobus monkeys, forest hogs, and many exotic species of birds. There are also hyenas, lions, and leopards, but these are not often seen. To watch game it is best to find a watering hole or salt lick, because, in the forest, animals usually leave before you have a chance to see them.

Once out of the forest, at about 12,000', there are great plains of heath and tussock grasses covering the moorland. The moorlands lead to numerous rock spires and faces that surround the main peaks of Mt. Kenya. The rock offers excellent climbing. The peaks are volcanic plugs of hard syenite, several of them reaching to over 14,000'. Point Pigott, the fourth highest peak on the mountain, has several good established climbs and many new-route possibilities. Tereri and Sendeyo can both be climbed in a day and have some of the most promising unclimbed routes in Kenya.

The main peaks of Nelion and Batian are the destination of most Mt. Kenya climbers. Both summits are nearly 17,000' and can only be reached by technical ascents. Batian is slightly higher than Nelion, the summit being a few easy rock pitches from the Gate of the Mists, a saddle between the summits. Although some can be done round trip in one day, most routes should be regarded as two-day climbs. There is a small bivy hut on top of Nelion.

There are numerous excellent routes to the summit of Mt. Kenya. Most are mixed with rock, snow, and ice, although there are such classics as the 14 challenging ice pitches of the *Diamond Couloir*, and the 15 pitches (5.7) of the *Standard Route*. Over 30 routes to the main summit are de-

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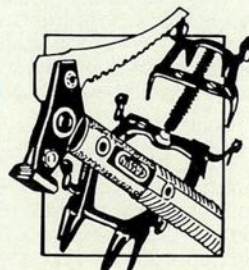
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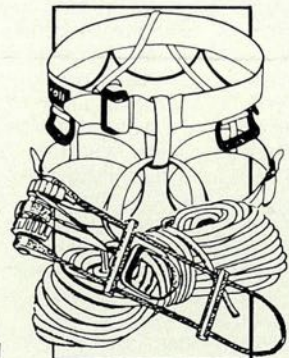
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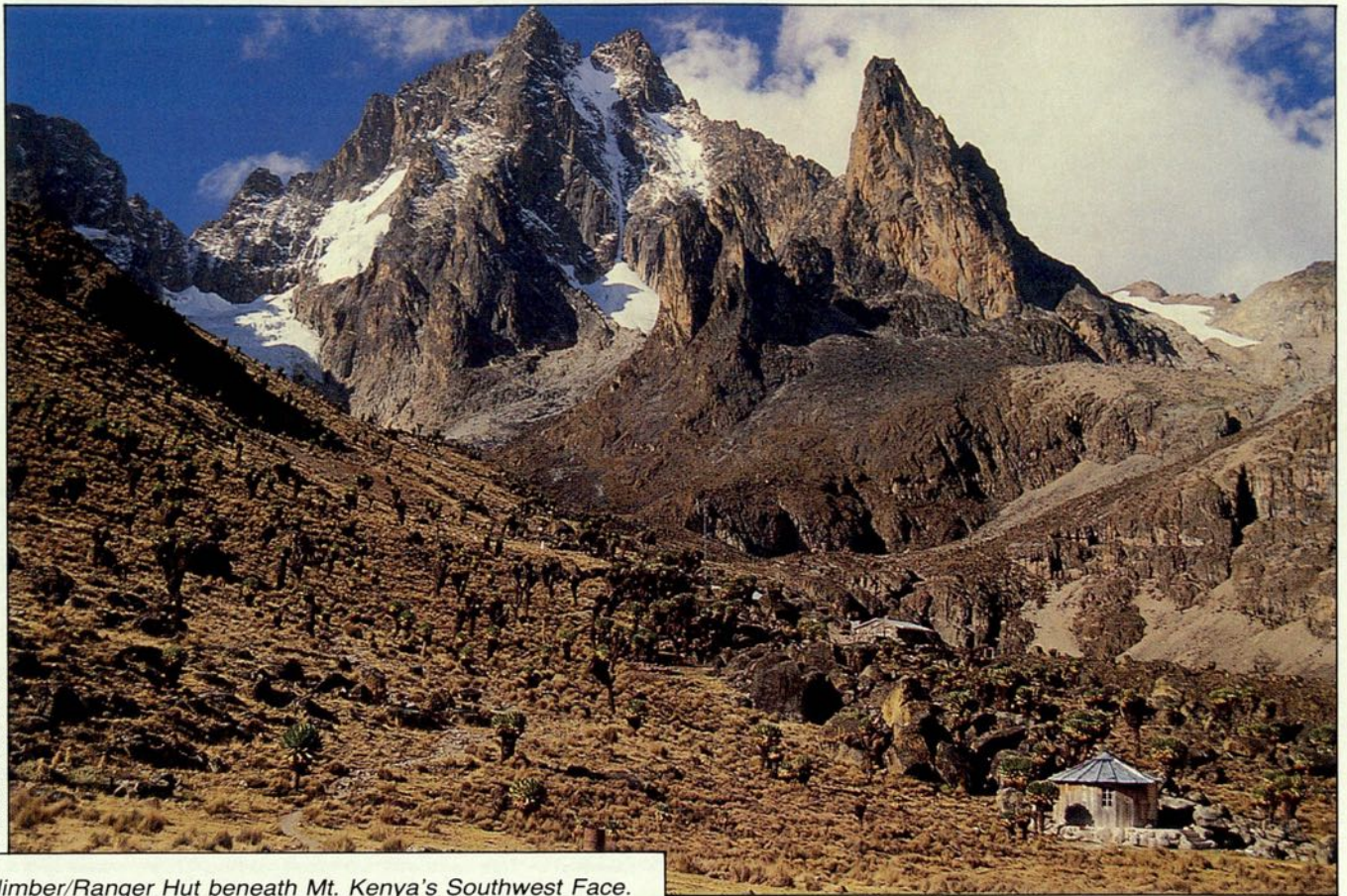
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Climber/Ranger Hut beneath Mt. Kenya's Southwest Face.

scribed in the *Guide to Mt. Kenya and Kilimanjaro*, along with fifty others on subsidiary peaks in the area. There are also endless possibilities for new routes on the mountain.

Hell's Gate. After an adventure on Mt. Kenya, you can travel west over the Kenya highlands and drop into the Great Rift Valley to Kenya's most famous rockclimbing area, Hell's Gate. The solid, red rock walls of this large gorge offer particularly good climbing in a beautiful setting. The rock is smooth and the cliffs are steep with good crack systems. The floor of the gorge is grassland, filled with grazing buffalo, zebra, gazelle, hartebeest, and eland. There is also a pair of rare lammergeyers nesting on the cliffs. Many people visit the gorge just to hike along the scenic valley floor.

Hell's Gate is off the southeastern shore of Lake Naivasha, about 60 miles from Nairobi. It is easy to get to the lake via public transportation, but then you must travel ten miles west on the South Lake Road. If you have the means to rent a car, it is the more convenient. Hitchhiking and public transportation may be possible, but are difficult. There is a YMCA a mile before the Hell's Gate cliffs.

Camping in the gorge has recently

been opened to the public, but a sign cautions, "Beware of thugs."

Water is not available in the gorge, so you must carry in your own.

The Rift Valley floor is about 2000' below the surrounding highlands, and as a result it gets very hot, particularly from December to March. It is advisable to start climbing early in the morning, or late in the late afternoon when the cliff is in shade.

The latest guidebook to Hell's Gate lists over 45 routes on the main wall, mostly three to six pitches long. It also has route descriptions on ten outlying cliffs in the area. Otherwise, check with the Mountain Club for the latest information.

From Hell's Gate it is worth driving north to visit Lake Naivasha. There is camping on the lakeshore as well as luxury hotels. A two-hour boat trip on the lake provides a good introduction to the many species of unique African waterfowl. Boats are inexpensive and readily available.

Leukenya. This is the "backyard" for resident Nairobi climbers. It is a prominent ridge 24 miles southeast of Nairobi, with nearly 200 established climbs. The cliffs, composed of basement gneiss, offer a variety of steep climbs.

The climbing area, its access, and

the campground are all owned by Mountain Clubs of Kenya. Access is open to club members and their guests. Visiting climbers are welcome but should check in with the Mountain Club before using the property. The Club has a register book of the many new routes established since the guidebook publication in 1973.

To get to Leukenya, take the Mombasa road toward the village of Athi River. There is public transportation available. Just after the river, you will see the cliffs and the Leukenya road on the left. A dirt road will lead you around the cliffs to the east side where you can camp. There is no water at the campground. Vandalism is a major problem, and it is not advisable to leave any gear at the base of the cliffs or in the campground.

While climbing, don't be alarmed if you mantle up on a ledge and come face to face with a baboon family, who will probably be even more surprised — you will get to witness their superior climbing ability as they scatter on the cliffs. You will probably also see giraffes and zebras on the plains below.

Northern Kenya. Northern Kenya, still referred to as the Northern Frontier District, is a vast, sparsely populated expanse, stretching north from Mt. Kenya to the border 400 miles

References

Guide to Mount Kenya and Kilimanjaro, by *Iain Allen*. *Mountain Clubs of Kenya, Nairobi, Kenya, 1981*. As of this writing, the guidebook is out of print and being revised. A copy is available for xeroxing at the Mountain Club in Nairobi.

A Rock Climbing Guide to the Main Wall and Selected Routes at Hell's Gate, by *Iain Allen*. *Mountain Clubs of Kenya, 1977*.

A Climber's Guide to Leukenya, by *M.C. Watts*. *Mountain Clubs of Kenya, 1973*.

Addresses

Mountain Club of Kenya
Wilson Airport
P.O. Box 45741
Nairobi, Kenya
(tel.) 501747

Mambasa Peugot Service
Dunga Road
P.O. Box 45274
Nairobi, Kenya
(tel.) 557218

East African Road Services
(Bus information)
Racecourse Road
P.O. Box 30475
Nairobi, Kenya
(tel.) 23476

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away. The country is extremely dry acacia scrubland, populated by the Samburu, Rendille, and Turkana tribes. It is one of the most exciting and adventuresome parts of Africa to travel in.

The landscape is characterized by mountain ranges, huge volcanoes, and isolated rock spires. The climbing possibilities in Northern Kenya are endless and, for the most part, unexplored. Climbing in this country can only be recommended for the hardiest; the days are extremely hot and the nights are not much cooler, water is scarce and the acacia thorn trees on the approaches can turn Westerners' skin into a mass of scratches.

Nevertheless, the few mountaineers who have ventured into the territory have found the possibilities irresistible. Ol Doinyo Sabachi is an extinct volcano on the road to Marsabit whose south side is a solid, 2000' face. Off the eastern flank of Sabachi, there are several multi-pitch spires that stand alone in the scrub like huge monuments. Further north, just south of the Koroli Desert, are the Ndoto Mountains. In the dry rocky hills of the Ndotos stands Mt. Poi, a 7000' mountain with a striking resemblance to Half Dome. Mt. Poi has one known route on the east side so far. The country is riddled with isolated mountain ranges and unclimbed routes.

If you decide to take on the north country, you will need your own vehicle, preferably a 4-wheel drive. Carry all your fuel and lots of water. There is water available at various wells, but

they can be difficult to find. It's a good idea to arm yourself with a few key Swahili words to communicate with the locals.

The locals are friendly and if treated likewise can be of invaluable help. Using knowledge gained over the centuries, the native people thrive in the harsh environment successfully raising cattle, goats, and camels. They can show you water, lead you through the scrub and, for a small price, guard your car with their seven foot spears while you are climbing. The cultures of Northern Kenya are some of the most unique and fascinating in the country.

Aside from the areas mentioned in this article, there are many others throughout Kenya that offer excellent climbing. Ndeyia, Nzai, Soitpus, and Kitchwa Tembo are all worth looking into. There are also excellent mountains for those less inclined to technical climbing: the Aberdares, Mount Elgon, and the Matthews Range to mention a few. The best source of information for all these areas is the Mountain Club of Kenya. Wherever you go climbing in Kenya, you will find it a unique and rewarding experience filled with adventure.

—Melly Reuling



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EL CAPITAN

The Beta for Doing *The Nose-in-a-Day*

One of the finest routes in the world, *The Nose* on El Capitan, offers pitch after pitch of high-quality climbing, exposure, thrills, and perfect rock — it's got it all! For many, *The Nose* is a three- or four-day climb of a lifetime, but for a growing number of others, the goal is to do its 3000' in one day (aka doing *The Nose-in-a-day*).

This task requires being adept at all facets of rock climbing. Although a technical ability of only 5.11 is necessary, a potential *Nose-in-a-day* climber should be able to cruise over semi-difficult rock (hard 5.10 and moderate 5.11) confidently, swiftly, and efficiently. Plus, he/she should be able to deal effortlessly with ropes, anchors, racks, belays, and a pack. *The Nose-in-a-day* requires a special breed of climber, one who has the wall climber's ability to improvise and the free climber's ability to cruise.

Much of the route can be most efficiently climbed "French-free," a technique much akin to modern-day hang-dogging, only quicker. A typical "French-free" section on *The Nose* entails running it out 20' on 5.10, placing a piece, grabbing it, yarding past, running it out again, and so on. On easier ground, pure free climbing is best. "Whatever's fastest" is the rule, but keep in mind that haste makes waste — unnecessary energy expenditure is sure to catch up. On a long route like *The Nose*, maintaining steady pace boils down to speed.

Only five sections require aiders; none are longer than 60', and they total less than 250'. Nonetheless, good aid skills are a must.

The System. Although *The Nose* was originally done in a day by a party of three, improved techniques and gear have made a two-man team most effective. Assuming both members want an equal share of the leads, it is most efficient to alternate leading "blocks" of pitches (six or so) at a time. The second jumars each pitch carrying the pack. Actually, jumaring with the pack is more strenuous and exhausting than leading; therefore, the best scenario would have a fast climber leading the entire route, and a gorilla with 30" biceps merrily jugging every pitch. The block system works because the leader can stay focused in "lead-mode," and get a rest after each lead, whereas swapping leads forces the second to go directly from jumaring to leading with no rest.

With the block system, it is ideal for

team members to switch ends of the rope after each lead. This is most speedily affected by having permanently tied loops at either end, each climber affixing the rope to his harness via a locking carabiner (two opposed locking carabiners are safer).

After leading a pitch, the leader's first job is to tie off the rope (*The Nose* has predominantly fixed belays) and

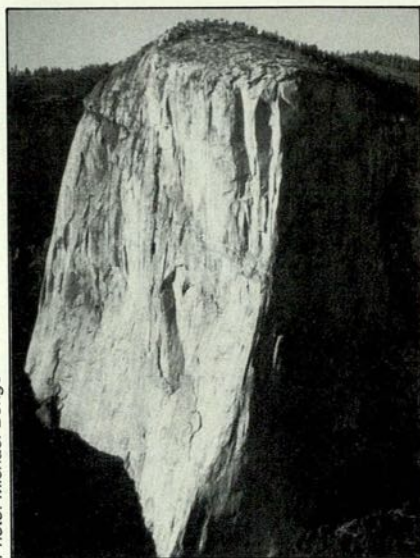


Photo: Michael Bengte

shout "off-belay, jumar when ready." The second immediately starts jumaring and cleaning, securely tied in to his jumars with daisy chains. When seconding a block of pitches, never unclip from the jumar/daisy-chain setup. As the second nears the belay, the leader should be prepared to immediately begin the next pitch, needing only the rack and a belay. When the second arrives, he transfers the cleaned rack to the leader, unclips his end of the rope from his harness (the jumars are his anchor), and gives it to the leader, who then exchanges it for his anchored end. The second then puts the leader on belay, and the vertical quest continues. The second should clip into the anchored end at some point.

With a coordinated effort between partners, the changeover at belays shouldn't take more than a couple minutes; many things can be done to speed things up. For example, the second should keep the rack organized while cleaning so reracking at the belay is kept to a minimum. When the second reaches the belay, he should

immediately relinquish the rack to the leader, and then prepare for the belay. The belayer's setup time should never exceed the leader's preparation time. Changeovers must be kept to a frantic minimum.

Also, belays can be partially cleaned as the leader is setting up the higher belay. Changeovers are most easily done at ledges. On aid sections, clip the aiders into a free biner on the rack so they're ready for clipping the next piece. Also, it's more efficient if the leader remains independent of the belayer; that is, if the leader wants tension, he should clip directly into a piece with a fifi hook. Of course, the belayer is needed for pendulums and tension traverses. Dozens of other little "tricks" are best learned through experience. Always be aware of maximizing efficiency.

Simul-climbing is a time-saving method, albeit a dangerous one. It involves both members climbing at the same time with gear placed by the leader as the only protection, i.e. no fixed belay. Therefore, this technique should be used only by very competent climbers at a level well below their limit. The following scenario on "How to Climb The Route" recommends simul-climbing in only two 30' sections. More simul-climbing can be incorporated, but is not recommended; although it can save time, simul-climbing may not be energy efficient because the second is forced to free climb with the pack, perhaps at an uncomfortable rhythm.

If there are parties above on the route, you'll likely need to pass. However, this is a difficult skill to master, requiring courtesy and patience. It may be impossible to pass for several pitches; graceful passing requires that a faster party be aware of natural breaks in the route, so when the opportunity arises, it can sneak by. It is the faster party's responsibility to minimize delaying the slower party.

Training. The best training for *The Nose-in-a-day* is doing long routes and climbing all day on the crags, especially those with approaches. Obviously, it's best to do a lot of climbing with your *Nose-in-a-day* partner to become familiar with each other's climbing style. Also, soloing is an excellent way to "move" and find your natural rhythm. Below is a list of good training routes. The hours in parenthesis are my times on these routes: they are given as a gauge — the same pace should break 12 hours on the *Nose*. *Routes Climbed Alternating Leads*. Sentinel: *Chouinard-Herbert*, *Steck Salathé*, *West Face* (4-5 hrs, 1hr to base). El Capitan: *West*

What To Bring.

- Two gear slings — one per person
- Rack (see topo)
- Personal gear — harness, shoes, chalk-bag, Muntner locking biner, 3" daisy loop with fifth hook attached-tied to harness (optional)
- One 10mm-11mm x 165' rope (180' is advantageous)
- One 7mm x 165' rope (optional — for retreat and occasional pack hauling)
- One pack
- Water — amount depends on conditions; 1 gallon per person is probably maximum.
- Food — easily digestible energy food (like Jack LaLane bars!)
- One belay/rappel device (to be shared — also know the Muntner hitch)
- One pair jumars w/aiders and daisy chains attached
- One pair lightweight aiders (1/2" aiders fit in a pocket)
- Warm clothes (optional — in case you don't make it)
- Headlamp(s) (optional)

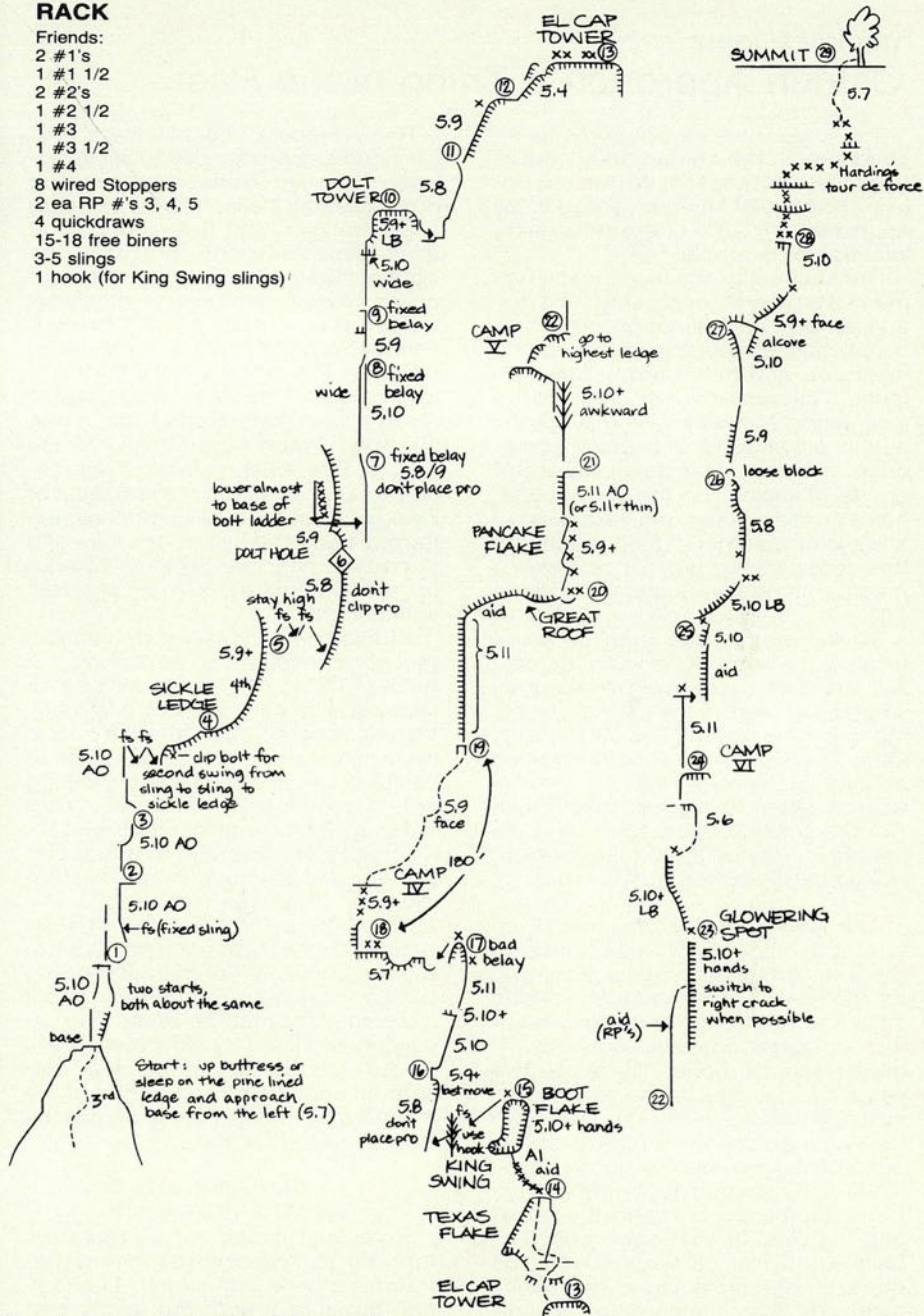
How to Climb The Route.

- Pitches 1-4: These can be done in less than an hour. French-free.
- Pitch 5: Some simul-climbing is required. As soon as the leader clips into belay, the second jumars.
- Pitch 6: Stay high, no pro to Dolt Hole so second can swing across easily.
- Pitch 7: Aiders optional for bolt-ladder, lower to small roof, swing to Stovelegs, no pro to belay so second can swing across (after lowering a bit).
- Pitch 8-10: Stovelegs — probably the most strenuous part of the route. Perhaps another Pitch can be eliminated with long Pitches, but then the benefit of fixed belays is lost.
- Pitch 10-13: Easy to El Cap Tower. Belay second (instead of jumaring) on Pitch 13.
- Pitch 14: Texas Flake, no pro, leader swings rope outside of Texas Flake for second (strenuous jumar).
- Pitch 15: First part — aid (first time aiders are needed). Second part — 5.10+ hands, 2-2.5 Friends.
- Pitch 16: King Swing. Use a hook on the slings mid-way, then flip it off after second swing. No pro to belay (except maybe for the last move — then unclip it) so second can lower out easier. (Possible with one rope)
- Pitch 17: Hard free-climbing, bad belay.
- Pitch 18: Boulder hopping, jingus for the second.
- Pitch 19: 180' simul-climbing.
- Pitch 20: Great Roof: first part goes mostly free, aid under roof (aiders).
- Pitch 21: 5.9+ flake, French-free last 20' section.
- Pitch 22: Awkward, go to highest Camp V ledge.
- Pitch 23: Aid (aiders) — RP's. Switch to right crack and free climb after 50'.
- Pitch 24: All free to Camp VI.
- Pitch 25: Overhanging hands, then tension to right crack — aid (aiders) for 30'. Then free to belay.
- Pitch 26: All free.
- Pitch 27: All free.
- Pitch 28: To bolt ladder.
- Pitch 29: Harding's bolt ladder — aid (aiders) to summit.

The Nose-in-a-Day (VI 5.11 A0)

RACK

- Friends:
 - 2 #1's
 - 1 #1 1/2
 - 2 #2's
 - 1 #2 1/2
 - 1 #3
 - 1 #3 1/2
 - 1 #4
- 8 wired Stoppers
- 2 ea RP #'s 3, 4, 5
- 4 quickdraws
- 15-18 free biners
- 3-5 slings
- 1 hook (for King Swing slings)



The Nose-in-a-Day™ 1988, A5 Adventures.

Face (5 1/2hrs, 1hr approach). Washington Column: *Astroman* (Valley to Valley, 5 1/2hrs). Half Dome: *The Autobahn*, *Reggae Route* (5 1/2hrs). *Routes Done In Nose-in-a-day Style* (second jumars). Washington's Column: *Direct South Face* (4hrs). Lost Arrow Spire: *Lost Arrow Direct* (8hrs). *Soloable Routes*. Higher Cathedral Rock: *Northeast Buttress* (hard and scary), then *Braille Book*. Half Dome: *Snake Dike* — the approach is the main training be-

nefit. Washington Column: *Direct Route* (5.7+). Manure Pile Buttress: *Nutcracker* (my record of 8 minutes, 47 seconds still stands — 600').

Pre-climb preparation. Three days before: Climb a long route. Two days before: Loosen up on some moderate soloing; maybe an easy run around the Valley loop. Eat well, and get lots of sleep. One day before: Complete rest, stretch, breathe, psyche. Carbo load — I like to eat a lot of semi-salty pasta and vegetables,

along with frequent doses of potassium gluconate which helps endurance. Also, drink as much water as you can. Sleeping at the base the night before always improves my psyche. (Note: Fixing pitches is generally considered bogus; the whole route isn't being done in a day.) If you want the benefit of a bright moon, make sure to go 3-5 days before a full moon. Then it will be shedding light at sundown. Good luck!

— John Middendorf IV

THE KNEE JOINT

Ostrich Approach a Thing of the Past

The knee is the most commonly injured joint in the human body, and is especially susceptible to athletic injury. Knee-joint injuries account for approximately 25% of downhill skiing injuries, for example.

Consequently, the knee joint has made a lot of orthopedic surgeons rich and famous. And, although the arthroscope has profoundly improved the diagnosis and treatment of knee injuries, it has also made access into the joint almost too easy, giving surgeons a new "playground" to explore, sometimes selfishly. The development of sports medicine, on the other hand, has allowed a better understanding of knee-joint disorders; their treatment has come a long way since I was a medical student in Scotland 25 years ago.

Then, most knee injuries were treated by applying a cylinder cast with the knee in extension for about six weeks, followed by the patient spending many months in physical therapy. Often, particularly if the injury involved a major ligament, the patient was not able to return to pre-injury activities. But the "ostrich approach," i.e. hide the leg long enough and the problem will go away, lacked good results.

The knee joint is a complex structure. It is made up of three bones — the tibia, femur, and patella. Four major ligaments — the medial and lateral collateral ligaments, and the anterior and posterior cruciate ligaments — attach bone to bone. There are two types of cartilage in the knee. Two cartilage disks — the medial and lateral meniscus — provide shock absorption and stability to the joint. They are C-shaped, rubber-like structures interposed between the femur and the tibia, one on each side. The unique articular cartilage covers the three bones, providing a low coefficient of friction, some energy absorption, and a self-lubricating bearing surface. The lubricant of the knee joint is called synovial fluid, and is produced in the knee. Numerous small ligaments attached to the menisci and the fibrous capsule that encloses the joint are important to the overall stability of the joint.

The knee is controlled by several very strong muscles, which are attached to the bones by tendons. It also has both a nerve, and a blood supply, a range of motion from zero to approximately 130°, and very little lateral or medial movement, and some rotational movement.

Rock climbers, mountaineers, and ski mountaineers are bound to sustain knee injuries. Between pounding down descent trails, kicking steps up snow couloirs, and traipsing up and down slopes of spring corn snow, the climber/skier subjects the knee to a lot of use, abuse, and the opportunity for traumatic injury. Although tremendous advances have been made in the management of knee-joint problems, it is still not possible to restore the knee to normal after a major injury. Therefore, prevention is the key, and the best method of prevention is either staying in the armchair, or being physically fit. Strengthening leg muscles adds stability to the joint and decreases chances of injury. A regular, well-thought-out training program is important.

Strength is only part of prevention, though. I recommend stretching out before climbing or skiing, as well as incorporating daily stretching into any training program. Concentrate on the hamstrings and heel cords. Prior to climbing, skiing, stretching, or working out, it is best to warm up by doing some type of low-level exercise.

The prophylactic use of a brace to prevent knee injury is not recommended, because it prohibits the athlete from using the group of muscles that the brace is protecting. Braces are useful for the athlete who has had a previous ligament injury, but it is important that the brace be prescribed and fitted by a person experienced in athletic injuries. I do not recommend purchasing a knee brace in a sporting goods store or across the counter in a drug store.

INJURIES AND THEIR TREATMENT

Knee-joint injuries can be classified into three types: overuse, acute traumatic, and congenital. Damage can occur to any of the joint's previously mentioned components (cartilage, bone, ligaments, or tendons) and, frequently, involves more than one component.

Cartilage Injuries. Chondromalacia patella affects the posterior aspect of the patella (knee cap). The articular cartilage or bearing surface of the patella becomes softened and fibrillated (roughened), losing its ability to provide a low-friction surface; it also loses its energy-absorbing characteristics. The victim frequently experiences an aching feeling and a grinding sensation, which can sometimes be

heard when the leg is extended. This can also be accompanied by a small amount of swelling. The knee feels stiff, and pain develops when climbing stairs or an incline.

Chondromalacia patella is the most common knee-joint complaint that I see in my office practice. It is usually a reason for discomfort rather than true disability, but can, on occasion, be very disabling.

It is primarily an overuse injury brought on by sustained up-and-down movement or keeping the joint bent for long periods. When caused by overuse, this condition usually doesn't develop into a chronic problem. It generally reflects a lack of fitness, and, if the athlete perseveres and modifies his/her activities, symptoms will commonly subside without treatment.

If symptoms persist despite modification of activity, then the athlete can be treated with physical therapy and perhaps the use of a mild nonsteroidal anti-inflammatory drug taken for a short period. The importance of a stretching program cannot be over-emphasized in the prevention and treatment of this condition. Other important factors in the prevention of chondromalacia patella are proper selection of good running footwear, avoidance of hard training surfaces, and taking rest days.

Chondromalacia patella is also seen in individuals who have a malalignment of the patella. This is a congenital problem and is more common in females than in males. In this condition, the knee cap is not centered over the femur, but is tilted laterally, causing the surface of the articular cartilage to break down.

Treatment of malaligned patella is similar to the treatment of chondromalacia patella due to overuse, i.e. modification of activities, thigh muscle strengthening, stretching, and a physical therapy program. If the malaligned patella does not respond to this treatment, then, arthroscopically, the roughened articular surface can be smoothed off, and the knee cap loosened for more normal alignment. This is best carried out before the articular surface is severely damaged. Very severe cases of malalignment may require open surgery. Most malaligned knee caps, however, respond to nonsurgical treatment.

In some cases, the knee cap is so badly malaligned that it will actually dislocate off the front of the knee; if this happens more than once, surgery is required.

Chondromalacia patella can also be caused by a direct blow to the knee cap. Treatment is the same as outlined above.

Athletes with pronated feet can also develop chondromalacia patella, because the increased rotational movements of the foot stresses the knee cap. The prescription of a suitable orthotic, which stabilizes the foot and prevents the rolling tendency, can help tremendously. Climbers and backcountry skiers should consider orthotics in their approach/running shoes and touring boots.

If chondromalacia patella becomes chronically disabling, surgical treatment may be the only solution; however, it is, unfortunately, unpredictable. Arthroscopic surgery, which can include shaving of the damaged articular cartilage and release of the lateral capsule of the patella, has an approximately 70-percent chance of reducing symptoms. Open surgical procedures are, in my experience, less reliable and require a long rehabilitation period. Also, complications of the surgery can be dramatic.

In a very small group of athletes, this condition is resistant to all forms of treatment. The only option left is a patellectomy, or removal of the knee cap. This operation has a reasonably good record for removing pain, but it does decrease the strength of the thigh muscles by approximately 25%. The procedure is not incompatible with athletic performance; I know of several high-caliber athletes, including skiers and mountain guides, who still perform at extreme levels.

The menisci (cartilage disks) are also commonly damaged. At one time, the most common knee operation was removal of the meniscus. Many times there was really nothing wrong with the menisci — many of the other problems in the knee joint can simulate a cartilage tear, and, before the arthroscope, the diagnosis of cartilage tears was largely a clinical one, which was a hit-or-miss proposition.

Today, cartilage tears can be accurately diagnosed arthroscopically, and the management of these tears now consists of conservative excision of the damaged area, or if the whole meniscus is involved, it can be reattached surgically. Removing the cartilage disks is avoided because it has become recognized that the menisci are very important for a well-functioning knee. Removal of this structure leads to the onset of early arthritis in the joint.

Tendinitis. Patellar tendinitis, inflammation of the patellar tendon, is another condition caused by overuse. It is usually treated nonoperatively with physical therapy, short courses of nonsteroidal anti-inflammatory drugs, and modification of activity level, along with a continuing conditioning program. Surgical treatment is highly unpredictable. Treatment of the rare, chronically disabling cases of this condition is difficult.

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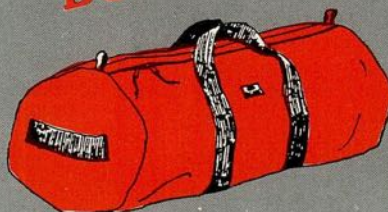
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Unfit climbers can develop another form of tendinitis on the inside of the knee on sustained uphill trudges. It was dubbed "Sahib's knee" by the mountain people in India and Nepal when they first started taking British climbers into the high ranges. Increased fitness and time should see symptoms subside.

Iliotibial tendinitis, a condition produced by inflammation of a tendon on the outside of the knee, is yet another problem. It may be difficult to differentiate this from the symptoms of a torn lateral cartilage. The treatment, again, is that for all forms of tendinitis.

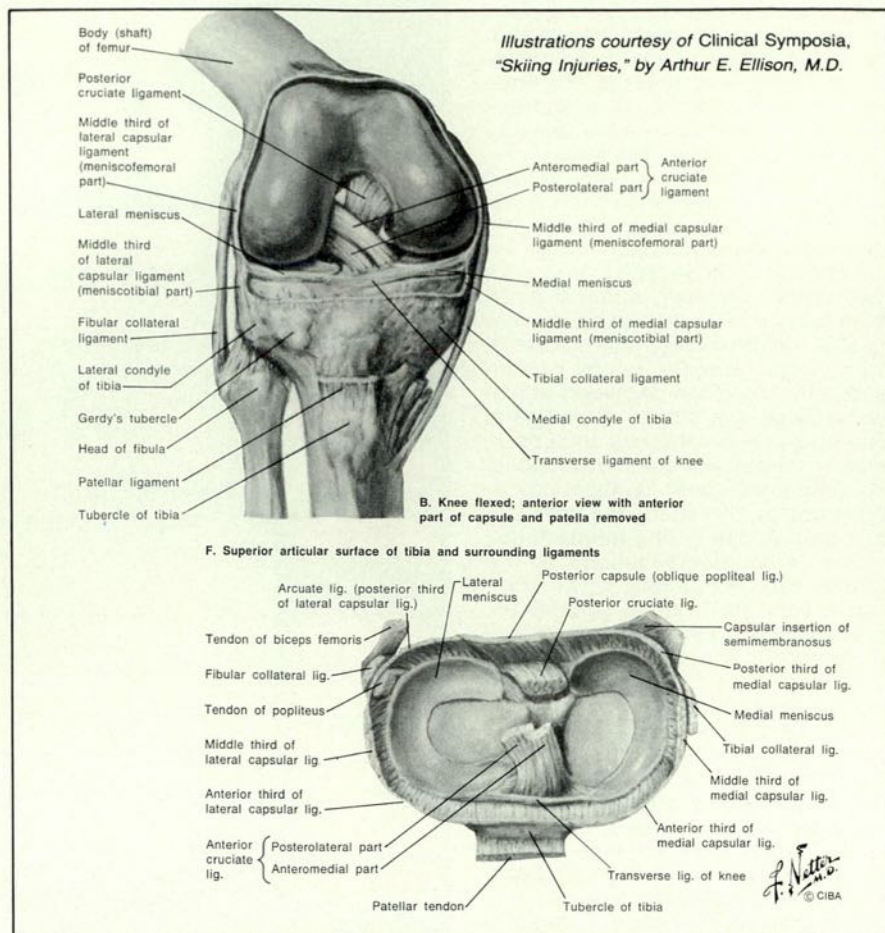
Ligament Injuries. Acute traumatic injuries to the knee joint result either in ligament damage, dislocation, and/or fracture. Falls from a height tend to create fractures, whereas twisting injuries produce ligament tears and dislocation of the patella. Direct trauma can produce both ligament damage and dislocation.

The most common knee-joint injuries are ligament tears, which are classified into three grades. A Grade I tear is a stretch injury without lengthening of the ligament fibers. A Grade II tear causes elongation of the ligament fibers without disruption. A Grade III tear is a complete tear of the ligament. Tearing any of the four major ligaments supporting the knee structures, either singly or in combination, can produce instability of the knee.

The medial collateral ligament is the one most commonly injured when the knee is subjected to a lateral force. Grade I sprains of the medial collateral ligament can be managed by the application of ice for the first 24 hours followed by rapid mobilization of the joint, utilizing such physical therapy as whirlpool baths, ultrasound, and transcutaneous nerve stimulation (massage).

Grade II and Grade III tears of the medial collateral ligament can also be managed nonoperatively. Currently, these injuries are treated by a short period of total immobilization in a full leg cast from the groin to the toes with the knee at 90 degrees and the foot internally rotated. This is followed by a bracing program for about three months. During the bracing program, the patient is put on an exercise program to maintain knee motion and keep the muscles surrounding the joint strong. Even complete medial collateral tears can be managed successfully with this approach. It's possible for the athlete to return to full activity three to four months after the injury.

Tears of the lateral collateral ligament are uncommon. Injuries to this ligament are almost always accompanied by damage to other intra-articular structures. Therefore, injuries of the lateral collateral ligament require very careful evaluation, and, generally, the



knee should be examined under anesthesia in conjunction with the arthroscope. Anterior cruciate ligament ruptures are commonly seen in association with injuries to the lateral side of the knee. It is very important for the physician not to miss an anterior cruciate ligament rupture when the patient complains of pain on the outside of the knee.

Anterior cruciate ligament ruptures are the most common ligament injury experienced by skiers. The athlete is acutely aware of sudden pain and usually hears and feels a definite pop as the ligament ruptures. An isolated anterior cruciate ligament rupture may be difficult to diagnose; this is dependent on the examiner's experience. The key to diagnosis is the patient's testimony of hearing or feeling a pop in the knee joint at the time of injury. If the physician suspects an anterior cruciate ligament rupture, then it's best to examine the knee under an anesthetic combined with an arthroscopic visualization. If the physician sees the injured knee soon after the injury, before any swelling has occurred, the diagnosis is much easier.

The treatment of anterior cruciate ligament ruptures is controversial. Most authorities agree that anterior cruciate ligament ruptures associated with medial collateral ligament tears

or other significant damage do require surgical treatment. Isolated anterior cruciate ligament ruptures can be managed nonoperatively. However, the patient must undergo an extensive physical therapy program, and, usually, will have to use a brace during athletic activities.

It is my feeling that isolated anterior cruciate ligament ruptures causing instability of the knee should have surgical reconstruction in the aggressive athlete.

Currently, there are two approaches to the reconstruction of the anterior cruciate ligament. The most common and certainly the most tested is the open operation where the ruptured ligament is directly sutured, if there is enough tissue left. The ligament is also reinforced utilizing a piece of tissue taken from one of the surrounding tendons, commonly the patellar tendon.

It is also possible to reconstruct the anterior cruciate ligament arthroscopically. This method is not yet widely practiced, and, although the initial results in skilled hands appear to be excellent, the long-term results are not known. The use of synthetic material to reconstruct the anterior cruciate ligament has also been tried, but initial enthusiasm has been damp-

ened by recent reports of negative reactions of the material with body tissues. I do not recommend synthetic ligaments at this time.

There has also been an attempt made to replace the anterior cruciate ligament utilizing tissue taken from a deceased person, and, again, the long-term effects of this operation have not been established.

Regardless of the procedure used, best results are obtained if the repair is performed within the first few days of injury. The ligament can be repaired several months or even years after the injury. However, if the injury has caused chronic instability in the knee joint over a long period of time, the repair has to be more extensive and the results are less predictable.

Although the current trend supports aggressive surgical treatment for anterior cruciate ligament ruptures in athletic persons, it is possible to have a knee which will function relatively well with a good physical therapy and bracing program.

Posterior cruciate ligament ruptures are much rarer than those of the anterior cruciate. But since the posterior cruciate is difficult to examine, injuries may occur with more frequency than thought. Often, ruptures of the posterior cruciate ligament are accompanied by other major ligament injuries. Isolated posterior cruciate ligament ruptures are extremely difficult to repair surgically, and results are unpredictable. It is my practice not to repair these, managing the patient with a physical therapy and bracing program. My reasons are that results from surgical repair of the posterior cruciate are not nearly as good as those for the anterior cruciate, and that I know many athletes who have returned to normal levels of athletic activity after having a posterior cruciate rupture.

Dislocations and Fractures. Dislocations of the patella are quite common. They may occur with or without fracture of the patella. If there is a fracture with a bone chip in the knee joint, the bone chip has to be removed arthroscopically. Patellar dislocation can be managed by immobilization of the knee for a short period of time in a cast followed by a physical therapy program. If the athlete develops recurrent episodes of patellar dislocation, then surgical repair is required. Repair is by either of the surgeries mentioned in "Cartilage Injuries."

Fractures of the knee joint can involve the patella, tibia, or femur. Because they are usually very serious injuries, most require aggressive surgical management, the results of which can be excellent. This involves accurate alignment of the broken bone and rigid fixation, along with a therapy program.

—John McCall, M.D.

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Equipment designed for training is relatively hard to find within the climbing industry. Although homemade devices such as rope ladders and crack machines have been around for years, climbing gear suppliers, as well as most climbers, have been slow to take training seriously.

But things are changing. Climbers are finally beginning to look at themselves as athletes, and fortunately, climbers themselves still run most of the industry that supports our sport. Nowadays, to be recognized as a "good" rock climber, it is necessary to train in one way or another, either with hours in the gym or weekday afternoons on the boulders. To entertain thoughts of climbing the world's hardest routes, a dedicated training regimen is absolutely mandatory.

Even those of us who aspire to do no more than the classic moderates in Yosemite or the Shawangunks are starting to train in larger numbers. It makes us feel better, look better, and more importantly, climb better.

The increasing importance of training is reflected in the development and supply of training apparatus, although there has been considerable lag time. Chouinard Equipment was the first in the U.S. to actually manufacture a training device specifically for climb-

ing, nearly five years ago: the blue doughnut or, as listed in their catalogue, the Forearm Trainer. Although more of a warm-up device than a training tool, the item was quickly accepted.

Soon after, Chouinard came out with the Bachar Ladder, a finely crafted and somewhat expensive version of the old PVC-runged, faded-11mm-rope ladder, which for years was *de rigueur* for any serious climber. They also introduced the Travel Gym, a surgical tubing contraption designed for a quick pump in a motel room — sort of a yuppies' fitness toy that virtually no one took seriously.

That was about it for several years. Meanwhile, an increasing number of climbers seriously interested in training developed their own devices, things with names like the Murray Hang Board or the Skinner Box. Such apparatus started to pop up all over the country, but most climbers were still doing pull-ups. Then came Metolius.

Without a doubt, Metolius Mountain Products has had the greatest impact of any company in the promotion of climbing-oriented training in the U.S. It started with the unveiling of the Simulator at the Las Vegas trade show last March. The success of this molded

finger board, designed to increase strength by dead-hanging, has since brought training to the forefront of the climbing industry's mind. Although there is still a long way to go in the development of serious training devices, this spring has seen a virtual explosion of apparatus on the climbing market.

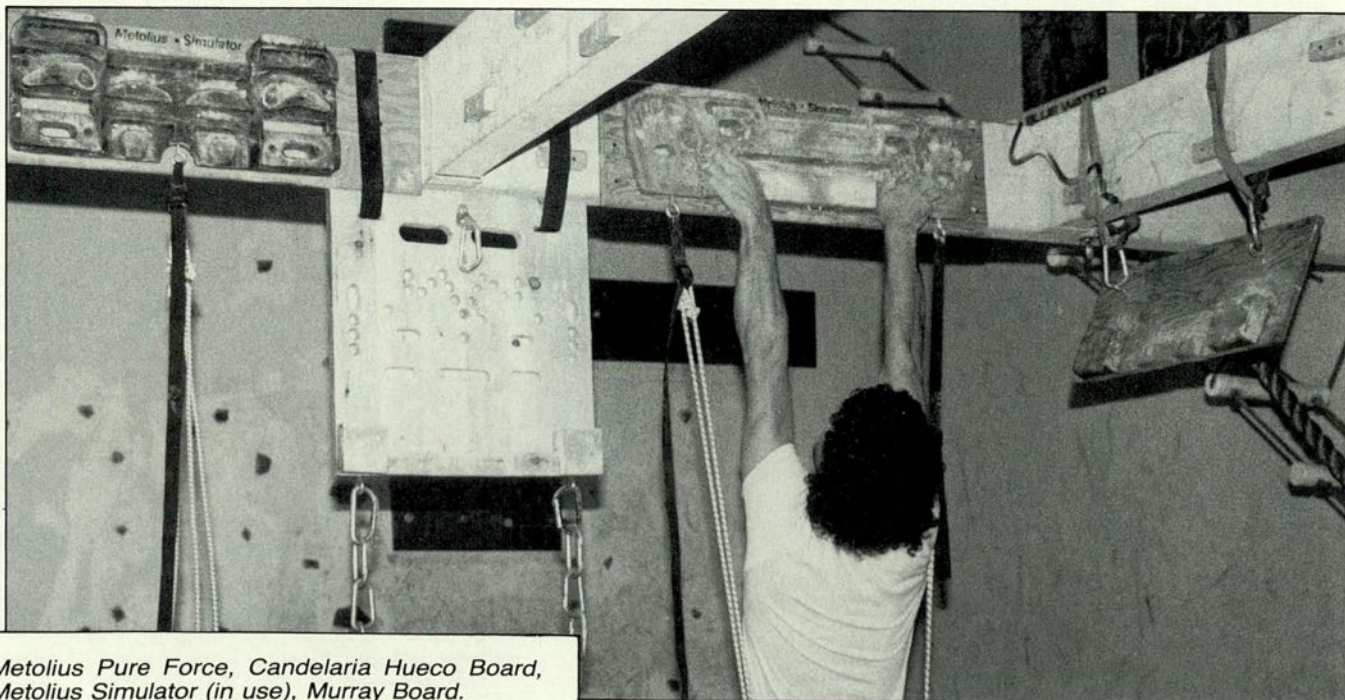
Unfortunately, this explosion has been accompanied by a confusing cloud of often-conflicting information. It is safe to say that no one really knows the best way to achieve optimum results while staying injury-free. And it is practically impossible to compare training devices without discussing training philosophy, despite its shortcomings.

One last qualifying remark: only equipment directly marketed to the climbing public is reviewed here. There is decent stuff applicable to climbing sold outside of the climbing industry, so it pays to look around.

LOWER ARM APPARATUS

Finger, hand, and forearm training devices are undoubtedly the most important link between training and climbing. Many high-standard climbers believe the type of training with the best carry-over value to climbing is that which essentially simulates the act of climbing. However, Dr. Mark Robinson, a leading climbing-related injury specialist and a well-known climber, asserts that such training, especially when used with the overload principle (increasing stress

Photo: Georgia Saviers



Metolius Pure Force, Candelaria Hueco Board, Metolius Simulator (in use), Murray Board.



beyond normal climbing levels) virtually assures injury.

The type of training that Dr. Robinson is most critical of is the same that is sweeping the country: free hanging from finger edges. From what I've seen, there is no question that climbers are getting stronger using hang boards; then again, some people are getting hurt. The difference seems to be in the amount of thinking put into their training.

Another type of apparatus offered by the climbing industry solely with forearm strength in mind is the hand-held squeeze device. With this, it is possible to produce lactic acid build-up in the forearms (the "pump"), and theoretically improve grip strength. However, in climbing, any squeezing is static and generally does not involve the palm. Subsequently, the applicability of squeeze devices to climbing is held in suspicion by many of our nation's hard core. Alan Watts' opinion of squeeze devices is simple: "Virtually useless."

On the other hand, it is more or less agreed that squeeze devices are useful for warming up and helping in the prevention of tendinitis. Larry Arthur of Mountain Tools says their greatest benefit may be psychological — just the fact that you're exercising with climbing in mind is bound to be an asset.

Metolius Simulator and Pure Force. This spring, anyone who wants a hang board has four basic options: make it, make it with purchased plans, buy a wood board, or buy a molded-resin board. The top of the line, at least in expense, is the Simulator by Metolius.

What else would you expect from the largest climbing gear manufacturer nearest Smith Rock than a well-conceived hang board and the most sophisticated (albeit one of the only) training programs in the English language?

The Simulator is a molded resin-constructed 2'9"X8" board duplicating many holds. These include four widths of edges (1/2" to full-hand), a variety of pockets, two sizes of slopes, a pinch for each hand, and a matched pair of holds best described as claws. The board looks and feels like a textured plastic, but is much more durable. The meaty part of the holds is textured so slipping is minimized (chalk is still advised), yet the edges are left smooth for comfort. An adjustable two-point suspended elastic cord can take as much weight as needed to remain at the threshold of failure for as long as possible.

The board's design, however, isn't its strongest asset. Included with the board is a 12-page training booklet based on methods developed in Europe two years ago. Although state-of-the-art training methods for

the fingers and forearms are undoubtedly different now, the information is carefully thought out and has produced significant results in some of the leading European climbers. The booklet advises variety as the key to an effective training program and warns of tactics that may lead to injury. Three basic stamina and six basic power sequences are described, as well as advanced sequences suitable for the highest levels of fitness. Almost all are stationary; the sequences vary by using different holds, adding weight or taking it away with the shock cord, and working with different time intervals.

The board and the training approach taken in the booklet might well change the face of American free climbing. Over 2000 boards have been sold, raising the brows not only of the climbing industry but of assorted experts praising and condemning deadhanging as they see fit. Even Metolius says that hang boards must be used with caution and forethought.

Metolius' Chris Grover admits that a wood hang board based on the Metolius design could be built much more cheaply, and it would produce the same results. He feels the question comes down to one of money vs. time. However, I prefer the feel (and admittedly, the looks) of the Simulator to any wood board I've ever used. Besides price, the only drawback I can see to the Simulator when compared to a wood board is the necessity for a fixed anchor point such as a beam or doorway. Most wood boards are free swinging, hanging straight down from a pull-up bar, like Candelaria's Hueco Board, or from perpendicular eyebolts, like the homemade Murray Board (the eyebolts cant the board out so that when loaded it swings back to vertical).

The Pure Force is Metolius' new hang board design for spring 1988. I think they might have blown it, not because of an inferior design to the Simulator, but because it might actually be better and the cost is \$20 less — more for us, less for them.

The board is smaller, 1'11"X9", so it'll fit in more areas and be easier and cheaper to ship. There are five widths of edges (3/8" to full-hand), two of which are curved from side to side to allow a more natural fit for each bent finger. There are also two sizes of slopes and a match pair each of pockets and knobs.

The holds on the Pure Force are also textured all the way out to the edge. This gives you more security when you're sweating and at your limit, but may hurt tender skin. The holds can be filed down to a desired texture.

So, if you choose this board over the Simulator you lose out on a couple of pocket sizes, a pinch, and the claw holds, which the curved edges essen-

tially duplicate. The biggest drawback to the Pure Force is the one-point suspension shock cord; it is harder to get in and out of and doesn't allow as much support as the two-point system on the Simulator. You could, however, turn it into a two-point system by installing your own anchors on the surface on which you mount the board.

Both the Simulator and Pure Force come with Metolius' training program book and screws for mounting to a beam or above a doorway. An optional steel bracket is offered which holds the board away from the wall or suspends it from the ceiling; its design is simple and secure. A third board design is being developed. Simulator: \$99.00, weight: 16lbs. Pure Force: \$79.00, weight: 13lbs. Optional mounting bracket: \$35. All prices include shipping.

The Hueco Board. This wood hang board was developed by Rob Candelaria, one of Boulder's strongest climbers and an excellent gymnast. The difference in design between the Hueco Board and the Metolius boards can be attributed to a difference in training philosophy.

The Hueco Board is designed for movement rather than deadhanging, based on the premise that the former is more similar to actual climbing as well as less boring. Candelaria has developed a number of routines where you're either performing tasks, like clipping carabiners from the bottom to the top of the board (rings are built-in) or simply moving hands across a variety of holds.

The 2'X2' board is made out of pine and attaches to a pull-up bar with slings. For most hand sequences, including those you will inevitably think of yourself, Candelaria recommends propping your feet on a chair to reduce load (which can be varied by adjusting the distance to the chair), and using a crashmat. The holds range from one- to four-digit pockets, to 3/8" to 1 1/2" edges; you can also figure out four thicknesses of pinches, but there are no slopes.

The two advantages the Hueco Board has over the Metolius boards are cost and portability. But that's about it. Some like the feel of wood better than resin, but if the resin is textured like almost all Metolius holds, wood just doesn't compare for security of grip. However, the Hueco Board has slightly raised lips on all the larger pockets — a nice touch.

Candelaria's games are less boring and keep you on the board longer than Metolius routines, but for power, endurance, or injury prevention, I'm not convinced that Candelaria's routines are superior. This is somewhat of a moot point since you probably could figure how to apply either philosophy to any of the three designs. The only clear problem I have with the Hueco

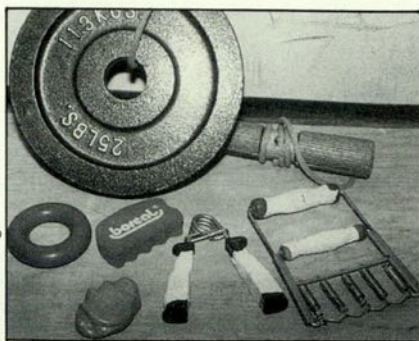


Photo: Georgia Saviers

Homemade wrist roller, Chouinard Forearm Trainer, Boreal Foamer, Power Puddy, wishbone and spring-type squeeze devices.

Board is the diameter of the one-digit holes, which are tight for my fingers.

I've heard that the Hueco Board is well liked among many Boulder climbers, but I suspect it won't make much of a dent in Metolius' business. The board comes with a handout describing Candelaria's routines; sling and carabiners are not included. It is available from Candelaria at the Colorado Academy of Artistic Gymnastics. Price: \$70.00.

Five Twelve Plus Hueco Board.

You have to build this wood hang board. Five Twelve Plus is Jack Thom, who offers a booklet of plans for a variety of apparatus; all but the Hueco Board are described later. I didn't have a chance to build his version of the Hueco Board, but the plans are so well presented and easy to follow there really wasn't any reason to.

Thom's design is based on the layout of the Simulator, incorporating most of the pockets and edges but no slopes and no claw-hold. The plans call for two small perpendicular pipes which you hook your fingers around to simulate fingerlocks; unique, but the carry-over to climbing seems dubious. No sort of shock cord system is indicated. According to Thom, the 3'X1' board takes two to four hours to build once the materials are gathered, and will cost between \$25-\$30, including \$14.50 for the booklet.

Experienced carpenters could get away with building their own design after looking at others, and save the \$14.50. But if you are anything less, I think the money might be worth the time and materials you'll end up wasting without sound advice. Regardless, the beauty of a homemade board is the lack of reluctance you'll have for modifying it.

Chouinard Forearm Trainer.

Hand-held squeeze devices come in a wide variety of designs. Several years ago, Chouinard introduced their design — a rubber doughnut, much like a dog's chewing ring. It was competitively priced and more comfortable in

use than competing spring-loaded designs.

Although the blue doughnut couldn't give you as good a pump as most of the existing devices back then, it was novel and made by Chouinard, so climbers ate it up. It still is on the market today, even though Sole Survivor has since brought in two products that'll give it a good run for the money. The two big pluses for the Forearm Trainer are its durability and size. It may crack a bit, but it'll still give you a decent squeeze after several years. And it's nearly 3" in diameter, perfect for medium-big hands. Price: \$4.75.

Boreal Foamer.

Sole Survivor's answer to the Forearm Trainer is more comfortable to use, gives a more uniform resistance to all the fingers, and is nearly two bucks cheaper. On the other hand, a brand new Forearm Trainer gives a tad bit more resistance than a brand new Foamer. And whether the Foamer will last as long as the blue doughnut is another question — the Foamer just hasn't been out long enough.

The Foamer is similar to a sponge-sized piece of extra-firm 3/4" thick ensolite, with grooves for the fingers and thumb. Unlike the doughnut, which can collapse with pressure, the Foamer compresses, giving an increasing resistance. My only criticism is its width; my paw starts out half-closed on an at-rest Foamer. Another inch would make it more full-hand. Price: \$2.95.

Power Puddy.

Although some climbers have been using this stuff for a while, its manufacturer really hasn't tapped into the climbing market. Enter Sole Survivor. With their distributorship, expect this silicon-based rubber to end up on a lot of climber's dashboards.

It's kind of like blue Playdough, but has a more rubbery feel and leaves absolutely no residue on your hand. Since it is malleable, it's more difficult to get a pump than with other devices. But this is not what it was designed for; in fact, with 30 minutes of vigorous use it begins to soften considerably, giving decreasing resistance to a point where it's not doing you any good.

It is basically designed as a warm-up or therapeutic device. As such, it beats the other hand-held squeeze devices, ahem, hands down. This is because it can work not only the finger's flexors (closing muscles), but the extensors (opening muscles), abductors (spreading muscles), and adductors (side-to-side squeezing muscles) as well. And the importance of working out antagonistic muscle groups is something nobody argues about. Power Puddy comes in four "resistances," allowing you to build up or down as necessary.

Power Puddy's drawbacks? Start with the \$7.95 price (and I prefer to double the Puddy that comes in a package, to give more of a full-hand workout). It also picks up dirt too easily, so watch where you lay it down. Finally, it absorbs sweat and skin oil irreversibly. But the stuff is dynamite.

Traditional Squeeze Devices.

There are two traditional designs of handheld squeeze devices, both manufactured outside of the climbing industry but occasionally found in climbing shops.

The spring type is a square frame with an sliding center bar, which you squeeze against one side of the frame, pulling any number of springs on the other side; more springs give greater resistance. The wishbone type has two handles shaped in a V and joined with a two- or three-wrap coil. Everyone I know who has used both prefer the spring type; you can adjust the tension and work the fingers more evenly.

I can get a forearm pump from either design easier than from any of the previously described squeeze devices. However, the carry-over value to climbing of such training is considered relatively low at best. For a warm-up device, I'd stick with Sole Survivor or Chouinard; their products are simply more comfortable.

Prices start at \$3.50/pair for the spring type and \$2.95/pair for the wishbone type. Generally, the cheaper ones break or deform fairly easily.

Wrist Roll Devices. Among the other apparatus which sometimes work themselves on to a climbing shop's shelf are wrist roll devices. There are basically two kinds. The most common device looks like a foot-long straight handle bar with a wheel in the middle. To work out, grab the handles on either side of the wheel and twist. A mechanism inside the wheel allows the handles to turn independently. All the devices I've seen of this type have a dial, usually on the end of one of the handles, which allows the resistance to be adjusted.

The other type is the wrist roll bar. A 3' or 4' tether attaches a straight handle to a weight, which is rolled up and down as the tether wraps and unwraps around the handle. I've only seen a commercially produced wrist roll bar once; they are very easy to make, using a piece of 1" dowel, some webbing, and a weight.

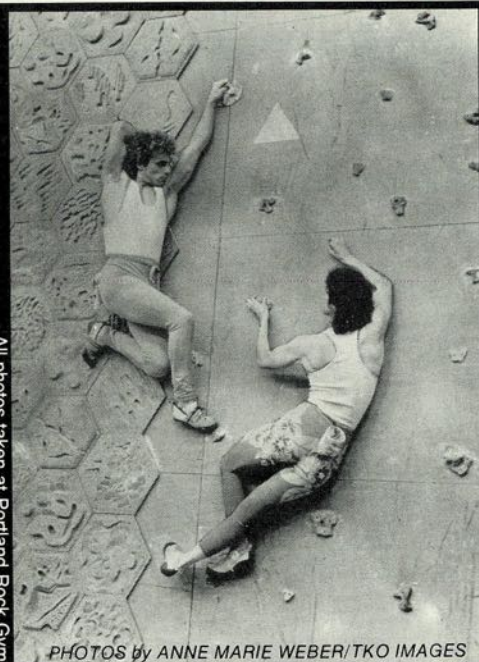
Both types of apparatus are close kin of the classic wrist curls done with free-weights. Dr. Robinson asserts that this is one of the safest ways to train the forearms, wrists, and fingers. Free-weights can help train the fingers by allowing the weight to roll on and off the last joints of the fingers ("finger curls"). Since you can't do this with the two hand-held devices mentioned here, their sole use will leave

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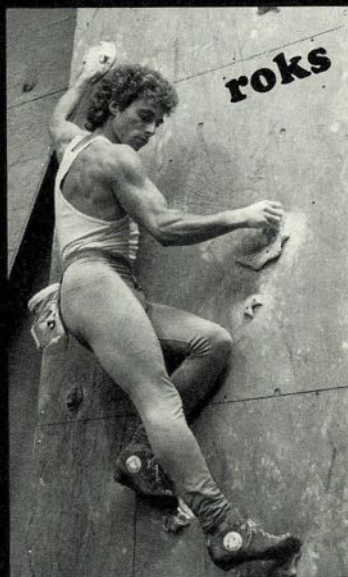
All photos taken at Portland Rock Gym.



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UPPER BODY APPARATUS

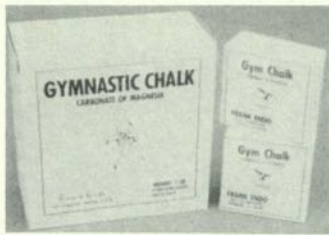
For training "above the elbow," there just aren't many commercially produced devices designed for the rock climber, except climbing walls, which I'll talk about later. There is the infamous rope ladder, better known as the Bachar Ladder, but this has been used for purposes other than climbing for over a century.

The reason for the rope ladder's infamy comes from the joint and tendinitis problems associated with its use.

Although hang boards may catch up in a few years, there is no other training device which has produced so many injuries.

If you must use rope ladders, Dr. Robinson advises not to go down the same way you went up, unless you use your feet or are considerably unweighted, preferably using some kind of counterbalance system. Better yet, figure some other way to get down. Lowering, hand under hand, is simply destructive.

Chouinard Bachar Ladder. This and the Travel Gym have been discontinued this spring, but there will



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undoubtedly be a few lingering around shops for months to come.

The Chouinard Bachar Ladder is a wood rung set designed to be used with any old rope you provide. The rungs are made of maple with a set-screw system which allows easy rung distance adjustability. The makers claim the system is slip-proof, but the rungs have claimed more than one set of knuckles and forced numerous bail-outs — no permanent damage, only a knot in the rope below the rungs so cleverly designed to avoid using knots. Admittedly, this could be from not torquing enough with the Allen wrench to set the rungs. Price: \$59.00 (for a 10-rung set, extra rungs \$6.60 each).

Chouinard Travel Gym. This is virtually worthless for anything but a casual warm-up. An 8oz "gym" made of surgical tubing is a nice idea, but if you're serious about fitness and on the road, find a real gym. Almost all commercial gyms have a day rate; college gyms are cheap, if not free, and there's one in virtually every city. If you're not serious about fitness and on the road, do a few pushups and find a sturdy door jam or tree branch to hang around on; it's a good bet you'll get bored with the Travel Gym sooner. Price: \$17.50.

IME Olympia Pro Chin Bar. International Mountain Equipment is offering several pieces of common gym apparatus through their catalogue. The items described here are all made by an American manufacturing company specializing in institutional-grade apparatus. As surprising as it may sound, IME is moving this stuff quite well.

The Pro Chin Bar is a classic pull-up bar with welded-on U-shaped brackets on each end. It can hang down from the ceiling with just enough room above to keep your head from hitting or from the wall with just enough room to keep your legs from brushing. Made of 1 1/4" steel tubing, it'll be as bomb-proof as its anchors. Price: \$39.50 (plus \$8.50 if shipped), weight: 15lbs.

IME Olympia Pro Dip Bar. This free-standing dip bar is made of 1 3/4" galvanized steel tubing, reinforced with 1" galvanized steel braces. The base looks like a lopsided H, 4' long by nearly 2' wide. It stands 4'6" high, and the spread of the dip bar is 22", which is a fairly standard institutional width. IME's Bill Kane admits that the bar has a very minor wobble, but adds that it can be easily shimmed and he will be happy to tell anyone how. Price: \$79.00 (plus \$10.00 if shipped), weight: 50 lbs.

IME Olympia Weight Vest. This is a well-made canvas-duck vest with pockets for soft weight packs. IME

supplies 20lbs of weight in 2.5lb packets. The pockets are distributed in the front and back to allow whatever you consider optimum weight balance, and the shoulders are padded.

Weight vests, like any training device, can be easily overused by the over zealous, leading to injury. Especially notorious is the use of a weight vest on a rope ladder. Weight vests can be very useful in the development of power, but a consideration of what is to be achieved, and why, is essential to optimizing climbing performance and avoiding physical damage.

Weight vests eliminate plates or other hard weights dangling around your waist, and are usually easier to adjust. Some trainees may prefer a pulley system to add weight, but even then the pull most likely will remain around the waist. If you want the pull on your shoulders, a weight vest makes sense. Price: \$36.50 (plus \$8.50 if shipped), weight: 20lbs.

IME Pegboard Climber. This solid, well-crafted pegboard is made of 1 1/2" thick hard maple, kiln-dried to avoid cracking or warping. The 6'X6" board has two rows of machine-drilled offset holes, and is finished with a triple varnish coating.

A pegboard can increase lock-off strength and grip strength, much like a rope ladder. Also similar to a rope ladder, it is easily overused, causing a variety of tendinitis and joint problems. But if you want a pegboard, IME's is a surprisingly good buy. Price: \$75.00 (plus \$9.00 if shipped), weight: 20lbs.

Five Twelve Plus Training Equipment Plan Booklet. Jack Thom is a builder by trade. When he wrote this a few years ago, his primary motivation was simply to get the information out to the community. So far, he's distributed around 300 copies, and no one has had a bad thing to say yet.

The booklet contains plans for a pegboard, mantle/dip board, crack machine, finger traverse board, dip bar/double-leg lift bar, hang board (described above), and adjustable rungs for a rope ladder. Although I didn't get a chance to build any of the devices, it is obvious that the booklet is superbly done: very clean, very understandable, very professional. The drafted diagrams are numerous and clear, the instructions are simple and well ordered. (For an example, see Thom's article on how to build a pegboard in *Rock and Ice* no. 22, pp. 9-60; the text and diagrams came directly out of his booklet.)

However, I find some of his designs somewhat lacking. The 16-hole pegboard is a bit small at 2 1/2'X2 1/2', and the crack machine is a bit short at 8". His design calls for the finger traverse board to be mounted against a wall, which I would find awkward; I

don't like dragging my legs. And the 1" diameter handles on the free-standing dip bar are too thin for comfortable use.

But, if you consider the booklet as a source of ideas rather than strict recipes, its advice on construction is a well of expertise. It will be a good investment for anyone with little or no construction experience. Price: \$14.50.

CLIMBING WALLS

Given a decade or two, artificial walls may end up as a full-fledged branch of the mountaineering family tree. Indeed, there are already people who prefer climbing on them. As a training device, a well-designed climbing wall can give it all: strength, endurance, balance, technique, even injury. The key phrase is *well-designed*. Admittedly, American artificial wall technology is far behind that in Europe. But what's new?

Metolius Macrotiles. Towards the end of November 1987, Metolius finally hit on a mixture of sand and fiberglass that is pleasing to the eye as well as to the touch. Molded in 18" hexagonal plates with a variety of surface features (30 different molds so far) Macrotiles are rapidly gaining favor among institutions as the American-made surface material of choice for their climbing walls.

They are prohibitively expensive for individuals — prices start at \$8.00 per square foot — but can be the icing on any multiple-user climbing gym's cake. Line the walls with them and you have not only a device for training, but an attractive and fun interior.

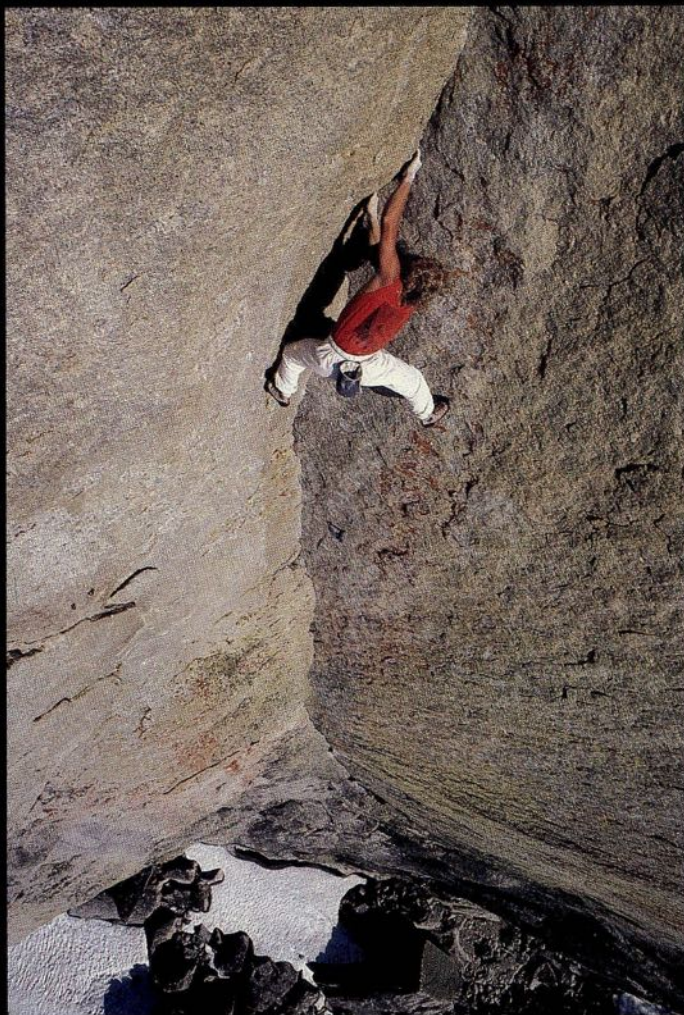
Tiles up to 2 1/2" thick are designed with a variety of holds, from small edges to shallow cracks. Each tile can be turned in six ways, giving six different sets of holds. Permanent attachment, therefore, is not recommended; Macrotiles are pre-drilled and are best mounted with cabinet screws.

The first generation of Macrotiles were made with hard molds, hence the holds were rounded or flat at best. Frankly, I didn't like them at all. Later generations, however, are made with soft molds, giving everything from hard, sharp edges to incuts; these are really enjoyable to climb on.

The negative side to Macrotiles, besides their price, is their lack of history. Although based on a successful European design, the materials used are different, and the durability of the tiles is not known. Presumably, they should endure as long as the indoor wall they are attached to. Outdoors, all bets are off. Volume and institution discounts are available. Weight: 15lbs each.

Metolius says that they should have European-style modular holds by late spring. The design they are working

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on is made of similar material and will anchor with a single point.

Sport Climbing Wall. Sport Climbing Systems Inc. is the newest entrant to the climbing industry fray. Kent Olmstead, who previously ran a company specializing in climbing walls under the Powroll name, has joined forces with Dan Goodwin and Anne Marie Weber, who previously owned a climbing promotion company.

The Sport Climbing Wall is actually Powroll's "The Wall," as advertised in *Climbing* for the last two years. Olmstead, with the help of professional

engineers and draftsmen, designed this 8' wide by 12' high plywood climbing wall to be adjustable from vertical (90°) to overhanging (120°). Holds can be wood, natural rock (bolted to the wall), synthetic modular holds, such as Sport Climbing Systems' New Generation Roks, or tiles, such as Macrotiles. Two versions are offered, basic (once built does not break down) and portable (breaks down in three sections).

There are three ways to achieve the Sport Climbing Wall. You can either buy only the plans, the plans and all the hardware (truss plates, mend-



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plates, nuts, bolts, etc.; you buy the wood), or three prefabricated 4'X8' easy-to-assemble sections. Olmstead estimates that it would take two people a day to build the wall from scratch, and an hour to build it using the prefabricated sections.

The plan booklet, while not as professionally presented as Five Twelve Plus' booklet, clearly has been penned by engineers experienced in dealing with the public. It is easy to follow, and numerous illustrations reduce the chance for snafus. The plans accompanying the prefabricated sections were not reviewed, but are most likely laid out in the same easy-to-understand manner.

Once constructed, the wall is surprisingly sturdy. It does shimmy a little while in use, but this is to be expected considering that its made of wood and not anchored in terra firma. Violent lunges are not appropriate; however, considering the tilt you can set it at, B2's can be easily constructed. The durability of the wall depends on the type of wood used and whether it's left outdoors or indoors. Price: basic plans, \$12.95; portable plans, \$19.95; basic plans plus hardware, \$69.95 (plus \$10-\$25 for shipping; the wood will cost about \$100.); portable plans plus hardware, \$99.95; complete wall, prefabricated portable, \$399.00 (plus up to \$195.00 shipping).

New Generation Roks. These fiberglass-and-sand individual holds are designed to attach to wood walls with cabinet screws, or to concrete with an appropriate epoxy. Previous generation Roks, as marketed by Powroll, were basically hand-shaped globs. New Generation Roks are molded and sandblasted. Avantgarde shapes range across knobs, pockets, and edges. A set of 30 Roks will easily cover a 120 sq.ft. wall, giving at least six distinct boulder problems.

So why buy these when you can pick up a natural set or make some out of wood? First, one of the faces of each Rok is perfectly flat, allowing easy attachment via predrilled holes. And Roks are more natural feeling and diverse than anything you could create with wood. Finally, at \$2.67 each, compared to Macrotiles, they're a steal, but on the other hand, you get only one hold. They appear durable, but suffer from the same lack of history as Macrotiles. Price: minimum set of 30, \$79.95 (plus shipping). Volume and institution discounts available.

Sport Climbing System's Dan Goodwin promises a plethora of new products in the near future, including single-anchor modular holds, large panel-size tiles, advanced indoor and outdoor walls, and complete gym systems. "We want to revolutionize the sport," says Goodwin.

GENERAL FITNESS APPARATUS

In the cardiovascular (CV) training equipment trench wars, two devices have emerged which have considerable applicability to rock climbing. Indeed, they even incorporate our sport's name into their titles. Both are aimed at institutions, primarily because they are so expensive. But who knows, maybe there really are some rich climbers amongst us. Stranger things do exist.

Versaclimber. This sophisticated device can most easily be described as an 8'-9' tall post, standing at a 75° angle. Within the post is a hydraulic track in which two sets of pegs are mounted. The basic technique is to place your hands and feet on the pegs and take off like climbing a ladder, keeping your appendages on the pegs.



Photo: Georgia Saviers

Climbing an endless headwall on a modified Versaclimber.

The set of pegs on either side of the post are at a set distance, and the movement of one peg causes the others in the hydraulic track to move as well. So when your left hand and foot are high, your right hand and foot are low. It's like near-vertical shuffling, with resistance on upward movement as well as downward. Attached to the post is a display board which, on the basic model, indicates elapsed time, rate, and distance climbed.

You can buy models with a fixed or adjustable resistance, and two different display boards, the basic just described or a "PACE" board. The PACE board also includes a heart rate sensor and a computer preprogrammed with 15 workout modes; if your heart rate strays from the target set by the program you chose, it beeps to get you in line.

The Versaclimber has been around for nearly five years and has a good record for durability. There aren't

Manufacturers/Suppliers

Colorado Academy of Artistic Gymnastics
2907 55th Street
Boulder, CO 80309
(303) 449-2811

Chouinard Equipment
P.O. Box 90
Ventura, CA 93002
(805) 653-5781

Five Twelve Plus
Box 6581, Station C,
Victoria, B.C.
Canada V8P 5N7

Heart Rate, Inc.
3186-G Airway Avenue
Costa Mesa, CA 92626
(714) 850-9716

International Mountain Equipment
Box 494, Main Street
North Conway, NH 03860
(603) 356-7013

Metolius Mountain Products
63255 Lyman Place
Bend, OR 97701
(503) 382-7585

Sport Climbing Systems
P.O. Box 1206
Bend, OR 97709
(503) 382-0037

Sole Survivor
4283 Southbank Road
Oxnard, CA 93030
(805) 983-6245

Treco
11846 Tug Boat Lane
Newport News, VA 23606
(804) 873-1177

many devices better for cardiovascular training and general fitness. For rock climbing, it's the best of the CV machines available, especially considering an option unintentionally built into the machine.

At Pacific Nautilus, where I train in Eugene, Oregon, the local climbers have found that you can get on the Versaclimber on its backside, giving an endless 115° headwall. One of the locals has developed blocks with several widths of in-cut finger edges and pockets that mount on the pegs, vastly increasing the machine's carry-over value to rock climbing. Ten minutes on the Versaclimber "headwall," using the smaller holds, is harder than anything I've ever climbed.

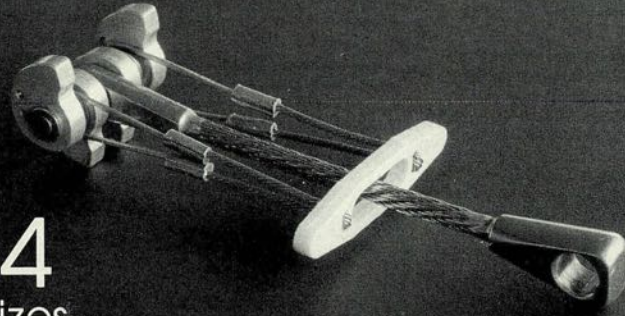
The Versaclimber is distributed by Heart Rate. The basic model fits under an 8' ceiling, weighs 15lbs. and starts at \$1995.00; PACE models start at \$2495.00.

Power Climb. This apparatus, designed by Treco, is Versaclimber's only competition in the battle of the climbing CV machines. Although I haven't used the Power Climb myself, from its photos and the information sent to me, I think rock climbers will lean toward the Versaclimber.

The 819 tall machine looks like a steep staircase, pitched at the same or slightly lower angle than the Versaclimber. Instead of steps, there are

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rungs, set in a continuous loop like a treadmill. This is more like true ladder climbing than the Versaclimber; you reach up for each rung after it pops over the top and step off the lowest rung before it sinks under the machine for a new cycle.

There is a small electric motor which controls speed according to any one of a number of preprogrammed workouts selected from an "onboard" computer. You interface with a small keyboard and video screen which shows heart rate (measured with a telemetry device), elapsed time, rate, total rungs climbed, energy expenditure, oxygen consumption, and calories expended.

According to Chad Ehrenfried, president of Treco, Power Climb is better than Versaclimber because it's easier to learn how to use and is less traumatic since you don't have to push the rungs back up (as you do Versaclimber's pegs). Also, Power Climb

allows you to maintain high aerobic levels longer because, in general, the machine doesn't require as much muscle power. From what I can tell, he's probably right.

However, Power Climb is considerably more expensive, and for the rock climber, it doesn't give you the killer "headwall" that the Versaclimber design offers. And I like the idea of working the antagonistic muscle groups the Versaclimber's "shuffling" allows; Power Climb's rungs go only one way.

Now in terms of which machine is truly the best for user-friendly CV training, you'll have to look in some other magazine. Price: \$5495.00, weight: 650lbs.

—John Steiger

Gratitude is extended to Pacific Nautilus in Eugene, Oregon, the Body Shop in Bend, Oregon, and the Portland Rock Gym in Portland, Oregon, for use of their facilities and expertise.

EQUIPMENT

CORDLESS ROTARY HAMMERS

Bosch vs. Hilti: Which One for Your Holster?

"They're pronounced Fee Rays," E insisted, "and you'll never climb in E.B.'s again."

I pulled the oversized Fires on and stepped up to my nemesis. *Initial Friction* had dumped me dozens of times, often just a move from the summit. Twenty feet of smearing later, I knew I needed a pair.

It took even less time to sell me on cordless rotary hammers (CRH). Mike took me out to the boulder in his backyard. A single 3/8" stud commemorated the hour of effort we had put in a year before when I taught him how to hand drill. Fifty seconds later, Mike's CRH had cloned the hole. I thought of how many hours of my life were wasted drilling by hand.

This new technology for power bolting is having a great impact on climbing areas across the country. Cordless rotary hammers allow longer, stronger bolts to be placed; in the future, 3/8" bolts should become standard on all free climbs. They also provide the option of drilling on the lead with one hand.

Currently, the Bosch 11213 K and the Hilti TE 10A are the only two CRH's that have enough capacity and are light enough to be used for climbing. Both work on an electro-pneumatic principle.

In the climbing community, the name Bosch has become synonymous with power bolting. The 11213 K "Bulldog" (referred to as "the Bosch" hereafter) has been unleashed at the American crags for over a year. It weighs a mere 7lbs 12oz and runs on 24-volt rechargeable NiCad battery packs. The chuck accepts SDS bits.

Hilti has earned a reputation amongst construction workers for its rugged, dependable power tools. The Hilti TE 10A (referred to as "the Hilti" hereafter) outweighs the Bosch by 1lb 14oz and runs on 36-volt rechargeable NiCad packs. The Hilti chuck accepts TE-C bits and SDS bits. Chuck adapters are available to run straight-shank bits with both the Hilti and the Bosch.

I tested both rotary hammers near Mt. Woodson using a single granite boulder chosen for its homogeneity and hardness (hand drilling a 3/8" hole took me eight minutes per inch with a sharp Star Hamrtwist bit). Holes 3/8" wide by 3" deep were drilled until the battery could no longer supply the power to finish a hole. Two batteries were used with each rotary hammer so that data would not be dependent on the performance of one battery.

Batteries were quick-charged until the charger light indicated a full charge.

Both rotary hammers were first tested with a Driltec bit. Next, the Bosch was tested with a Bosch bit and the Hilti with a Hilti bit. The Hilti was also tested with the Bosch bit. (Hilti TE-C bits will not fit Bosch SDS chucks; therefore, that combination was not tested.) All bits were new prior to testing. Reversing the order of batteries run was also done to determine if difference in drill times were due to bit dulling or battery variance.

Times were recorded for each hole drilled. The accompanying graph presents data from the first round of tests when bits were at their sharpest and performance at a peak. Subsequent test with dull bits yielded similar curves, but at a lower performance level.

Looking at the graph, it's evident that B battery times are generally slower than A battery times. This is due to bit wear. When the B battery was run before the A battery the results were reversed. Slow first-hole times are due to cold tools. After a few holes, the tool warms, loosening the permanent lubricants.

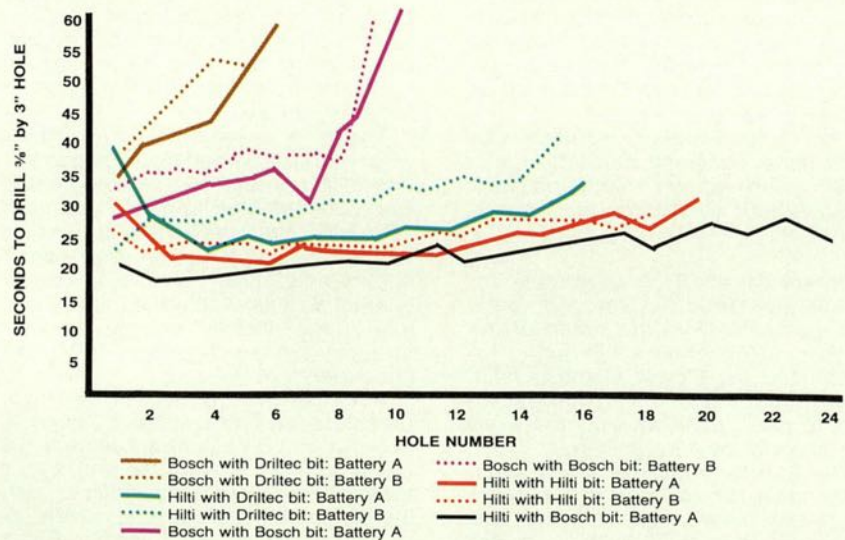
The slope of the curves is a function of diminishing battery power and increasing bit wear. In the field, the Bosch noticeably slows from one hole to the next (confirmed by the steeper slopes of the Bosch curves). With a little experience, one can judge when the battery will drill only one more hole. When the battery is exhausted, the bit will still turn, but not with enough power to drill rock.

The Hilti curves are flatter; the Hilti drills faster and for more seconds per charge than the Bosch. In the field, there is no feeling of diminishing power from hole to hole. The Hilti is equipped with automatic cut-off: when battery power is too low then the drill stops without warning. It feels like the automatic cutoff on a gas pump. This could be a problem when you have only half a hole drilled. After the first cutoff, I could squeeze the trigger and get bursts of power that would last several seconds. Waiting several minutes after each cutoff would allow the battery to recuperate. In this way I could sometimes finish a hole (up to 1 1/2" of granite drilled after first cutoff). To avoid unfinished hole problems with either the Bosch or the Hilti, carry a spare battery pack.

Freshly charged batteries give more holes per charge than charged batteries that are allowed to sit before use. Total seconds of drilling per charge remains approximately constant for freshly charged batteries at a given temperature. To work their best, NiCad batteries must be properly conditioned. To do this, fully drain the batteries under load and recharge them; repeat this process three to five times. Once properly conditioned, both Bosch and Hilti batteries can be charged up to 500 times.

During my tests, I discovered that all carbide-tipped bits are not created equal. Holes drilled per battery charge are dependent on the amount of time taken to drill each hole. High performance bits that hold an edge well are necessary to maximize rotary hammer performance.

The Driltec bits dulled quickly; of the bits tested, they drilled the fewest



holes per charge. In fairness, I should mention that the batteries used to test them had been charged twelve hours previously as opposed to immediately (1 hour) prior to testing as with the other bits. Natural power leakage from the batteries doubtlessly occurred in this time as indicated by a lower number of total elapsed drilling seconds per charge. I feel that with batteries charged immediately prior to testing, the Drilltec bit would drill one more hole per charge, possibly two holes with the Bosch. (The Bosch batteries lost a greater percentage of power in twelve hours than did the Hilti batteries.)

The Bosch bit outperformed the others. Not only was it the best in the the Bosch, but it bettered the Hilti bit in the Hilti. At its fastest, the Bosch bit/Hilti rotary hammer combination clocked an amazing 18 seconds per hole.

The Hilti bit performed well, but drilled a tighter hole than the Bosch bit. I had to force a 3/8" hammer-in Star stud anchor into the Hilti bit hole, while the same bolt would slide into the Bosch and Drilltec bit holes.

Both the Bosch and the Hilti would drill straight down into rock under their own weight. Adding pressure would decrease the amount of time needed to drill a hole, but only to a point. When too much pressure is applied, the bit slows. The trick is to let the tool do the work — *don't force it*. New tools may not equal the statistics shown in the graph until they undergo a break-in period. Maintenance is not required until the brushes wear out, which takes an estimated six to 12 months of daily construction use.

The advantages of the Bosch are its lighter weight and lower cost. The Bosch is a good choice for the climber who only drills a few holes at a time or who is carrying the tool on the lead.

The advantage of the Hilti is its superior performance. With one battery, the Hilti weighs less than the Bosch with two batteries and drills more holes. Nevertheless, I recommend buying a spare battery. The climber who drills lots of holes should consider making the extra investment to own a Hilti.

Construction tools are like auto parts; nobody buys them at suggested retail. Dealers will drop a lot off the prices listed, especially if you work a package deal with spare batteries, bits, etc.

Lastly, a few words of caution: wear eye protection, follow all manufacturers' safety instructions, and remember: unless used with discretion and respect for others, a bolt kit can get you into more trouble than it can get you out of.

—John Sherman

Correction

Climbing apologizes for not crediting John McMullen for his superb drawings that accompanied John Middendorf's bolting review in Climbing no. 106.

CORDLESS ROTARY HAMMERS

Model	Price	Weight	Holes per Charge*	Charging Time**
BOSCH				
11213 K	\$459	7 lb. 12 oz.	10	1 hr. 50 min.
Spare Battery	\$99	4 lb. 14 oz.	—	—
Drill Bit	\$12.30	—	—	—
HILTI				
TE 10A	\$599	9 lb. 10 oz.	23	2 hr. 15 min.
Spare Battery	\$215	5 lb. 9 oz.	—	—
Drill Bit	\$27.50	—	—	—
			*3/8" x 3" granite	**Average @63°F

Drilling on the Lead

Climbers no longer need a no-hands stance, a skyhook, or a rap line to drill bolt holes. What is needed is a cordless rotary hammer (CRH), a strong pair of arms, the right kind of bolt, and the boldness to put routes up on the lead.

There are two approaches for getting the CRH up the cliff: hauling it up from below or carrying it on the lead. Hauling from below gives the tool a beating on any wall less than vertical. It also gives your arms a beating, especially the arm you're hanging onto the rock with. To keep from dropping the CRH as you haul one-handed, use an ascender (recommended) or your teeth (dicey). Hanging the CRH with a fifi hook from the last pro placed reduces the amount of hauling to each subsequent bolt placement.

Carrying the CRH on the lead is awkward unless the tool is modified so that the battery pack can be attached to the climber's swami, and the rest of the tool can ride in a holster. Not only is the modified CRH always there when you need it, it's easier to hold at arm's length. However, you must carry the extra

weight on every move, and modification voids the tool's warranty. Although I've never had one turn on accidentally, the potential is there if one is careless.

A proper grip on the CRH makes one-handed drilling easier. Hold the tool upside down by the back half of the body. The index finger lies along the handle. The two middle fingers fit between the handle and the battery pack. The expressive finger works the trigger. Modified CRH's are held like a video handycam, the strap freeing the fingers from gripping. Dropping one accidentally is less likely, but, if you do, it's not as apt to pull you off, provided it's attached to you.

Mark the bit for hole depth or use the CRH's depth gauge. A blower bulb, long mouth tube, or pocket Dustoff can be used to clear the hole.

Not all types of bolts can be placed one-handed. You must be able to slide the bolt far enough into the hole so it won't fall out before you can hammer or torque it in. Hammer-in type bolts work well. Taper bolts also work but are more difficult to slide in as far, making them more likely to fall out.

—John Sherman



SKI PACKS

Take The Load Off Your Shoulders

Before doing this review, I thought that there were packs available for ski mountaineering. I was wrong.

With few exceptions, packs are either designed for general mountain use, or made specifically for climbing. While many packs will perform for hiking to a sunny crag or front-pointing a snowy nordwand, most will fall short if you fill them with a load for ski mountaineering, and look for operability with mittened hands, adequate pockets, and attachment systems for skis and shovels.

So a good ski mountaineering pack is a specialized animal. The basics include a simple load compression system; methods for strapping on skis and shovels; wide, padded shoulder straps with top stabilizer straps and a chest strap; a fairly wide, non-twisting hip belt with a no-see-to-operate buckle; a simple, internal stiffening system; top loading for simplicity and reliability; quality stitching; fabric that is a good compromise between weight and durability; and a reasonable price.

The packs reviewed here are suitable for a day of heavy ski touring or a lightweight overnight. The number of packs available today is staggering — we looked at over 40 models before selecting these 14 as the most appropriate for ski mountaineers. Use the features listed below and the specifications on the chart to help you in making a choice.

Volume: Volume figures given by manufacturers can be misleading because of different methods of measurement. In reality, slight differences are not worthy of consideration because lash points, extra pockets, and compression straps make a huge difference in the amount you can load. More importantly, since a larger pack allows you to carry more, it should have a suspension system that will transfer more weight to your hips.

Weight: Some of these packs weigh in at more than five pounds. If your idea of ski mountaineering is hauling a sack up the Trango Tower, then parachuting off with skis, by all means purchase a fully optioned Ironclad. Otherwise, a lighter pack will let you carry an extra liter of vino to the hut, or less weight to the summit.

Durability: All of these packs are durable enough for ski mountaineering. However, the zippers in panel-load packs are a weak point; if you plan on continuous use, stick with a top loader. Top loading packs also let in less snow when opened in the inevitable blizzard.

Most packs are well-made, although there are subtle differences in quality. Look for double or triple

stitching on important seams, reinforced high-wear areas, and good-quality, waterproof fabrics. I like to think that ski trips involve a lot of skiing, but mountaineers end up carrying their skis quite often. As a result, packs suffer a great deal of wear from ski edges. Mitigate this by careful loading, and strapping skis tightly onto the pack.

Ski and Shovel Attachments: No one makes a pack with a quick, solid, and simple ski holder. Ski slots behind pockets work, as do compression straps, but both methods take a lot of time to rig. And with height adjustment next to impossible, your skis often end up catching on every tree branch, or else battering the backs of your knees.

Lashing skis lengthwise, over or under the top flap, is an alternative, especially with short skis. Another popular method is to put the ski tails down through the ice axe loops (on packs with two), then lash the upper portion of the skis to the pack; this works well because it angles the ski tails away from your legs.

A decent way of attaching shovel to pack is another item missing from my wish list. None of the packs reviewed have a shovel attachment.

Internal Frame: Most packs have some sort of internal frame or stiffener. For loads under 20 pounds, flexible plastic or foam works well, allowing the pack to move with your body. For larger loads, nothing beats the way stiff aluminum transfers weight to your hips. Keep in mind that a pair of skis adds up to 16 pounds to your load, and a flexible frame will often collapse like a wet noodle under their weight.

Fit: Different sized people are accommodated in two ways: by sizing and by adjustability. When available, a sized pack is the ticket to comfort. Adjustables usually work fine for average sized folks, but larger and smaller people will find that most ride poorly off the shelf, and are complex to properly fit.

Shops usually load packs with dense, neatly-packaged weights for demonstration purposes, so fitting can be deceptive. Remember that out in the field you'll be more likely to have a jumbled load of water bottles, repair kits, cameras, food bags, and clothing; you won't be able to reach the fancy adjustment straps with mittened hands, the waist buckle will catch on your parka, and try as you may, with goggles on you won't be able to see it.

So fit your pack carefully in the comfort of the shop. Demo several models if you're having fit problems; all harness systems have people who love and hate 'em.

Pockets: Top loading packs have

pockets in the top flap. I also like pockets on the sides; some folks don't, complaining that their arms are obstructed during pole swings. If you like side pockets, having them permanently attached works well. Most packs do not have sewn-on side pockets, but offer add-on models that attach via compression straps or by clever keyhole clasps or plastic tracks. Several of the packs have a removable top flap that converts to a fanny pack.

Loading: With a small load, it is often convenient to stuff the top flap into the main bag and cinch up the drawstring. Many top load packs have the drawstring mounted on an extension of the main bag, thus precluding this useful and time saving cinch-up. Two drawstrings, on the extension and the main bag, are optimal.

One problem is that every time you pull an item out of the sack it tangles in the extension, especially the longer ones that tuck down into the main bag. Extensions are more of a hassle than they are worth, and I usually cut them out.

Another small but important factor for loading is the location of the top flap buckles on the main bag. If they are too high, you won't be able to cinch down the top flap unless you have a full load.

Options: Most of these packs are designed with as many lash points, straps, and buckles as possible. Do you really need all that stuff flapping in the wind? Keep in mind that versatility always means compromise; a fully optioned pack is going to cost more, weigh more, be harder to operate in full conditions, and have more to go wrong.

Chouinard. The 3000 and 4000 are conventional top loaders. Both feature convenient interior pockets, plenty of lash points, two tool loops, and a simple suspension system. Two sizes and minimal adjustment allows for fitting.

Their pleated top flaps look great in the store, but serve mostly to catch snow in the field; like many packs, the buckles are mounted too high to secure the top flap with a small load. However, the two buckled straps sewn onto the underside of the top flap are perfect for securing skis or a pile jacket.

The 3000 is the smaller of the two, and carries loads of under 25 pounds fine with its foam frame. The 4000 offers similar features, but its aluminum stay frame makes it a better choice for larger loads. Both of these packs are simple, lightweight, and well priced.

Dana Designs. The Bridger is a medium sized top loader. Two vertical zippered pockets on the back of the pack are meant to replace side pock-

ets, but they aren't accessible when you sit on your pack in the snow, with shoulder straps up. And when the top flap is cinched down it covers the pockets.

The Bridger rides very well. It has a comfortable waist belt and plastic sheet/single aluminum stay frame; this system offers the perfect compromise between flexibility and lifting weight off the shoulders. Skis can be attached with the two ice axe loops.

Defrance. The Conformist is a large, well-made top loader, with horizontal, around-the-back compression straps. Optional side pockets attach very securely with keyhole buckles; they are tapered so they don't interfere with swinging ski poles. They are the best optional pockets I've seen.

The complex top flap can be wedged to the waist belt to make a small fanny pack, but it's not really large enough for ski mountaineering. To make the pack smaller, leave the top flap at home and cinch it up with one of two drawstrings. Although the Conformist has a lot of volume, its minimal plastic sheet frame can only be recommended for lighter loads.

Gregory. The Spire is a large top loader, and definitely has it all: aluminum stays, two drawstrings, low-mounted flap buckles, keyhole side pocket attachment, top flap fanny pack, zipper compartments, two ice axe loops that accept skis, vertical compression straps, lashing straps on the bottom, and lots of lash points. But all these features add both weight and cost.

Gregory's innovative fit system allows you to "wear," rather than carry the pack; different human frames are handled by changing sack size, strap and belt lengths, and bending the aluminum stays. However, this system is lost on my average-sized frame, and the large waist belt is somewhat uncomfortable for lighter loads. My favorite Gregory feature is the no-slip "gription" mesh on the waist belt.

Jansport. The Super Sack is a small panel loader with a foam frame, and would work well for someone with minimalist inclinations. Sewn-on side pockets have ski slots that accept alpine skis, provided the bindings will swing outside of the pocket in the touring mode. The pack has two horizontal around-the-back compression straps, but only one ice axe loop. There is no chest strap, although this would be easy to sew on. Economically priced, the Super Sack is a good small skiing pack.

Karrimor. The Jaguar E54 is a large top loader. Available in one size, it adjusts using Karrimor's S.A. system; the shoulder straps attach to



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SKI MOUNTAINEERING PACKS

Model	Price	Weight	Volume	Sizes
CHOUINARD				
3000	\$100	2 lb. 9 oz.	3000 cu. in.	Reg., Tall
4000	\$138	3 lb. 6 oz.	4000 cu. in.	Reg., Tall
DANA DESIGNS				
Bridger	\$145	3 lb. 5 oz.	3200 cu. in.	M, L
DEFRANCE				
Conformist	\$202.95	4 lb.	3873 cu. in.	one size
GREGORY				
Spire	\$120	5 lb. 12 oz.	4214 cu. in.	S, M, L
JANSPORT				
Super Sack	\$50	1 lb. 12 oz.	2085 cu. in.	one size
KARRIMOR				
Jaguar E54	\$170	3 lb. 9 oz.	3300 cu. in.	one size
Hot Earth	\$110	2 lb. 8 oz.	2740 cu. in.	one size
LOWE				
Contour Alpine	\$135	4 lb. 6 oz.	3300 cu. in.	one size
Cloudwalker II	\$99	2 lb. 15 oz.	2280 cu. in.	one size
MADDEN				
Sunlight	\$175	4 lb. 7 oz.	4100 cu. in.	M, L
MCHALE				
Alpine I	\$168.50	4 lb. 8 oz.	3500 cu. in.	custom
MOUNTAINSMITH				
Super Tour	\$120	3 lb.	2990 cu. in.	one size
OSPREY				
Zephyr	\$135	2 lb. 15 oz.	3100 cu. in.	M, L
WILD THINGS				
Andinista	\$235	3 lb. 3 oz.	5500 cu. in.	S, M, L

a slider which moves on the aluminum stays. Only one waist belt size is offered.

The E54 compresses by horizontal side straps, as well as adjustable top flap straps, and has a horizontal zipper to access a compartment that can be optionally sectioned-off from the main bag. There are two drawstrings for top closure, and two ice axe loops for skis. Optional side pockets attach securely with a plastic track system. This is a very good pack for long day or overnight tours.

The Hot Earth is fairly small, but has a rigid foam and malleable metal frame that lifts weight off the shoulders. It does not use the S.A. suspension system; the shoulder straps are simply sewn to the pack body. There are two horizontal compression straps on each side of the pack. Unfortunately, the top flap anchor buckles are mounted too high. The Hot Earth comes

without a chest strap, but does have webbing loops stitched to the shoulder straps, so a retrofit is easy. This is a good smaller ski pack, and its stiffer frame is unusual in this category.

All of Karrimor's packs are simple, innovative, and have a distinctly international look and feel. However, the stitching is of a much lower count than most other packs, and some important seams are only single stitched. Karrimor's prices certainly do not reflect this kind of oversight.

Lowe Alpine Systems. The Contour Alpine is a good medium-sized ski pack. Sizing is accomplished by adjusting the Torso Ladder suspension system, which works fine for medium-to large-sized folks; if you are petit, the pack will be in the way when you tilt your head back. However, it can be

adjusted quickly and easily. The Contour Alpine has two ice axe loops that fit skis, and it can be compressed with horizontal straps. Optional side pockets buckle to small sliders on the compression straps, a tedious method. Also, the top flap anchor buckles are not low enough to stabilize the flap with a small load, and many extra straps and an overkill waist belt add up to a heavy pack.

The Cloudwalker II is a technical climbing pack which features two wonderful quick release ice axe loops that are just a bit too tight for AT skis. With its tool holsters and removable hardware racking system, this might be an ideal pack for the couloir fanatic, but it can also be pressed into service as a more standard ski pack. Again, the top flap anchor buckles are too high. It has a foam back pad, no extension, horizontal compression straps, and a very simple suspension system.

Madden. The Sunlight top loader has sewn-on side pockets, clean lines, and a good weight-to-volume ratio. Compression is performed by three horizontal around-the-back straps. The adjustable aluminum-stay suspension will support a good load, and two sizes are available for better fitting.

From a technical standpoint, the most interesting thing about this pack is the flow material in the shoulder straps. It adds weight and cost, but could be a Godsend for folks with overly sensitive shoulders. The Sunlight has a heavy zipper to access the lower portion of the pack, which has an optional, zippered internal partition. Our test pack's partition had no stop for the zipper slider, and it was soon lost. There are no ice axe loops on the Sunlight.

McHale and Company. If you can't find what you want in the retail pool, try Dan McHale's custom packs. One of their standard packs, the Alpine 1 top loader, has undeniable quality: almost every seam is double or triple stitched, special sliders prevent loose straps from slapping you in the face, and the flap buckles are mounted just right. All buckles are replaceable in the field. Although the Alpine 1 is not exactly light, McHale assured me that he could build a similar pack at almost half the weight.

The Alpine 1 has two aluminum stays and a foam pad. Sizing is custom; each pack is built to the buyer's measurements. Two ice axe loops will accept skis, and horizontal straps on the sides allow compression, while optional side pockets attach to metal sliders on the straps; they are elaborate and expensive.

Although this is more of a climbing than a skiing pack, the custom options mean that you could design the ultimate ski pack.

Mountainsmith. The Super Tour top loader is a medium-sized pack with a minimal plastic frame. It comes in one size, adjustable by a simple, easy-to-work webbing/buckle combination; however, the straps twist much too easily when extended for a big torso. The flexible plastic frame does a poor job of transferring weight to the hips, but will work for loads under 25 pounds. Unfortunately, the flap buckles are too high on the pack body, making cinching impossible for small loads.

One distinct feature of the Super Tour is its "Omni Belt," a widely contoured, unpadding Cordura hip belt. For lighter loads, this system is comfortable, supportive, lightweight, and functional. The pack also features the "Delta," a glorified compression strap that attaches from the hip belt to mid-way up the back of the pack. In theory, you saddle up with the Delta loosened, then reach down and tighten it, pulling the load into the small of the back. I didn't find the slight increase in comfort worth the extra effort, but another tester appreciated the ability to transfer weight more efficiently to the hips.

Most of the straps are removable or stowable, so it's easy to convert the Super Tour into a piece of luggage. Two ice axe loops and plenty of lash points are provided. Another fine touch is the pouch inside the top flap, the perfect stash for car keys and spare change. This is a lightweight, versatile pack for folks with average-to-small torsos who don't plan on carrying larger loads.

Osprey. The Zephyr is a small panel loader. It goes a step beyond most packs of this type with a stiffened plastic frame and enough length to allow shoulder lift. Two different sizes and adjustable shoulder straps allow fitting. The Zephyr's clean suspension includes a lightly padded waistbelt, and stabilizer straps on the shoulder straps.

There are lots of lash points, and the two ice axe loops accept skis. Compression is by horizontal straps on the sides; optional side pockets can be attached, and there is a sewn-on, vertical-zipped pocket on the back.


Wild Things. The Andinista is a large top loading climbing pack that can moonlight as a ski pack. It is very lightweight considering its volume, and its zipper compression system is clean and functional. Attaching a shovel and skis requires some jury rigging, but there are plenty of lash points. Three pack sizes are offered, all with minimal strap adjustment. For the climber aka ski mountaineer, this is a beautiful piece of equipment.


— Lou Dawson

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In December 1977, two Utah backcountry skiers were dug out from an avalanche. Fortunately, they were part of a party equipped with shovels and avalanche beacons. They were the first Americans to be found alive utilizing avalanche transceivers.

In contrast to that lucky pair, the first transceiver recovery in the U.S. was on December 28, 1974. The victim's partner had a beacon, but no shovel; after an hour of digging with his hands he gave up and went for help. Several hours later a rescue team found his friend, dead from suffocation.

Avalanches are a constant concern for ski mountaineers. If you expose yourself to avalanche hazard, even only a few times a year, you are playing the odds. A one in a hundred chance of an avalanche may not seem bad, until you're exposed to the same risk a hundred times. Avalanche beacons can put the odds in your favor.

However, the odds for a buried victim's survival after a half hour are only about 50/50, and close to nil soon after that. Thus, an avalanche victim has to count on his companions for rescue. That's why carrying and becoming an expert with avalanche rescue beacon, compact shovel, and convertible probe/ski poles is essential.

A beacon is a simple device. Batteries supply power to electronics that either send or receive a pulsed radio signal. While in avalanche terrain, everyone travels with their units transmitting, still taking all normal precautions, especially exposing only one skier at a time to danger. In the event of a burial, the remaining people switch their transceivers to receive mode, then locate the buried person; with practice this should take under five minutes.

Snowslides are often so violent that victims die from trauma before suffocating, which can make transceivers body locators. Still, it's sensible and responsible to use one. In Colorado last winter the recovery of four beaconless avalanche victims dried up Summit County's emergency budget, prompting the county sheriff to call for closure of the backcountry. If the victims had been properly equipped their rescue would have been a snap.

In 1968, Dr. John Lawton of New York invented the Skadi, the first avalanche rescue transceiver. His creation was affectionately called "the hot dog" by avalanche control workers; it barely fit in a large jacket pocket. But they caught on and it wasn't long before the Europeans latched onto American ingenuity and came out with the comparatively inexpensive and compact Pieps.

Presently, there are companies touting everything from infrared sensors, to radar, to magnetometers for avalanche rescue. Nevertheless, a beacon, probe, and shovel carried by each party member remains the proven standard.

This year's transceivers are relatively foolproof, compact, and well thought out. There is a tendency for manufacturers to get into a race for bells and whistles and overall heft. Avalanche transceivers should be unobtrusive until needed, so less bulk, simplicity, and an affordable price should be your guidelines.

Range: Although beacons of the same make have slightly better range when used together, each member of a party seldom carries the same brand. Because of this, I did range tests with all possible combinations. The units were in slightly used condition with fresh batteries.

RANGE

Reception Unit	Transmit Unit	Effective Range*
Echo	Echo	69
Echo	Pieps DF	72
Echo	Ortovox	57
Echo	Skadi	78
Ortovox	Ortovox	78
Ortovox	Skadi	70
Ortovox	Echo	60
Ortovox	Pieps DF	68
Pieps DF	Pieps DF	72
Pieps DF	Ortovox	54
Pieps DF	Echo	54
Pieps DF	Skadi	68
Skadi	Skadi	72
Skadi	Echo	55
Skadi	Pieps DF	56
Skadi	Ortovox	58

*Plus or minus three feet

The range tests were done in an open field. The receiving unit was set at maximum volume, then walked toward the transmitter while orienting it for maximum reception. Once contact was established we fine-tuned the orientation, then continued until the point of minimum usable signal was reached; because of the diversity of human hearing, as well as a slight breeze, this point varied by about three feet either way.

The test results show that the average range for a search is 63 feet when using units of different makes; the shortest was around 50 feet. Consequently, the initial rough zigzag or rectangular search pattern used to hear a signal should pass no more than 50 feet from any place in the search area.

In other words, you could move directly down the middle of an avalanche search area if it was up to 100 feet wide; if wider, you should use a zigzag pattern or two searchers. Practice different rough search patterns to find one that works best for you.

Range can be drastically reduced by a number of factors.

Because the internal antenna is easily damaged, causing slight changes in broadcast frequency, take care not to drop your beacon. Discharged batteries and corroded battery terminals also result in range loss and unreliability. Most beacons have a battery check feature, but to be safe I regularly use a Radio Shack battery checker.

Your beacon search can be thrashed by the baneful electromagnetic interference (EMI) fought tooth and nail by electronics engineers. There are reports of interference from electronic watches, radio stations, and power lines. In my tests I found the dual frequency models more susceptible to power line EMI than the single frequency 2275 Hz models.

The most alarming problem with transceiver blockage are pieces of metal, such as aluminum shovel blades and portable radio cases. It's been documented that an aluminum shovel blade placed within a few inches of the transmitting unit may reduce effective receive range up to 54%. Conceivably, a shovel pack could get twisted around by an avalanche to the point where it would cause this problem. Plastic shovel blades eliminate this concern.

For maximum range and reliability wear your transceiver under clothing in the chest area. It should be at least six inches away from any metal. If you plan on carrying any metal near your chest, such as a radio or stereo, put the transceiver under your armpit with a second strap around your chest. Check the beacon's batteries and range often. And don't expect high technology to insulate you from the elemental forces of nature.

Dual Frequency: Correct frequencies for transceivers is a touchy issue, especially in the nebulous world of equipment politics, where a military contract may dictate a company's existence.

Lawton built the Skadi around the 2275 Hz frequency, and the Pieps followed suit. This frequency is a good compromise between cost and performance. Unfortunately, the Swiss government decided to go one better for a military unit, and settled on the 457 KHz frequency because of slightly increased range. The spin-off from this military project was the 457 KHz Autophon, a popular unit in Switzerland; however, several lives have been lost because of incompatible transceivers.

The current solution is the dual fre-

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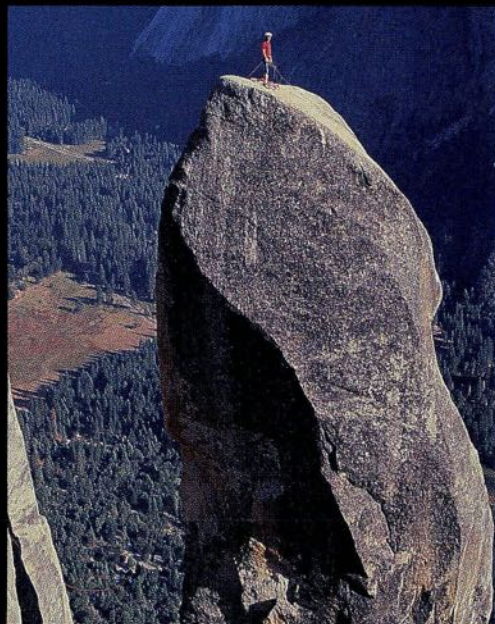
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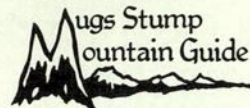
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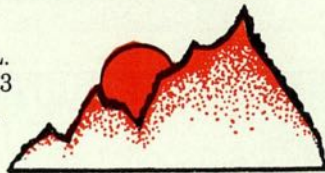
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AVALANCHE TRANSCIVERS

Model	Price	Weight	Battery (est. life)	Volume Control	Dual Frequency
ECHO 4	\$135	8 oz.	9 volt (1500 hours)	none	no
ECHO 4S	\$150	8 oz.	9 volt (1500 hours)	two position	no
ORTOVOX	\$225	11 oz.	2 AA (300 hours)	four position	yes
PIEPS DF	\$225	14 oz.	2 AA (300 hours)	continuous	yes
SKADI	\$225	12½ oz.	Nicad (168 hours)	four position	no

quency beacon, which transmits and receives both frequencies. It costs more and is heftier than a single frequency unit, but you won't have to worry about being on the wrong wavelength. If you plan on traveling in Europe, by all means purchase a dual frequency unit so you won't gag on frequency salad. Otherwise, stick with the simpler and less costly single frequency units.

Weight and Size: The small weight differences between transceivers should only concern the extreme alpinist or marathon ski mountaineer. Bulk is more important. A slim-fitting unit will fit by riding on its neck strap under a layer of clothing and be less prone to being ripped off in a slide; a bulky unit is uncomfortable to wear this way.

Battery life: For the expedition fanatic, a unit with long battery life and replaceable batteries is a good choice. If you'll be skiing in and out of civilization, rechargeable batteries are downright handy. At any rate, use the best quality alkaline batteries and test them before use.

There is a rumor that long life lithium cells of all sizes will be available soon. If you're an expedition mountaineer these will be handy, although lithium cells rapidly drop off to zero power when they're used up. Consequently, they'd be a poor choice for the user who doesn't pay careful attention to time in the saddle.

Durability: All the current brands and models hold up well. The Skadi has the best durability reputation, while the older Pieps models have the worst. If you're buying a used beacon, test it well, particularly for range.

Some units have the earphone hard-wired into the case, which can create problems as the wire fatigues with use. A jack-and-plug system avoids these problems.

Another durability problem is condensation building up inside of the beacon. Some of the units advertise a resistance to this, but after a 10 day snow storm low on Mt. Rainier, my beacon quit. It worked again after it dried out, and I've concluded that it's a good idea to seal beacons in a plastic bag during wet conditions.

Ease of use: All transceivers are confusing at first, and someone unfamiliar with beacons is not going to

pick one up and perform an efficient rescue. But with use, the controls become simple. Eventually, every back-country skier should be able to play their beacon as well as their millionth game of Pac Man.

Echo. The Echo is made in the U.S.A. It was designed by Paul Hamer, who built the Echo with no volume control. This freaked out a lot of avalanche professionals, who'd cut their eye teeth in avalanche rescue with careful adjustments of the Skadi volume control. Eventually, a two position volume switch was added, but in my opinion it's unnecessary. During my own tests without a volume control, the Echo worked just fine. In fact, it is the easiest for novices to use on winter Outward Bound Courses.

The Echo receives and transmits by plugging and unplugging the earphone jack — an idiot proof system. Plugging the jack into the appropriately marked hole turns it off, and yanking it out of either hole puts it into transmit for emergencies. My only suggestion is that the lettering for the two jack sockets should be easier to read, which can be remedied with some tape and a marker.

The best thing about the Echo is its price. It's also the lightest, most compact, and has the longest battery life. For single frequency use in North America, the Echo is a simple and extremely functional piece of technology.

Ortovox. This is the bells and whistles unit. By offering an optional VU meter — like the jumpy needles on your tape deck — which plugs into the earphone jack, Ortovox has provided a visual alternative to the traditional audio search. It's called the "Visovox." For windy days, or people with hearing problems, it's dynamite.

The Ortovox operates on both frequencies. It also turns off by detaching the neck strap, an ingenious idiot proofing. Once the neck strap is attached and it's switched on, a battery check light blinks and you're ready to rock and roll.

To receive, pull out a seal, then plug in the earphone — it's that simple. If the white death roars down while you're searching, just rip out the phone jack and you'll be transmitting

again. The four position volume control is located on the front of the case and can be adjusted with mittens. The Ortovox has given good service to skiers worldwide. If you need a dual frequency beacon, this is a good choice.

Pieps. Motronics of Austria was the second outfit in the world to market an avalanche transceiver, the Pieps. Because of the high priced Skadi, the Pieps flooded the market in the early seventies. Now they're offering the Pieps DF. This dual frequency beacon comes with an armored case, but it adds the weight and bulk you would expect from a tank, even though the unit inside is of average size and weight. It is also printed with clear directions.

All the DF functions are controlled by a dial and a clever switch that doubles as the earphone holder. Receive mode is automatic when you pull out the earphone. For emergency transmit you simply push the switch back with a finger. Otherwise, the earphone reels in. I found the DF to work well in most situations, but it picked up enough EMI around power lines to be almost unusable. If your transceiver will be abused, the armored DF case is the ticket. In general, the DF is an adequate dual frequency rig and well worth the price.

(Pieps also makes a single frequency model, the SF, which was unavailable for testing.)

Skadi. Today's compact Skadi is a far cry from the old "hot dog." Most professional avalanche people prefer the Skadi for its durability and the convenient rechargeable battery which lasts a week. The built in neck strap, integral case, and convenient earphone compartment make this a solid unit. My favorite thing about the Skadi is its faster beep, which makes it easier to recover.

The achilles heel of this beacon is its fragile, hardwired earphone. When I told the folks at Skadi, they made me a sample with a jack connection. You may be out of luck repairing a European transceiver, but with a Skadi, repairs are as close as the U.P.S. truck.

The Skadi is controlled by simple movements of a top dial, and its firm clicks are intended for gloved hands. There are simple directions in plain view on the case.

For a single frequency beacon, the Skadi is pricey. But no stones are left unturned in the pursuit of excellence; from its gold plated, corrosion proof switches, to its hermetically sealed components, this transceiver is the top of the line. It's the choice of almost all professional snow workers in the United States, so if you're committed to avalanche safety, it's the tool of choice.

—Lou Dawson

CLIMBING SKINS

CLIMBING SKINS The No-Slip Grip

At age 13, I took my first overnight trip up a local valley. The wet snow of early March was impossible — my red wax had just enough grip for climbing, but iced up on the downhill.

As I climbed higher, the snow temperature decreased, and slush blocks formed under my feet. Scraping removed the ice, but spread the gooey klister on my skis, pack, clothes, and hair; the ice reformed when I resumed skiing. Using wax, it took me two days to walk nine miles. When I returned with climbing skins, the same trip took six hours.

Climbing skins were invented when early Nordic skiers strapped animal pelts to their skis. They would point the hair ends toward the ski tails, so that the skins would slide forward, yet provide traction when the hairs were pushed backward.

Later, mountaineers glued skins on with klister. Of course, when they stripped the skins off, the klister stayed on the ski. The stick-on skin made sense, and eventually, glues were developed that stayed on the skins only.

Today's stick-ons are easy to apply and remove, glide well, are light, and eliminate ice chunks between the skin and ski. On steep, icy side-hills, strap-ons hold the edges off the snow and limit your edge hold; stick-ons also eliminate this problem.

Stick-on synthetic skins are expensive, and the common complaint is that they don't stick. This can be prevented with proper tip and tail attachment systems; duct tape may work, but will eventually fall off and litter the trail. The glue should be reapplied periodically, but let it dry overnight, otherwise you'll end up with glue all over your ski bottoms. Glue will stick if it is warm, but not if it's below freezing, so keep snow off the stickum. If in doubt, keep the skins warm under your jacket until the next application. Doubling the glued side of the skin back on itself will protect the glue.

Materials: Climbing skins are available in white nylon (Montana Montanys), stiffer nylons (Pomoca and Chouinard), still-stiffer plastic (Wasatch), and black mohair (Coltex).

The stiffer nylon hairs climb better and have less glide; the stiffest plastic skins are incredibly durable, climb

well, but glide poorly; the mohair skins weigh less, have better glide, but are also much less durable.

Color: Darker colored skins dry much faster than white skins, a huge advantage for spring touring. Be careful to dry skins off your skis, otherwise the sun's heat will leave glue on ski bottoms.

Attachment: These systems vary widely. If they drag on the snow they will wear out quickly and add resistance to your stride. Elasticized tip attachment systems work well, but carry a spare. Also, work the bugs out before long trips, because new setups are likely to fall off.

An economical attachment system can be made by cutting the skin an inch from the tail of the ski and sewing a six inch piece of 3/4" flat webbing to it. Put the skin on the ski, flip the webbing over the tail and tie a loop of small-diameter shock cord through a sewn loop in the webbing. Put a 10 pan head screw in your ski, then hook the cord over it. This system is reliable, lightweight, and glides well.

Width: As a rule of thumb, use the widest skins available; leave the edges exposed to allow essential maneuvers like sidestepping and snowplowing. "Skinny" skins glide well, but are useless for steep climbing.

Accessories and Maintenance: Glide spray works great before trips. In the mountains, use a block of Montana skin wax.

For renewing glue, Pomoca makes a convenient spray which will reanimate dead glue. Otherwise, all companies sell glue, which should be applied in several thin coats, allowing each coat to dry overnight in a warm place. It is good to let the glue get nice and thick through many renewals, but if the glue gobs up unevenly, remove it with a scraper and hot air gun. Work outdoors, because the glue is flammable.

When you're ready to point your skis downhill, apply paste glide wax to the ski bottoms, which will prevent small gobs of skin glue from adhering to the bases and improve ski performance.

Chouinard. The Chouinards have the usual nylon skin characteristics of great durability, good traction, more weight, and less glide. The tip attachment system is sold as a separate option and works well, but requires some tinkering.

Coltex Mohair. This skin comes in five different widths, which allows significant fine tuning in sizing. This cloth-backed, goat hair skin has more glide, less weight, and less durability. They are my first choice for long walks. The Coltex tip loop is thin and poorly attached; mine failed, but was easy to repair. Also, the rubber tail hook wears out quickly and pops off.

Pomoca. This is another nylon-

Model	Width	Price	Color	Traction	Glide	Resistance to Icing
COLTEX						
Mohair	32mm	\$57.50	Black	D	A	C
Mohair	42mm	\$69.75	Black	C	A	C
Mohair	50mm	\$78	Black	C	A	C
Mohair	59mm	\$86.50	Black	C	A	C
Mohair	65mm	\$95	Black	C	A	C
MONTANA						
Nylon	50mm	\$82.75	White	B	C	D
Nylon	63mm	\$86.25	White	B	C	D
POMOCA						
Standard	50mm	\$78.50	Red	B	D	A
Standard	63mm	\$79.50	Red	B	D	A
Pro	63mm	\$100	Red/Blue	A	D	A
WASATCH						
Snake Skin	50mm	\$39	Black	C	C	B
CHOUINARD						
Nylon	50mm	\$87.50	Blue	B	D	A
Nylon	63mm	\$93	Blue	B	D	A

plush, synthetic backed skin — with all their good and bad qualities. Their durability is incredible, they climb like mini crampons, and they never ice up. The tip attachment system works well. The Pomoca Professional skin has about the same glide, but climbs much better and is more durable than the standard skins. Pomoca also sells a mohair model that wasn't available for testing.

Montana Montanyl. These synthetic skins have better glide than the Pomoca and Chouinard, but less than the Coltex Mohair. They are white, which makes them difficult to dry in the sun; this is unfortunate because they absorbed a great deal of water during my spring testing. For midwinter use, they are a good compromise between weight, durability, and glide.

The directions recommend that the skin be cut several inches shorter than your ski, then tip hooked and stuck to the base. This method of attachment works fine in your living room, but is inadequate in the mountains.

Wasatch Snake Skins. Climbing skins cost like they are made of gold. The folks at Wasatch Mountaineering have taken heed, and for the past several years have quietly sold their maverick Snake Skins for significantly less than the nearest competition.

Snakes have plastic hairs which stand up when the skin is stretched out to attach it to your ski. The more you stretch, the better the grip. Snake skins work, but you give up a few things for the savings. For starters, they only come in a Nordic ski width. Also, they strap on, and have much less glide than any other type of skin. On the good side, they climb like a D-9 tread, they are made of a plastic that absorbs no water, and they are very durable.

— Lou Dawson

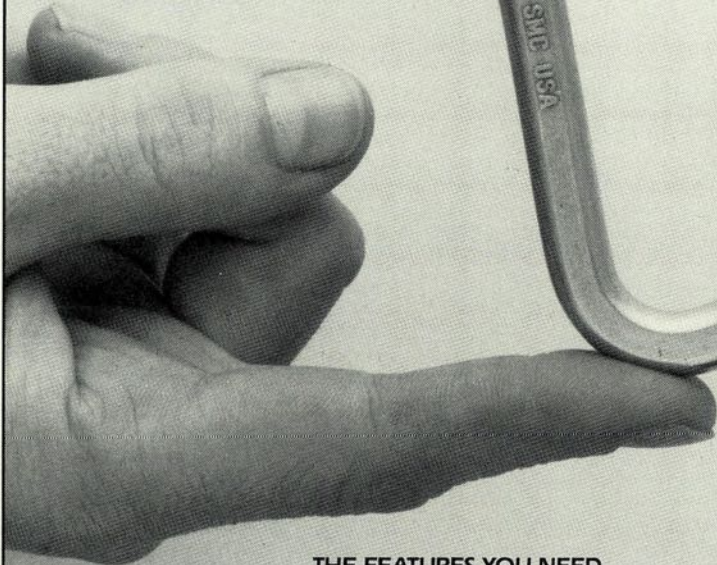
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If you wanted a winter climbing suit a few years ago, you had to order it from Britain or make it yourself. Admittedly, the unpopularity of cold routes had minimized the demand for such a garment. But now that frozen waterfalls and glaciated ranges are in greater vogue, Wild Things has filled the frozen void with a smart-fitting and carefully designed suit.

The Equipe Solitaire Altitude Suit is intended for the raw vacuum of high altitude, but will also warm up Alaskan climbing, subzero ski tours, bitter cold days on the lifts, and frosty oil changes underneath your automobile.

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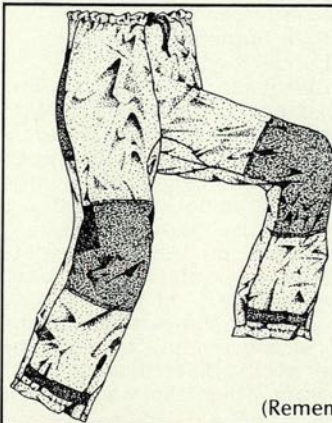
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ing and climbing, hence the lack of full-length leg zippers for pulling the suit on over boots. Leg zips can also serve the purpose of ventilation, but the manufacturer feels that full ventilation is not necessary in sub-zero extremes. Instead, a zippered vent below the hips pumps hot air out as the wearer walks, skis, or climbs; this works surprisingly well. Cooling down can also be achieved by removing layers from the upper torso, opening the chest and dropseat zippers, taking off your hat, bivouacking, or climbing higher into the death zone.

The heat-seeking concept of this Gore-Tex suit is to layer the upper torso according to your own specific needs. Consequently, the upper suit is uninsulated, with the exception of a smooth-riding, fast-drying liner. This is an efficient solution to wrestling with the sauna effect of a single, heavily insulated layer. The legs — which don't have the heat output of the core chest area — are insulated with 4oz Thermoloft, which dries quickly and retains its insulating properties when wet.

One of the nicest features is the built-in gaiters, which incorporate gripper fabric and grommets to hold them down over boots. Otherwise, the suit has a large kangaroo chest pocket, and two slant pockets on either side of the chest. The insulated hood is also available in a larger size for helmet wearers. Colors range from red/yellow, to turquoise/gold, to pink, to black. The Equipe Solitaire Altitude Suit weighs approximately 3lbs and retails for \$550.

—Jonathan Waterman

GUIDE COMFORT Binding Update

In *Climbing* no. 104, we did a cursory review of the new Ramer Guide-Comfort binding, promising an update after on-snow testing. In late January, they were mounted on a pair of test skis, then given a pounding for several weeks.

The Guide-Comfort uses the same binding plate and pivot-release toe as the Ramer Universal, but a step-in Look heel replaces the plastic latch of the Universal. Mode changes are made with a simple sliding catch mounted aft of the binding plate.

This mechanism is the strong point of the Guide. With the light touch of a ski pole you can click from latched down, to free heel, to elevated heel. The change is easy enough to do while slowly moving downhill. An additional benefit is that the binding plate rests on the ski unless it's in the elevated mode; the Ramer Universal forces you into an uncomfortable raised heel position except when latched down. Thus, touring on the flats is much more comfortable with

the Guide, and free-heel downhill skiing a pleasure.

The only disadvantage of the Guide's new mode change mechanism is that a small plastic anti-friction device (AFD) gradually digs into the top skin of the ski and compromises lateral release. An AFD plate on the ski would be a simple and effective solution.

The Guide-Comfort is also difficult to mount and tune. One problem is that the mode change mechanism is so far back that many skis are not thick enough to hold screws. The best solution is to shorten the binding plate, but this is a difficult job that requires a drill press and grinder. And after the binding was mounted, I discovered that the lateral release was locked out by the end of the binding plate impinging on the mode mechanism, so it was back to the grinder for more clearance.

The step-in heel gives a very solid heel attachment and accurate DIN release settings. And like the Universal, it only takes seconds to adjust for differently sized boots. But it also adds weight (6oz.) and is difficult to use in deep powder or on steep slopes. I wonder if the step-in really saves any effort; you still have to bend down to flip up the toe wire and fasten the safety straps (there are no ski brakes for the binding).

As for durability, after about 20 days of intense use I've had no problems other than the AFD wear mentioned above. Nevertheless, the Look heel would be difficult to repair in the field, so for long trips, add the heel clamp from a Universal to your repair kit.

Aggressive downhill skiers may have problems with lateral release in both Ramer bindings (see *Climbing* no. 104). Nevertheless, the Ramer Guide-Comfort is ideal for long treks because of its light weight, durability, and convenience.

—Lou Dawson

HARNES WARNING Don't Fall Out

Climbers using a buckled harness should be aware that under certain unusual and very specific circumstances, their harness could come unbuckled under body weight.

To prove this to yourself, clip a sling to a solid anchor, then clip a large diameter carabiner (such as a Chouinard Pearabiner or Clog HMS carabiner) to the sling with the large end of the carabiner hanging down. Now buckle the harness normally without putting it on. Make sure to double the tail end of webbing back through the buckle as you normally would. Next, clip the carabiner to the buckled strand of the harness. The carabiner should be on the side of the buckle from which the webbing tail emerges.

Now, pull on one side of the harness in such a way that the buckle jams against the carabiner. You'll notice that the buckle is forced to turn almost 90 degrees from its orientation in normal use, when it's flat against your body. Cocking the buckle in this way reduces the friction created by the buckle. The result: body weight alone will pull the tail end of webbing back through the buckle.

Smaller-diameter carabiners can do the same thing, but the force required is typically much greater: around 500 pounds with the small end of a Pearabiner against the buckle of a new Chouinard Bod Harness, for example. Well-used webbing slips more easily than new. The loop of rope created by tying in can do the same thing, but the load required is substantial: 1100 pounds with a Chouinard rope and Bod Harness, for example.

Obviously, it is only in rare circumstances that a carabiner could be jammed against a buckle in this manner. Despite the several hundred thousand buckle harnesses in use worldwide, no accidents have been reported in which this scenario was proven to be the cause. For it to occur, several criteria must be met. One side of the harness must be immobilized, which could occur, for example, with some peculiar anchoring arrangement like a sling girth-hitched around part of the harness, then clipped to the anchor. Another criteria, at least for failure under body weight with 2" buckles, is a large diameter carabiner. With 1" buckles the story may be different.

The seatbelt webbing of my well-used Culp Harness will slip significantly if I simply twist hard within the harness while rappelling, jamming the large-diameter carabiner holding my rappel rig against the buckle. Climbers might twist in this manner if they are trying to free a stuck rappel rope, or while executing a difficult pendulum on rappel.

I've also heard of one case in which a Whillans harness started to come unbuckled while its wearer was jumaring. The carabiner attaching the jumars was clipped directly to the buckled part of the harness, and as the climber jumared, the carabiner banged against the buckle. Fortunately, he noticed that the webbing was slipping through the buckle before getting into serious trouble.

Climbers using Culp and similar Whillans-type harnesses should always clip their rappel and jumar rigs through the two sewn tie-in loops. Climbers using any type of buckled harness should make sure that they avoid all situations in which a carabiner clipped to the buckled part of their harness jams against the buckle. Buckled harnesses can be used safely, but only if this scenario is avoided.

—Glenn Randall



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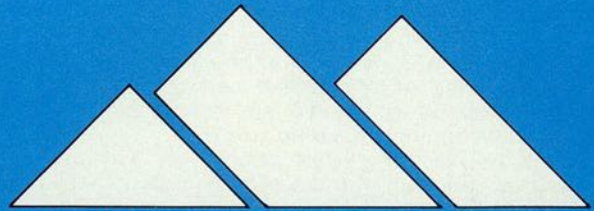
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SOUTH DAKOTA

A New Twist: Climbing Area Expanded

Reports of climbing areas being closed, restricted, or threatened are found in virtually every issue of *Climbing*. However, it is encouraging to see an occasional reversal of this trend. One recent example is Mt. Rushmore National Monument, where friendly negotiations between local climbers and park officials have resulted in the opening of a substantial amount of previously off-limits rock.

Mt. Rushmore National Monument is a relatively small park containing a complex mass of granite blades, spires, and domes. At the center of the park are the four 60' sculpted busts of Presidents Washington, Jefferson, Roosevelt, and Lincoln. While climbing has been allowed in most of the park, a large area around the granite sculptures was closed to hikers and climbers.

Over a year ago, Vern Phinney, a prominent local climber and author of the soon-to-be-published guide to Mt. Rushmore, began negotiations with park officials. His goal was to open climbing on the various independent spires on the edge of the off-limits boundary. Park rangers were very receptive, and, to everyone's surprise, they not only allowed access to the spires, but also reduced the restricted area by approximately one half. This opened a series of 200'-500' cliffs to climbing for the first time.

To maintain a good relationship with the park service, climbers should observe two simple rules. One, all climbers are required to sign a registration form at the Visitor Center. And two, no climbing is allowed within the restricted area around the sculptures; this area is well marked by signs

and is outlined on the area map supplied with the climbing registration form.

As more routes are established and the new guidebook is published, Mt. Rushmore could rival the nearby Needles as a destination climbing area. There are many fine routes at all levels of difficulty, including a high concentration from 5.9 to 5.11, and locals welcome visiting climbers.

—Mike Engle

MINNESOTA

Park Policy Coming

Taylors Falls, Minnesota, is a very popular climbing area with Minneapolis/St. Paul climbers. Currently, the Department of Natural Resources (DNR) is preparing a climbing policy that will affect all Minnesota State Parks. This will not only include the rocks in Taylors Falls, but also crags along the North Shore of Lake Superior and in Blue Mounds State Park.

The DNR's major concerns are that the rocks are being abused, and that certain aspects of climbing make the parks unaesthetic for other visitors. There is no bolting controversy in Minnesota — most climbs are either top-roped or easily protected. However, the only bolt in Taylors Falls was found and removed by the park last summer; it is interesting to note that it was placed 5' off the ground on a classic bouldering testpiece.

A ban on white chalk is the most significant policy proposed so far. There has also been discussion of climbing registration, and the potential exists for a ban on climbing in certain

areas if park resources continue to be abused.

Unfortunately, there is no organization in the Twin Cities through which climbers can express their concerns to governing agencies. It appears that the DNR is willing to work with an organized group of climbers on formulating regulations.

I am forming such a group, and urge all interested climbers to contact me at P.O. Box 47, Taylors Falls, MN 55084. Take the time to show how much you love Minnesota climbing.

—Don Theisen

NEW MEXICO

Cochiti Closed

The closure of Bland Canyon (aka Cochiti Canyon), near Cochiti Lake has been a major setback to the New Mexico climbing community. Located less than an hour's drive from Albuquerque and Santa Fe, the area is owned by the Pueblo Indians of Cochiti. The closure was announced after several years of tension between climbers and the tribe.

Drawn by the area's fine winter weather, climbers have visited Bland Canyon for two decades. No records of first ascent activity have been kept; nevertheless, the area has an excellent concentration of cracks, not to mention superb face climbs on the darker-colored cliffs.

The Tribal Council, irritated by heavy traffic in recent years, bulldozed entry roads and posted "No Trespassing" signs last winter. The nub of the issue appears to be the impact that the increased traffic has had on the Pueblo's land. "There have been incidents of littering and people going in there with four-wheel drives," says Marcello Suina, the Pueblo's Governor.

Whether climbing at the area will be

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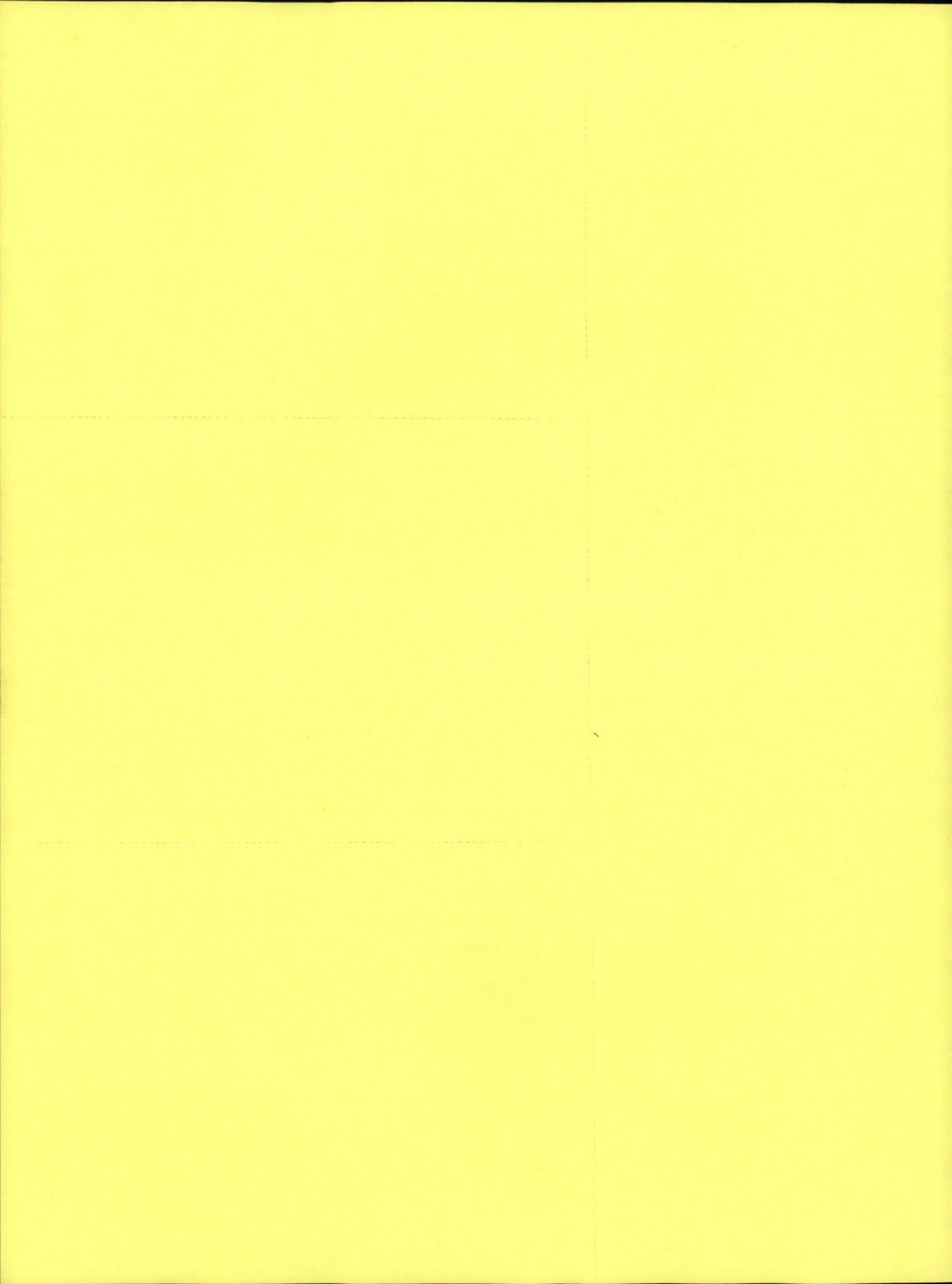
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allowed in the future has been left open. "It was the Council's decision to close Bland Canyon," says Suina. "We may look at opening it up again if a solution can be worked out."

Remember, breaking the law on Indian lands is a Federal offense. That can get you time in a cozy penitentiary, where you can do jumping jacks in the infield but you can't climb the walls.

—Mark Lewis

BRITISH COLUMBIA

Development Threat

The Canadian Mountain Parks (Jasper, Banff, Kootenay, and Yoho) are at very grave risk these days.

Over the past five years, an amendment to the Parks Act, Bill C-30, has been drawn up incorporating the public's wish that these areas remain unspoiled. However, it has been stalled by lobbying groups, myopic Alberta members of Parliament, and entrepreneurs demanding more development.

An example of the political pressure brought to bear by these groups is a recent proposal to build a large ski resort, with accompanying townsite for 15,000 people, near the Hooker and Chaba Icefields. While the area falls conveniently outside the National Parks, the developer is requesting that Parks Canada build a 45km access road from Sunwapta Falls, up the Athabasca and Chaba River valleys, and into British Columbia. This would forever disrupt wildlife and untracked lands in what is probably the least spoiled area of the four Mountain Parks.

Climbers from the U.S. and around the world enjoy these mountains, and the passage of Bill C-30 will help protect their unspoiled beauty for future generations. Concerned individuals are urged to address their comments to: The Right Honorable Tom McMillan, Minister of the Environment, 533 Confederation Building, House of Commons, Ottawa, Ontario, Canada K1A 0A6.

—Jon Popowich

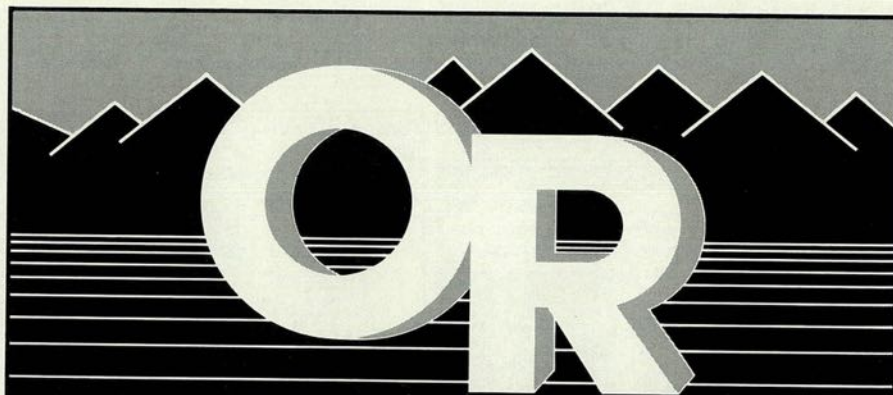
AUSTRALIA

Arapiles Plan Feared

Just before Christmas, the Ministry for Conservation, Forests, and Lands released a 63-page management plan for Mt. Arapiles, Australia's best climbing area.

Of specific interest to climbers are proposals that would restrict camping to six weeks and ban climbing at the western cliff (Campbell's Kingdom) from July to November to protect nesting peregrine falcons.

Rock climbing groups have been in-



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vited to participate in the preparation of a code of conduct for climbers. This code will discourage wire brushing, chipping, and the use of permanent fixtures (i.e. bolts), while encouraging the use of colored chalk and the protection of the peregrine falcon and vegetation on rock faces.

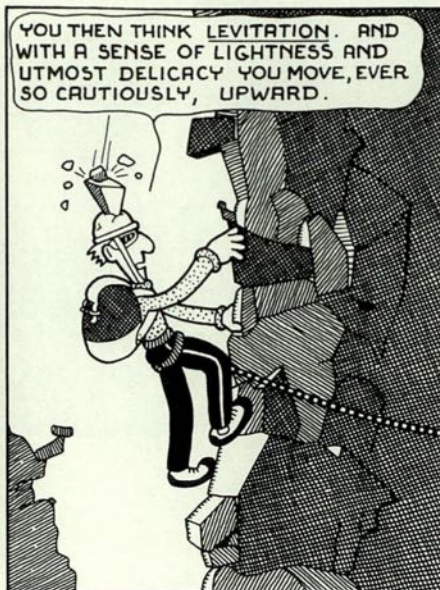
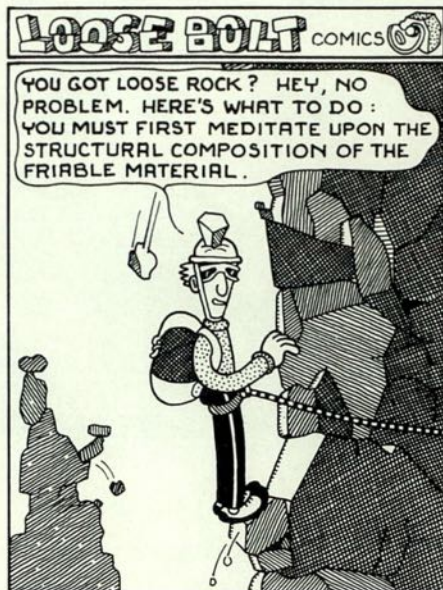
Arapiles locals are horrified by many of the proposals in this management plan. Roads, car parks, tourist tracks, and fences have already been built without public input, and a climbing ban to protect the peregrine falcon is a farce. The birds' main dangers are from poachers and pesticides, and widespread publication of exact nesting sites is more likely to imperil the bird than the unproven impact of the odd, stray climber. And the way is left open for more cliff closings: "Rock climbing is permitted throughout the park, with the exception of areas seasonally closed to rock climbing for the protection of peregrine falcons."

Only eight recreational activities are allowed at Mt. Arapiles under the proposed plan: camping, picnicking, climbing, bushwalking, pleasure driving, cycling, nature observation, and photography. The nasty, unwritten consequence is that all other recreation is banned. Lastly, a code of conduct is anathema to our free sport, the first step along the road towards permits for climbers, accreditation, approved climbs for approved climbers, and penalties for misconduct.

Climbers have scrambled happily over Mt. Arapiles for nearly 25 years, without rules and without detriment to the place. Local climbers strongly oppose the planned controls on climbing, but we need support from climbers worldwide. Comments can be directed to the Department of Conservation, Forests and Lands, P.O. Box 487, Horsham, Victoria 3400, Australia.

—Keith Lockwood

REVIEWS



Gabe's Fall

Peter Lars Sandburg
 Birchfield Books
 Box 1305, N. Conway, NH, 1987
 Softcover, \$11.95, 196 pp.

I recall the first time I read a Peter Sandburg short story. Thumbing toward the center of someone's old copy of *Playboy*, I found "Calloway's Climb," Sandburg's tense and multi-layered drama of an aging climber struggling to resolve his former greatness and a soured marriage. At this point, it was centerfold and residual raging hormones vs. cerebral edification. Sandburg won — no small feat, I was the first to admit.

Ten years later, while preparing a literature lesson for a class of eighth graders, I discovered another Sandburg story. This one, "Hawsmoot," also explored the theme of climbers growing old, and it read as well in an adolescent's short story anthology as "Calloway's Climb" had amid the T & A of *Playboy*. Sandburg certainly has range.

Those who take their climbing fiction only from our sport's popular magazines and journals may be unfamiliar with Sandburg's short stories, seven of which appear here. His contributions to the genre span a twenty year period, but all, aside from the *Playboy* pieces, have hidden in fairly obscure publications. Unless you subscribe to *Phoenix Point West* or the *South Dakota Review*, you may have, like me, missed some of them.

And until now, more's been the pity because the majority of these stories are ambitious departures from the all-too-familiar climbing story themes. You know the types: obsessed

climber relentlessly mounts cliffs, peaks, and women searching for the true meaning of life; bereaved, estranged or brain-damaged climber is therapeutically redeemed by the sheer beauty and joy of climbing; wimp climber and a great guy; extraterrestrial climber dies on a Neptune NEI 33+.

Sandburg, fortunately, is different. His stories are firmly lodged in the here and now and never stray far from short fiction's primary source of power: ordinary characters caught in believable struggles against nature, others, and ultimately, themselves. Several of the pieces clearly achieve what Edgar Allan Poe once claimed was the elusive central aim of short prose: unity of effect or impression. Anyone who has seriously read climbing fiction should appreciate "The Rhyme Of Lancelot," Sandburg's earliest and thoroughly atypical climbing story. Here, two oldsters take their secretive amours on a serendipitous ascent of an Arizona peak and, upon reaching the summit, admit their reciprocal love. The moment is ripe for vapid symbolism, but Sandburg refuses the easy finish and turns them homeward, back to lesser lives and marital lies simply "because there was nothing else to do, and because it was getting late."

His resistance to pat situations and contrived resolutions is again evident in "Hawsmoot" where Sandburg pits the old protagonist, a legend at Devil's Lake, against a brash youngster on a difficult free-solo climb. Hawsmoot nearly falls at the crux, but finishes and, against the advice of admirers, decides to "go on climbing as always (and) hope I am high when the hands

don't hold." Rather than neatly tying together the issue for the reader, Sandburg leaves room to either concur with Hawsmoot's decision or pose the larger question: why damn it?

And in "Calloway's Climb," perhaps his best story and one made into a TV movie with Mariette Hartley, the unfaithful Nils Johnson vainly grapples with lost powers and a now distant wife. Because neither of them is clearly relegated to a good-guy or bad-guy role, their conflict generates more honest tension than the climbing sequences and, like much in real life, is never fully resolved. Sandburg's intense portrayals of these characters artfully elevate the high drama latent in a relatively common marital rift.

There are, of course, the lighter and less weighty entries. The "Old Bull Moose of The Woods" is a staccato tale tailored for an intended *Playboy* audience. Male vs. female climbers, love on the rocks, that sort of thing. Sexist? Though Mr. Sanders disagrees in his background notes to this story, yes it is, except that the attraction here lies more with writing style and Texas dialects than content.

"B-Tower West Wall," in contrast, is more typical of climbing fiction in relying on suspense and intrigue to satisfy. A climber's young boy is held hostage by mob members while he is forced to perform a high altitude breaking and entering at a downtown skyscraper. This fictional drama is a good example of implausibility that is overcome by carefully controlled action and doses of uncertainty.

While as a whole, Sandburg's short stories lack a consistent outlook or style, they always propel their characters through cathartic situations

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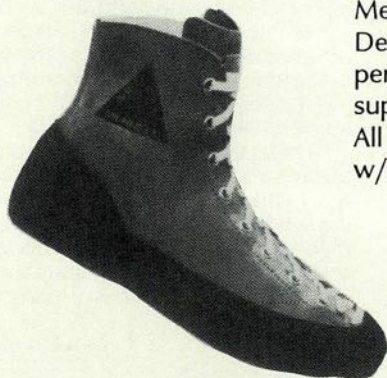
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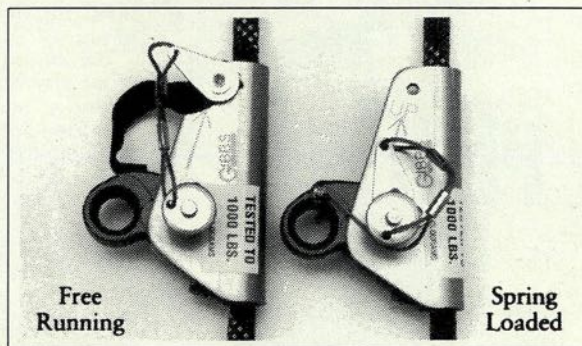
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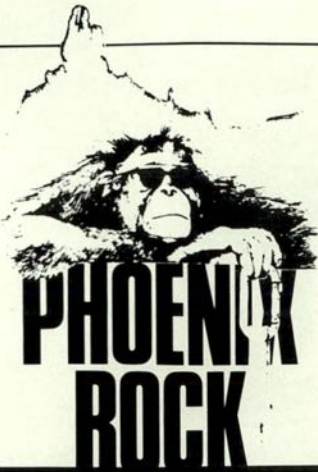
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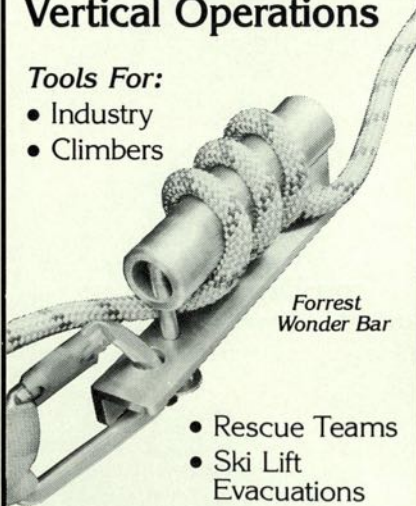
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where things will "never again be quite the same as they had been before." And that, after all, is what good short fiction strives to faithfully and creatively record: our struggles with change, and the occasional hard-won victories.

Sandburg's ability to focus on a story's essential elements, concentrating on characters rather than being seduced and diluted by ideas, establishes at least one standard of writing by which other climbing short fiction ought to be judged. In his introduction to *Gabe's Fall*, George Hurley noted that from their first meeting, he knew Sandburg wanted to be a writer. Mr. Sandburg obviously succeeded. For those interested in the craft of climbing fiction, and for those just looking for a good read, this short collection is worth a long look. I only hope he someday adds more.

—Jim Vermeulen

Clouds From Both Sides

Julie Tullis

Sierra Club Books

San Francisco, California, 1987
Hardcover, \$17.95, 336 pp.

Delays during the ascent, too many nights at 8000 meters, snow and bone-numbing wind. These tests of high altitude, circumstance and heavy weather combined to kill British mountaineer Julie Tullis on K2, her "mountain of mountains," after she reached its summit in August 1986.

The last chapter of Tullis's autobiography was penned by Peter Gillman, and a tough task it must have been. It was needed, though, to bring her story to its bittersweet conclusion, and Gillman writes in a sensitive and sincere style. Still, there was something damn frustrating about coming to that chapter, and I felt almost as if I might somehow roll back fate by not reading it. Because *Clouds From Both Sides* is so richly full of life, the chapter on the author's death seemed almost a separate strata of text.

The title's essence, its depiction of a brilliant, creative spirit in love with mountains and all things alive, comes through in a passage Julie wrote at 25,700' on her first visit to K2:

"I climb mountains for moments like this, not only to reach the summit — that is an extra bonus, a special gift. Gazing out from my elevated viewpoint, over Shipton's 'unexplored country,' I felt completely in harmony with my surroundings. It was like looking at, and at the same time being part of, a great work of art. It had an even greater satisfaction because I was no passive observer; mountains offer the ultimate human experience — to be involved physically, mentally, and spiritually."

The narrative begins in childhood bombshelters of World War II London and moves to the deep sandstone

chimneys of High Rocks, 40 miles away. Here, at Harrison Rocks, and at other outcroppings in Britain, Julie learned to climb. These areas set the scene for her romance and marriage to rock climber Terry Tullis, and for their subsequent outdoor school for training handicapped and problem children, some of whom also became climbers.

Twenty-four small black-and-white photos and two dust jacket pictures provide plenty of illustration for Tullis's engaging, imaginative writing. The flow is smooth, from Arlene Blum's "Foreword" to the final chapters. And considering the diverse personality of Tullis, there is a bit of something for a wide range of readers. For example, when writing of her teaching experiences, Julie deftly depicts the climbing process for the lay person without losing the mountaineer.

When she agreed to accompany cinematographer Kurt Diemberger to Nanga Parbat, Julie's life took another leap forward, into the new realm of photography, sound recording, and high-altitude mountaineering. With a contract to make a film for French television, Julie's undaunted confidence enabled her to organize and pack the filming gear she was just learning about, and head off for her first Himalayan expedition, the only woman on a 14-person team. The experience led her to other filmmaking and climbing ventures on Everest, Broad Peak, again on Nanga Parbat, and on K2, which she visited three times.

After her first taste, Tullis began spending a great deal of time away from the family she loved; in 1985, she spent 52 days above 20,000'. With the same intensity that she devoted to her practice of the martial arts (she wore a black belt), Tullis used mountaineering to harmonize her physical and spiritual selves.

"This control, which has enabled me to be strong enough to cope with so many hardships in my mountaineering and continue when others have given up, I gained mainly through sitting absolutely still in meditation."

Read this book, if you can sit still long enough.

—Marlin Stum

The Climber's Guide to North Carolina

Thomas Kelley

Earthbound Books

Chapel Hill, North Carolina, 1987
Softcover, \$19.95, 257 pp.

Part of the mystery of climbing in North Carolina has been eliminated. Previous guides informed climbers about some of Carolina's hidden treasures, but now the state's premier areas are laid out to the public.

One of the main problems faced by outsiders climbing in North Carolina has been getting good directions; Kel-

ley's guide has tried to simplify this. His description for access to the Linville Gorge will be appreciated by anyone who has bashed around in the vertical laurel bushes.

Another example of the author's good work is in his attempt to characterize each climbing area in a brief description, much as Harlin has done in his regional guides. Before you climb in these areas, read Kelley's introductions and you'll enjoy the climbing all the more.

Route descriptions are limited to topos and photos. Generally, the topos are clear, but the photos could have been better — although it is difficult to photograph a rock half hidden by trees. Some of the more complicated routes, such as those found on Whitesides, are described in more detail. Most climbers will find the route information adequate but not beta-like.

Kelley has managed to follow the subtle Southern tradition of preserving adventure. Yet when caution is warranted, he gives it: "Practically all Stone Mountain routes are seriously runout...unprotected routes are the norm."

Another truly helpful and important feature of this guide is Kelley's recognition of access and regulation problems. In the Southeast, climbing areas tend to be located on private land, and continued access has always been tenuous. Kelley identifies each area's access situation and provides climbers with some guidelines for maintaining it. Kelley also mentions regulations where they exist in parks and on federal land. These simple facts are often buried in guide book introductions, but Kelley makes them brief, understandable, and available to the climber thumbing through the guide. He also includes valuable information concerning emergency services.

For climbers who have never experienced the charm of Southern climbing, the publication of Kelley's guide should tempt them into a visit. The guide will also make that visit more enjoyable by giving them a comprehensive and understandable itinerary to follow. I plan to head down some time this winter to take advantage of the warmer climate, and I'll be sure to take my copy of *The Climber's Guide to North Carolina*.

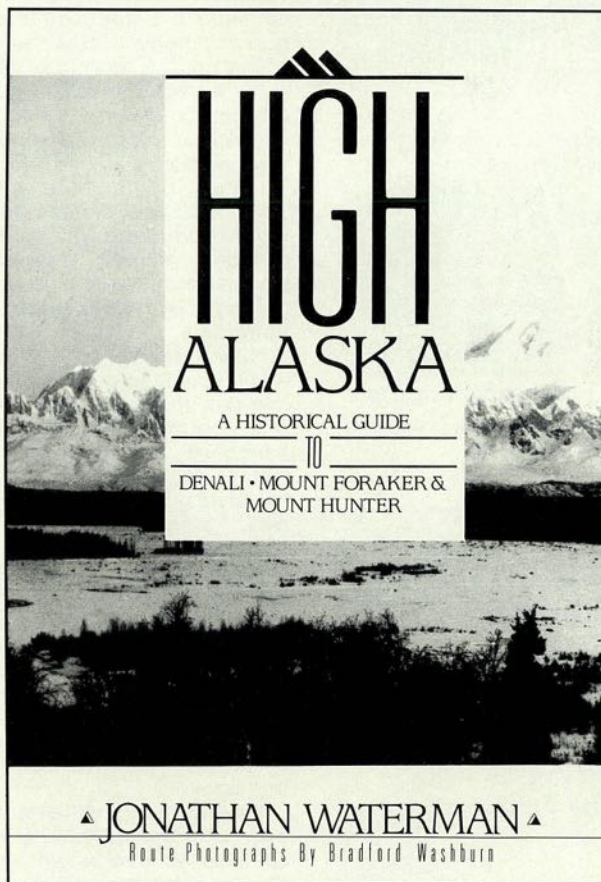
—Stuart Pregnall

The Outdoor Athlete

Steve Ilg
Cordillera Press, Inc.
Evergreen, Colorado, 1987
Softcover, \$12.95, 280 pp.

The Outdoor Athlete delivers sensible, balanced, and comprehensive advice for practitioners of outdoor sports. Steve Ilg provides the reader a basic understanding of the need to balance strength, power, aerobic, and

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flexibility training with diet and rest. Later, climbers, skiers, kayakers, sail boarders, mountain bikers, and other outdoor devotees receive a series of specific routines tailored to their sport.

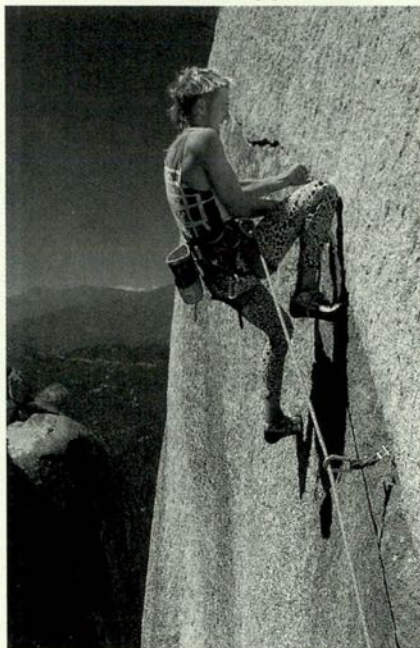
Despite my 15 years of burrowing through exercise books and back issues of *Ironman*, I found some of his suggestions revelatory. According to Ilg, rolling an ab wheel on the floor is the most advanced stomach exercise; my protesting stomach muscles concur. His training routines for technical

climbers are both vicious and safe, a rare combination. He's seen enough pointless injuries to abhor them and to warn overzealous trainers against too much specificity. And Ilg's "get lean prescription" will blast fat from any body.

Insights validated by experience pepper the pages; many flout conventional wisdom. The author quotes the Barbarian Brothers: "There is no such thing as overtraining. There is only undertraining, undersleeping, and fai-

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lure of will." If you follow Ilg's programs, only a failure of will can prevent you from making giant strides. In short, this is a remarkable compendium of training lore targeted for previously neglected athletes.

While the content of *The Outdoor Athlete* is irreproachable, numerous flaws irritate and confuse the reader. The author suffered from a momentary bout of the Joe Weider Syndrome when he renamed bent-rowing/upright-rowing supersets "Two Way Ilgs," but no other signs of megalomania mar the book. The index and organization would benefit from some polish, and the copy editor should be horsewhipped, but the author's torture of the English tongue is unforgivable.

It's a shame that Ilg encases good advice and creative thinking in gelatinous prose. Some sentences have no discoverable meaning. For example: "Training, by its sheer and intensely singular nature, unveils icons that clot modern wordage." Icons can't be unveiled by training, despite its sheer nature. But even if unveiled, they couldn't clot modern wordage; Ilg got there first.

"Many people are conditioned to a want for coiffed details for diet plans." We can read this two ways. Either, many people expect detailed diet prescriptions, or many people endure a lack of detailed diet plans with flashy hairstyles. I can't decide which is correct.

The diagnosis is clear. Ilg tries to drop ten dollar words on ten cent ideas, and the unwieldy constructions miss their targets entirely. The elegance and simplicity Ilg praises in diet and exercise finds no echo in his pretentious prose. Let's hope he sheds excess wordage with the same determination he applies to ridding his body of fat when the time comes to revise this book.

Having savaged the book, I find myself recommending it to my friends. Despite its overblown writing, *The Outdoor Athlete* has no equal as a training guide for climbers. Buy it, get strong, and enjoy the fractured English.

— James Martin

Desert Rock

Eric Björnstad
Chockstone Press
Denver, Colorado, 1988
Paper, \$25.00, 454 pp.

Finally, the long-awaited (or hated, by some) guide to the canyon country of the desert Southwest is available. Eric Björnstad's *Desert Rock* covers the largest climbing area in the country — the entire Colorado Plateau (except for Zion and the Grand Canyon). But make no mistake, this thick tome is more than just a guidebook, it is a significant historical record as well.

Guidebooks are often controversial, but the publication of this one has been particularly so. The natural beauty and remoteness of the area, combined with the adventurous nature of the climbing, breeds a certain mystique among those who've spent time there. So, for some, opening this unique playground to the masses is a threat to its natural integrity. And others, more selfishly motivated, simply want to keep these fantastic crags to themselves.

Björnstad himself admits, "Ten years ago I was against having a guide. I had a very protective attitude towards the area." But the recent boom in desert climbing prompted him to change his mind. Before, "...a guide would have merely popularized the area," but now Björnstad feels, "A guidebook will educate."

The current explosion of desert climbing is concentrated in just a few areas, and one intent of the guide is to publicize other areas in hopes of spreading the impact. Another is to educate visitors about the fragile nature of the desert environment. Whether the guide succeeds at these tasks remains to be seen.

Some feel that such a guide will destroy the adventure of desert climbing. Björnstad suggests that those who feel this way should just not read the book. And he says, "The area has more potential than any other place on the planet." The 600 routes in the guide are hardly even a beginning; *Desert Rock* is primarily a record of early explorations, the story of the Golden Age of Canyonlands climbing.

Indeed, this book gets heavily into historical ramblings and anecdotes. This represents a major change from the usual fare dished up by Chockstone Press, as well as recent guides from other publishers. It certainly makes for a more personal atmosphere, but this style is not without its problems.

The historical information is incomplete, emphasizing only early achievements. Developments in the last decade are recorded, but stories about these climbs are rare. Furthermore, several tales of non-climbing adventures clutter the book. For instance, the preface to the Indian Creek section, rather than getting into the climbing history, contains a rather long tale about a weird religious cult which was based nearby. This story may interest some, but its relevance in a climbing book is hard to justify. We also read about the author helping Clint Eastwood in *The Eiger Sanction*, his role in the filming of a MTV production, and so forth. Björnstad should have saved these stories for his autobiography and spent more time recording recent history.

To his credit, though, Björnstad has collected some fine climbing stories, such as an account of the first ascent

of Shiprock by Bestor Robinson. And he revises other previous accounts: Harvey T. Carter and Cleve McCarty are credited with the second ascent of Castleon Tower (as well as the first free ascent), and Fred Beckey is credited with the second ascent of the Priest, not the first.

As for route descriptions, *Desert Rock* does an admirable job, especially considering the challenge of covering such a huge area. Profusely illustrated with maps, topos, and photos, this book is visually enticing. Climbers have plenty of routes to choose from and should be able to find their way. As with any guide of this magnitude, mistakes are to be expected, but generally route descriptions are accurate and ratings reflect a consensus. There are some obvious errors in the book, a photo mis-captioned as *Supercrack* being the most blatant. However, these mistakes do not have a major impact on the general quality of the production.

A potential sore point of the guide is Björnstad's inclusion of climbs on the Navajo Indian Reservation. Contrary to popular belief, there is no climbing ban on the reservation. Furthermore, very few of the towers visited by climbers are sacred to the Navajo. Even so, climbing is generally discouraged by tribal officials. Björnstad tries to skirt this complex issue by including less information about the climbs here, omitting topos and equipment lists. Thus, the routes (which are some of the finest of the region) are identified only by location and difficulty. He has justified recording these routes as a historical reference. I doubt this will prevent climbers from using this information. Perhaps Björnstad should have said nothing about the area if he wished to discourage climbing on the Navajo's land.

In addition to recording numerous climbs, *Desert Rock* contains a lengthy introductory section, which includes the obligatory geology lesson and overview of climbing history, as well as practical considerations for visiting the area. Kyle Copeland provides an informative discussion of soft-rock climbing techniques. Bill Forrest offers his impressions of the canyonlands in a poem, and Chuck Pratt, Huntley Ingalls, and Layton Kor all contribute short essays. Indeed, Björnstad seems to be trying to cover all the bases. The result is a thick, verbose volume, uneven at times, but always attractive due to its production quality.

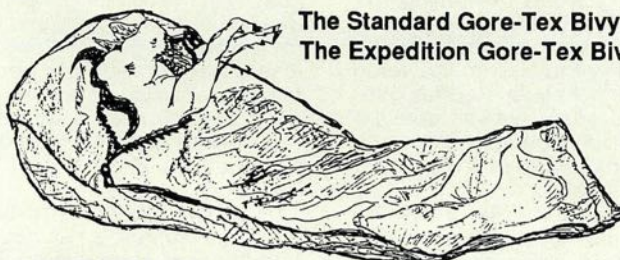
Overall, *Desert Rock* represents a monumental effort by Eric Björnstad to capture the essence of canyon country climbing. He admitted to me that he could have used another year to check facts. For better or worse, this slick volume is the most important guidebook to appear in many years.

—Charlie Fowler

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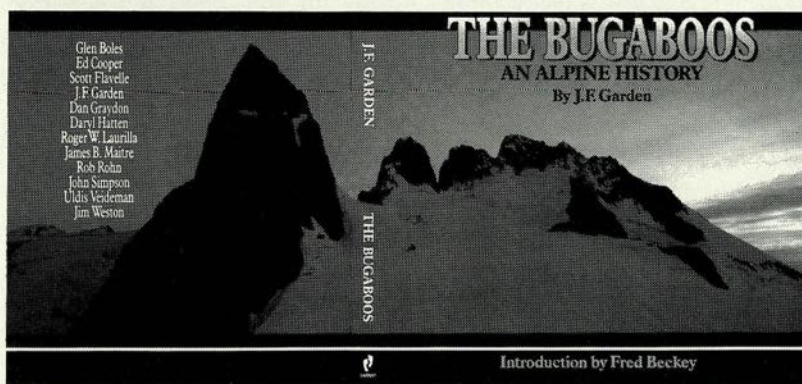


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Competitive Elegance

Dear Editor,

Thank you for the timely and salient editorial comments about competition in the climbing world (*Climbing* no. 105). Competitive climbing in its present form threatens to obscure and perhaps destroy the charm and value of climbing as it has existed for generations. Fortunately, we still have the chance to decide how to incorporate formalized competition into the American climbing scene.

Why must the focus be solely on getting up harder and harder routes? Instead, can't we follow the example of sports such as diving and gymnastics, and let the climber determine his own program? Difficulty could be used as a multiplier in a scoring system based on style and grace, instead of becoming the ultimate goal of the endeavor. This would eliminate the need for organizers to manufacture holds, and would do away with problems such as those experienced in Troubat, where ties were unresolvable due to the organizer's choice of routes.

There are other advantages to judging competitions in this way. Elegant climbers who can't do 5.12 could compete, and the likelihood of soft tissue injury might be reduced. There would be no need for secrecy about route selection; in fact, acceptable routes could be practiced ahead of time and the competition would actually benefit in the form of improved performances.

Let's hear it for skill, style, and elegance. Frankly, I'm tired of the brute-force mentality that seems to have dominated the sport lately.

— Bill Gooch, Austin, Texas

Confessions of a Thief

Dear Editor,

Guilty as I am of establishing a number of moderate-grade routes without bolts (or rope) in both Tuolumne and Joshua Tree, I must comment on Steve Russell's letter (*Climbing* no. 105).

Climbers should be wary of blind adherence to the First Ascent Principle: "A climb shall be repeated in a style at least as good as that of the first ascent party." I suggest a more pragmatic policy: "Climb in the best style you can, given the conditions and context of the route." How someone else did a route may influence you, but ultimately the measure of your performance is subjective.

If you feel a route is criminally unprotected and absolutely requires bolts, go ahead and drill. Do so in a well-crafted manner so that those who

climb after you may appreciate your efforts. Realize, however, that there are climbers who get their kicks out of chopping such additions. And stand up for your position. Confront the first ascent party directly. Report your activity to the climbing media and your local guidebook editor, and take credit (or blame) for your actions. Anything less is irresponsible and beneath contempt. Better yet, leave the drill in the pack and choose a different route. There are hundreds to choose from, particularly in Joshua Tree and Tuolumne.

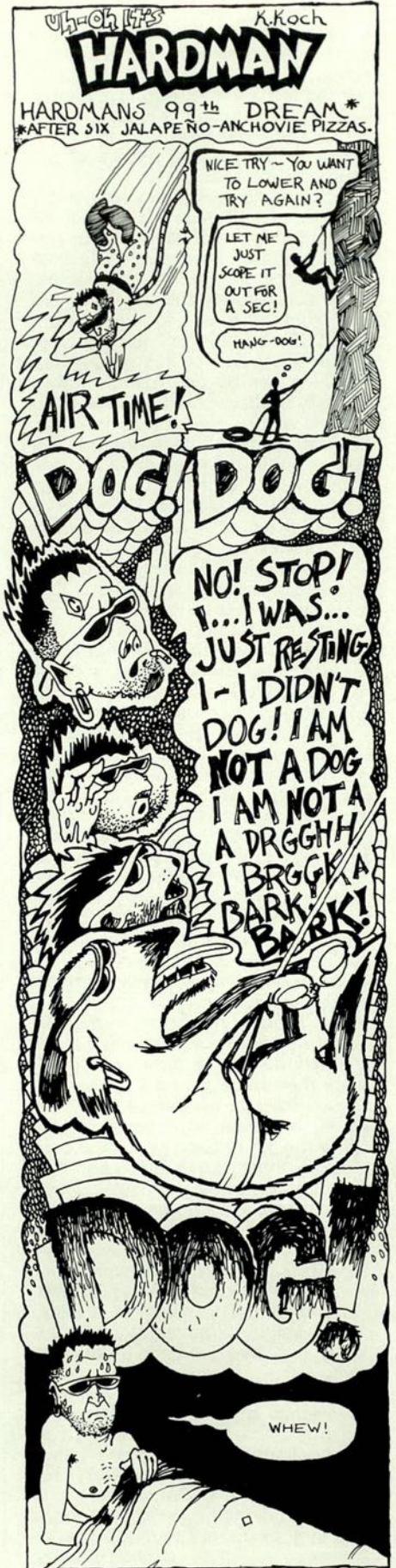
A lack of obvious protection on moderate routes is not necessarily a bad thing, or even unsafe. Protection begins with the climber, not the gear. If you don't fall, you don't need to worry about the lack of pro. If you think an extra bolt provides extra safety, you're living in a dream world. "Bombproof" placements, both nuts and bolts, fail regularly with nasty consequences. It's better to learn about runouts on a one bolt 5.8 pitch of solid Tuolumne granite than on a similar pitch of bad rock with a bad bolt halfway up a Grade IV as the weather moves in.

The claim that experienced climbers are "stealing" all the good moderate routes by ascending them with minimal protection is hilarious. How can a route be "stolen" if it doesn't exist yet? Once created, such a route might be inappropriate for someone who struggles at the grade given, but it hasn't been "stolen" from anybody. What's to stop moderate climbers from establishing new routes with as much protection as they feel is necessary? Despite doomsayers' proclamations otherwise, there's a lot of virgin rock out there, and most of the moderate routes haven't been touched.

Speaking for myself, I love to climb, but my climbing time is limited. There's enough rock out there that I'd rather do routes I haven't done than repeating ones I have. If I can't find a partner, I'll go soloing on easier routes. Often, a route involves moderate sustained friction without stances; to drill under such circumstances is possible, but painful, so the number of placements is minimized.

Sometimes there are adjacent bolted routes and additional bolts would be confusing. Some places have a local ethic of boldness which I respect. Sometimes the crux moves are right off the ground, and the route gets progressively easier. And, more often than not, good nut pockets and knob tie-offs appear in the middle of otherwise blank routes; it's just a matter of being sensitive to your environment.

— Alan Nelson, Albany, California



Golden Oldies

Dear Editor,

Randy Vogel, in his piece on Tahquitz and Suicide (*Climbing* no. 104), calls *The Mechanic's Route* the country's first 5.8. It appears he may have never heard of *Wiessner's Crack* and *Vector* at Ragged Mountain, put up by Fritz Wiessner in 1934 and 1935, respectively.

Moreover, having recently done *The Mechanic's Route* and even more recently been brutalized by Fritz's Connecticut testpieces, I can assure Mr. Vogel that not only were *Wiessner's Crack* and *Vector* earlier, they were, and still are, harder.

—Bill Thomas
Santa Barbara, California

Sprechen Sie Deutch?

Dear Editor,

I read with great interest Robert Kelman's review of *Sportklettern heute* by Wolfgang Gullich and Andreas Kubin (*Climbing* no. 105).

However, there was no mention of an English translation being available, or even if the book is distributed in this country. Can you help?

—Ted Walker, Carlsbad, California

Published in German only, Sportklettern heute is available in the U.S. from Chessler Books, P.O. Box 2436, Evergreen, CO 80439.

Peru Info, In English

Dear Editor,

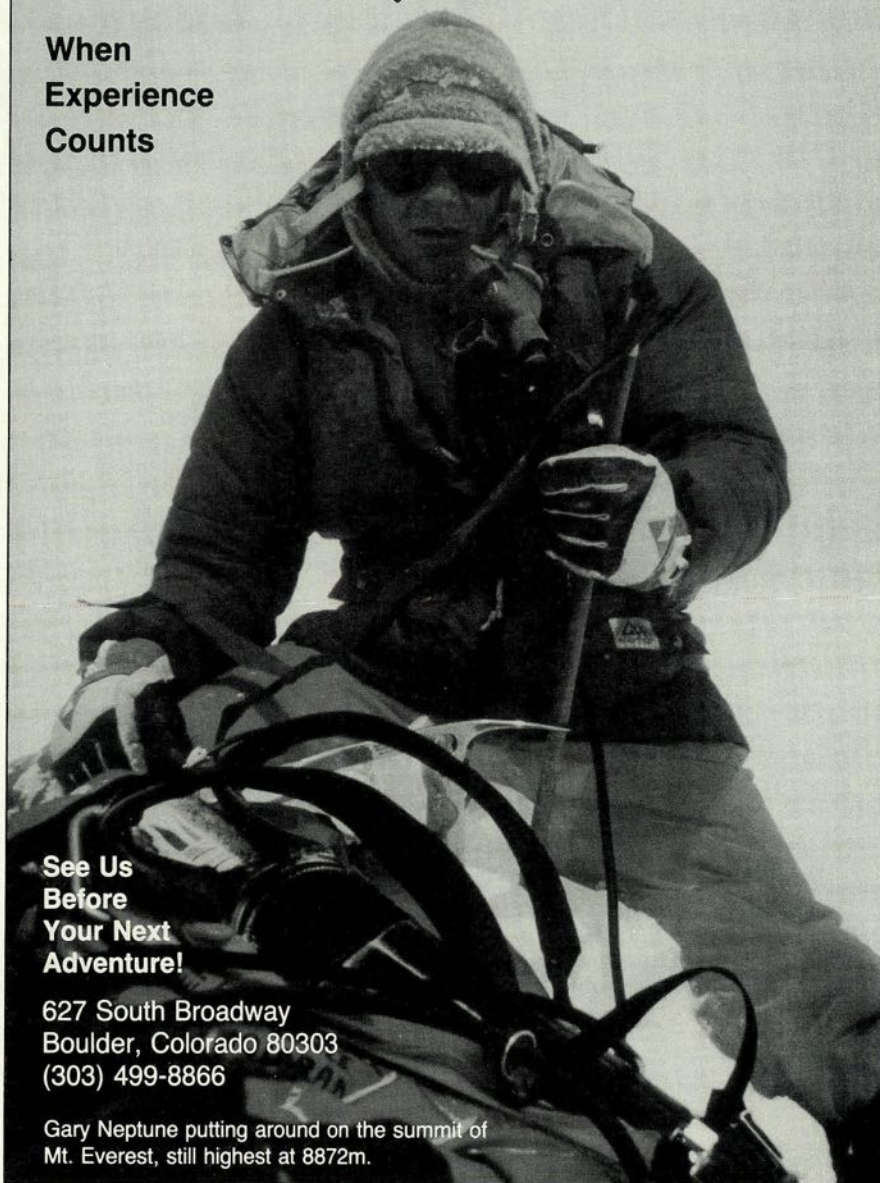
Ralph Richardson-Healy's article about climbing in Peru (*Expeditions, Climbing* no. 104) was most informative, and hopefully will encourage more people to consider the Peruvian Andes as a viable choice for mountaineering pursuits. The Cordillera Blanca is truly spectacular and offers a wide range of climbing suited to various levels of technical expertise.

In addition to the information already presented by the author, readers may be interested in *Mountaineering in the Andes: A Source Book for Climbers*, by Jill Neate. It includes the topography and climbing history of most interesting South American peaks, along with an exhaustive bibliography of the climbing there. It can be ordered from Mountain Books, Box 25589, Seattle, WA 98125.

Another reliable source is the South American Explorers Club in Lima, Peru. This is a non-profit educational organization which functions as an information network for South America. Members can access current information on a multitude of topics and areas, use the Clubhouse in Lima, and much

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more. Interested parties can write to SAEC, Casilla 3714, Lima 100, Peru. Or contact our U.S. office at 1510 York St., Denver, Colorado 80206; (303) 320-0388.

—Betsy Wagenhauser, Director,
South American Explorers Club

Information Sought

Dear Editor,

I am working on a bouldering guide to the Austin, Texas area. Since no-hands routes will be included in this book, information on no-hands rating systems would also be greatly appreciated.

Contributions should be sent to me at 6429 Spicewood Springs Road, Austin, TX 78759; (512) 338-3661.

—Bill Gooch

Dear Editor,

I am compiling a guidebook to New Mexico which will include Cochiti Cliffs, Cochiti Mesa, Tres Piedras, Brazos Cliffs, the Organ and Sandia Mountains, Ship Rock, and Questa Dome.

Information on these and any other areas of interest should be sent to me in care of Sandia Mountain Outfitters, 1406 Eubank NE, Albuquerque, NM 87112; (505) 293-9725.

—Garry Wolfe

Bolt Control: Up to Community Cooperation

Rock climbing in recent years has undergone many changes — so many that the sport resembles very little what it was ten years ago. The style in which routes are established and later repeated is different, the varieties and means of placing protection is different, even the conception of rock climbing itself has been transformed.

Today, we may hangdog, place bolts on rappel, and spend the time it takes to do two El Cap routes working out the sequence on 20 feet of rock. But change has come quickly and sometimes irreverently, splitting climbers into factions with often artificial distinctions. Now, it seems we all must fit into one of two categories. We are either "rock gymnasts" or "mountaineers."

Though we have become two species, we still sometimes inhabit the same domain. The rock holds us together as a community, irreversibly bonding us as "rock climbers." It keeps us thriving in harmonious groups in some areas, and tearing out each other's throats in others. Yes, we are all free spirits, but where the confines of an area force us together, we must be social, and in order to have the benefits of this important aspect of climbing, we must obey social rules. These rules, while insuring freedom for all, must maintain as first priority a sensitivity to our groups and the limited resource on which we depend.

This means ethics, climbing ethics, which may come as a surprise to many who think that the new ethics mean no ethics at all. This is far from the case. We are still free climbers, routes are still more than games of connect the dots (at least in this country), and our crags are still aesthetic places. The new developments seen in the last few years do not mean anarchy — far from it. If anything, new styles of climbing demand not a weakening of ethics but a strengthening of the entire system from which ethics has emerged, a strengthening of climbing from its social core.

The ethics of social consciousness must be locked into the minds of today's climbers, especially those placing bolts, like fetters around their ankles. These ethics should bind not to impair, but merely to slow. Bolts have opened up a treasure-trove of new routes in areas long thought climbed out. But in the clamor for new lines, the freedom bolting allows has been the source of many abuses. Mustered on by the whirl of electric drills, many modern ascensionists have given themselves no room (or time) for reflection and responsibility. It is only with the help of ethics that we can be kept from being blown around on the ends of our ropes. It is only with the weight of historical and social obligation that our new routes can be kept positive additions and not detractions to the area in which we climb.

The advent of preplaced fixed-protection systems is as undeniable an advance in the evolution of free climbing as was the introduction of clean climbing protection in the early 1970's. That bolts have a place in American climbing is obvious. That rappel-placed bolts have a place is equally a non-issue. That bolts can be placed on every available square inch of rock most certainly demands attention.

The freedom to place bolts on rappel did not create this situation, it only heightened our awareness of it. For regardless of style, bolting has never had any natural limitations. Ironically, not only has placing bolts on rappel made bolting easier, it has made it more acceptable because it has eliminated the need for bolt ladders. Bolts on rappel became the creed of climbers who were doing routes on

walls too thin or steep to place bolts from hooks, yet didn't want to place the dozens necessary for bolt ladders. 5.13 meant rappel-placed bolts, just as 5.12 meant bolts from hooks, and 5.11 meant bolts from stances; just ask John Bachar or Tom Higgins.

This does not imply that placing bolts on rappel is a tactic to be employed only on 5.13's. Intelligently created rappel-bolted routes of any grade can be a great asset to any area, but by no means should this tactic be used to damage or belittle the testpieces of earlier eras. It is inconceivable that someone would have had serious intentions of trying routes like *Desdichado* or *To Bolt Or Not To Be* prior to the advent of rappel-placed protection. Today, it should be equally inconceivable that someone would place bolts on rappel to climb a line that had been left by consensus for an inspired ascent. It is extremely unlikely that the testpieces of today conflict with those of yesterday for they represent not just a difference in technical difficulty, but more importantly, a difference in ideology. For this reason, it is also unlikely that these routes and the styles they represent cannot coexist. What is needed is a mutual respect, a respect which is directed both forward and backward.

In the 1950's and 1960's, it was impossible for aid climbers to foresee the widespread movement to free climbing in the decades that followed. Likewise, it is impossible for us to foresee the decades ahead. Although it is good to have concern for the future, it must be well based. Short of quarrying the cliffs, we can't really destroy them, nor can we destroy the challenge they provide. Yosemite, Eldorado, and the Gunks prove you don't need virgin rock to enjoy climbing or get a challenge from it. We have been rediscovering the same areas generation after generation, enjoying the same routes and appeasing our explorative appetites with new variations, eliminates, even entirely new lines.

This is not to say we can do no harm. Climbing stands to lose a great deal from carelessness and irresponsibility. Of principal vulnerability is the aesthetic, historic, and social side of climbing. Bolting highlights this fact because it can be done anywhere, by anyone.

Nevertheless, bolts, because of the freedom they offer, are free climbing's most versatile tools. With them it is possible to develop routes that rival "natural lines." It is only with this inspiration that bolts should be added to our cliffs. Bolt routes are not natural to the extent that climbers, not the rock, determine the protection parameters and, thus, "shape" of a route. This demands a high standard of care. As Mark Sonnenfeld said, "Bolt routes must be *well crafted*."

A well-crafted route implies several considerations. If bolts are placed, it is important that they be the most secure and permanent type available. Toproping a route prior to drilling seems necessary to insure all bolts are placed logically. Later ascensionists should also be considered. Of primary importance: what will their opinion of the route be? Bolts on a mediocre route generally take away more than they add. Allow time to ask different climbers what they think about the potential line. In areas with diverse climbing styles, it might be a good idea to have available a list of concerned climbers representative of each style who will give their point of view.

As far as runouts go, bolts should be placed to protect parties that have no knowledge of the route; dangerous

runouts should be minimized. When considering future ascensionists, by no means underestimate the advantage of even one pass over a route on top rope; it would be a terrible shame to have a friend hurt by an artificial (and thus avoidable) "psychological obstacle." Death routes are the mark of a different genre; well-crafted routes should be safe.

A well-crafted route is also aligned with the aesthetics of an area. Are other lines too close? Are the main sections easily escapable? Is the line contrived? It is possible to create a well-crafted route without bolts. This variety of craftsmanship is a decision to let the line remain as a top rope; it is as commendable, in some cases more so, as equipping it. It is important to realize the thrill of doing a new route often taints our eyes to its aesthetics. It is easy to perceive a bolt you have placed as beautiful even though public opinion decries it. A well-crafted route should exist in its own right as a creative masterpiece and not as personal graffiti asserting "I was here."

Bolts can destroy classic or historic routes. It is generally agreed that adding bolts to routes which were established without is an act of extremely bad taste. Doing this not only destroys the creative effort of the first ascent party, but often removes a unique element of the climb. In Eldorado, several classic older routes have recently lost exhilarating runouts or unique protection problems because of the addition of bolts. This has nothing to do with replacing old bolts and anchors which should be considered part of the general upkeep of an area and something in which all responsible local climbers should participate.

Bolts can destroy classic or historic routes indirectly as well. This occurs when established lines are bisected by bolted variations or by the simple intrusion of bolts on a section of rock historically considered to be bolt-free. Consider these areas stylistic or historic preserves: areas of rock on which a selected genre of route is allowed to remain uncluttered. For example, I hope the walls around *Perilous Journey* will always remain pristine, a breaking ground for fearless, on-sight soloists. In 1975, David Breashears gave climbing something special; why not return the favor?

I would call these places "primitive areas," because they should mirror the protected areas our governments have set aside on public lands. An example of such an arrangement exists on English gritstone. On natural (unquarried) cliffs bolts have never, nor will ever, be placed. A single bolt on natural grit would mean more than the defacement of that particular section of rock, it would be an insult to British climbing. On quarried grit, however, the feeling is much different; ancient bolt routes abound, much to the pleasure of locals who have climbed some of their hardest technical routes there.

The gritstone example illustrates the coexistence of two very different styles in areas not separated by state boundaries, but often by only a couple of hundred feet. This type of outlook is important to nurture here in America. Areas don't have to be all or nothing, bolt or anti-bolt. Areas which forsake rappel-bolted routes altogether deny their climbers the pleasures of safe and fluid climbing as well as one of the best sources of training and self-improvement. Equally, in areas where bolting is given free reign, classic routes, techniques, and a historical perspective may be lost as well as a degree of scenic beauty. Diversity is our best solution, and it should be strongly supported on our cliffs and in our communities.

The fate of climbing will be decided by all of us. The rock, like the people, can slide to an extreme in either direction and become homogeneous and boring, or become a fractured battle zone of conflicting interests and unmovable opinion. In both scenarios, rock and climber suffer, and the social (or anti-social) side of the sport kills the personal side — this is where the real loss occurs.

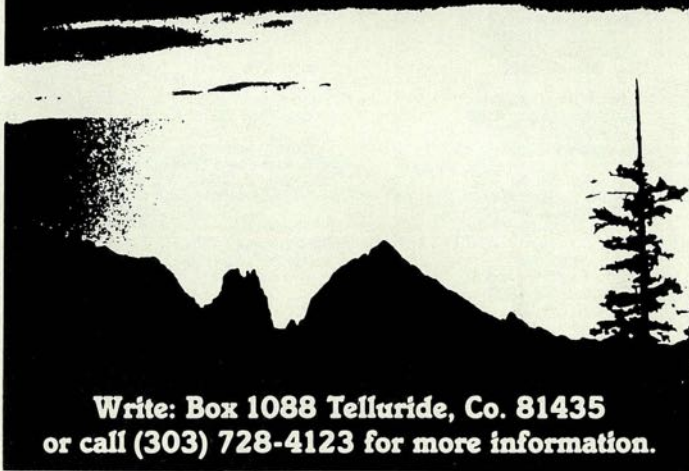
— Christian Griffith

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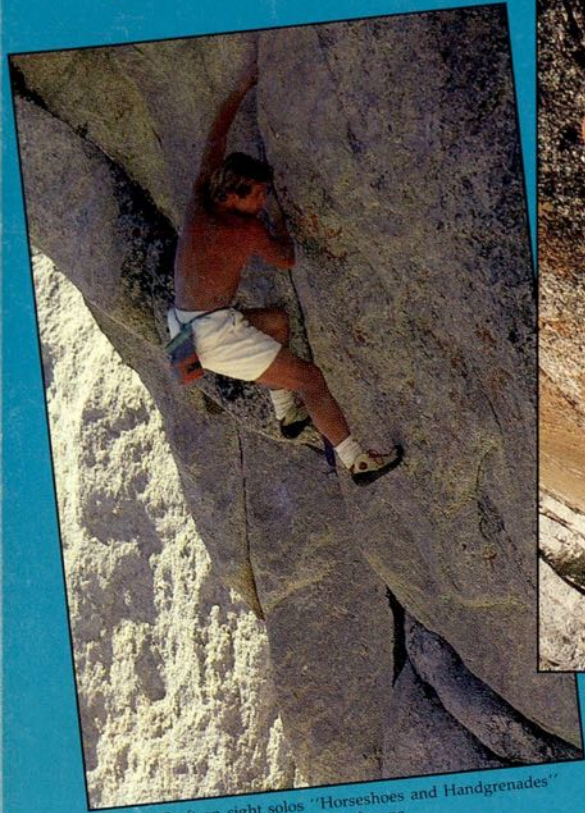
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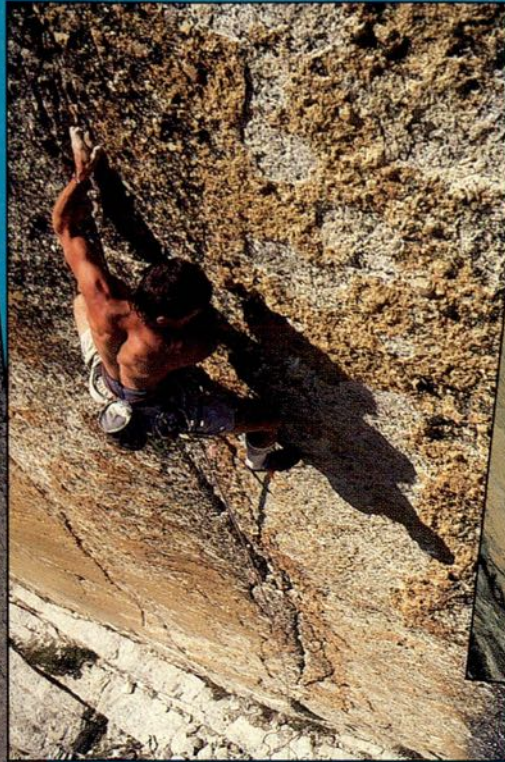
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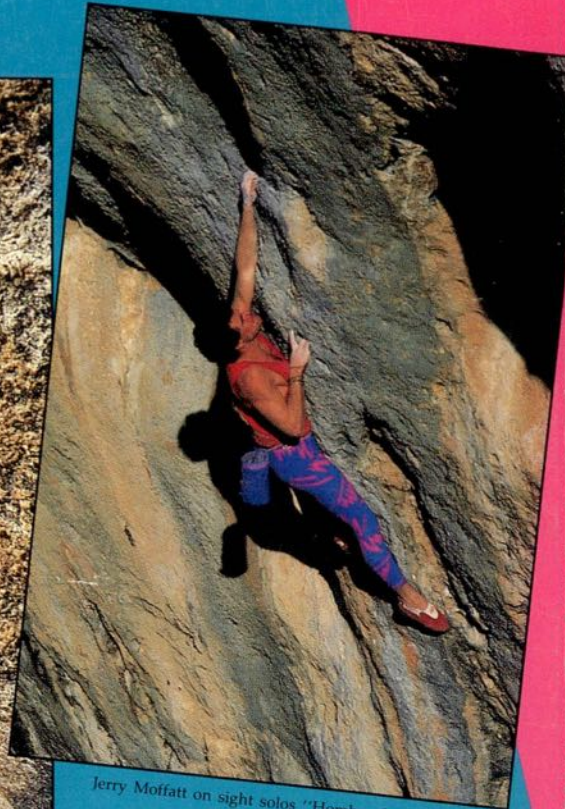
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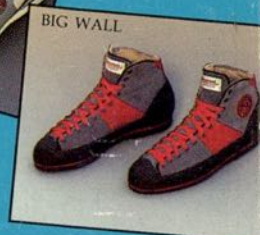
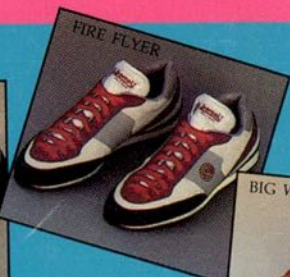
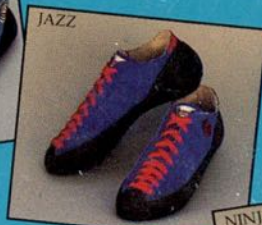
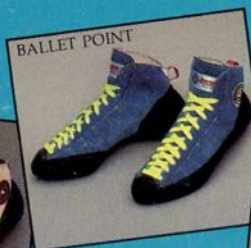
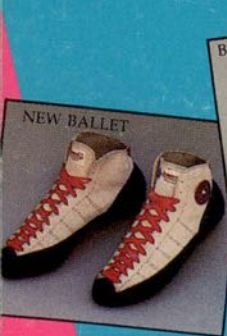


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