

The Mountaineer

1977



Published July, 1978

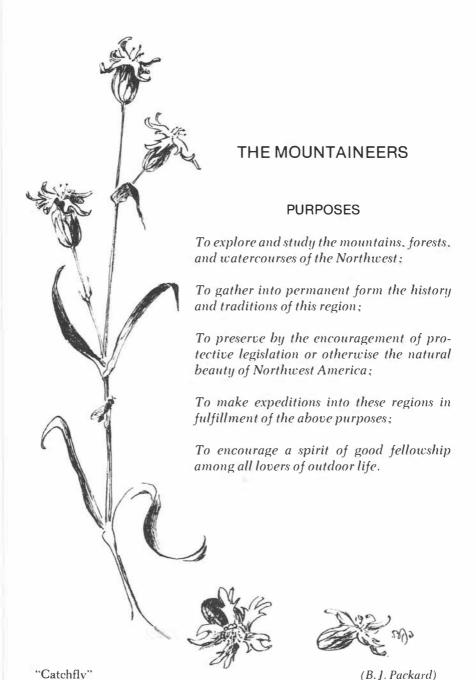
Cover: Prusik Peak and Alpine Larch (Bob Gunning)

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Entered as second-class matter April 8, 1922, at Post Office, Seattle, Washington, under the act of March 3, 1879. Published monthly, except July, when thrice-monthly, by The Mountaineers, 719 Pike Street, Seattle, Washington 98101.





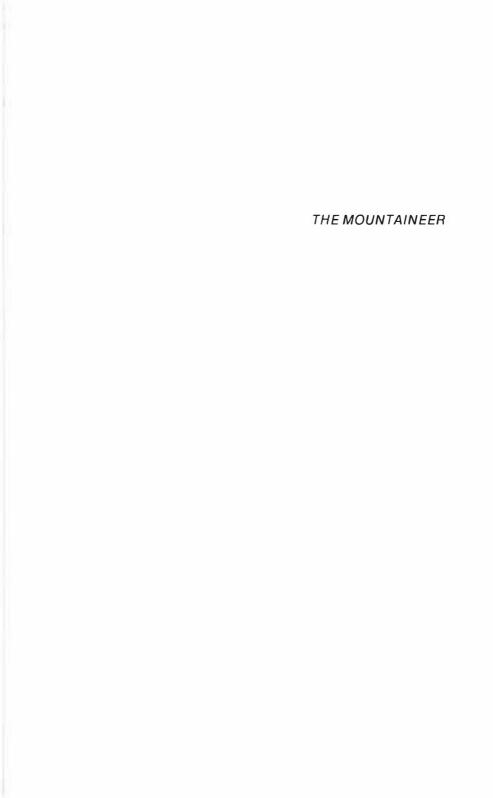
Woodnymph (Pyrola uniflora)

(Ramona Hammerly)

Contents

High Adventure Lowdown DAVE LORD	3
The Mountaineer Players: Their First 55 Years NEDRA SLAUSON	7
North From Snoqualmie on the New Pacific Crest Trail WILLIAM K. LONGWELL, JR.	11
Denali South Face '77 Expedition JAN BALUT AND GLENN BRINDEIRO	22
Fifty Years in the Mountaineers ELVIN P. CARNEY	27
A Walk in Paradise LAURA DASSOW	30
The Alpine Club of Pakistan WALTENTENMANN	39
Climbing Equipment Safety Standards and the UIAA CAL MAGNUSSON	41
Gallery: Mountains, Flowers and Birds	43

The Future of the Arctic National Wildlife Range KEN DAVIS	50
Memories of Old Snoqualmie Lodge DAVID H. LEE	59
Alpine Birds and Their Energy Edge TONY ANGELL	62
Climbing Notes EDITED BY JOAN FIREY	70
Book Reviews	77
In Memoriam	101
Good Night Song	162





"Scene on Mt. Si"

High Adventure Lowdown

DAVE LORD

Excitement is where you make it. The truly slothful mountaineer can squeeze a fulfilling measure of heroism from any mountain/mole-hill regardless of the conditions. A good case in point is a recent winter ascent of Mt. Si by Steve Costie and Dave Lord, supported by Molly Costie. Experienced mountaineers and even many hikers snort at the mention of Mt. Si, and I am sure the reader knows why. But from the wistful vantage of Chicago, "The Riviera of The Midwest," Mt. Si must be regarded as beautiful and challenging—all in all, a delightful prospect of alpine exercise. Mt. Si can also become a great climb if the experience festers properly in the climber's memory. But this is getting ahead of the progress of the expedition.

I was certain that I had left the car's lights on when we left it an hour before in the almost empty parking lot at the trailhead. "But," I thought, "we've gone so far up this rotten trail, the car won't start even after the time it takes to run back to it." We were committed.

The trail reminded me at first of walking in Seattle's Ravenna Park on a rainy autumn day. We could tell that few people had used the trail recently; the dull green and brown leaves from the alders were pretty much undisturbed and there were many clear pools of water impounded on the trail that fed incipient Amazons starting their journeys down Mt. Si. As we gained altitude, the rain ended and we were in a misty scene with half a foot of wet, dirty snow on the pathway. (From the footprints in this snow, and from the number of automobiles in the parking lot now far below, we all made accurate predictions regarding the number of people ahead of us.) And then came that winter wonder of wonders: we were suddenly above a bank of cloud and within a sunny evergreen forest plastered with a foot of sparkling new snow. High above was that ominous filmy

skein of cloud that presages the more typical Cascade winter weather; but being overly-experienced with this sort of thing, we all knew that the day would remain fair for us.

Then a wind rose and, in concert with the bright sun, caused lumps of snow to fall from the treelimbs like a storm of outsized raindrops. We were now able to amuse ourselves by speculating upon our chances of being struck by a dollop of snow; we reached no conclusion though we collected some relevant data.

At last the trees gave way and we approached the notorious "Hay-stack" comprising Mt. Si's final heights. We tramped across a whitened meadow to the eastern side of the Haystack where in summer there is the closest thing to a trail that rock climbing can afford. At this point we met the party preceding us—a group of about ten teenagers on their first-ever ascent. They were high-school students and were led by a crusty old climber who had brought a long manila rope and a battle-scarred ice ax. He looked at our packs and the equipment that dangled from them and said, "I sure wish I had brought crampons, too." Then, nevertheless, he began to lead his party up the Haystack's northeast flank, following a rising band of snow through some trees.

Because we were now east of the Haystack, conditions changed: the sun was gone and we quickly realized that it was quite cold. Because of the teenagers above us, we decided to traverse a hundred feet to the aforementioned near-trail to the summit, which, for the benefit of the one or two who have not been to Mt. Si, is a gully leading to a point on the crest of the summit ridge a dozen feet below the actual summit.

Being more experienced, Steve halted at the foot of the gully. Being lazy, I hoped that we might still ascend without having to put on crampons, and so I walked up the route until a combination of verglas and steepness convinced me to turn back and let Steve use some of the stuff that we had expended so much energy hauling up.

Our route was saddled with extraordinary conditions. First: the gully had been repeatedly washed by water, which froze in place when a cold spell struck the mountain. Second: this cold spell brought snow and strong westerly winds. Being on the east side of the peak, the route was covered with a few inches of spindrift which masked the slippery rock and offered no support in itself. The bulk of the spindrift though had sloughed into a sugary pile at the base of the gully. Third: we were away from the sun, and the air was

very cold for the elevation and fourth, as the weather on Si worsened, a strong wind was funneled down the gully. Thus the small section of the summit rocks that we intended to ascend possessed the most savage microclimate possible on this mountain. Meanwhile, just above and to our left, the high school expedition made its way slowly, but with much greater facility than we.

Putting on crampons and rope in a 20-knot wind and at a temperature of about ten degrees Fahrenheit is not the usual image one has of a day on Mt. Si, but this was the case during our trip. We were succeeding in making a mountain out of a molehill.

Steve courageously led off, skittering up icy ledges to what we later recognized as the proverbial crux move—a steep little chimney extending the opportunity for an unprotected fall to the base of the gully. Here Steve spent a great deal of time admiring the aesthetic quality and significance of his position and of the route, after which he stabbed with his ax and jabbed with his crampons up this move in a fit of extreme determination. Then he plowed up a very slippery but gentler slope hidden by a layer of beautiful powder snow, coming to a gasping halt and gratefully hugging the lone tree along the route.

While Steve had been leading, I was forced to remain motionless on belay in the teeth of the cold wind that poured down from the gap in the summit ridge just above. I knew that I was really cold because beyond my usual discomfort at being in such a state, which may be attributable to psychological rather than meterological reasons, the outer shells of my mittens were frozen after only a few minutes.

Armed with the license to try to kill oneself off a top rope, I was soon able to join Steve at the tree halfway up the gully. From there I led to the ridgecrest, the only difficulties being wading through ever-deeper snow and hacking at an incipient cornice to gain the ridge. Then we were back in the sunshine, and a few seconds later we were at the top, with the highschoolers all around gurgling and screeching with excitement. Aye Hamish, Sco'land's nice, boo 'tis oonly train'n fear Sigh 'n winter!

It was also getting colder. We could not see Mt. Rainier, but the wind had torn some holes in the layer of cloud below and we caught glimpses of the North Bend laid out in a seemingly tropical lush valley. In the same glance were the crusted battlements of the now-mighty Mt. Si, looking just like photographic views of the Peruvian mountains— Nevado Sai, en La Cordillera de Las Cascades. Later

we would return to Mt. Si in winter, once climbing the same route and two others as well, but we never found conditions even approaching the severity of those which we found the first time we went there out of desperate boredom.

Bolstering our flagging self confidence, Steve and I descended by our ascent route and outpaced the descending highschoolers even though we rappelled from the tree. Our support had grown so cold waiting the hour or so that we had fiddled around that she had retreated to a sunny spot—not even heavy sweaters and a down parka had stopped the cold in the gully. Thus when we rejoined Molly, she very eagerly led us down the mountain at an athletic clip. Back in the forest it began to grow dark and a warm rain was pounding the parking lot by the time we crunched across it toward the car. And surprise, the car did start.

The Mountaineer Players: Their First 55 Years

NEDRA SLAUSON

Fifty-five years of presenting plays in a uniquely beautiful outdoor setting—that's the record of the Mountaineer Players. It's a record few amateur drama groups can match in this area. Since 1923, only a global war has ever cancelled the Players' annual spring production at the club's Forest Theatre and Wild Rhododendron Preserve in Kitsap county.

The first production, complete with costumes and music, was "Robin of Sherwood," given on a pleasant Sunday afternoon in June, 1923, for an audience of 100-plus. But though this was the first fully-staged play, countless skits and campfire stunts preceded it on Mountaineer outings to Kitsap since the first 74 acres were purchased in 1913. (Going to Kitsap was a real outing in those early days. The route was via Chico; one backpacked the last two miles or so to reach the property.)

The success of the 1923 play led to organizing a play-production class the following winter under the professional direction of Mrs. Robert F. Sandall. The next spring's production was seen by more than 200 Mountaineers. But all was not ideal. As Harriet Walker tells it: "The heroism of the audience, who sat with their feet in a bog and batted mosquitoes, could not be counted upon indefinitely. On June 6, 1926, they were led to a new Forest Theatre."

Selected by William C. Darling, the site of today's theater was turned into a beautiful natural stage by the muscle-power of scores of Mountaineers. Cedar-bark slabs became wings on either side of the stage. Branches from trees felled during clearing operations were covered with countless wheelbarrow loads of gravel and soil to form

the mound upstage. Mosses, ferns and the ubiquitous wild rhododendrons provided the finishing touches.

"In 1931," Harriet Walker recalls, "T. D. Everts, with blueprint and transit, directed the enlarging and terracing of the seating space and the leveling of the stage. The area of the mound was doubled. Seats were included in the blueprint, but a depression was in the horoscope." Improvements in the performance and backstage areas, along with the yearly recovery and/or repair of winter's excesses, have continued regularly. But as for seats ... well, the rustic log-edged terraces have served well for nearly half a century. With folded blanket, boat cushion or foam pad underneath, the terraces are quite comfortable. And they are part of the Forest Theatre traditions.

The long and distinguished history of the Players and the Forest Theatre is a tribute to the talent, dedication and plain hard work of Mountaineers by the hundreds. Staging a play is a massive exercise in detail: selecting the play, obtaining performance rights, choosing the director, casting the parts, conducting the rehearsals, planning and creating sets and costumes and properties, designing the publicity, arranging for transportation.... the list is endless.

For any outdoor theater in the Pacific Northwest the weather is always a gamble. In early days transportation was a gamble also. Before the road from Bremerton was built, the Mountaineers traveled to Chico and backpacked from there. Starting about 1927, the Players chartered a steamer to transport the audience from Seattle to Chico. They prayed for good weather, especially on the Seattle side of Puget Sound, for if bad weather kept the audience away, the \$100 cost of the steamer had to come out of the Players' own pockets.

However, neither transportation problems nor stormy weather ever cancelled a Mountaineer play. World War II caused the only break in the Theatre's long history. The 1942 production was the last until 1947. With transportation and weather chancy, audiences for that production were small and proceeds were smaller. But was it a failure? Not a bit! Said Mrs. Robert F. Sandall, "This (staging a play) was a real war service, a source of sane and wholesome recreation at a time when just this is so sorely needed."

In 1947 the Players once again offered a spring play amid blooming rhododendrons and dogwood. They have done so every year since. The 1978 premiere of "The Marvelous Land of Oz", written by the Players' own Evelyn MacDonald, is the 51st play to come to life in the Forest Theatre.

FOREST THEATRE PRODUCTIONS

By the Mountaineer Players

1923	Robin of Sherwood
1924	The Shepherd in the Distance
1925	The Little Clay Cart
1926	Reinald and the Red Wolf
1927	Alice in Wonderland
1928	Robin of Sherwood
1929	Make Believe
1930	Snow White and the Seven Dwarfs
1931	Alice Adventuring in Wonderland
1932	Ali Baba and the 40 Thieves (by Harriet Walker*)
1933	The Reluctant Dragon
1934	The Rose and the Ring
1935	Toad of Toad Hall
1936	Under Richard's Banner (by Harriet Walker*)
1937	Snow White and the Seven Dwarfs
1938	The Sleeping Beauty of Loreland
1939	Rip Van Winkle and the Silver Flagon
1940	Ali Baba and the 40 Thieves (by Harriet Walker)
1941	A Midsummer Night's Dream
1942	The Princess and Mr. Parker
1947	The Sleeping Beauty of Loreland
1948	A Thousand Years Ago
1949	The Prince and the Pauper
1950	If I Were King
1951	A Connecticut Yankee in King Arthur's Court
1952	Green Valley
1953	The Warrior's Husband
1954	Androcles and the Lion
1955	Green Pastures
1956	Kismet
1957	The Teahouse of the August Moon
1958	Annie Get Your Gun
1959	Donegal Fair
1960	Sing Out, Sweet Land

1961	Li'l Abner
1962	Wildcat
1963	Little Mary Sunshine
1964	Around the World in 80 Days
1965	The Mouse That Roared
1966	The Wizard of Oz
1967	Paint Your Wagon
1968	A Connecticut Yankee in King Arthur's Court
1969	Calico Cargo
1970	The Hobbit
1971	The Student Gypsy
1972	Alaska, or The Secret of Yonder Mountain
1973	The Magic Forest (by Earl Kelly*)
1974	Brigadoon
1975	Plain and Fancy
1976	The Golden Apple
1977	A Midsummer Night's Dream
1978	The Marvelous Land of Oz (by Evelyn MacDonald*)

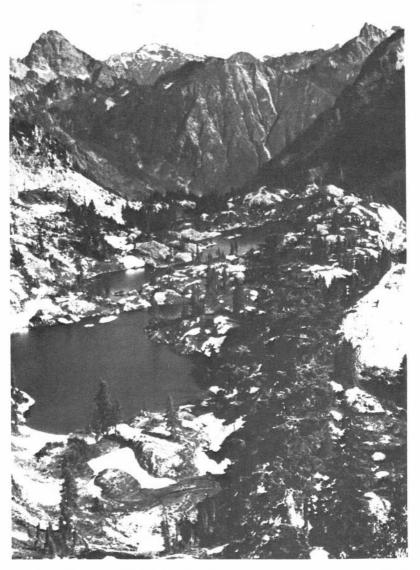
^{*} Members of the Mountaineer Players

Data by Georgia Graham



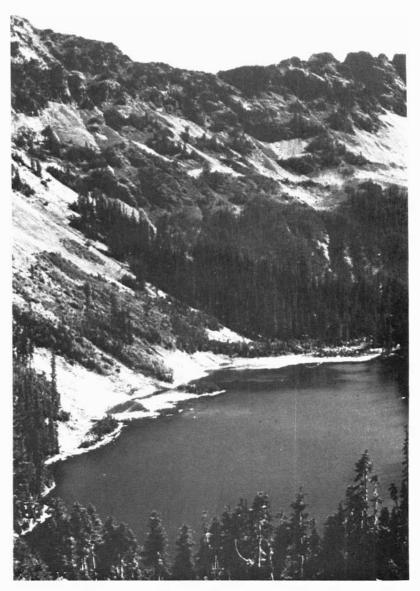
1942 Players' production: The Princess and Mr. Parker

(Photo courtesy Georgia Graham)



Rampart Lakes on Rampart Ridge. Peaks in skyline (l. to r.): Thompson, Big Snow. and Alaska, where the PCT climbs across the 5,600-foot level.

(William K. Longwell, Jr.)



Joe Lake (4,624 feet) from 5,100-foot level of the PCT. Right skyline peaks: The Brothers.

(William K. Longwell, Jr.)



New PCT tread under Kendall Peak. From this point the northbound PCT traveler gets the first high view of Snoqualmie Pass.

(William K. Longwell, Jr.)

North from Snoqualmie on the New Pacific Crest Trail

WILLIAM K. LONGWELL, JR.

1978 is the year to hike the Washington section of the Pacific Crest Trail (PCT). During 1977 most relocation work was completed, especially north of Snoqualmie Pass.

The new PCT north from Snoqualmie offers spectacular views found nowhere else in Washington or Oregon. Two views of Mt. Adams appear just north of Snoqualmie on the new PCT; one looks down Gold Creek and across Hyak to Adams from the Gold Creek headwall, and the north end of Escondido Ridge offers the other.

A whole new geography awaits the PCT traveler—The Comb, Huckleberry Saddle, The Brothers, Watson Pass, Ptarmigan Park, Rufous Lake, Vista Lakes, Escondido Potholes. Mountaineers working on their two ten-peak Snoqualmie Lodge pins have been familiar with these names for 70 years, as well as those of Edds Lake and Iceberg Lake. The new PCT north of Ridge Lake offers three awesome views of these lakes.

From the new PCT an excellent high-country traverse can be made with a basecamp at Huckleberry Saddle, 11.4 miles north of Snoqualmie. Then climb over Chickamin Peak and drop to Chickamin Lake; continue on to Glacier Lake; one mile due south of Glacier climb to a meadowed gap (camping) which offers unique views of Lemah and Chimney Peaks, Spectacle Lake and the Delate Creek Drainage, Escondido Ridge, Mt. Hinman, Mt. Daniel and Mt. Stuart. Five minutes south of this gap and you're back to the PCT, where a 3.2 mile trail carries you over Watson and back to Huckleberry Saddle.

Until 1978 the PCT was a trail without crest. Dutch Miller Gap at 5,000 feet was the *only* crossing in the 50 miles from Snoqualmie

Pass to Deception Pass. Now, the crest is crossed and recrossed at least ten times in the first 12 miles from Snoqualmie.

No more will the PCT drop to 1,600 feet, as it does at Goldmeyer Hot Springs. Now in the 40 miles and 164 switchbacks to the Waptus River, all is above 3,000 feet and almost 20 miles is above 4,500 feet, with a 5,800-foot highpoint. Only at Snoqualmie Pass, at Lemah Creek, and at the Waptus River does the trail drop to 3,000 feet.

The new PCT leads past old-time sheep driveways, under the hanging glaciers of Chimney and Daniel, and through ancient mining claims. The Gold Creek headwall offers vintage vertigo. The PCT leads just under the summit of Kendall, switchbacks virtually over the top of Alaska and offers a front door view of Red, Mt. Thompson and Burntbook Peaks. It climbs around 20 lakes on its way to the Waptus River.

This 51-mile section of the PCT took 11 years and \$800,000 to build. It was not built without tragedy. One packer's death forced one company to fold and forfeit to a bonding company. Sprague Brothers Construction Company of Eugene, Oregon, which built most of the difficult 8.3 mile section from Ridge Lake to Park Lakes, suffered several bad falls and one fatality. In August, 1975, two young men slipped from an eight-inch pioneer trail under the Brothers and pitched headlong over a cliff and onto a rockfall. Both suffered serious injuries and were rescued by helicopter.

The next year brought heartbreak to Sprague Brothers. In early September, 1976, James Watson was clearing rock from the trail with a bar after dynamite had blasted a route through the cliffs. Suddenly, without warning, the wall above him came loose, swept him off the trail and dropped him lifeless on the rocks below. In memory of James Watson, the Forest Service had suggested that the pass where Rampart Ridge toes into Chickamin Ridge be named for him.

Sprague Brothers lost heart and pulled out for the season. They refused to finish the job until this segment was relocated. At this point Elmo Warren came to the rescue.

I first met Elmo Warren in August, 1967. He was clearing a three-mile section of new PCT from the south Spectacle Lake exit to Lemah Creek, a segment which stood without connections until the mid-1970s. With his work on this section he established his reputation with the Forest Service.

I met Elmo again in 1974, three miles north of Snoqualmie. He was building the 6.9-mile section to Ridge Lake. In 1974 the trail deadended at The Comb, that rock rib that divides Commonwealth and Silver Creeks.

The next year Warren's camp was at Ridge Lake. He completed the trail that year.

On a 1976 trip from Waptus Lake to Snoqualmie Pass along the uncompleted PCT, I again met Elmo Warren, this time on switchback ten, just north of Lemah Creek. He was completing the section to Vista Lakes and was finishing the uncompleted trail over Escondido Ridge for another crew that had defaulted to a bonding company. Later that year he began the 5.3-mile section between Cathedral and Deception Pass.

After the death of James Watson, the Forest Service re-surveyed a 2,000-foot route from Watson Pass to the Brothers, several hundred feet under the point where Watson had died. However, this route crossed a mining claim and right-of-way was difficult to acquire.

Back to the Sprague Brothers. Would they be willing to "sub out" this 2,000-foot section? Yes. The Sprague Brothers were relieved to get rid of it.

Elmo Warren was called in 1977. Yes, he could build the trail across the original route after he finished the Cathedral-Deception section.

In late July, 1977, Elmo began to build and cleanup the trail across the Gold Creek headwall. He finished by September 15.

Elmo's work deserves appreciating by Washington's PCT hikers—because of his determined efforts the grandeur of the state's mountains is made more easily accessible.

Among the memorable adventures found in hiking the Pacific Crest Trail is that of meeting the long-distance hikers, those who hike from border to border, Mexico to Canada or vice versa.

Many back-country walkers I meet make disparaging remarks about long-distance hikers, generally voicing unkind words about the Pacific Crest Trail at the same time. They don't remember, however, that each of us has different motivations and all of us respond differently to that common call of adventure.

One 60-year-old man walked the entire Washington PCT last summer to bring back the memories of the identical hike he took as a young man 35 years earlier.

Others attempt a long-distance hike because they sense that this experience will be a watershed experience for them. Their lives long afterward will be measured against this achievement.

I like to do different stretches of the PCT each summer so I can meet some of these long-distance walkers. To allow someone to pass by me and disappear down the PCT forever seems to me almost an impiety. I talk to the people I meet on the PCT.

I have learned to spot these long-distance walkers. They seem to possess a singlemindedness that sets them apart from other hikers. Their shoes are worn, as are their cumbersome backpacks. Most walk in tee-shirts and shorts, rain or shine. Their guide books are well-worn and grimy. All have weather-beaten (dirty?) faces. All wish to stop and talk, especially to someone who knows the trail and has walked it that year.

What wonderful stories these long-distance hikers have and make. Here are some 1977 samples.

I met Max on Three Fools Peak on July 27. He stopped and didn't want to stop talking. He wanted to tell me about a bear scare he experienced the night before, his first night in Canada.

Max was a 70-year-old sailor from West Germany. Four years earlier his ship had landed at Gold River, B.C., on north Vancouver Island. Somehow he had acquired a book on the PCT and decided then he would walk the trail on his next trip back to the North American West Coast. He began planning.

Four years later his ship arrived at Vancouver. Having saved vacation time, he left the ship and caught the bus to Manning Park to begin his first hike in America.

On September 1 six of us were hiking the new 5.3-mile stretch of PCT from Deception Pass to Cathedral Pass. On a corner under Cathedral Peak Nancy suddenly appeared. Meeting her was the highlight of my hiking summer.

She was alone and had hiked alone since she began at Campo on the Mexican border on March 19. For the past two weeks she had walked in clouds and rain. She had lost two days trying to find the new, fogbound trail near Alaska Mountain, and was forced back to Snoqualmie. Now she was ill and needed some slight medication. She was glad to see us.

Little Nancy, 5 feet, 1 inch and 118 pounds. Only 18 years old. Sometimes her pack weighed 75 pounds. With 200 miles to go, she thought she could finish in about ten days.

In the 45 minutes I sat with her, we shared information on the trail ahead and on other hikers we both had met. She was full of information. She never had to purchase gas for her stove, for other hikers always gave some to her, or she found containers of it at trailheads. Once she missed a food drop and hiked eight days without solid food just to reach Crater Lake, her next drop. Her worse experience was 13,200-foot Forrester Pass, highest point in the PCT. Near there she spent five days in ice and snow. Her best time came on the summit of Old Snowy, highest point in Washington's PCT, where she wanted to spend the whole night.

During her hike she developed the fine art of talking to herself, just to get through the lonely days. Some of those days she just cried and cried.

In spite of her recent discouragement, her mental gear-up for the finish was evident. She was committed to finish. We said our goodbyes and on she flew, hoping to reach Deception Pass before dark. After she left me, I heard her on the switchback below, singing to herself.

Nancy finished on September 12, 177 days after her start. She may have been the first woman to walk the entire PCT alone.

We saw Bill one day after we met Nancy. He knew he was behind her. In early spring he and Nancy had passed and repassed each other, but he had dropped out for two weeks since he last saw her. He began his trek with three other companions. Everything went well until the snows of the High Sierras. After that came the rains, along with the usual discouragement. On a northern California summit Bill wrote the following words. "Scenery means nothing to me anymore, just Monument 78. I don't ever want to hike again." Arriving at Mt. Hood in a rain, Bill and his three companions went home to Portland. After a week, Bill decided to finish. Not so his companions. They were finished.

Gary was sitting against the entrance to the White Pass ski lodge when I met him on August 17. We were just finishing a three-day trip from Chinook Pass and he was enjoying his first good rest since the Columbia. Yes, he had begun in Mexico. Yes, it was about the time long-distance hikers should be coming through Washington. He hoped to reach Canada by September 1.

I never saw Gary again, but I heard about him from other hikers. Sierra snows forced Tom and Don from the PCT during May. Consequently, they were just reaching Snoqualmie Pass on October 16.

I met them six miles north. They told me that Stampede Pass weathermen gave them about 7-5 odds they'd reach Canada before inevitable snows. Two days into the Glacier Peak Wilderness Area successive November snowstorms pummeled them. They reached Stehekin to replenish supplies. After that waist-deep snows slowed them; they took three days to hike 19 miles to Rainy Pass. Realizing they would never reach Canada without snowshoes, they took four days to hitchhike to Seattle to rent them; then returned to Rainy Pass to finish the last 60 miles, but walked well east of the PCT in hopes of avoiding heavy snows. However, frostbite and the snows slowed them and they were forced to abandon this last effort, 32 miles short of Canada. They backtracked to the highway and went home to Arizona. They had been on the trail from Mexico for eight months.

Last summer's long distance hikers have gone, and it is time to take a look to the future. Now that the Pacific Crest Trail north of Snoqualmie is completed, travelers can expect heavy usage and competition for camping sites. Three obvious camping areas north of Snoqualmie will receive much pressure. Ridge Lake, just seven miles from Snoqualmie will see overuse from day hikers and overnighters on their way north or south. Huckleberry Saddle, with its fragile ponds and little soil, probably will be the goal of turn-around hikers and travelers on their first night out from Snoqualmie. The upper Park Lakes area will also see much pressure.

To avoid sharing these camping areas with so many others, leave the trail and camp elsewhere. Here are ten suggestions.

- (1) Hike to Ridge Lake (7.3-5,210) and walk to the outlet of Gravel Lake. Drop west-northwest one mile to Goat Creek. Climb west above the creek and contour the 3,600-foot level to a junction with the old Cascade Crest Trail. (If snow conditions permit, hike south over Red Mountain Pass to Snoqualmie Pass from here.) Continue to Goldmeyer Hot Springs, about three miles from Ridge. From here it's three more miles down the old railroad grade-PCT to Rock Creek, seven miles to Snow Lake and 14 miles back to Snoqualmie Pass. Total: 24 miles.
- (2) After reaching Ridge Lake, hike down to Alaska Lake. Two routes are available. At the crest of the ridge dividing Silver Creek and Alaska Lake, find old way trail and follow it to Alaska's outlet. Or, cross the rockslide on PCT just north of Ridge Lake to the first steep meadow and drop to Alaska. From the outlet follow a meagre

trail to the Gold Creek Trail and try to find the solution to its puzzle to Rocky Run Forest Camp. 15 miles.

- (3) From Ridge Lake take the PCT to end of first switchback (5,600) north of Alaska Saddle. Trail builders call this Vibram Point. Drop through rocks and meadow along spur to the outlet of Joe Lake (4,624). Follow precipitous trail to Gold Creek Trail and exit to Rocky Run Forest Camp. 17-18 miles.
- (4) From Huckleberry Saddle (11.4-5,000) find route to Burntboot Creek. From here either hike upstream to Avalanche Lake or down to old Cascade Crest Trail near Goldmeyer Hot Springs. Much brush. 30 miles if return Snow Lake route.
- (5) From Huckleberry Saddle climb over Chickamin Peak and drop to Chickamin Lake (5,780), or contour from the Saddle on west side of Chickamin to the pass at Chickamin Lake's west end. From the lake hike to Spectacle Lake and PCT or descend to Glacier Lake (4,750) and climb south over meadowed gap to the PCT, one-half mile east of Watson Pass. 30-33 miles, depending on destination.
- (6) From the meadows midway along the Gold Creek Headwall descend south to Ptarmigan Park, the flat, meadowed with a small pond (4,500). Camping here. Ptarmigan Park can also be reached from Watson Pass. Exit westerly to Gold Creek (3,200) via timbered spur and find climber's trail across creek that leads to the Joe Lake Trail. This trail begins where Gold Creek drops into a gorge. Take the Gold Creek Trail out or climb to Joe and the PCT. 20-25 miles.
- (7) From Park Lakes climb southwesterly under Alta Pass and find route over "East Alta" to Lila and Rampart Lakes. Exit via Rachel Lake Trail or to Lake Lillian and Mt. Margaret Trail.

The following are trail hikes with no cross country hiking.

- (8) Hike from Snoqualmie Pass to Park Lakes and exit Mineral Creek. If the goal is the end of the Cooper Pass road, the distance is about 23 miles. The route along the up-and-down trail beside Kachess Lake to the Lake Kachess Forest Camp is 27 miles.
- (9) From Snoqualmie Pass hike to Lemah Creek and go out to the Pete Lake Trailhead. Do this in *one* day. 28 miles.
- (10) Take the old PCT from Snoqualmie past Snow Lake and hike to the Middle Fork. Climb over Dutch Miller Gap and drop to the Waptus River Bridge—29 miles. Hike the *new* PCT 34 miles back to Snoqualmie. This 63-mile trek will become a very popular hike.

Study maps for more possibilities and hope for good weather. The Trail Log that follows may be helpful also.

PCTTRAIL LOG SAMPLER

S	N	
50.0	0.0	Snoqualmie Pass $(3,020)$ PCT leaves parking lot area, crosses old road and takes four switchbacks to reach
48.1	1.9	Rock slide (3,880). Here trail loses elevation to drop below cliffs. Three kilometer and wilderness signs here.
47.5	2.5	New Commonwealth Creek trail junction (3,950). This access trail avoids numerous crossings of Commonwealth Creek.
46.8	3.2	Water (4,260). Last water until Ridge Lake at 7.3. Just above is camp (trail crew).
46.0	4.0	PCT crosses Cascade crest numerous times here. Look n. through trees for view of PCT winding across Kendall Peak.
45.7	4.3	South end of Kendall Peak rockslide. PCT makes long traverse through open area. Flat rocks for lunch.
45.3	4.7	North end of traverse, a flower-filled switchback corner.
45.1	4.9	High point of PCT between Snoqualmie and Ridge Lake (5,460). Trail looks out to Red Mountain. Note mine tailings at base. Small ponds below trail.
45.0	5.0	PCT reaches crest here on n. side of Kendall. Old climber's trail here. An excellent view down Silver Creek and across to Rampart Ridge. Stand out on east side and look for PCT under The Brothers.
44.4	5.6	The Comb (5,200) PCT crosses spectacular pass between Commonwealth and Silver Creek and remains on east side until mile 51 at Deception Pass. Vertical cliff on east side here. Trail crew had large generator in rocks above.
43.1	6.9	PCT crosses ridge that divides Silver Creek and Alaska Lake drainage. Look for PCT as it climbs Alaska Mountain. Trail makes descent and reaches crest at
42.7	7.3	Ridge Lake (5,210) The crest here is just ten feet above Ridge. Gravel Lake to west is in Western Washington. Camps on south side of Gravel. Walk to western end of Gravel for views of Goat Creek, Red Mountain and Pass, the old PCT, Burntboot Creek and Middle Fork of Snoqualmie. Easy access down to Goldmeyer Hot Springs from here.
41.7	8.3	PCT here (5,340) reaches crest again. Climb a few feet off trail on old climbers route for best view of Edds Lake. PCT begins climb of Alaska Mountain.
40.7	9.3	Alaska Saddle (5,660). To north Huckleberry, Chickamin and three miles of trail visible on Gold Creek headwall. Look back for views of Granite Mountain. Three Queens visible over Watson Pass. Note avalanche track down Alaska. PCT drops via six switchbacks past Vibram Point
39.9	10.1	Joe-Edds Saddle (5,040). At mile 10.0 is an excellent view of Joe Lake.

39	9.6	10.4	Camp in grassy swale (5,200) above Joe Lake. Only seasonal water. From here PCT makes traverse through steep, open slopes of Huckleberry Mountain.
38	8.9	11.1	As PCT approaches Huckleberry saddle, watch for colony of marmots in rocks and grass below trail.
38	3.6	11.4	Huckleberry Saddle (5,550), a large, two-acre flat area, camping. Site of 1975 trail crew. Views west. Small pools.
37	7.9	12.1	View north (5,840) to rarely visited Iceberg Lake and glaciers of Overcoat Peak. Glacier Peak above left. Trail moves east along Gold Creek headwall. Look south for views of Mt. Adams.
37	7.5	12.5	The tread works through vertical cliffs, over rock ribs and gullies via switchbacks. The large vertical gully here is major avalanche chute from Chickamin Peak.
37	7. 1	12.9	Two more switchbacks and the trail gains more gentle terrain. Ptarmigan Park is below right, access is from this point. Camping there and route down Gold Creek.
36	3.0	14.0	Tread crosses cliff. Extensive blasting created trail here. Near this point James Watson fell to his death. PCT climbs, then drops to
35	5.6	14.4	Watson Pass (5,700), where Rampart Ridge toes into Chickamin Ridge. Below are Park Lakes and Mineral Creek drainage. South are Alta Mountain and Hibox. East is Stuart. PCT makes two shortswitchbacks and traverses rockslide to
3.	5.2	14.8	Point where trail makes sharp turn. Above is low gap and route to Glacier Lake. Views abound there.
3	5.1	14.9	Trail crew camp. Water just below. Three Queens looms to east.
34	4.2	15.8	Unmarked route to W. Park Lake, the easiest route. It's six miles down Mineral Creek Trail #1331 to Cooper Pass road #228.
34	4.1	15.9	Campsites abound near unnamed lake (4,860). Note unique drainage pattern from pool to pool. Trail climbs to
3	3.1	16.9	Chickamin Ridge crest (5,310). Views in next quarter mile to to Lemah and Chimney and Glacier Lake. Look back from crest to upper Park area and Watson Pass. Spectacle Lake. The PCT decends to Lemah Creek via 64 switchbacks.
3	2.9	17.1	PCT descends into gully
32	2.1	17.9	Trail emerges from gully 100' above trail crew camp. Climb out to viewpoint for excellent views of Spectacle Lake. Look across valley and pick up switchbacks climbing Escondido Ridge.
3	1.2	18.8	Upper Spectacle Lake exit $(4,270)$. Trail sign here reads: " $\frac{1}{2}$ mile Spectacle Lake, 3 miles Park Lakes."
3	0.5	19.5	Delate Creek Bridge (3,900) crosses outlet of Spectacle Lake over spectacular waterfall. Just beyond is
			Another Spectacle Lake access, via old, steep trail.
28	8.3	21.7	Trail junction (3,220) to Petc Lake. Trail sign reads: "14 miles Waptus River, 3 miles Spectacle Lake." This access trail crosses Lemah Creek 1 mile above Pete Lake.

27.6	22.4	Lemah Creek Bridge and camp (3,160). Waterfall above. Note old climbers trail.
26.6	23.4	Chimney Creek Bridge (n. Fork Lemah Creek) (3,140).
26.4	23.6	Junction with Pete Lake trail. Sign reads "12 miles Waptus River, 5 miles Spectacle Lake." Pete Lake is 2 miles and trailhead is $4\frac{1}{2}$ miles from here. Just beyond is
26.3	23.7	Trail crew camp on banks of Chimney Creek.
26.0	24.0	Trail camp at first switchback corner (3,250). Follow side stream. Water in next mile is last until ridgetop, 24 switchbacks away.
		As you climb, note increasing views toward Lemah and Chimney (west) and Chickamin Ridge (south).
21.5	28.5	Vista Lakes (5,450). To reach lakes, make short climb due east and drop to lakes, the route of original survey. PCT makes one more switchback and reaches open country.
21.2	28.8	Ridgetop (5,600). Look south for views of Adams, Rainier, Three Queens, Hibox and Chickamin Ridge.
		The PCT contours into a basin, passes upper Escondido Pothole (5,470), with views down to Escondido Lake (4,620) and beyond to Mt. Stuart.
20.3	29.7	The trail reaches an open basin above the lower pothole (5,310). Camping here in large, often snow-filled meadow, site of a trail crew camp.
		The tread climbs toward another saddle (5,410) with views of Cooper Lake (se), contours another basin (watch for sheep trails) and reaches
19.8	30.2	Ridgetop (5,110) at unmarked trail junction to Waptus Pass, 2 miles east. Views of Bears Breast, Hinman and Daniel. It's 30 switchbacks to the Waptus River. Trail crew camp and water just ahead. The PCT here traverses an old burn and crosses old sheep trails.
15.7	34.3	Waptus River Bridge (3,000) and junction with old PCT west to Dutch Miller Gap. $$
15.2	34.8	Spade Creek Bridge. New PCT no longer follows Waptus lakeshore, but contours in timber above lake and reaches
12.0	38.0	Spinola Creek and junction with older PCT (3,400). One mile south to Waptus River Trail and lake.
8.5	41.5	Deep Lake (4,382), meadows and ford of Spinola Creek. PCT climbs in long, gentle switchbacks to
5.3	44.7	Cathedral Pass (5,600). Views of Rainier, Daniel, The Citadel, Granite Mountain and the ever-present Stuart. The PCT follows old tread for two switchbacks, then moves north on new tread.
4.3	45.7	1976 trail camp (5,400). PCT drops via several short switchbacks to
3.3	46.7	Ford of Hyas Creek (4,800). Camping, Glacial stream.

1.9	48.1	Ford of wild, Daniel Creek (3,900). This glacial stream is perhaps the most difficult stream crossing on Washington PCT north of Middle Fork Adams Creek on Mt. Adams. Forest Service will flatten creek basin and build a network of gabions for safer crossing.
0.9	49.1	Creek crossing (4,360). Lynch Peak above.
0.00	50.0	Deception Pass (4,520). Stevens Pass, 20 miles.



Denali South Face '77 Expedition

JAN BALUT GLENN BRINDEIRO

We knew that we had to be lucky. Our plans for ascending the West Rib of the South Face of Mt. McKinley allowed for very little margin in food and fuel, for it was our intention to ascend Denali alpine style, thereby avoiding numerous carries of contingency supplies up the mountain. And the absence of load shuttling on the route would make fixed line unnecessary.

This would allow a rapid and uncomplicated ascent; however, this approach had the disadvantage that we would have to carry everything with us as we climbed, resulting in 75-pound packs above the 11.600-foot elevation.

Of even greater concern was the fact that our short supplies would hardly last through the long storms so typical of Denali. Perhaps we drew some encouragement from our knowledge that others had been quite successful with a similar approach.

The party consisted of Jan Balut and Glenn Brindeiro, both of The Mountaineers, Jamie Wild, an intense, self-taught climber, and Carl Carlson, a climbing partner and friend of Glenn from Colorado Springs. We formed a very close-knit group of four individuals possessing nearly equal committment to the adventure and little doubt as to our complete dependence on each other. Perhaps it is no surprise that we functioned well without an appointed group leader.

We took advantage of the flexibility of mountaineering ethics, which in the case of Denali permits one to fly by ski plane to the 7,000-footlevel on the Kahiltna glacier.

We departed Seattle on Saturday, May 28, on a 7:15 a.m. flight, along with two other parties of three all bound for Denali. At Anchorage airport the four of us boarded Buddy Woods' Otter for a

one-hour flight over the tundra and a memorable aerobatic maneuver through "one-shot" pass, landing on the Kahiltna beneath the icy flanks of Mt. Hunter and Foraker.

The hour? Twelve noon, Alaska time!

Packing our gear onto tub sleds we could only wonder at the fact that we had approached Denali with more speed and ease than is often the case with Cascade peaks. But as a result each of us were facing an abrupt introduction to the wilderness of Alaska and the immediate physical effort of moving more than 120 pounds of supplies up the mountain. In anticipation of this total lack of any real break-in period, we had conditioned ourselves in Washington by repeatedly carrying 70-pound loads up Mt. Si, with Carl substituting 14,000-foot Pike's Peak for Si in his regimen.

On this Saturday we managed to establish Camp I at 8,000 feet at the junction of the main Kahiltna glacier with it Northeast Fork, six miles from the landing sport. We occupied an abandoned igloo complex that we believed to have been constructed by six Russian climbers somewhere ahead of us.

Sitting in a warm igloo enjoying a breakfast of pancakes and maple syrup, it seemed reasonable to entertain oneself with a vision of cozy little igloos strung conveniently up the West Rib by the Russian climbers. But this was not to be; we learned later the Russians had made for the summit marathon style hardly bothering to bivouac.

We left a supply of extra food and fuel for our return at Camp I and proceeded up the Northeast Fork of the Kahiltna glacier toward the base of the West Rib pulling our sleds behind us.

At 9,600 feet the slope rose sharply into the ice fall making it impossible for us to proceed further with the sleds. Here we established Camp II from which we planned to make two carries of loads through the ice fall to its head at 11,600 feet.

The next day, trading snowshoes for crampons, we climbed the ice fall spending more time than we had expected finding a route through the maze of ice (and finding a hidden crevass in the process).

At 11,200 feet we called it a day and cached our loads in the snow some 400 feet below our goal. Yet in Seattle we had talked seriously of making two carries to 11,600 feet in the same day. How easy it is to underestimate Denali!

June 1. Camp III above the ice fall had been established by first carrying part of our loads on sleds and then making one extra carry through the ice fall with packs.

On this day, with good prospects for the weather, we departed as planned with one single load (our 75-pound packs) towards the crest of the West Rib. We soon discovered that the combination of heavy packs and local pitches of moderately steep ice made for some long climbing days. Carl climbed the first belayed pitch without his pack, belaying the rest up and then bringing up his own pack under belay.

Also, camp life was somewhat restricted. Few spots could be found with enough soft snow to dig out level platforms and hardly any could be dug larger than the floors of our two-man tents. Long walks around camp were out. Often the latrine area was only a few feet away from the tents. Thank God for the freezing cold!

June 4. From Camp VI at 15,100 feet we attempted to climb up a slope of uniform blue ice. Jamie, using all the ice-climbing equipment we had (an alpine hammer and two pickets which were almost useless on the ice) found his first lead on this pitch very slow going. But the slow progress on this hard slope was not our main concern.

For looking out to the southwest we saw unmistakable evidence of a storm front. The only uncertainty in our minds was the amount of time the storm would take to hit the mountain. We were forced to stop and assess our situation.

On the one hand we had just begun our climbing day and had actually made no real progress. We were tempted to continue on for a few hours more. But as far as we could see the ice slopes above us would be too hard to dig either a tent platform or a snow cave. Moreover there appeared to be no rocks above within easy reach that could act as a shelter from avalanches should the storm bring a heavy snow fall.

So it was unanimously agreed that we should look for a secure camp site. Nearby was a large covered 'schrund which had an uphill wall offering some protection for tents. Traversing to this spot we discovered, on closer inspection, an opening leading to the bottom of the 'schrund some 30 feet down. After exploring the 'schrund while on belay we determined that its bottom was safe enough to erect the tents. Here in the 'schrund, where we now had the most well-protected and comfortable camp since the igloos, we crawled inside our down bags for some rest.

While we slept, avalances swept down the slopes just as we had feared. Some snow drifted through the top of the 'schrund and slowly buried one tent from top to bottom. The next day this avalanche

provided us with some beneficial exercise shovelling snow out of the 'schrund.

Besides that, there was little else to do but sleep and eat. To conserve our supplies, we ate only half the daily ration of food we had allowed for on our climbing days. Also, we read short stories, wrote in our logbooks, and checked out our gear.

The storm continued to blow for a total of four days and each day we climbed out of our "hole", as Jan put it, "like the prairie dog," to assess the weather. All our attempts to obtain a weather forecast or make radio contact from this location failed.

When the storm finally cleared we left our "hole" for a point on the crest of the West Rib at 16,300 feet. We did not feel that our stay in the 'schrund had been wasted, for in fact the storm provided us with the only rest we had on the mountain and our acclimatization to the altitude undoubtedly benefited from this four-day stay at 15,200 feet. Still, our climb to 16,300 feet this day proved to be the greatest strain of all. We chose a route directly above the "hole" which, although it appeared steeper, did seem to be free of hard ice.

Later though, this choice led us over unpleasant mixed rock, ice and snow. This 13-hour day ended as we climbed up a 48-degree snow slope to the crest of the West Rib with the snow breaking away beneath every step we took.

We cheered up considerably on reaching the crest when we spotted, within shouting distance, the first people we had seen for 11 days—three friends of ours (one of the parties that had departed Seattle with us) who had approached the Rib from the other side by ascending the West Buttress route to 14,000 feet. We had not planned to rendezvous vet here we were, reaching the crest only minutes apart!

The next day both groups ascended the west side of the Rib, establishing a camp at 17,500 feet (our Camp IX). After five hours' sleep, the four of us left for the summit, leaving tents and other gear at camp and stashing ropes and packs on the great snow plateau at 19,500 feet. Making our way across to the summit we experienced a strange loss of balance before finally adjusting to the dead flat plateau.

It was 8 p.m. and the 14th day of our climb when we stood on the summit. Our handshakes and smiles revealed our satisfaction in attaining the summit of this great Alaskan peak. We had worked hard to reach the top. Yet all agreed that this last day had been the easiest of them all (no doubt the lighter packs were a factor). Below, on the plateau, we could see tracks: ours and those of West Buttress climbers. If any others had climbed today they had already made their descent; we had the peak to ourselves.

All too soon we would be making our descent to camp and later down Denali's West Face to the 14,000-foot basin on the West Buttress route, around Windy Corner and back to the site of our Camp I. But now, dropping down a few hundred feet out of the wind, we sat for an hour enjoying views of lakes reflecting the sun through low clouds.

Postscript

When a climb such as ours has been executed according to plan, when there are no setbacks or accidents, it is natural that it be described as a routine ascent.

Yet, day by day, it did not seem routine to us—far from it. For so often we would experience more difficulty on a given day than we had expected. And we had our share of doubts. Indeed it was not until the last day of the ascent that we possessed a reasonable degree of certainty that we would reach the top.

But most of the hardship and the anxiety is quickly forgotten with the passage of time and with the return to "civilized" comforts. Thus, a month later a climb report sent to McKinley Park possessed a tone best captured by one sentence: "No one in our party experienced problems at altitude, all ate well and we enjoyed the climb tremendously!"



View of Mt. Hunter from Mt. McKinley on the west rib—Camp IV; 13,200 feet

(Jan Balut)



Big Four Mountain, Central Cascades

(Jim Taulman)



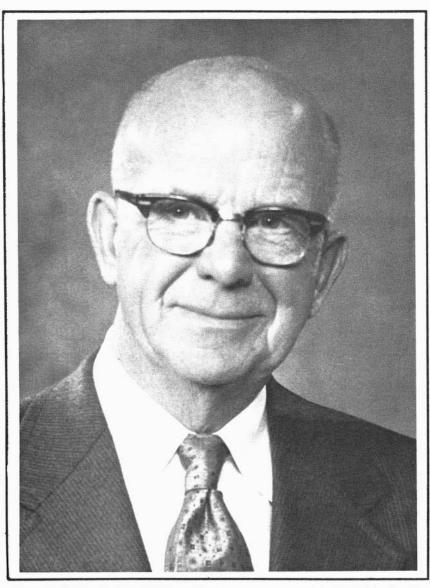
First local outing of The Mountaineers, Sunday, February 17,1907. Destination: West Point Coast Guard Lighthouse, now part of Discovery Park, Seattle

(Photo courtesy Ken Hitchings)

The Anniversary Walk

On February 5, 1977, 44 Mountaineers hiked along Discovery Park beach to West Point Coast Guard Lighthouse, and signed the same lighthouse log as did their predecessors 70 years prior. On that day they took the trolley to Fort Lawton, and were met by the Commanding Officer. After hiking to the lighthouse by a woodland trail, they built a fire on the beach to cook lunch and returned by the beach route at low tide.

Today's Mountaineers started their hike from the car parking lot, and gathered for coffee and a greeting from the Discovery Park Ranger at the Vistors' Center, formerly part of the Fort Lawton Army Hospital. Proceeding along a well maintained Nature Trail, in hiking gear of somewhat different fashion from their predecessors, they were met at the lighthouse by the Coast Guard Officer of the Day. There was a tour of the spotless lighthouse with interesting information from the attendants. After having lunch on the sunny rocks of the beach, they returned to the bluffs and continued along the park loop trail through the meadows and along the cliffs. Two young future Mountaineers took it all from their perches inside Dads' backpacks.



Elvin P. Carney, President, The Mountaineers 1935-1937

(Wallace Ackerman Photo)

Fifty Years in The Mountaineers

ELVIN P. CARNEY

Biographical note: Elvin P. Carney was the first president of The Mountaineers after Dr. Edmond S. Meany. As of July 1978, he will have practiced law in Seattle for 50 years. He is still active at 74 and of counsel of the law firm of Carney, Stevenson, Siqueland, Badley, Smith and Mueller. The following are his reflections on the past, present and future of The Mountaineers.

Dr. Edmond S. Meany was president of The Mountaineers from 1908 to 1935. At the time of his death, I was the Vice President, so accordingly became President and served as such from 1935 to 1937. I served for several years thereafter as a trustee. As of 1979, I will have been a member of The Mountaineers for 50 years.

During the last few years or so before his death, Dr. Edmond S. Meany was more of a figurehead than an active President. The club was operated by trustees and capable committees. Although I did not become well acquainted with Dr. Meany, I had great respect for him, and on a 1936 summer trip around Rainier I presided at the dedication of a monument to him on Burrough's Mountain with the following statements:

God has richly endowed the Northwest with numerous natural, beautiful and inspiring playgrounds. Of these playgrounds, Rainier with its lofty, snowcapped peak, its lakes and meadows, its wooded lowlands, is the peer of them all and the favorite rendezvous of The Mountaineers.

God has given each generation of men a few individuals who, like the mountain peaks, rise high above the multitude in personality, character, and public deeds. Such a man was our late president, who served not only the public but who richly endowed our organization and gave particular inspiration to our members as we gathered during a quarter of a century around numerous campfires.

Prior to becoming an attorney, and while going to the University of Washington and Harvard Law School, I worked during the summer months as a fire patrolman and firefighter for the State of Washington for its forests and some privately owned forests. I also served for two years as a fire patrolman for Lyman Timber Company, a logging company some ten miles east of Sedro Wolley.

After I graduated from law school, I wanted to hike and climb with people of common interest. Accordingly I joined The Mountaineers, which appeared to be the outstanding organization for that

purpose.

During my first years with The Mountaineers, I was able to climb the first ten of the Snoqualmie Lodge peaks and the six major peaks in the State of Washington.

When I became President, I became more aware of the capabilities of the trustees and committees and found it easy to assign responsibilities to them. Efficient committees accomplished work that needed to be done.

I was responsible for the amendment to the club articles and bylaws which limited myself and future presidents to two-year terms. I felt that in this way a leadership and advisory group could be built up. I was followed by enthusiastic and efficient presidents and officers.

With the Finance Committee, I worked to build up a better accounting system which increased the efficiency of The Mountaineers and helped extend and improve its relationship with another organizations.

In climbing, I believe the committee education on climbing techniques has greatly improved the technology and safety. I was surprised, when I first became a member, that on some of the climbs on our steep-snow areas and glaciers the leaders and the tail-enders were tied to the rope and the others merely held onto the same! I believe that now, on climbs with five to seven climbers, everyone is fastened to the rope. New equipment has improved safety. Even before improvements, The Mountaineers had a fine record of climbing free of accidents.

The major change since 1935 is the increase in membership from some 900 to over 9,000, and the majority of the membership is no longer made up of mostly teachers and librarians, but people in various employment. To keep The Mountaineers from growing too large, it may be desirable to limit the number of members.

A debatable question challenges The Mountaineers at this time as to the creation and use of wilderness areas. We need to maintain employment areas for the production of timber and paper requirements and to preserve wilderness areas. It is important that wilderness areas not be limited to those who hike with their packs on their backs, but should also be available to people who are not capable of that type of recreation or who, because of age, are not able to hike as they did in their youth.

It is important that we have adequate areas open to the public, such as Mount Rainier, Hurricane Ridge and other similar places. It may be necessary in some areas, such as Mount Rainier, to eliminate private cars and require entry to the park on buses. It is also important that trails generally used be covered with asphalt so that people won't get off the trail and tramp vegetation in order to avoid mud and water, with the result that they destroy flowers; excellent examples are asphalt trails on Hurricane Ridge and Mount Rainier.

Subject to practical limitations, it does not appear to me that the use of horses and airplanes to go into wilderness areas and lakes should be entirely prohibited. In other words, those who can't hike in should have access to some lakes and areas.

Before I became a Vice President of The Mountaineers, strangely enough I was chairman in charge of the committee for Kitsap Cabin and my wife was secretary of the committee for Snoqualmie Lodge. My wife's primary activity was with The Mountaineers Players; she acted in quite a few of the plays they had at Kitsap Cabin. My primary interest was hiking in the wilderness areas and climbing the Cascade and Olympic Mountains. Women have always had an important part of the activities of The Mountaineers, both at the time I became a member and now. The only exception to women that I know of is that none of them have been President of The Mountaineers—maybe an exception should be made one of these days. But whoever is President, I think it will continue to be a wonderful club.

A Walk in Paradise

LAURA DASSOW

Perhaps a walker's most cherished dream is to find himself set down in some center of this planet's natural beauty, to live, for a time, in all its daily shades, with freedom to roam at will through its particular glories. One summer I was given this dream: the National Park Service selected me to be a volunteer naturalist at Paradise, Mt. Rainier.

That was a peculiar summer. Record snows had fallen the preceding winter, and mountain trails normally open in July were snow-bound until September. I arrived at Paradise in mid-June to find the road a ribbon of wet asphalt between two canyon walls of ice. The snow was twenty feet deep. When I left some ten weeks later it still lay two and three feet deep in the valleys, and that year the summer never did see the famed flower-fields of Paradise.

The snow was exasperating, especially when the Paradise fog hung over us low and thick for days on end and week by week the inert dirty mantle of ice held on without melting by more than the merest trickle. For days we would see little but horizontal planes of white and gray, interrupted by the dark spires of alpine firs; we would hear little but the swish of tires on wet pavement, the squawks of Clark's nutcrackers begging crumbs from disappointed tourists, and the roar of an occasional icefall on the Nisqually Glacier.

Yet I learned to be glad for the snow. It obliterated all paths, and was everywhere a path. It led in utter solitude across deserted valleys and up otherwise impassable slopes to lonely lookouts and abandoned ridges. Up high, the sun melted off what snow the scouring winds had left and created islands of intricate and tiny life in a vast, frozen sea. Whenever my work scheduled allowed, I trod over the snow to seek these islands out and watch the dissolving ice give way to avalanche lilies, anemones, then valerian, paintbrush, bistort and lupine.

A Walk in Paradise 31

I often saw animals on these walks, for they were disturbed only by infrequent hikers and this, or hunger, made them bolder than I expected. Indeed, one day in late July, when I set out early and walked until the sun was low, delegations from all the beasts of Paradise crossed my path. The sun brought us all out; I alone was surprised.

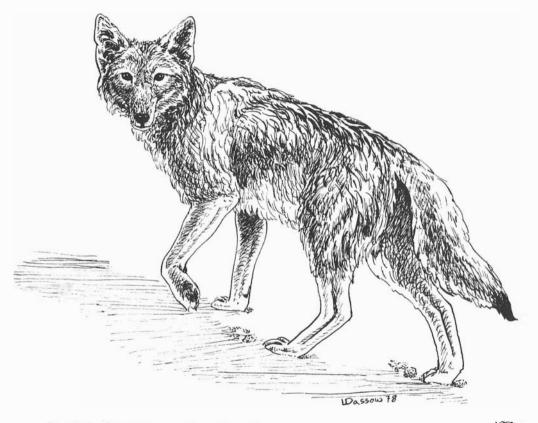
My walk began behind the old Paradise Inn, from whence I angled down along the slope. A road loops around the valley I meant to cross, but I was only gradually learning where it went; the surest sign of its presence was a half-revealed stone bridge that provided passage without risking the treacherous snow bridges across the burgeoning Paradise River.

Beyond this bridge I passed a long, rock ledge above the buried road, where already there were flower blossoms. This was the haunt of the valley marmots. They were out as usual, soaking up the morning sun. One peered at me over the brink of a flowery ledge. Another lay basking on a prominent rock like a full-maned lion guarding his stone castle. I expected them to scuttle off and whistle, but they merely eyed me closely: I left them as I found them, thinking how seldom we are privileged to do so.



Hoary Marmot (Marmota caligata)

(Laura Dassour)



Coyote (Cams latrans)

(Laura Dassow)

A Walk in Paradise 33

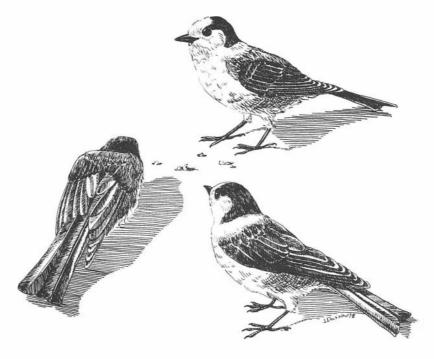
On the far side of the valley I began to zigzag up Mazama Ridge, and soon I was scrambling up the steep hillside, clinging to bare willow stems, trying hard to reach an oasis of fir and mountain hemlock guarding a melted-out patch which promised shelter and a few moments of relative stability. I climbed into the darkness and took off my sunglasses to look around, blinking with light-hazed eves. The forest floor beside me was dancing in the oddest manner, so I rubbed my eyes and waited. But as the dazzle cleared the earth still danced, and I realized I was seeing creatures, first one, then another, then several, leaping and dashing in and out and along the logs and forest duff, brown as the earth and quick and fluid as water-droplets. I had stumbled onto a colony of voles! Tiny, secretive, omnipresent, they had existed to me before only as a side-seen streak to a perfectly round hole by the roadside, or as a furry stuffed sausage in the Visitor Center display, presented as once having been a vole. These before me were still too fast to be seen properly, but as they darted and scuffled I began to have a sense of their presence. Then they disappeared, one after another, as inscrutably as rain stops falling. I waited, but the show was over except for an occasional brown meteoric instant.

I had almost reached the crest. At the top, there was a whole sky and earth full of sun, and snow fields, and flowers alongside a newly snow-free and still trackless trail. This I followed to the brow of Sluiskin Falls. I crossed the snow to the east edge of the ridge—and there, in the bowl below me, trotted a coyote. He was heading north toward deeper snow, and as soon as I appeared, though well above him, he paused, alert, with one paw lifted, and looked back at me. For a breathless few moments that small figure below was a whole canine world to me; self-assured, he resumed his pace, breaking it now and then to sniff at the snow and study me over his shoulder. Moving so steadily, he disappeared over the far rim, carrying his world and purpose with him. Coyotes are not often seen in the Park.

Nothing more appeared across the broad, silent bowl, so I wandered on down Mazama Ridge, dropping onto the trail and leaping back onto the snow as the terrain demanded. At the time I didn't know how boggy the flat would be later, nor how much I'd wish the snow back; each bare patch was a treasure, and to be studied to see if I could recognize the embryonic seedlings just breaking through the dirt.

Bearing back to the eastern edge of the ridge, I followed a spur

out until I came to the ideal lunch spot: a high, sheltered glade. bounded by snow, silence, and immense space, but itself an isle of fresh plants and resilient green-and-silver evergreens, warm with the sounds of errant insects. It wasn't long—it never is long—before I heard the soft swish of wings, and looked up to see a visitation of whiskyjacks approaching tree by tree. These gray jays are the most trusting—or perhaps only the boldest—of wild birds. They always win me over with their quiet, polite manners, their thick velvet feathers, black enamel beaks and eves so dark and alert. Once a Clark's nutcracker made off from under my nose with half a meat sandwich: I've never vet known a whiskvjack to manage more than a slice of bread, and then only when my back was turned. This day I dubbed them the Velvet Gentlemen and hand fed them crumbs from my sandwich. Then they fluttered off like big butterflies, whistling to one another. These birds are so wholly alpine that even Paradise winters don't send them south or to lower elevations.

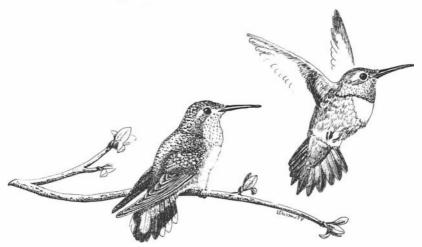


Gray Jay or Whiskyjack (Perisoreus canadensis)

(Laura Dassow)

A Walk in Paradise 35

I left my glade of flower gems to move on down the ridge, lazy and enchanted. The trail appeared and disappeared at my feet until I came out on an icebound pond set in a high bench above Reflection Lakes and Stevens Canyon. Glacial blue under the warm sun it mirrored a perfect frozen reflection of the Tatoosh Range. Beyond it, the trail was once more at my feet, amazing me with our perfect agreement. It led me down the ridge, through a family of rufous hummingbirds. They chirped back and forth, buzzed my red bandanna, whirred among the trees and blueberry flowers, perched for a nervous instant on a branch to rise off it like bees. I felt as new as they, alone in a bright world still secret and unafraid, the first to discover its latest spring.



Rufous Hummingbird (Selasphorus rufus)

(Laura Dassow)

I found my way along the shore of Lake Louise and back to the road, far below the flowering glade and icy pond. I was back in the world of cars and fumes, people trailed by cameras and dogs. Yet more wild animals haunted the road. Pikas find ideal homes in the jumbled rocks above the roadbed. Here in safety they whistled and stared at me from above. Only the most patient search would discover them, motionless and all but invisible in the rocks, interrupted in their summer-long labor of husbanding their haystacks, winter fodder.



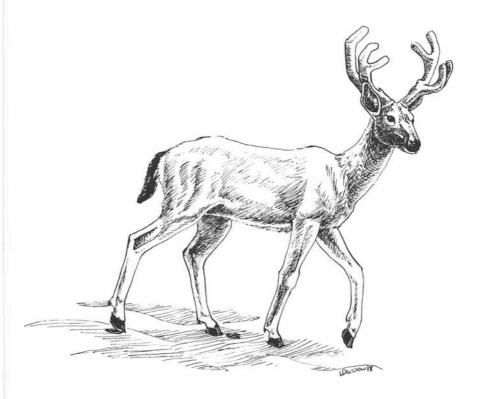
Pika (Ochotona princeps)

(Laura Dassow)

Marmots announced themselves with deeper whistles, and scuffled around their burrows below the road. All day I had been crossing deer tracks up and down the ridges; as the snow retreats up the mountain they follow it, pushing higher week by week to take advantage of the new growth. I left the road to cut across the snow and at last encountered a lone buck in velvet, shy of my presence. I tried to circle in front of him and he circled away behind, the two of us forming two continuous and steadily diverging arcs, until he vanished behind a hummock of snow.

By now I was feeling well exercised and impatient of the snow,

A Walk in Paradise 37



Blacktail (Mule) Deer (Odocoilus hemionus cdumbianus)

(Laura Dassow)

which was no longer firm, but wet and heavy under the lateafternoon sun. I slogged along under a spell of astonishment, that so
many of the local inhabitants should make their appearance before
their summer guest. The last half-mile I recalled the day's events
and anticipated an evening hour of relaxed sunset-viewing from the
balcony of the staff headquarters with a cup of something hot. And
while I was doing just that, a bear lumbered out of the trees into the
clearing below the road, where the picnic tables were beginning to
emerge. He angled toward the garbage cans for his weekly visit,
slow and cinnamon-red in the long, late rays.



Black Bear (Evarctos americanus)

(Laura Dassou)

The sun slipped behind the rise of Pyramid Peaks and the cool air was drawn from the shadows by the last fading light. That night the Nisqually Valley remained clear, neither misting up from below nor clouding in from above; it would be a night for star-gazing, the waxing moon setting just after the sun. From the window I could see the Tatoosh peaks blushing the cool alpine red. In earlier days they had been silvered and remote in the mist. That day they were clear and close.

What a sense of time and space! The world rings these hills around, and I felt closer to the past and the future than ever before. I have seldom seen farther than I did that day, nor felt more in harmony with the ancient rhythms of land and sky.

The Alpine Club of Pakistan

WALT ENTENMANN

Anyone who will pack 20 to 30 kgm. (45-65 pounds), about 10 to 15 km. (6-9 miles), to a high camp at 3,000 m. (9,840 feet), crawl along a ridge swept by 90-km. an hour winds (56 mph.), sleep on a narrow ledge, start up a glaciated peak at one a.m. by flashlight or just snowshoe in the rain must be at least a little crazy—or so think other people who just don't understand. Anyway, alpinists, that rare breed of *homo sapiens*, seek each other, regardless of race, color, creed or whatever. So, naturally, while at Islamabad University, I searched out the Alpine Club of Pakistan. Unfortunately it took almost two and one-half weeks to locate it, since it is actually quartered in Rawalpindi, 20-30 km. (12-18.5 miles) from Islamabad, quartered in a Pakistani Army Engineer Corps compound.

Language proved a barrier; I could not get past the outer sentinel. However, just as I was about to give up, I presented one of my calling cards. Seems like everyone of importance in the Orient has a calling card and anyone with a calling card has got to be important. Immediately this produced a sergeant, who in turn produced a major, who spoke English quite well. Over the inevitable cup of tea, he contacted the president of the ACP, a retired major-general, Qamir Ali Mirza, and made an appointment for me the morning of the day after next.

The general, an army liaison officer, and I had tea. The general outlined the founding of the ACP and its objectives and I told him about The Mountaineers. He had heard of Jim Whittaker and I told him, "Yes, Jim is one of our boys." He had seen ads for *Freedom of the Hills*, but had never actually seen a copy and was very interested. The

young organization's library was almost non-existent and I promised to help. We both expressed our regrets that I had not found them sooner, for our study-group was to leave Islamabad later that very day to tour the country and Afghanistan. He would have gotten some of the available members together for an informal reception.

The club was founded in January, 1974, with the object of promoting "good fellowship among lovers of mountains, of mountain climbing and skiing, of mountain exploration, etc." The club believes it can play a useful role in promoting mountaineering in the country and by rendering assistance to foreign expeditions. It was planning (as of 1976) a mountaineering school at Naltar, near Gilgit. The club hopes to train good liaison personnel for foreign expeditions in the country and work in training porters for the expeditions. The last K-2 attempt by Whittaker and party attests to the need for this. The club could, if authorized by the government, act as representative/ agent for all foreign expeditions. It could then process their cases for obtaining of official permission and clearance, recommend qualified and suitable liaison officers and porters, arrange road and air transportation, living accommodations, etc. The club would ensure proper reception and send-off for the expeditions and entertain them in "modest get-togethers" in Rawalpindi, This should "generate considerable international good-will and understanding." The club would also compile reports on the experiences of these expeditions and circulate them to all concerned. This would prove a very valuable source of information for future expeditions.

The office of the ACP is located at 11 Kitson Rd., Westridge, Rawalpindi, and the organization hopes to have sub-offices in provicincial towns as soon as possible. We wish the fledgling organization the best of luck. May they obtain their Great Expectations!

Climbing Equipment Safety Standards and the UIAA

CAL MAGNUSSON

Most mountaineers are aware of an organization known as UIAA, but few know just what UIAA is or does.

Union International des Associations d'Alpinisme (UIAA) originated with the alpine countries of Western Europe in the early 1930's and now has members in some 50 countries. Each member country is represented in UIAA by a club or organization within the country. The American Alpine Club is the United States representative.

UIAA is composed of seven commissions: safety, youth, mountain huts, mountain protection, alpine skiing, organization, and expeditions. The Safety Commission is the best known group among mountaineers and has the greatest impact on mountaineering. It develops and maintains standards for mountaineering equipment.

The climbing rope was the first item to be considered by the safety commission. In the early 50's, the first standards for it were written. The UIAA standard for climbing ropes requires that the rope must be capable of absorbing the impact of a mass of 80 kilograms (176.37 pounds) falling freely a distance of five meters (16.40 feet) on 2.8 (9.24 feet) meters of rope, ie, the fall is from a point above the anchor to below the anchor. The impact force generated by the falling mass must be not greater than 1200 kg (2,640 pounds). The rope must withstand three such impacts without failure. The rope must also be capable of supporting a static load of 75 kg (165 pounds) without elongating more than 6%. The rope must also pass a knotability test.

Since carabiners are used to attach the climbing rope to anchors, belay points, and to the climbers, a standard for carabiners was the next to be developed. In a fall, the load on the carabiner supporting the rope is the impact force on the rope plus the load from the belayer. A carabiner must be capable of withstanding a load of 2,200 kg. (4,840 pounds) with the gate closed in order to receive the UIAA mark of approval. The carabiner must also pass tests with the gate in the open position and with a load applied outward on the gate.

Ice axes are also covered by UIAA standards. The shaft when mounted on supports 500 mm. (20 inches) apart must withstand a load of 500 kg. (1,100 pounds) applied midway between the supports. The head to shaft connection and the spike must also meet certain standards. Preliminary standards have been developed for climbing helmets and climbing harnesses. Members of the Safety Commission are assigned to working groups. Each working group has the responsibility of developing a standard for one specific item of equipment. In addition to the above mentioned items, groups are also working on standards for pitons, jam nuts, and cord and webbing.

The working groups work together to draw up preliminary standards and to make recommendations for changes to existing standards. The proposals from the working groups are then presented to the Safety Commission at their annual meeting. The 1977 meeting was held at the Mohawk Mountain House at New Paltz, New York. This was the first time a UIAA meeting has been held in the United States.

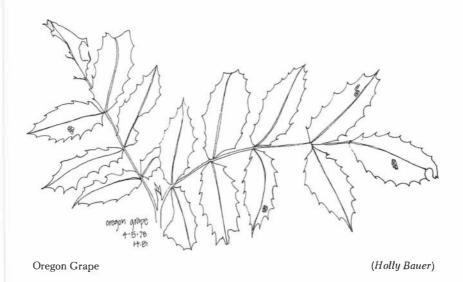
The UIAA certificate of approval can be issued only to the manufacturer of the equipment for which the UIAA standards exist. The manufacturer must request approval through the national organization or club represented on the board of approval of UIAA. In the United States, requests must be directed to the American Alpine Club, 113 East 90th Street, New York, New York 10028.

Samples of items submitted for approval must be tested by one of the UIAA approved testing laboratories. The manufacturer of equipment approved by UIAA must commit to produce in conformity with the samples submitted for approval. Tests may be made periodically to insure that the article being produced continues to meet the required specifications.

The UIAA mark of approval on a piece of equipment indicates to the consumer that the equipment meets the standards set up by the UIAA Safety Commission, and that the article is suitable for its normal intended use.

Even the best equipment, if abused or misused, may fail. For maximum safety in mountaineering, use equipment bearing the UIAA mark of approval whenever possible. Learn to use the equipment properly, and inspect the equipment periodically for signs of wear or damage.

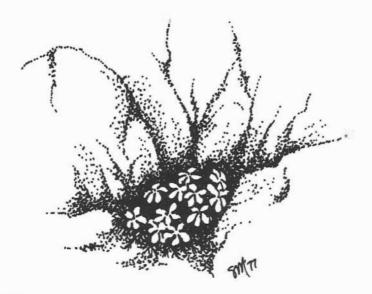
Gallery: Mountains, Flowers and Birds





Rock group—Hurricane Hill

(Ramona Hammerly)



Moss Campion

(Susan Marsh)



Cormorants

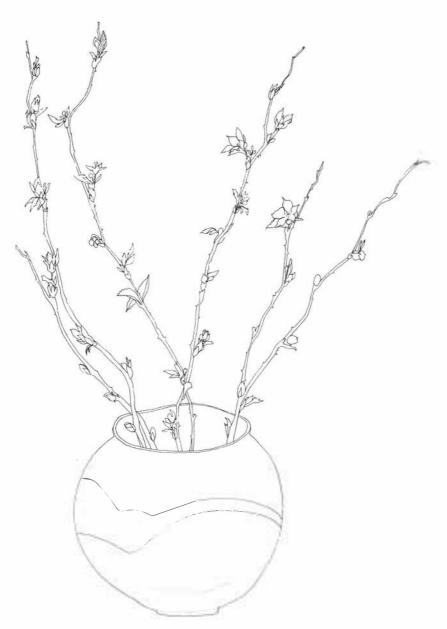
(Susan Marsh)



Mt. Baker, Swift Creek Valley

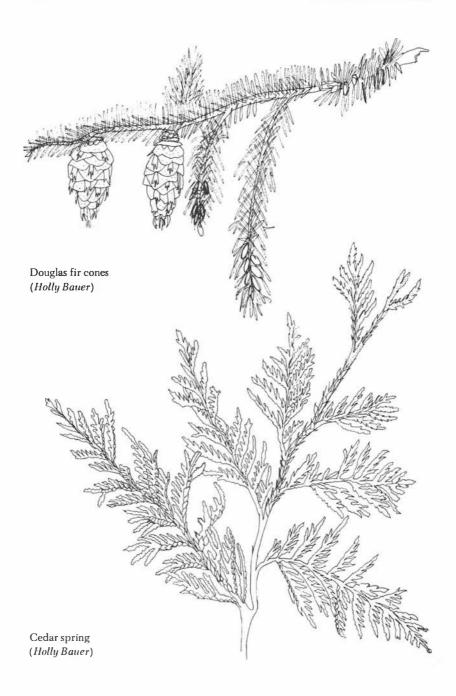
(Susan Marsh)





Salmon berry buds







Cedar Stump on Blanchard Mountain

The Future of the Arctic National Wildlife Range

KEN DAVIS

Introduction

It seemed like a minor decision. The choices had been narrowed to either returning to the Canadian Rockies for another trip that promised to be as enjoyable as earlier excursions to the Mount Robson area and the Tonquin Valley, or taking a chance on the unknown, a Mountaineer outing to the Brooks Range. The year was 1969, and Sean Rice had announced a trip to the Arctic National Wildlife Range with the idea of making the second known ascent of Mount Chamberlin. Arctic National Wildlife Range? I had never heard of it. A young friend of mine, thirteen and eager, who wanted to see an arctic wolf, convinced me that we should go. As in the poem by Robert Frost, we too took the less-traveled path, and how it has made a difference!

Ironically, Sean's trip was a great success except for wildlife viewing. That was virtually nil. We blamed the heavy air traffic, as a frenzy of oil-exploration activity was going on around us. Our two weeks there hooked up, however. From that original Mountaineers group of 14, five of us have returned to the Range a total of 15 times.

What is the attraction of this place that draws us back year after year? Why are we concerned that its most attractive feature may soon be lost to all of us and its most important wildlife role destroyed? Before attempting to answer these specific questions, let us consider the Arctic National Wildlife Range (ANWR) generally.

The Location of the ANWR

The ANWR occupies almost 9 million acres in the extreme northeast corner of Alaska and is the largest unit of the U.S. Fish and Wildlife Service. Its northern boundary is the Arctic Ocean, and the Range extends from the west bank of the Canning River east to the Canadian border. From high on the Canning River the boundary angles generally southeast through the foothills on the southern side of the Brooks Range.

The Brooks Range stretches across the north of Alaska. The gently rolling plain north of this mountain range is the now-famous North Slope. Under provisions of section d-2 of the Alaska Native Claims Settlement Act of 1971 (Public Law 92-203), the Department of the Interior has proposed the addition of approximately 3.7 million acres to the Range in two units. The larger unit is southeast of the present boundary, near Arctic Village. The smaller unit is directly south of the present boundary and adjacent to Canada. The current congressional deliberations on the disposition of the Public Interest Lands in Alaska include these proposed additions.

Background to the ANWR

While whalers of the 1800's became acquainted with the coast-line of what is now the ANWR, Ernest Leffingwell of the U.S. Geological Survey did most of the early detailed exploration, covering the area both east and west of the Canning River for ten years beginning in 1906. In 1922-23 Olaus Murie (later to be one of the founders of the Wilderness Society) explored the eastern Brooks Range with his brother Adolph (now famed for his subsequent wild-life studies in McKinley National Park). In 1936 Robert Marshall also began to publicize the Brooks Range and called for its preservation as a natural area. In the early fifties George Collins and Lowell Sumner traveled into some of the area now included in the Range. They too recommended that the area be preserved.

The real turning point came in 1956 when Olaus and Mardy Murie spent part of the summer at (and named) Last Lake and Lobo Lake on the Sheenjek River. Included in their party was George Schaller, then a student at the University of Alaska but now better known for his studies on the mountain gorilla and the Serengeti lion in East Africa. Justice William O. Douglas and his wife joined the group for a short time also. Mardy Murie describes this early visit to what is

now the ANWR in her book, Two in the Far North. Olaus traveled about Alaska in 1957, giving illustrated lectures and gaining support for the establishment of an arctic wildlife refuge. In 1959 Senator Warren Magnuson introduced a bill that would have established the ANWR and granted sub-surface mining rights. Hearings held in Washington, D. C., and in Alaska showed wide public support but were opposed by mining and other economic interests and both Alaska senators (sound familiar?). A year later it became apparent that the bill was going nowhere, so Secretary of the Interior Fred A. Seaton, with his remaining time in office growing short and in the face of public support, established the ANWR by Public Land Order (2214) on December 6, 1960.

The ANWR still hasn't been officially classified. Wilderness hearings scheduled several years ago were cancelled pending settlement of the Alaska native land claims. That congressional settlement set the stage for the Public Interest Land bills now before Congress. The fate of the ANWR will be settled this year.

The Geography of the ANWR

The ANWR can be divided into three regions. The Brooks Range traverses it in an east-west direction. Many peaks reach the 7,000-8,000-foot range, and Mt. Michelson, at 9,239 feet, is the highest. Some are rugged, with hanging glaciers and steep snowfields; others present gentle, rolling profiles.

River valleys cut deeply into the Brooks Range; those on the north side drain to the Arctic Ocean; those on the south side flow into the Porcupine River which in turn joins the Yukon River, ultimately emptying into the Bering Sea. The crest of the Brooks Range forms a continental divide that can be easily traversed. On several of our visits we hiked up side valleys and climbed the ridges flanking these river valleys. From a distance many of the slopes appear devoid of life, but the hiker finds rocks decorated with orange, yellow, and black lichens and may be surprised by lush alpine meadows rich in mosses and wildflowers.

The land to the north and south of the Brooks Range is almost two different worlds. The North Slope is essentially a gentle rolling treeless plain, cut by the swift-moving rivers. Grasses and tussockforming sedges are the dominant vegetation although scrubby willows are abundant along the streambeds.

In spite of the low annual precipitation total, permafrost, often just inches below the insulating turf, keeps the moisture on the surface so the ground is often wet underfoot. Geological features related to the permafrost abound; pingos (resembling miniature craters), frost-heaved tombstone-like blocks of rock, and various types of patterned ground such as polygons and sorted and nonsorted circles are among such phenomena we have encountered.

Rivers on the south side of the Brooks Range tend to be more gentle and meandering once they leave the mountains. The most noticeable difference from the North Slope is the presence of trees here, mainly white and black spruce. These trees extend far up the southern valleys but hardly constitute what one would call a dense forest. Growth is extremely slow and trees a few inches in diameter are decades old.

ANWR Wildlife

The only disappointment of our initial trip was the lack of wild-life. Subsequent trips have been highly rewarding. The North Slope of the ANWR is the caribou calving ground for the Porcupine herd. In normal years cows first make the long migration from their wintering grounds in Canada, cross the Brooks Range and calve in the foothills or out on the plain. They are on the move constantly, seeking out the lichens they favor for food.

In 1970 a small group of us hiked from the Arctic coast at Camden Bay to Lake Schrader, site of the basecamp of the 1969 Mountaineers Outing. Along the way we saw several thousand caribou, about half the cows even then accompanied by high-spirited calves. Their antics amused us. Later in the summer the bulls join the cows. In mid-July they begin the journey back to Canada. If one is so fortunate as to be at a crossing point at the right time, perhaps 80,000 caribou will be seen filing past within a day or two. No other species of animal is so visible in such large numbers. Other attractions include moose, wolves and the snowy-white Dall sheep on high mountain slopes, and grizzly bears. We've seen grizzlies every year but have never been bothered by one. Awakening one morning on a gravel bar along a southside river, we found that a sow grizzly with her cub had passed within ten feet of our tent during the night.

Occasionally there is a special treat. One day two of us hiked ahead

of the others, and as we crossed a rise we spotted an animal loping toward us. On the treeless North Slope distances can be very deceiving, so we sat to watch this animal approach. "It's not the right shape for a bear," we thought, "and no wolf runs like that - a wolverine!" We were delighted at our good fortune in meeting this animal which is so seldom seen. It continued toward us, loping along as if it had springs on its legs, pausing frequently to bury its nose in the grass. Hunting? Whenever it dropped its head, we'd scamper, and crouch low a few steps closer to its line of advance. It drifted down 20 yards below us, still seemingly oblivious to our presence. As it would soon be out of our view, we stood up and whistled. Now suddenly downwind, the wolverine quickly decided this was a bad place and sped away.

Such wildlife shows are unpredictable. One can go for days and see little of the big mammals. Then you can arrive on the scene and in a day see:

a wolf and a caribou staring each other down only to be frightened by an approaching airplane;

two grizzlies suddenly appearing over a ridge in pursuit of a moose but easily outdistanced by it;

a black wolf, its tongue hanging out, chasing a caribou up the river ice directly in front of the camp;

upon climbing a hillock to watch the chase, losing sight of those two around a bend but spotting another wolf crossing the river;

turning back to camp and seeing a grizzly bear coming up the river ice and heading right for our camp. (As the bear approached, still not seeing tents or people, it lay down on its back and rolled back and forth in the slush on top of the ice. Rising again and shaking off a torrent of water, the bear kept coming. At 30 yards, we started to shout and whistle: close enough! The grizzly circled our camp downwind, reared up over the shrubby willows to get a whiff, and turned to run off!)

That wildlife greeting took place the day we arrived for one of our visits to the ANWR! We thought the rest of the trip might be anticlimactic. It wasn't. Day after day we enjoyed wilderness wildlife experiences.

What about birds? As the snow recedes in June, birds from as far away as Argentina come to nest. Especially long distance travelers, such as the American golden plover and the Arctic tern, breed here. Raptors and songbirds, ducks and loons, one can easily see 40 or

more species in a short visit while more than 140 species have been recorded on the Range.

Once we camped along a river where we found a caribou recently killed by a wolf. After helping ourselves to some fresh caribou backstrap, we sat back to watch what else would feast on the carcass. Three golden eagles arrived to take turns feeding. A raven joined in, completely tolerated by the eagles who continued eating amid the din of a circle of protesting excluded gulls. As soon as the eagles left, the gulls quickly chased the raven off and fed. When the eagles returned, so did the raven, and once again the gulls retreated. This scene repeated itself for several days until one night, while we slept, a grizzly dragged the carcass a half mile downstream, and finished it.

The ANWR and Recreation

The ANWR offers the best recreational possibilities on the North Slope. Here the mountains are close to the ocean, the terrain is more rugged, and the plain is relatively drier.

Wildlife observation is a major attraction. Hiking cross-country with a heavy pack isn't easy; there are no trails, and traversing terrain thick with tussocks can make a grown man cry. Rivers, if they must be waded, can be treacherous or relatively easy, depending on the season, time of day, and recent weather. Day hikes into the mountains, along ridges, and up side valleys, are invariably rewarding. Each such trip is different and full of surprises: unexpected wildlife shows, strange geological formations, colorful alpine meadows, and remarkable views. The transition from Spring to summer in late June sees the dull brown tundra green and become a carpet of purple, white, yellow, and blue flowers. The whole scene is alive with nesting birds: a camouflaged nest of naked baby birds can suddenly appear underfoot. The summer is short-lived, however, and by mid-August the red and yellow colors of autumn appear.

Several of the rivers, both north- and south-flowing, are suitable for kayaking or canoeing, but care must be taken in selecting time of year and river to suit the abilities of the party. At break-up in the Spring, the river may be fast and treacherous, while later in the summer low water and braided channels can force the boater to do some wading. We have paddled along the coast to conclude two different trips. Paddling in the fog among the ice bergs is pictur-

esque, but routefinding can be difficult. During summers the ice doesn't retreat from the shore until very late, and a kayak may then become a human-hauled sled.

Mountain climbing possibilities are good; many of the snow-covered peaks look inviting, especially Mt. Chamberlin and Mt. Michelson. The technical rock climber will find little here, however.

When visiting the ANWR one must be prepared for harsh weather at any time. There have regularly been snowstorms on the 4th of July. Summer temperatures may hover in the low 40's or high 30's while in clear weather the temperature may soar to the high 60's. With such temperatures in midsummer, the hiker will be greeted with droves of mosquitoes. Their density and persistence make a retreat to a mosquito-proof tent a needed relief. Below a temperature of 42°F. the mosquitoes withdraw to the grass. Cold weather does have its compensations.

History of Use and Misuse

Although the ANWR has escaped the destructive development of Prudhoe Bay, it hasn't entirely avoided "trashing" by man. The most obvious examples are two abandoned military DEW line sites, at Camden Bay and at Beaufort Lagoon. When these radar sites closed down, buildings, equipment, and debris remained. Vehicles and oil drums dot the tundra, and bed springs rust away in tundra ponds.

The reef east of Barter Island is littered with oil drums swept free of the storage site near the village of Kaktovik by the tsunami following the great Alaska earthquake. Rows of these drums are now used as windbreaks for Eskimo tent camps.

Former hunting parties and camps of oil exploration teams at Peters Lake left vast quantities of debris. A clean-up effort by three conservationists consolidated the drums, cans, and bottles, and the U.S. Fish and Wildlife Service removed the debris the following winter.

Although we have encountered a few other littered sites, the ANWR remains relatively pristine.

Under the able direction of Refuge Manager Averill Thayer, the ANWR is apparently withstanding the increasing number of annual visitors. Sanitation is a severe problem around the lakes. Because of the permafrost, all waste flows into the lakes. Formal camps are

now required to fly their waste out with them. Another most hopeful policy has been the closure of the Range to oil exploration camps.

That there has been an increase in interest in the Range for recreational purposes is obvious. It seems that every summer flight to Barter Island brings more campers, hikers, and boaters. Various organizations are booking trips into the Range, and some private parties are just "showing up". As has been seen in other areas, wilderness experiences may require dispersal of parties and/or a reservation system in the future.

Current Threat to the ANWR

The most serious threat to the ANWR is that of oil and gas development. With all the activity at Prudhoe Bay to the west and, as the result of exploration on the Range, oil companies, some Alaskan politicians, and other developers are most anxious to open up the ANWR - at least the North Slope - to exploitation. Should this happen, the stated reason for the foundation of the Range in the first place - "for the purpose of preserving unique wildlife, wilderness, and recreational values" - will have been compromised.

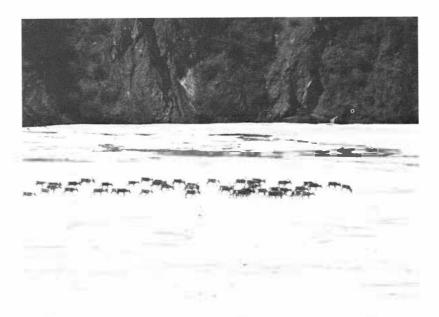
It would mean that heavy construction equipment and their attendant work crews and machines would be swarming over the primary calving grounds of the last great herd of caribou. It would mean criss-crossing the tundra with feeder pipelines, haul roads, and air strips. Experience in Canada has clearly shown that roads and caribou herds don't mix, and the intense activity associated with the development of an oilfield would certainly alter caribou behavior. The caribou recently won a reprieve from threatened demise when the Alaska Highway gas pipeline route was chosen over that of Gas Arctic which would have crossed the North Slope of the ANWR and opened the Range to further exploitation.

Mr. Justice Thomas R. Berger, Commissioner of the MacKenzie Valley Pipeline Inquiry, after a thorough study of proposed and prospective developments in Canada's MacKenzie Valley, called for a ten-year moratorium on development there and suggested that a gas pipeline follow the Alaska Highway. In a recent speech to the Arctic Institute, he told the audience that the widely-held belief is a myth that economic development in the North can take place under conditions which would also protect the environment. He further argued that we can get along without exploiting resources in the

North and suggested that the preservation of wilderness areas should be considered a contribution to our technologically-biased civilization.

He recommended that the nine million acres of the Yukon Territory north of the Porcupine River be preserved as a wilderness area (a designation that doesn't officially exist in Canada at this time but which Justice Burger urged should become an amendment to the Canadian National Parks Act.) This supports the concept of an Arctic International Wildlife Range encompassing and protecting the entire range of the Porcupine herd, a concept first proposed by a group of conservationists in a conference in Whitehorse in 1970. How tragic it would be to threaten the existence of this herd by turning their calving grounds over to industrial development.

Conservationists are often condemned for allegedly desiring to "lock up" the whole State of Alaska, to convert the whole state into one huge national park. Now we see the other extreme, where development interests, already with the rest of the North Slope in oil production or being prepared for it, now seek to take the ANWR, leaving no part of the North Slope ecosystem in a natural state. Our nation should see fit to preserve this one piece of the North Slope, in order to protect the greatest caribou herd remaining in North America, and to provide an unaltered portion of the ecosystem for scientific studies, wilderness observations, and recreation. The entire ANWR should be officially classified as wilderness, with efforts made to cooperate with Canada in the formation of the Arctic International Wildlife Range.



Caribou crossing Kongakut River ice—north side of Brooks Range. ANWR, Alaska

(Ken Davis)



Towing kayaks on Arctic ice pack near Beaufort Lagoon. ANWR, Alaska

(Ken Davis)



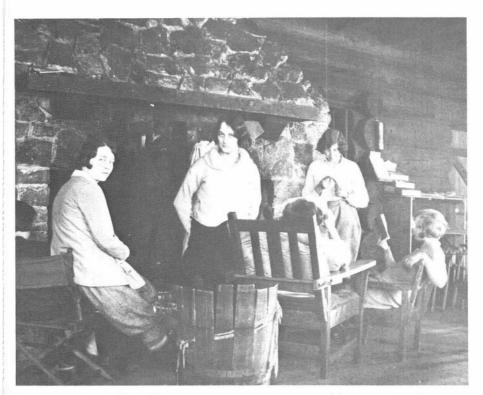
Kongakut River Canyon facing north— north side of Brooks Range. ANWR, Alaska

(Ken Davis)



Upper Hulahula River valley facing south—continental divide peaks, north side of Brooks Range. ANWR, Alaska

(Ken Davis)



Snoqualmie Lodge fireplace group, c. 1930

(Photo courtesy O. Philip Dickert)



Snoqualmie Lodge in winter, 1930

(Photo courtesy O. Philip Dickert)



Windows to the Mountains

(Photo courtesy O. Philip Dickert)



Outside the lodge in summer (l. to r.): Rudy Ansler, Priscilla Storey, Jim Martin, Norman Grigg, Mary Dunning

(Photo courtesy O. Philip Dickert)

Memories of Old Snoqualmie Lodge

DAVID H. LEE

Biographical note: The author has been on the Snoqualmie Lodge Committee for a number of years, is the current chairman of the Canoe and Kayak Committee, a past member of the Mountaineer Players, a climber, skier and all-around Mountaineer who writes, "It seems as if I have been a member of The Mountaineers all my life." The following are his recollections of the first Snoqualmie Lodge as a boy of seven or eight years.

I remember the lodge because my dad, Fairman B. Lee, was the chairman for at least one year. Almost every weekend my sister Margo and I would make the trek behind Dad and Mom to the lodge. The trail started up alongside Lodge Creek as it tumbled down the cliff and gurgled through the conduit under the highway. Many switchbacks later we reached the old railroad grade and stopped for a rest. Then on up more switchbacks into the deep timber and finally the last turn came and the lodge was there sitting on the hilltop. The lamps of the caretaker's cabin cast a welcome glow at the end of those Friday evening treks. Ray and Florence were the caretakers and cooks. Florence could turn out hot cakes by the dozens for the 35 to 40 Mountaineers that would be there for Sunday breakfast.

The lodge was built in 1914 on a site one and one-half miles from Rockdale and two and one-half miles from Snoqualmie pass summit. It was a log structure made from trees cut in the adjoining forest. The main room was 20 x 34 feet, with adjacent kitchen and women's dorm. Later, a cabin for the caretakers was added, connected by a covered walkway for the wood pile. The men's dormitory was in the attic over the main room. It was the vantage point for viewing the peaks along the Denny Creek valley. A lightning storm around Kaleetan was a hair-raising experience. The women had it soft. Their dorm was ground floor level and even got some heat from the living room fireplace.

Snoqual mie was primarily a mountain climbers' lodge. It was used

as a starting and/or ending point for climbs of the surrounding peaks. Snoqualmie, Guy, Kendall, The Tooth, Chair, Red, Denny, Silver and a dozen or two others were climbed by hundreds of Mountaineer men and women who used Old Snoqualmie lodge as a base. Day hikes were made along the old Meeker trail (now Cascade Crest Trail) to Snow Lake via the Summit or south to Ollallie Meadows and beyond. Climb or hike all day and dance all night. The wind-up Victrola with its horn got plenty of use. There was one record that I used to play over and over. I was heartbroken when I discovered one weekend that it was missing. Someone must have been driven to the point of sailing it into the forest. I don't remember the tune or title.

One of the memories of the Old Lodge involves the car trip to get there. In 1935 and 1936 going to Snoqualmie Pass wasn't the onehour trip it is today. From Seattle one went around the north or south end of Lake Washington or maybe took the ferry from Madison Park to Kirkland. We lived on Queen Ann Hill and used the northern route via Green Lake, Lake City, Lake Forest Park, Juanita, Kirkland, Redmond, Snoqualmie Falls and finally into North Bend. The coffee stop and meeting place was the North Bend Hotel. When they saw us coming the free crackers and catsup disappeared from the tables. Going on from North Bend was an adventure into the wilderness. The highway went up the hill by the water fall of the South Fork of the Snoqualmie River, past Camp Mason below McClellan's Butte, the Hi Valley gas station and the Bandera emergency airport and on past Denny Creek and Venables Store. It was a real occasion to see a train emerge from or enter the tunnel at Rockdale. Finally, we reached the parking lot across from Lodge Creek. The car was equipped with a locking gas cap and the distributor rotor was removed to help insure that it would be there to get us home again. It was at least a four-hour trip in those days.

The wintertime trip was often longer. Snow would pile up on the two-lane roadway faster than it could be plowed off. The old lodge was probably one of the first ski lodges in the Snoqualmie Pass area. Skiing wasn't the downhill sport it is today. The only way back up was to sidestep or herringbone. Parallel skiing then was cross country. Every year the Snoqualmie skiers would compete with the Meany skiers on a cross-country race between the two Lodges. When Lodge Lake froze over before the snow fell we had ice skating on a natural rink.



Snoqualmie Lodge 1914-1944

(Ramona Hammerly)

One last memory is of the swing hung between two tall Douglas fir trees. The cross bar that the ropes were tied to seemed 100 feet up (really maybe 20) and to sail out over the hill with a good pusher behind you almost had you touching the tree tops. My sister and I and other Mountaineer children, some not so young, kept it going by the hour.

This lodge burned to the ground and was replaced with the present lodge in the 1940's. The organization, operation and traditions of present Snoqualmie Lodge are carryovers from the original lodge. It is still operated by a volunteer committee who are dedicated to the Mountaineer principles of intelligent use of the outdoors for the benefit of the present and future generations. While primarily a ski lodge, it is getting more and more year-around use. With central heating, hot water, indoor plumbing, gas range and stone fireplace it is a comfortable and well-used mountain facility.

Alpine Birds and Their Energy Edge

TONY ANGELL

Editor's note: The article and illustrations are adapted from a chapter of Ravens, Crows, Magpies and Jays by Tony Angell, published in 1978 by the University of Washington Press.

One summer I led an expedition of teachers and students on a twoweek field journey that was to include the expanse of our Northwest from open ocean to the Columbia River Plateau. For the first several days we camped on the coast and shivered under the incessant rains. The students' romance with wilderness was fast dissolving. Near the end of the week, spirits low, we traveled inland to the Olympic Mountains. The snow was deep along Hurricane Ridge and our sullen line trudged along, showing little interest in discussing alpine ecology. The voungsters held fast to their city-bred skepticism when I spoke of a bird so fearless that, if you had food to offer, it would fly from the trees to your hand. As the mountain gods would have it, there were gray jays in the vicinity, and, when I took a cracker from my pack to prove the point, one of the birds winged out of the clouds and alighted on my hand. His appearance was the magic our trip needed, and I like to remember that, as he flew off before astonished faces, the clouds began to shred, the breeze warmed, and a blue sky opened up over us.



A gray jay flies to his cache with food

(Tony Angell)

We wondered later what this bold bird must do to survive in this alpine habitat so inhospitable to us most of the year. The same questions were posed about the nutcrackers, piñon jays, and ravens we found in other high mountain haunts. Whatever their adaptive strategies, we were sure that these birds of the family *corvidae*, like ourselves, were influenced by a single need—that of gaining access to and maintaining a source of energy.

Whatever a bird can do to enhance its access to available and dependable energy might be called an energy advantage, or edge. Certainly the success enjoyed by the corvid family can be attributed in part, to possessing such an edge over other species. Obvious energy benefits are derived from forming colonial or communal units. Still, corvids have some other very specific behaviors and skills that enhance access to or conservation of energy.

The Nest

The three species of North American corvids that nest early in alpine and subalpine habitats build amazingly well-insulated nests, as we might expect; but their energy efficiency doesn't end here. Piñon jays, for example, place their platform of sticks on the south side of their nesting tree 85 percent of the time; that is, the nest is positioned to maximize the amount of solar energy available to incubating adults and nestlings. These birds also roost in a manner that permits taking full advantage of differential heating. The heavy piñon jav nest platform may be composed of more than 170 sticks. If the seed harvest has been good the previous fall, birds may begin nesting as early as February when the winter sun is low. During this month, birds in most colonies place their nests out on branches to catch as much sunlight as possible. If they nest in late spring or early summer when the sun is high and intense, their structures tend to be closer to trunks where there is greater shade. From the outside to the inside, the grass lining of the nest becomes progressively finer and more shredded. Directly under the cup itself, there is a onecentimeter-thick layer of finely dissected plant parts. It is almost powdery in form and undoubtedly adds significantly to the insulation of the nest.

A pair of nutcrackers uses as many as three hundred twigs in their nest and spends approximately thirty-five hours of active time on its construction. Nesting at times as high as nine thousand feet in elevation, nutcrackers use layers of mud for the bottom of the bowl, and upon this place wood pulp. From such a base the birds form their cup of grasses and line it with soft inner bark. Cold cannot penetrate from below and the nest is so firmly placed that no storm can dislodge it.

Gray jays, also early nesters at high elevations, cache insulation material in summer and fall for later retrieval during early spring of the following year. The cache provides ready access to critical materials that might otherwise be under snow at this time. The insulation is incorporated into the nest with such efficiency that the incubating jay and her eggs are kept warm and healthy at temperatures that may reach nearly— $40\,^{\circ}F$.

The roofed nest of magpies breeding in hot desert areas may very well serve to control the amount of solar heat reaching both the incubating adult and the young. The nest itself is enormous and in at least one case reached seven feet in height after it had been repaired and used year after year. The pair will first gather mud or cow dung and attach this as an anchor to an appropriately large branch. Next, heavy sticks are inserted into this base in a generally upright position and, when the mud hardens, are cemented in place. A third step involves the build-up of a mud bowl within the structure, which is then lined with bark strips, feathers, horse hair, grasses, or any other soft and durable substance that will provide insulation for the eggs and young. Throughout this step-by-step construction, the exterior and roof are being completed. Construction may be carried on intermittently over a two-and-one-half-month period. An entire nest may be composed of over fifteen hundred individual branches of varying sizes.

The roofed nest also has two entrances, providing not only convenient entry and exit for the adults, but also a passage for air circulation. The roof, of course, is also a factor in thwarting predators like hawks and horned owls. Tree-climbing mammals like raccoons and foxes are not as easily deterred and account for most predation of young magpies.

Recycling

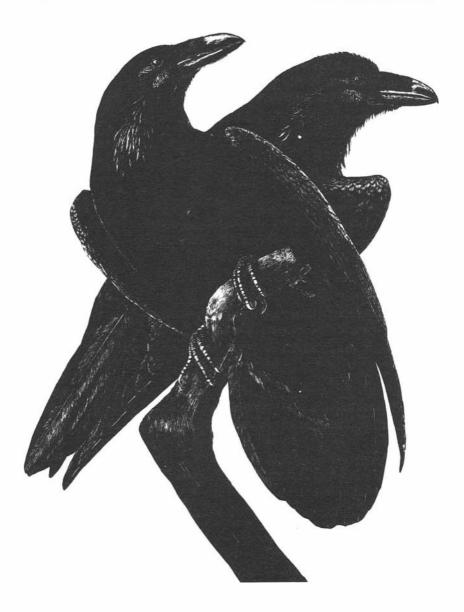
Some corvids have been particularly successful in areas in which, though they may have a food supply, they do not have all the conditions necessary for reproduction. In the American Southwest, food



Young magpies in their "roofed" nest

(Tony Angell)

is available but nesting trees are few and far between. In response to this, during the first half of this century the white-necked raven made some rather remarkable adaptations. Lacking the usual nest material, the ravens exploited the availability of haywire and barbed wire clippings. By traveling fence lines and fields, the ravens accumulated sufficient materials to construct the platforms and bowls of their nests almost entirely out of wire. Many of these wire nests were secured to the only elevated structures around, the cross arms of telephone poles. While the successes were admired by naturalists, who pointed to the ravens' ingenuity and efficiency, they were horrifying to the telephone company. Each spring the wire nests short-



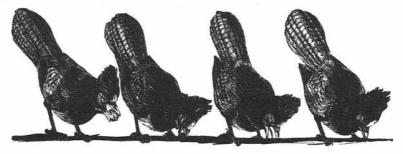
circuited the lines and cost the telephone company thousands of dollars to repair. One year the company received more than two hundred calls from users who were suffering communication problems caused by raven nests. In response, the telephone company sent out their linemen and nearly a thousand pounds of wire nests were removed from the local poles.

In eastern Washington state there is good foraging habitat for ravens, but also a dearth of trees. Here birds have nested in railroad trestles and within abandoned buildings. One pair of birds nested on the bookcase of an old school house while other birds constructed an eyrie around the moving plunging rod on a windmill. The principle materials used in its construction were wire and the rib bones of sheep. The ravens have even included a touch of decoration by including a jawbone of a cow on the front edge of the nest.

The Cache

We've spoken elsewhere of those special physical advantages that some corvids possess to aid them in their caching efforts. Certainly the pouch of the nutcracker and the esophageal cavity of the piñon jay facilitate a more efficient delivery rate, as they can carry a considerable load to the caching ground rather than making a great number of trips with single seeds. This same capacity to carry food permits piñon jays and nutcrackers to make fewer trips to the nest to feed their young than do other passerine species. When they arrive with a packed pouch or cavity, they can pump the youngsters full of food at every visit.

The caching flights of nutcrackers are often made on those warm fall days when air rises up mountain slopes. To gain elevation to



cache sites in a rock bank that may be as high as 10,500 feet, the birds simply enter a thermal shell and take a free lift to the heights. Once they make their deposit, gravity brings them back down to the foraging grounds. The result is a comparatively small energy investment for a considerable energy return in the future.

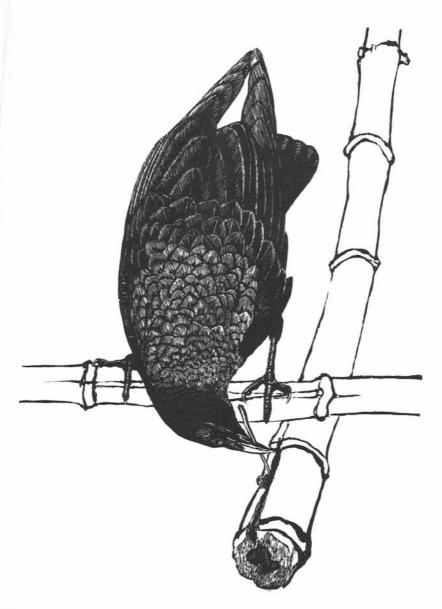
A cache itself can reach considerable proportions. One flock of 150 nutcrackers, living in piñon-juniper woodlands, stored nearly 300 pounds of piñon pine seeds. This represented a total of 63,000 individual seeds cached. Of that total, 130 pounds was fat, a sizable energy reserve from which to draw.

Unconsumed portions of caches often germinate and result in extension and reforestation of trees like limber, ponderosa, and pinon pine. The new trees then assist in maintenance of watersheds and soil development. These trees may also provide new food resources for birds in the future.

The caches of both pinōn jays and nutcrackers are nearly always located on the southern exposure of trees, cliffs, and open ground. Such locations remain relatively free of snow and ice throughout the winter. Pin̄on jays are so consistent in their caching choices that one of their brethren, the Steller's jay, has learned to pilfer from these stores by always searching the south sides of trees.

The life of the piñon jay is closely tied to the energy resources of the piñon nut. In some parts of its range, where the piñon crop is abundant, the piñon jay will normally nest three times a year. If, however, there is poor nut production, the late summer and early fall nesting is delayed until the following spring, as the lack of a sufficient cache will discourage earlier nesting.

Every successful species has a strategy for securing and maintaining its energy requirements. In an era of ever-increasing disrupted terrestrial environments, corvids have proved particularly adept at exploiting the available energy resources. This family may be unique in the diversity and sophistication of its strategies for gaining that elemental and essential component for viable life—the energy edge.



A common crow uses a tool to probe for food

Climbing Notes

EDITED BY JOAN FIREY

Cashmere Crags: Fantasia Tower, North Face

Martin Woodruff and I did a new route on Fantasia Tower on August 2, 1977. After reaching Fantasia Saddle we climbed a gulley on the right beneath the tower then ascended to the saddle between the summit and adjacent north pinnacle. A difficult traverse led to a ledge on the west face. The top of a block was reached via flake and face holds. A short, tricky move yielded summit. 5.6

—DAN STAGE

Triplets, North Buttress of East Peak

The first reported ascent of the north side of the Triplets was made via the most prominent of its several buttresses on August 4, 1977. The east side of the buttress was gained 200 feet above its lowest point. Several hundred feet of class 3-4 poor rock was followed to its crest. Pleasant climbing on the buttress and a connecting rib lead directly to the summit block. Solo time was 3 hours from Cascade Pass. The first traverse and second ascent of the other two summits was also made.

-ALLAN G. FRIES

Forbidden Peak, South Face

A new route was done July 1977 by Craig McKibben and Jim McCarthy on the south face of Forbidden Peak that ascends directly to the summit and lies 150-200 feet to the right of the other south face route.

The route starts on right hand slabs 100 feet below a five-foot long bluegreen streak of copper mineral. From a belay twenty feet below the streak, climb left and up to a horn then left again and up sixty feet to a belay alcove (5.9). The third lead traverses left forty feet then climbs up and right another seventy feet. The fourth lead climbs left through a roof onto easy ground. The next lead is easy and for the next four leads climb straight up. Leads number seven and eight are in a right-facing open book and the ninth has a very hard start getting into a left-facing book (5.9 or 5.10). Traverse right on lead ten to a large ledge then climb straight up steep thin slabs (5.9) to a point thirty feet left of the summit. Grade IV, 5.9

—JIM MCCARTHY

Dorado Needle, South Side

A new route was done on the south side of Dorado Needle up a prominent ridge leading towards a point south east of the main summit. In August 1977, Margarite Hargrave and I approached from a camp at the Klawatti col traversing west over the Inspiration Glacier and head of the west branch of the McAllister Glacier to drop through the notch between Eldorado and Dorado Needle.

The 1,200 foot route had about eight leads of moderate class 5. Generally, the rock is sound and of good quality though dikes of softer rock must be climbed with care.

The route began with third and fourth class scrambling to the ridge crest and then one lead of the steepest section was climbed on a loose grey dike just on the north side of the ridge. The ridge was left before the top third and a class three gully was followed to a notch between the south east point and main summit block. Two further leads gained the summit. Grade III, 5.5.

-JOAN FIREY

Mt. Baker, Coleman Glacier Icefalls and Headwall

The Coleman Glacier gains 6,600 vertical feet from its terminal wall above Glacier Creek to the summit of Mt. Baker. The 150-foot terminal wall, the two major icefalls and the series of ice cliffs on the left (north) side of the headwall combine to make one of the longest and most sustained technical ice climbs in the North Cascades. In June 1977, Paul Bleakney and I led two parties up this route, enjoying an abundance of exposed ice due to the light snowfall that year. We reached the summit in the evening of June 15 with Geoff Bartram, C. William Wickstrom, Bill Crawford and Tom Burke after two previous bivouacs. The following week Bleakney repeated the route with Randy Dellinger and David Blomstrom ascending the more moderate right flank of the headwall. Bad weather necessitated three bivouacs before the summit was reached on the second ascent.

—DUNHAM GOODING

Arches Peak (7945') (Little Johannesburg), Plumb Line Buttress

Our Club climb party had originally intended to do Fisher Peak but our minds were changed at Easy pass by the 7,945-foot monolith sitting directly across the valley. This peak lies NNE of Mt. Arriva between the terminal forks of Fisher Creek.

The 2,700' north face is split by two close and parallel buttresses. On August 21, 1977, Steve Costie, Chris Martinson, Ken Small and I followed the eastern (left) buttress directly to the summit encountering ten pitches of class 4-5 on mostly unstable rock. Our hopedfor first ascent was a third but our direct 'plumb line' route on the north face (for which the peak was dubbed Little Johannesburg by the first ascent party) is new. Grade II-III, 5.4

-RICHARD FILLEY

Jack Mountain, Northwest Ridge, Approach Variation

In early June of 1977, Dave Adams, Mark Sandler and I repeated a route first pioneered by Mike Bialos and party in 1976.

The east bank Ross Lake trail is followed from Ruby Arm approxi-

Climbing Notes 73

mately 4 miles to May Creek. From there ascend directly up the fall line, keeping south of the seasonal tributary to May Creek and working through or around occasional cliff bands. The ridge crest is attained at approximately 5,000' from where a rising traverse can be made to the terminal moraine of the Nohokomeen Glacier on the north side of Jack Mtn. The Nohokomeen was ascended to 8,000' where one can attain the northwest ridge at a notch at 8,200'. The ridge is then ascended to the summit. We took 12 hours round trip from a camp at 5,000' on the ridge crest.

-DON GOODMAN

The Olympics: Pershing Massif

Two pinnacles can be seen from the Mildred Lakes trail parking lot. The pinnacle on the right (the less pronounced) was climbed by Greg McHugh, Steve Carey and me via Mt. Pershing route 5 of the *Climber's Guide to the Olympic Mountains*. From the basin (elevation 4,000 feet) of route 5, the pinnacles can be located to the west. Climbed May, 1976. Class 5.

-DAN STAGE

Winter Ascents

Three weeks of cold, clear weather in January and February 1976 were a preview of the balmy conditions that prevailed during much of the winter months of 1977. The drought of the winter 1976-77 presented climbing conditions that had not been experienced in recent history and may not be seen again by the present generation. February, 1977, in particular presented calm, clear, warm weather with an unusually low pack of consolidated snow. Many winter ascents were done for the first time in usually inaccessible regions because of the ease of access. A few of these first known winter ascents that have been brought to the attention of the editor are listed here.

- -Liberty Ridge, Mt. Rainier: January '76
- —Mount Thompson: early February '75, East Ridge, Jim McCarthy, Greg Markov

- —Huckleberry Mtn.: January '77, Al Albright, Don Goodman, John Marconi, Paul Wagenaar
- —Mt. Stuart, Stuart Glacier Couloir: February '76, from snow patch three-quarters of the way up, crossed to finish on upper part of North Ridge, Paul Eckman, Joe Weis
- —Colchuck Peak: January '75, couloir to the right of northeast buttress (also first ascent), Skip Edmonds, Clark Gerhardt, Paula Kregel, Greg Markov
- —Colchuck Peak, Wickwire-Lilleby route: January '76, Mark Thornton, David Seman
- —Dragontail Peak, Northeast Couloir: February '75, Cal Folsom, Donn Heller
- —Dragontail Peak, Wickwire-Stanley route: February '75, Skip Edmonds, Dick Heffernan
- —Prusik Peak, West Ridge: January '75, Dave Anderson, Cal Folsom, Tom Linder, James McCarthy
- —Mount Index, North Peak traverse to main peak: January 29, 30'77, Don Page, Byron Robertson, Mike Marshall, Larry Cooper
- —Mount Shuksan, North Face: December 23, '75, Bruce Blume, David Seman
- -Mount Challenger: February '77
- -West McMillan: March '76, Mike Colpitts, Jarl Secher-Jensen
- -Mount Terror: February '77, Paul Eckman, Roy Farrel, Joan Firey, Joe Weis
- —Liberty Bell, Liberty Crack: '77, five day ascent, 12 pitches, mostly aid in snow- and ice-choked cracks. (5.8, A3) Dave Farnham, Matt and Jamie Christenson, John Znamierowski
- -Cutthroat, southeast ridge: January '77, Paul Eckman, Joe Weis

1977 Summary of Soviet Climbing in the Cascades

After their successful return from Alaska, the Soviet team enjoyed a few days of "R&R" in Seattle. Then they turned their attention to the mountains of the Cascade Range.

During the weekend of June 11-12, Sergei Efimov and Alexei

Lebedehin, accompanied by Yosemite veteran Chuck Kroger, headed off into the North Cascades for an attempt up the classic Liberty Crack route on the East Face of Liberty Bell Mountain. When they arrived at the base of the face, they were dismayed to find another team already attempting the route. Fortunately, it started to rain heavily and the climbers on the face decided to rappel off.

Kroger took the first lead up the nearly vertical wall. Efimov's lead took him over the twelve-foot deep, 190° roof of the second pitch. Lebedehin's pitch involved the delicate A-4 section of the route. The climbing gained momentum with the fourth pitch as the threesome swung leads. After nine hours of climbing they reached the top: a remarkable time for this Grade V climb, considering that the two Soviet climbers claimed that they were "out of their element" on such a technical route.

During the same weekend Eduard Myslovsky, Vladimir Shatayev, Valia Ivanov and Oleg Borisenok chose to traverse Mt. Rainier. They packed enough provisions and equipment for a minor expedition. When I suggested that the mountain did not justify such heavy packs and that they certainly did not need tents weighing sixteen pounds, Shateyev replied that it is difficult to play cards in small tents and impossible with no tent at all!

Early Saturday afternoon, I dropped them off at the trailhead of the Carbon River Campground (elev. 2,600'). We reported to the park rangers that this team would climb the mountain via the beautiful Liberty Ridge, traverse the summit (14,410') and descend to Paradise via the Success Cleaver route: normally a two-day undertaking. The Park Service was quite surprised to see the team appear at the Paradise Ranger Station the following afternoon.

A couple of days later the Soviet team, Mark Fielding and I set off on a ten-day trip to the Picket Range: one of the most remote groups of peaks in the North Cascades. After a day and a half of hiking over Sourdough Ridge, we descended into McMillan Creek Basin: a magnificent cirque of rugged peaks, tumbling glaciers, streams and waterfalls. We established camp at about 3,600-feet and felt dwarfed by the many summits towering 5,500 feet above us.

On June 19th Shatayev, Myslovsky, Ivanov and Borisenok undertook the second ascent of the 2,300-foot North Face of East McMillan Spire.

Efimov, Lebedehin, Fielding and I set off to attempt the unclimbed North Face of Inspiration Peak. The Face is one of the shortest (approx. 1,500 vertical feet), yet one of the steepest, in the Cirque. At my suggestion, we left hammer and pitons behind and relied totally on American and Soviet "clean hardware" for protection. As usual, at the base of the Face, the two Soviet climbers stuffed their heavy alpine boots into their rucksacks and put on tight fitting "goloshes."

Fielding, who had just returned from several Grade V and VI climbs in Yosemite Valley, roped up with Efimov. I shared the rope with Lebedihin.

After about eighteen pitches of strenuous free climbing (almost every lead involved 5.8-5.9 moves), we reached the precipitous summit in dense clouds. The descent involved complicated traverses and rappels. We were benighted before reaching camp.

The following day, while resting in deteriorating weather, we decided to head home earlier than planned. Back on Sourdough Ridge we found ourselves at the mercy of high winds and horizontal rain. After searching a long time for level tent sites, the situation appeared to be distressing—for the comfort-loving group that we were. In diminishing daylight, Ivanov, looking wet and miserable, exclaimed in his limited English: "McKinley: no problem. North Cascades: problem!"

The next day the weather improved and the hike out proceeded normally except when a member of our group took the wrong turn at one junction and we waited anxiously for about three hours until he reappeared.

The Soviet team departed for Moscow on June 26th, after extending sincere invitations to meet again in the mountains of the USSR.

—ALEX BERTULIS

BOOK REVIEWS

Up For Grabs. Daniel Jack Chasan. Madrona Publishers Inc. \$4.95 (Paperback)

A small, easy to read book which unemotionally provides the facts on a wide range of natural resource issues is to be prized and recommended widely. Daniel Jack Chasan of Vashon Island, staffman for the "New Yorker" and contributor to "Audubon" and "Pacific Search", has compiled a series of essays on such major Northwest issues as timber, fishing rights, water, agriculture and land use that provides an additional bit of insight into these complicated questions.

For the Mountaineer who wants to know cooly and rationally what all the fuss is about on these major issues, here is a book that tells the story. Mr. Chasan does not give us the answers to solve these problems however, and some will be disappointed that conclusions are not drawn that sometimes seems self-evident. Most readers will be intrigued, however, by the questions that are raised in the book and will find that in discussing natural resource controversies today it may well be that we do not yet have the answers.

Mr. Chasan has made a good story out of the complicated interrelationships of the demands we all place on our mountains.

-DAVE HOWARD

Cascade Alpine Guide: Stevens Pass to Rainy Pass. Fred Beckey. The Mountaineers. \$11.95 (Paperback)

The new "Beckey's guide" to the north-central Cascades is certainly no disappointment. In fact, it is more of an historical and geological account of the area than the straight "climber's guide" we normally see for a particular area. The generally excellent aerial photos, historical anecdotes, and geological explanations combine to make this more a work of art than a back pocket reference. A copy machine will be a necessity for the active climber.

Each geographical section is followed by a handy list of trails as well as a not-so-handy list of footnotes. I was dismayed to discover that the Silver Star area and Chelan Mountains are not included in the book. Hopefully, this information will appear in a future edition.

A high point of this guide is the Monte Cristo and Glacier Peak map composites. Covering a fairly large climbing area, they will make it possible to avoid the multiple map problem when orienteering. The 200-foot contours are inadequate for precision route-finding in some cases, so regular USGS topos should also be included in your map case. Peak names and climbing routes are included which can be related to the text. Let's hope that similar maps of different areas will be published later. (These maps are also available individually.)

The text material is typical Fred Beckey. Usually, route descriptions are well researched but often gloss over a standard route while going into great detail over someone's never-to be-repeated route up the north face. I was delighted to see that Beckey was able to research and document names to many peaks which were formerly considered part of a ridge or a bump. By assigning a name and giving some history, he has broadened the horizons of a certain class of peakbagger. Very few summits of consequence have been overlooked. Certainly some routes have not been included but they would be of limited interest to the average climber.

Consistent with Mountaineer policy, high routes have been deemphasized to minimize impact on fragile areas. This probably affected some route and access descriptions. Rock-climbing areas covered in other texts (such as Index and Darrington) have also been omitted.

Despite some minor annoying factors such as a few missing peaks, a few poor photos, a lack of good sketches, no pocket for the maps, and an occasional less-than-complete standard route description, the over-all literary quality of the book is excellent and the technical route information above average. It really would be difficult to compare this guide to others except perhaps the last South Cascades book. Whether you are a climber, hiker, scrambler, or armchair history buff, you should definitely set aside some time to read this book from front to back.

Book Reviews 79

The Ascent of Denali. Hudson Stuck. The Mountaineers. \$6.95. (Paperback) 224 p., 2 maps, 45 photos.

This is a reprint of the old classic describing the 1913 first ascent of Mt. McKinley. The addition of Bradford Washburn's superb aerial photos of the peak showing the party's route provides even better coverage of the historic climb. Also included is new material on the tragically short life of Alaskan native Walter Harper, who at age 20 helped lead the climb.

Archdeacon Stuck writes in the third person, in a simple and compelling style that includes much understatement. All aspects of the climb are described: the history of previous explorations and attempts on the peak; the long preparations and approach from Nenana by boat, dogteam and snowshoes; the arduous two-week hacking of a route through the earthquake-shattered ice crest of Karstens Ridge (The ridge named for Harry Karstens who led much of the ascent was climbed in only two days during the previous year's nearly successful attempt but was shattered by a massive earthquake that hit the Alaska Range the day after the 1912 party had safely descended it.); and the final assault which culminated in setting up an instrument tent on the summit for recording temperatures and barometric pressures.

Approaching age 50 at the time of the climb, Hudson Stuck modestly gives credit to his younger companions for leading the ascent and helping him to the top. Among the notations that will be of interest to modern climbers are the footgear of the four-man expedition which consisted of moccasins fitted with thicker leather soles through which nails were driven for traction and which were worn with five pairs of wool socks on the final climb; home-made ice axes and crampons; bedding consisting of down quilts, two pairs of camel hair blankets and one down sleeping bag; and amber sunglasses which he praises at length. He also tells of shooting caribou and making pemmican at a foothills camp enroute; losing all their sugar, powdered milk, baking powder, dried fruit, bread, and much film in a tent fire; and using dogs to 10,500 feet on the upper Muldrow Glacier.

Stuck felt strongly about retaining the Alaskan name Denali and gives dissertations on the impropriety of renaming the mountain to honor a campaigning politician. He was also concerned about allowing the natives to retain their way of life in the face of an en-

croaching civilization and was particularly happy that half-breed Walter Harper was the first to stand on the summit.

Upon the party's return to Tanana more than three months after their departure, a Seattle newspaper requested "500 more words describing narrow escapes," but Stuck says, "Thank God, there were none to describe." After the climb he predicts that the incentive to scale McKinley would soon decline and that no other route would be found to the summit.

The only shortcomings of the book include poor legibility of lettering inked in dark areas of the aerial photos and the lack of a map showing the entire route of approach and routes of previous explorations toward the peak. If for no other reason, such a map would emphasize the great difference between the distance travelled by those pioneers and by the modern mountaineer.

—DEE MOLENAAR

Climb! Bob Godfrey and Dudley Chelton. The American Alpine Club. \$14.95 (Hardback)

This book deals with a rather narrow subject range in the literature of climbing: climbing in Colorado and rock climbing only. Furthermore, the book describes only climbing in a small area: the Front Range Corridor in the areas around Boulder and Colorado Springs. However, because the book deals with its subject so thoroughly the pioneering, development, and pure adventure of climbing plus colorful character descriptions—one gets a broadened sense of the subject that is totally satisfying.

One of the appealing aspects of this book is that the editors/authors are very down to earth about this sport rock climbing and don't try to make it more than it is or wander off into esoteric garble about the "meaning" of the activity. It is, they say in the introduction, strenuous physical activity, an avenue to spectacular beauty, a source of intense companionship, and, finally, a challenge. Their concluding admission that "rock climbing is, after all, a little bit absurd and that all of the commonly offered reasons for rock climbing are characterized by an underlying irrationality" form a solid base for the responses one has to many of the exploits and adventures described in the book.

The organization of information is one of the strong points of the book. It is divided into four logical time periods denoting developBook Reviews 81

mental eras. The Early Days covers the lengthy pioneering period of 1820-1949. Beginning with the Pikes Peak climb in 1820 on to the Longs Peak first ascent in 1868, we realize that these climbers were interested only in exploring and were hardly aware of climbing as a sport, either in Colorado or elsewhere. The sport development begins in the early 1900's. The photographs from this period are historically very interesting and the reproductions are excellent, as is the case throughout the book.

Obviously, by the 1950's a lot of climbing had been going on in the world and techniques were changing everywhere (for example, Wexler's dynamic belay, Fred Beckey's contraction bolts and the Salathe and Nelson tension climbing on Lost Arrow.) The Colorado climbers were unaware of these developments, however, and were simply making up techniques as they went along. This situation made for some great stories. The account of Hornbein, Riley and Sherman's climb of "Skid Row" is an inspiring example of pioneering unsophisticated but ingenious techniques. As it turned out this was the first attempt in Colordo climbing on an overhang and blank wall using artificial methods. Thus the 50's were the twilight of the older traditionally based period of rock climbing. Still an esoteric sport, it was nonetheless a firmly established one.

The 60's were considered the Golden Age of Colorado rock climbing when the pioneering efforts of the 50's were developed into new and daring climbs. The cast of characters, a truly committed group of climbers for whom climbing was a way of life, expended enormous amounts of time and energy. Given the context of Colorado and rock climbing the results were astounding.

It is in this section of the book that one reads some of the most entertaining and enjoyable material, especially in the extensive recollections of Layton Kor's climbing—what he and his climbs were like. "His predominant characteristic seems to have been an absence of fear." He was to become the most influential figure in Colorado's rock climbing history and to pioneer a remarkable number of rock climbs.

Finally, the book moves into the period of the 70's which was and is characterized by the free climbing of previous aid routes. As the author's put it, "The 1970's witnessed the phenomenon of the shrinking cliff." The photography in this last section of the book is truly impressive and gives a very clear idea of the incredible limits to which rock climbing has progressed.

Climb has everything going for it. It is well and carefully written, tells lively and interesting stories and is decorated and documented by incomparable photographs. I found reading it an unmitigated pleasure.

-KATIE KELSO

Yuraq Janka—The Cordilleras Blanca and Rosko. John F. Ricker. The Alpine Club of Canada and The American Alpine Club. \$11.50 (Paperback)

John Ricker has put together a thorough, scholarly guide of the Cordilleras Blanca and Rosko of the Andean region of Peru. The book includes chapters on early mountaineering history (by Evelio Echevarria); a brief treatment of the native mountain inhabitants, their way of life and culture (by Enrique Mayer); Essentials for Mountaineering Expeditions (by Geoff Wayatt); and a good chapter on Medical Problems (by Barry Hagen, M.D.) including a medical equipment list.

These chapters are excellent write-ups in general and very informative. Wayatt's account on equipment tends to be too specific using the first person to describe what was used on an ascent of the east face of Huascaran in 1971. (Since equipment and tools constantly change specific details quickly become outdated.) A more generalized treatment of what is needed in terms of clothing and equipment would be preferable.

The guide contains sections on the geology, glaciation, snow and ice conditions, weather and climate and access which are excellent.

The descriptions of the mountaineering routes are brief in keeping with the philosophy of ensuring that alpinists continue to make their own decisions. All routes are noted that have been recorded and extensive, definitive bibliographies are provided on the literature of Andean mountains and mountaineering.

The guide is well laid out. The system, abbreviations and symbols are clearly defined for ease of use. Excellent quality photos including three panoramic foldouts (six pages) accompany the text.

He concludes the book with a section on Quechua, the widest spread indigenous language of South America. He briefly describes its history; provides some insight into linguistics and then gives a simplified explanation of the map symbols for the Cordilleras Blanca and Rosko region.

Book Reviews 83

The approach of providing in a guidebook to other countries some insight into another culture is to be highly commended. The book has considerable value to the mountain traveler aside from the catalogue of mountains and mountaineering routes. The lack of definitive route descriptions will hopefully provide a model for future guides to other mountainous regions of the world that are not yet catalogued, retaining that all-important aspect of the sport—exploration and decision making, rather than following a step-by-step work description of where to go and what to do.

An impressive book and a significant contribution to mountaineering literature.

-JOAN FIREY

Storm and Sorrow in the High Pamirs. Robert Craig. The Mountaineers with the American Alpine Club. \$6.95 (Paperback)

In Storm and Sorrow, Robert Craig has written a compelling narrative of the overwhelming events which surrounded the 1974 American Pamirs/USSR Expedition. Born with the desire to climb in new ranges, nurtured by the detente and finally subdued by natural forces, the expedition provides Craig with the opportunity to chronicle one of the most devastating series of events ever to befall a group of mountaineers.

In response to a Soviet invitation, the American Alpine Club and Seattle resident Pete Schoening selected a diverse group of American climbers to participate in an international climber's "jamboree" in the seldom visited Pamirs. Rising to over 25,000 feet, the Pamirs presented the American group an unprecedented chance for difficult new ascents; further, it would promote understanding between two antagonistic cultures and hopefully pave the way for a continuing exchange of climbers. The contrasts apparent between the unusual collection of long-haired American climbers and the rigid militaristic Soviet approach to mountaineering provide interesting counterpoint in this fascinating book. Tragically, the mountaineering achievements are mostly relegated to acts of sheer survival when a series of earthquakes coincide with the century's worst weather to overtake the climbers of many nationalities on different routes.

Craig has drawn freely from the diaries and photographic collections of expedition participants and has written a book which is fast-

paced, yet warmly human as it relates death's unrelenting presence. We are allowed insights into the world of high standard alpinists faced with imminent disaster and the black humor they use to diffuse dangerous situations. . . . John Roskelley singing an old Fish song with the refrain "one, two, three, four, what the hell are we fighting for; we're all going to die!" Shortly thereafter, an avalanche buries their camp, killing Seattle climber Gary Ullin. Craig was Ullin's tent mate at this point and painfully recreates the subsequent fight for survival in the midst of terrible conditions.

Other deaths occur, creating a deep feeling of humanity between the many diverse nationalities present. The Soviets stage large, well-coordinated rescue efforts and receive Craig's praise for their concern and diplomacy. Throughout, the feeling is one of people united in the face of great adversity. In *Storm and Sorrow*, Bob Craig has reminded us that in modern alpinism, despite psychological and technical advances, the mountains still call many of the shots.

-CLARK GERHARDT, JR.

Great Ascents. Eric Newby. The Viking Press. \$13.95 (Hardback)

Eric Newby takes us on a journey through the great mountain ranges of the world and the history of their early exploration. Accurately titled "Great Ascents," the book is not a collection of who-donewhat, but a narrative history of great early attempts, from Mont Blanc and the Matterhorn in the 17th and 18th century, to Everest and Annapurna in the 20th. The author doesn't attempt to catalog every ascent of every mountain; he offers lively stories of the struggles on some important peaks.

Newby generally takes an area noted for early pioneers and pioneering in climbing and gives the reader an understanding of the triumphs and difficulties. In most cases he is quite good, as in the coverage he gives to the Alps. A notable exception to this is the chapter on Yosemite, which is too short and borrows too freely from other sources.

The book is beautifully illustrated with modern-day photographs and early drawings made by the explorers and, in that respect, quite enjoyable just to look at. There could be more maps for orientation uses.

This is not a book on mountaineering philosophy or technique, but an enjoyable history to read between outings.

Book Reviews 85

Cross-Country Downhill and Other Nordic Mountain Skiing Techniques. Steve Barnett. Pacific Search Press. \$6.95 (Paperback)

As fast as a Nordic ski-racer, almost as powerful as a downhill Alpine skier, and able to ski long river valleys, steep chutes, large glaciers and powder-covered mountain slopes—it's a new breed of wilderness skier! Combining the strengths of traditional Nordic cross-country and Alpine downhill a new way of skiing is beginning to evolve: cross-country downhill. Aided by the development of improved light-weight equipment, the rediscovery of old skiing techniques, and a desire by many skiers to escape the overcrowded ski areas while still retaining the exhilaration of downhill runs, this type of skiing will appeal to many who love skiing and the wilderness.

Cross-Country Downhill is a practical, usable guide to learning the Nordic mountain touring techniques. Written by Steve Barnett, a developer and instructor of these methods, it leads one through a helpful description of appropriate equipment and then to detailed explanations of technique aided by action photos.

Basic to the sport is the telemark turn, actually the first downhill turn ever developed. Not possible with rigid Alpine boots and bindinigs, the telemark turn utilizes free heel movement and affords great stability, aesthetic beauty and exhilarating skiing. Although the telemark is the key to cross-country downhill skiing, other techniques which have certain advantages are also presented. Together, Barnett claims there is a set of techniques for handling any snow condition on almost any slope.

General suggestions are provided on how to select wilderness touring trips. No longer need skiing be a one-season sport. Now it is possible to find skiable snow at almost any time of the year.

The major constraint to safe wilderness skiing is the threat of avalanche. While this book does not deal in depth with this problem, the wise reader will make good use of recommended references.

On first appearance, the techniques presented in this book may appear somewhat ungainly when compared with the obvious grace of the experienced Alpine downhill skier. However, with a reasonable amount of knowledge and practice, we are assured that cross-country downhill can be comparable in beauty and enjoyment but with the added benefit of wilderness surroundings. It makes one want to get out on skis right away and give it a try.

The Monte Cristo Area. Harry M. Majors and Richard C. McCollum. Northwest Press. \$10.95 (Paperback)

The stated purpose in the introduction to this book, is to answer most questions required by hikers, campers, tourists, fishermen, bicyclists, naturalists, mountain climbers and historical buffs. The book lives up admirably to this purpose. It does not, however, define climbing routes in the depth most climbers are accustomed to in climbers guides.

The chapter on history of the area I found particularly interesting. It includes some information and early photographs not previously published. The campgrounds in the area are all identified in drawings and some text indicating the number of camp sites, picnic tables, fireplaces and location of restrooms. Each description also indicates points of interest nearby. Trails throughout the area are described with great detail and accuracy concerning points of historical interest on or just off the trail as well as flora and fauna, fishing prospects and geological features. Many area maps and pictures are included. The book concludes with information for identification of trees, shrubs, ferns and flowers prevalent in the area.

If you have an interest in the Monte Cristo area you will certainly enjoy owning this book. Before you read this review I will be wandering through the mountains in the Monte Cristo area with my own copy in hand.

-ED PETERS

The Coffee Chased Us Up. Elof Norman. The Mountaineers. \$3.95. (Paperback) 115 p. 10 photos.

This is a chronicle of childhood life in the early 1900s mining town of Monte Cristo in the Washington Cascades, as seen in retrospect by 75-year-old Elof Norman. One of very few survivors of the town in its heyday, Norman tells the story after being persuaded to take a night-school course in writing.

Norman describes his family's arrival in Monte Cristo from Denmark in June 1902, their reception as "Swede foreigners", and their gradual acceptance and melding into the rough-hewn mining community. Life was a hard lot for the grownups who worked from dawn (when "the coffee chased us up") to dusk—the men in the mines, and the women with never-ending household chores, and all con-

Book Reviews 87

cerned with the education of the few children in the tow. A one-room school accommodated the children through the eighth-grade—if and when a teacher from the outside could be persuaded to remain for a few months. Snow often piled up two feet overnight and accumulated to over 15 feet. At such times shoveling became the order of the day for all, as they relied heavily on twice-daily trains from Everett bringing in necessary food and supplies.

But there was fun, too, for the children—hunting, fishing, hiking, childhood pranks and freedom of life in the mountains. They sneaked views of the town's night life which centered around the dance pavilion of the Royal Hotel where a victrola, accordians and fiddles provided the music. For the grownups such periods of relaxation were short, squeezed in after working 12 hours a day, six days a week. Occasional trips to the outside, to Everett and to Seattle (reached by steamer from Everett) were the only contacts with the world beyond the Cascades.

Eventually, the mining activity died down and people moved out, leaving the Normans among the last residents. Soon afterwards, Elof had to board out in Everett to attend high school. Schooling in Monte Cristo didn't prepare Elof for the transition, however, and he quit school and eventually worked in the Everett mills before running his own bar in later years. Throughout the years the author periodically revisited his childhood haunts at Monte, to show off the ghost town to city friends. Hopefully, this reviewer will also have Elof Norman take him on a personal tour of the old town and share in some of the author's memories brought out so well in this fascinating volume.

—DEE MOLENAAR

Guide to the Hoh Rain Forest. Mary Lou Hanify and Craig Blencowe. Superior Publishing Company. \$1.95 (Paperback)

"This is the forest primeval." This line from a poem by Longfellow is a perfect beginning for a guide to the Hoh rain forest. As the book states, "the Hoh forest is the only coniferous rain forest still in its natural state, in the world." This little booklet is a good starting point for any beginner wishing to learn about this area. Although it is not detailed enough in its 32 pages to satisfy the experienced naturalist or backpacker, it manages to convey the sense of variety and beauty of life, both plant and animal, that lies within this forested

area. About half is text and the other half scenic photographs of the life and the region described. It centers mainly around the Hoh Visitor Center and the activities which can be pursued from here, but includes many short paragraphs on subjects such as: mosses, mammals, liverworts and lichens, ferns, history of the region and so forth. It is laced throughout with appropriate quotes that seem to echo the authors' obvious love and concern for the area. This guide is a good beginning for one interested in learning more about this wild and rugged forest, but one is sure to want to go on to more detailed and specific texts after they realize the abundance that these woods hold.

—CATHY NEWSHELLER

Indian Heaven Back Country: Trails, Lakes and Indian Lore. Mel Hansen. The Touchstone Press. \$5.95 & Paperback)

This is a book that will always make good reading for back packers or arm-chair backpackers. It should be read now by all who seek the detailed background information needed to effectively support the protection of this exceptional high meadow and lake country 80 miles northeast of Portland, Oregon.

The trail guide portion of the text gives brief and understandable descriptions of trails, expected trail conditions by season, lakes and fishing prospects. In doing this it may well establish a new record for backpacker cliches: "the trail procedes at a jet take-off rate", or the "Cardiac Arrest Trail" allows the hiker "to enjoy the mind-blowing views." The value of the text is clear despite this verbal seasoning.

The meaning of the country to Indians of the region both past and present is defined, the flora and fauna are well-described, and additions to the big-foot mystique are "mind-blowing". Advice on hiking and camping techniques are well-handled and aimed at helping those readers who have no prior experience with these activities.

The author does an excellent job of establishing the area's need for protection and in pointing-out the very immediate dangers associated with present Forest Service policy. He urges the reader to join efforts to "set aside this wondrous land of lakes, craters, meadows and mountains as a wilderness area," and suggests one way to help is to "join an organization such as "The Mountaineers" or "Wilderness Society" who work to preserve areas such as this.

-FRANK FICKEISEN

Book Reviews 89

Trips and Trails, 2 (2nd edition). E.M. Sterling. The Mountaineers. \$5.95 (Paperback)

"While camping is good fun, it's even more fun to go snooping around." So begins the revised edition of *Trips and Trails*, 2, a Mountaineer publication of family camps, short hikes and view roads in the Olympics, Mt. Rainier and the South Cascades. The book offers a description of camping, campgrounds, logging roads and mountain courtesy in the introductory pages. Each description of a hike is accompanied by excellent, detailed maps and driving directions to the trailhead. The write-ups are complete, giving details of mileage, elevation gain, and scenic highlights along the trail—all written in a sensitive, descriptive manner. The introduction is my conclusion: "Camping is simply a method of reaching the edges of adventure, of escaping from the rigors of the city into the boundless freedom of the outdoors."

An invaluable addition to your library of Mountaineer guidebooks.

— MARY JANE WARE

Footsore 1: Walks and Hikes around Puget Sound. Harvey Manning. The Mountaineers. \$5.95 (Paperback)

Harvey Manning in his *Footsore 1* demonstrates that there are many places in the Puget Sound area to enjoy an outdoor experience *without* spending considerable travel time in getting to a trailhead. For those who find themselves wanting to get out but having limited time, and for anyone who wants to explore Puget Sound, *Footsore* will be a welcome library addition.

The area covered by *Footsore 1* extends from the Sound east to North Bend and from Everett to Tacoma. Short walks, outings for an afternoon or an evening, as well as longer day hikes, are all included.

Seventy-seven specific places are discussed with many additional hiking possibilities listed along the way. Round trip mileage, elevation, time estimates, and indications of when the trail is snowfree are given for each. In addition, if the trail is accessible via public transportation, this information is there also.

Maps are included in the text. However, one would do well not to rely exclusively on the book's maps. One can get by with them, but most would feel more comfortable with other maps to supplement them, especially since the scale for the maps in the book is not always apparent.

This volume can be very helpful for families wanting to plan trips for members of various hiking abilities. Suggestions given will also be welcomed by those who want to take visitors on short trips to show them the beauties of the area. This book is small enough to be tucked into a day pack for easy reference or it can be placed in the car for those occasions when extra time is available for a short excursion.

The Footsore series is a sequel to Footloose around Puget Sound. Additional volumes will cover the area from Bellingham to Olympia and from the Olympic Peninsula to the Cascades... everything within an hour's drive from the major population centers of Puget Sound.

Footsore 1 is a good beginning. One can hardly wait for the other books in the series to be available.

-MARY ANN CAMERON

Packrat Papers. Volumes #1 & # 2. Betty Mueller, ed. \$3.95 each.

Mostly in Fun: Rhymes and Reflections on Outdoor Experiences.

Gordon Thomas. \$3.95. Signpost Publications (Paperback)

Even the most jaded backpacker will find these revised editions of the *Packrat Papers* useful and tonic. The two volumes are crowded with know-how contributed by many people and with information drawn from sources like the Forest Service.

The reader thus finds plenty of solid advice on the basics of outdoor craft: clothing, shelter, camp paraphernalia, etc. Volume 1 also includes an admirable selection on sewing, with general remarks on fabric and technique as well as fairly detailed patterns. Volume 2 contains a discussion of food and a generous helping of recipes that should please even cranky appetites. There is also a chapter on safety which, though not always detailed, at least touches all the bases, from hypothermia to bears. The volumes conclude with good, particular advice on how to lessen one's impact on the wilderness.

The packrat, magpie approach gives us a lot of information in a small space, but it has its drawbacks. There are some gaps in the presentation, some subjects are treated at much greater lengths than others, and there is some repetition. Also, certain items of equipment—Visklamps, Mt. McKinley tents, and meat bars, for example—

are mentioned, but not described, leaving newcomers in the dark. And such developments as Gore-Tex and nylon pile clothing are not discussed at all. However, these books are not really intended for people who outfit themselves by simply buying the latest, highest technology; the books are better suited for people who enjoy applying their own wit to the problems of wilderness travel and who find satisfaction in putting cast-off or humble things to new uses.

It is the *Packrat Papers* wealth of homespun technology, thought up by a whole tribe of outdoor people, that makes the books valuable. We read about making a two-headed poncho to wear when toting a child; about using carabiners to make emergency repairs of tire chains; about dosing oneself with vitamin B1 to repel insects; about plugging one's ears with beeswax in public campgrounds; about growing beansprouts on extended hikes; about turning old socks into new mittens. No single author could be so ingeniously helpful.

Another Signpost publication, *Mostly in Fun*, by Gordon Thomas, is a collection of light verse on "outdoor experiences" of every stripe, from bicycling to fishing. The poems are usually short, with fourbeat lines held together by simple rhyme schemes, and a rhythm that is as comfortable as a hiker's stride. Mr. Gordon's heart is in the right place, his poems are to the point, and they sometimes have a nice bite to them. The following is a fair example:

FUMING

A paddle powers my canoe And when ashore, I hike. To work and back and marketing I always use my bike.

I spend no cash on gasoline And don't pollute the air. But still I live with noise and fumes - The neighbors add my share.

-PATRICK SCHNEIDER

Make It and Take It. Homemade Gear for Camp and Trail. Russ Mohney. Pacific Search Press. \$4.95 (Paperback)

For the individual who has never made his own gear, this book offers a worthy introduction to do-it-yourself projects requiring minimal skill and easily obtained materials. The designs are simple and uncomplicated. Clear, uncluttered illustrations guide the novice through step-by-step instructions. Amusing cartoons frequently show the completed item in (mis-) use. There are 40 undertakings including: cookware items, fishing gear, traps for sea creatures, hiking and camping equipment, various carrying devices, and some miscellaneous items. Although most of the constructions would present little difficulty for the beginner, the most ambitious project, a backpack tent, may prove to be a demanding task for the novice sewer. Installation of zippers, and the handling of yards of bulky material require patience and deftness that may elude the beginner do-it-yourselfer.

Some "technical expertise" with certain tools would be helpful. Competence pounding a nail, using a screwdriver, soldering and operating a sewing machine would enable one to assemble every item in this volume. And for those who find using such tools beyond their realm, the author has provided a brief discussion on their use. Suggestions are also given on how to use materials obtained at little or no cost from sources such as the local Goodwill or some forgotten corner of the attic.

Due to the book's larger size ($8\frac{1}{2}$ " x 11") it lies flat when opened and could be easily used in the workshop. The type is reasonable, large and dark for ease of reading. Although there are no sophisticated designs in this volume, there are 40 easily made projects to launch the person with a thin pocketbook and a yearning to show his independence on the path of creating his own unique equipment.

-NORM KOSKY

Understanding Avalanches. Barbara Diltz-Siler. Signpost Publications. \$2.95 (Paperback)

Mushrooming popular enthusiasm for ski touring and snowshoeing and the resulting increase in avalanche accidents has created an urgent need for public education about this principal hazard of the western mountains in winter. Signpost Publications' answer is a 32-page paperback entitled *Understanding Avalanches* by Barbara Diltz-Siler. Drawn primarily from the experience and knowledge of snow rangers of the U. S. Forest Service, it warns and instructs winter mountain travelers about the particular avalanche hazards encountered in the Pacific coastal states, especially Washington. It is accurate, very up-to-date, and quite readable, a particular advantage

since those who need to know can quickly read it through. Given the book's conciseness, the intended level of knowledge is covered quite completely. The accident response chapter is excellent, although perhaps difficult to refer to quickly in an emergency. However, a wallet-sized card checklist for survivors can readily be prepared from it. Unfortunately omitted is any warning of blasting and artillery fire for avalanche control in the vicinity of all downhill ski areas.

A problem not unique to this book is a confusion about the audience. At some points the author seems to assume a reader barely willing and able to learn the minimum possible to ski or snowshoe safely, a reader who must be frightened into attention and given a set of rules to be followed obediently. At other points, the reader is taken to be a person with reasonable judgement, one who can be given general principles and background knowledge and plan a trip accordingly. While perhaps some of the former attitude is understandable, for anyone in the latter category, *Understanding Avalanches* offers the essential information. More serious winter climbers need the greater understanding available in certain of the references in the bibliography.

-ROGER ANDERSON

Snow. Ruth Kirk. William Morrow and Company, Inc. \$12.50 (Hardback)

Ruth Kirk's latest book is a grab bag: it makes no sustained argument, but simply collects together a great deal of interesting information about snow. This information is of four different kinds.

First, the book talks about the physics and chemistry of snow: its formation, its gradual transformation from airy flakes to glacial ice, its role in the comings and goings of ice ages, and so on.

Second, the book describes snow's effects on plants and animals, and these passages constitute some of the best parts of the book. Creatures as different as ladybugs and polar bears hibernate beneath snow, while voles and lemmings tunnel actively through it; worms thrive on algae that blooms on its surface, and all manner of plants are protected from freezing and drying by it and so continue to provide food for animals. Caribou, for instance, smell lichens beneath the snow and so know just where to dig. Far from being a menace,

snow enables boreal, polar and alpine plants and animals to survive their harsh climates.

Third, the book tells us about those human societies which have learned to thrive in snow. These peoples learned to make sleds and skis; to clothe themselves in pelts and fish skins; to master the niceties of polar bear hunting or reindeer herding. They even adapted to their environments physiologically: the fingers of Eskimos receive half again as much blood as our fingers, and so stay useful at lower temperatures.

Finally, the book tells the story of modern man's dealings with the snowy places of the earth. Exploration got under way in the 16th century and has continued to the present, and we read some exciting tales of heroism and hardship. However, the chief impetus for modern man's contact with the snowy parts of the earth have been economic, not scientific, and in pursuit of profit we have slaughtered, plundered and polluted with much vigor. We have never tried very hard to adapt to snow, as have other kinds of life and all less developed societies, but have preferred instead to shovel it aside whenever possible, or to ride rough-shod over the fragile environment it creates. The consequences have been mostly disastrous.

Sadly, this is the weakest part of the book. Ruth Kirk writes as ably and engagingly as ever, but she seldom takes hold of the prickly parts of her story. Today the threats to the snowy environment beggar everything that has gone before; but such issues are usually neglected in *Snow*. The reader would be served by a more critical book.

-PATRICK SCHNEIDER

Northwest Trees. Stephen F. Arno and Ramona P. Hammerly. The Mountaineers. \$5.95 (Paperback) \$30.00 (Hardback deluxe edition)

At last we have a good handbook which deals exclusively with the trees of our region. What's more, this is a beautiful book and a pleasure to read.

Stephen Arno, as in his previous writing on trees, blends scientific facts and historical information in a colorful narrative style to produce fascinating accounts of our forests. One learns that two Puget Sound communities have living grand fir Christmas trees over 100 feet tall—what evergreen can grow in a thin layer of soil on bed-

rock—what tree family inhabits every area of the Pacific North-west—what wood is so hard that Northwest Indians used it to split western red cedar.

The author is a forest ecologist who knows and loves trees. His admiration for his subject is matched by Ramona Hammerly's elegant ink drawings. These trees have sat for their portraits by this artist. In sharp and precise detail, she not only presents accurate renditions of their features, but manages to evoke their presence, their haunting dignity and a sense of permanence. Her full-page portraits of trees stand alone as works of art. Scattered throughout the text and providing a delightful bonus are many small pictures of tree details and of other wildlife.

It's not necessary to be a botanist to use the simple, clearly-illustrated key. Twenty-one conifers and 14 deciduous trees or tree families are discussed. Separate chapters on each tree describe its features, where and how it grows, and its past and present uses by man and wildlife. The area covered included Washington, southern British Columbia, northern Oregon and Idaho and northwestern Montana. A front endpaper gives a generalized view of this area, showing the main locations of the various species.

Chapters on wild fruit trees and naturalized trees are included in the book. Omitted are some of the smaller, shrub-like trees, limited in range, such as mountain mahogany and wax-myrtle.

Although both versions of this book contain the same information, the larger deluxe edition is the one to splurge on for esthetic enjoyment. The paperback is the one to take on outings. Either one is proof that a book need not be full of expensive color plates to be instructive and of excellent quality.

-EVELYN PEASLEE

The Audubon Society Field Guide to North American Birds. Western Region. Miklos D. F. Udvardy. Knopf, 1977. \$7.95 (Paperback)

You're out hiking and you've stopped for lunch beside a stream. There's a bird making a fuss in the alders overhead. You can see it on a high branch—it's about the size of a robin but it isn't one. It's mostly orange with black and white wings and it has black around the head. Its big beak gives it a top-heavy look.

You're always curious about birds, but so far you've resisted adding a bird book to your back. It means extra weight, and besides, by the

time you've thumbed through the whole book trying to find a picture to identify a bird, the one you're after has usually flown away.

This unique new field guide to birds west of the Rockies may be just the thing for you. The author is professor of biological science at California State University and the visual key was developed by Susan Rayfield, associate editor of Audubon Magazine. In most field guides of any importance, bird species are arranged by families, but this guide simplifies things by grouping them according to their appearance.

In a thick section of 627 color plates, birds are put into categories such as "long-legged waders," "duck-like birds." and "tree-climbing birds." Each category is identified by a typical silhouette, or symbol, which appears in a key and again as a thumbprint on the proper plates. In the case of the largest group, the songbirds or perching birds, the symbol is color-keyed to the bird's predominant color. Page numbers on the plates refer to the text, where each bird is described as to size, voice and appearance: its habitat, range and nesting habits are discussed, as well. Here the birds are grouped according to their main habitat so that one can learn what one might see in any of 14 different areas, from sea cliffs to upland tundra.

Appendices include a descriptive list of bird families, a brief glossary and a long list of picture credits. Most of the photographs are excellent, particularly those of water birds and of birds found in the open where lighting is no problem in photography. But the photographs of the small, brownish-greyish-greenish perching birds are no better than most and may lead to confusion. The color groupings are necessarily arbitrary and it is best to consult more than one color section for these often nondescript birds.

Another area of confusion might be in the habitat designations. The authors define the primary habitat of a species as the one where most observers encounter it. not its breeding area. Then they proceed to make exceptions to this rule without sufficient cross-indexing or explanation.

These objections will probably occur only to expert bird-watchers. For the outdoor person with a casual but genuine curiosity about wild birds, this book will prove to be a useful field guide. The western region extends from Alaska south to the Mexican border. A companion volume covers the area east of the Bockies.

Bound in soft red leather and printed on fine paper, this book is

a bargain at the price. It measures $7\frac{1}{2}$ " x 4", weighs 18 ounces, and fits handily into any pack.

-EVELYN PEASLEE

Little Mammals of the Pacific Northwest. Ellen Kritzman. Pacific Search Press. \$5.95 (Paperback)

Small mammals have long been a neglected part of the fauna of the Pacific Northwest. Although they are far more abundant than birds in most habitats, mammals tend to be secretive and thus much more difficult to observe. A good book, written for the weekend naturalist, describing the life histories of small mammals and their important roles in the ecosystem has long been needed. Unfortunately, Little Mammals of the Pacific Northwest, does not appear to be that long-awaited book.

One serious omission of the book is that it does not impart any advice on how to observe or study small mammals. Also, it only lightly touches on the relationships of small mammals with man and with other animals.

As the introduction states, the "little mammals" alluded to in the title are the members of three orders of mammals: the insectivores (shrews and moles): lagomorphs (rabbits, hares, and pikas); and rodents (rats, mice, squirrels, and their relatives). Members of these groups range in size from the pygmy shrew, weighing about one-quarter ounce to the American beaver of approximately 40 pounds. Other mammals falling in this size range, but *not* covered in this book are the bats, weasels, martins, otters, skunks, and the raccoon and oppossum.

After the very short introductory chapters, the book plunges into species descriptions arranged into 12, somewhat arbitrary habitat types. A given species is described in the habitat section in which it is most often found, and it is also listed at the back of other habitat sections which it also frequents. Since there are so many habitats described and many species are found in several habitats, the result is that most chapters describe only three or four mammals, while they list many more. Mammal groups are also mixed up, so that the descriptions of the Merriam shrew, the white-tailed jackrabbit, and the Townsend ground squirrel are placed next to each other. This organizational format, coupled with the fact that many species are

not illustrated, makes this book very difficult to use as an identification guide.

As not that much is known about each species, the text is often limited to describing the animal's appearance and where it is found. Perhaps a better organizational scheme would have been to describe the life history and environmental requirements of each major group (such as shrews), followed by descriptions, drawings, and specific information on each species. At the end of the book there could be a description of each habitat, followed by a list of the species found there, and page references to the text.

It is difficult to tell what kind of reader this book was written for. Much of the text is written in a very casual, conversational tone; for instance, it describes a mountain beaver as "reminiscent of a muskrat that has lost its tail through misadventure". At the same time, however, it uses terminology such as "riparian habitats", "aestivate", and "Hudsonian life zone" with little or no explanation. Ranges on the distribution maps are indexed by the scientific name of the animal only, while the text mainly uses common names.

Perhaps a redeeming feature of *Little Mammals of the Pacific Northwest* is its list of references, which one could consult to find a better book.

- JANET M. WALL

Common Seaweeds of the Pacific Coast. J. Robert Waaland. Pacific Search Press. \$5.95 (Paperback)

Common they certainly are, the weeds of the sea. But not commonly known. The average beach stroller and tide pool prober can readily identify only kelp, even though our beaches are littered with many species of seaweed after storms. Few other areas in the world rival the Pacific Northwest in number of species of marine algae (a more accurate term for seaweed) and in prolific growth.

The author of this comprehensive guide to seaweeds, answers more questions than most people know enough to ask. J. R. Waaland, an associate professor of marine botany at the University of Washington, also teaches at the University's Friday Harbor Laboratories.

His book is not merely an identification "key," for 61 common species of Pacific Coast seaweeds; it also puts seaweeds into proper botanical perspective, relating them to land plants, discussing their

structure, their industrial uses, the interaction of algae and animals, and much more.

The text is scholarly enough to reward the "hipboot biologist", readable enough to be understood by the amateur beachcomber of tidal treasures. Sixteen pages of excellent color photographs will send you racing for the shore, eager to see the seaweeds in their natural habitat. Every species described is illustrated with either a sketch (by the author or illustrator Luann Bice) or with one of the author's unusually clear and beautiful color photographs. A map reveals exactly which beaches, from British Columbia down to central California, yield the best crop of algae, and charts of both littoral and subtidal zones pinpoint the location of different species.

Although seaweed will never be more than a culinary curiosity for most Americans, Waaland includes a brief section of seaweed recipes and mentions edibility and preparation hints throughout the text. Some information on Eskimo and Indian use of seaweeds would have added interest.

One is much more likely, however, to use this book to satisfy a mental hunger, a need to know. The author has a final word: Look, don't loot. That warning might well have come in a preface, given the condition of many popular beaches—ecological disaster areas as a result of what the author calls "the trample effect." Even the cautious can destroy fragile beach organisms.

Seaweeds broken loose from their holdfasts during storms and washed ashore are fair game, though, useful for food (if fresh), fertilizer and mulch. The time to go is now—spring and summer are the best seaweed seasons. Double your beach pleasures by viewing with a knowledgeable eye.

—ANN SALING

Messages from the Shore. Victor B. Scheffer. Pacific Search Press. \$8.95 (Paperback)

Teeming with ideas expressed in a smooth, swept-clean prose style, *Messages from the Shore* is the work of a man of consummate skills. Victor B. Scheffer brings to this work a lifetime of experience as a naturalist and professor of zoology, as a photographer, and as a prize-winning author. Most precious of all, he conveys that sense of wonder which enlivens the senses and quickens the mind.

In a series of ten photo-essays, Mr. Scheffer addresses himself to the

question of why the ocean beach holds an eternal fascination for humankind. The clean and diverse beauty of the seabeach is captured in 47 superb color photos showing patterns of wave-sorted cobbles, wave-polished agates, and wave-etched sands that are reminiscent of the paintings of Mark Tobey, and of the sculpture of Aristide Maillol.

This book would make an enchanting gift for anyone who loves the ocean beach, for whatever reason. For *Messages from the Shore* is much more than just a beautifully illustrated book. It is a highly personal work, quick with immediacy and joy. It leaves the reader with the pleasant sensation of having spent a soothing yet stimulating afternoon exploring the tidal zone under the guidance of an urbane, sensitive, and versatile savant—with, in fact, Mr. Scheffer himself. This is a very special book.

-DINA CHYBINSKI

Sleek and Savage: North America's Weasel Family. Delphine Haley. Pacific Search Press. \$5.50 (Paperback)

Some mustelids are neither sleek nor savage: however, this wonderful title refers to the svelte and sinister mink, marten, fisher and weasel/ermine for whom silkiness is only skin deep. To quote Ms. Haley: "Tooth for tooth and ounce, the weasel is the fiercest and most efficient predator in the mammal world. If this creature were as large as a cougar, nobody would dare to venture out of doors."

Loaded with zesty information, this sleek and lightweight volume would make entertaining backpack reading. Illustrated with 50 clear and zingy photos (nearly half in color), plus line drawings and range maps, *Sleek and Savage* could also prove useful in the wild, for ready reference. The pine marten is occasionally seen above timberline on Mt. Rainier and in the Olympics ("attracted by shiny or tinkly objects, or cheap perfume"). River otters are not uncommon on the San Juan islands and along the ocean strip. And several years ago two climbing parties gave up an ascent of Mt. Stuart when their way was blocked by a grotesquely unsleek - but distinctly savage - animal, probably a wolverine.

-DINA CHYBINSKI

IN MEMORIAM

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Olympics, Puget Sound

(Susan Marsh)

MOUNTAINEERS GOOD NIGHT SONG

Though like a wanderer, The sun gone down, Darkness be over me, My rest a stone.

Still in my dreams I'll be Nearer my God to Thee, Nearer my God to Thee, Nearer to Thee.

Good night, we must part, God keep watch, o'er us all, where we go. Till we meet, once again, Good Night!

Have you seen these other Mountaineer books?

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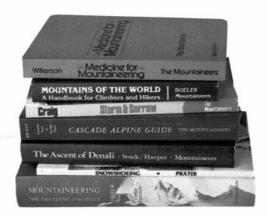
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