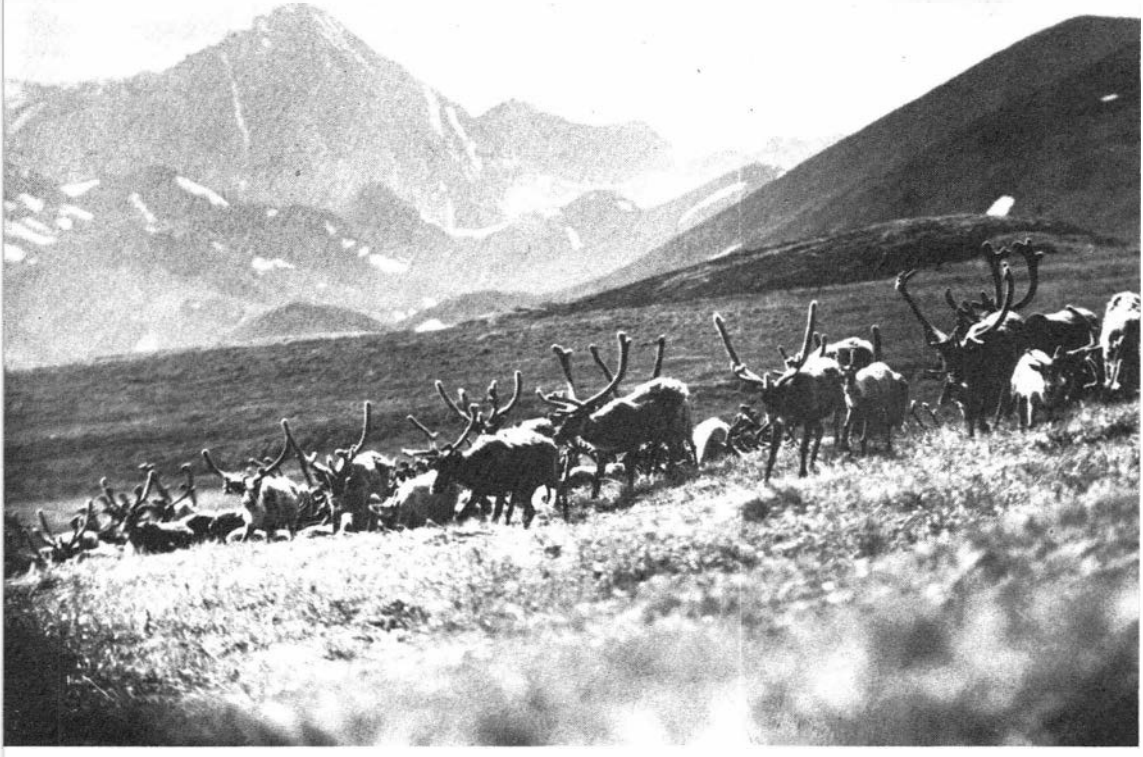
The Mountaineer



The Mountaineer

1970

Cover Photo: Caribou on the move in the Arctic Wildlife Range—Wilbur M. Mills

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The Mountaineers

To explore and study the mountains, forests, and watercourses of the Northwest;

To gather into permanent form the history and traditions of this region;

To preserve by the encouragement of protective legislation or otherwise the natural beauty of Northwest America;

To make expeditions into these regions in fulfillment of the above purposes;

To encourage a spirit of good fellowship among all lovers of outdoor life.

Fireweed (Epilobium angustifolium) is the Yukon Territorial Flower—Mickey Lammers

The Mountaineer

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CONTENTS

Yukon Days

By JOHN LAMMERS

The sun barely rises above the horizon and the days are cold, so cold that your breath hisses when it leaves your mouth in a great plume, seemingly quite out of proportion to the air you exhale. The smoke from the cabin chimney goes straight up and all is still and pure. The Whiskeyjacks are not very lively. They try to make use of even the slightest difference in temperature and sit on the low branches of the aspen in front of the riverbank to catch the rays of the sun. Dozing, they resemble furry balls, only tails and primary feathers protruding, white hoarfrost rimming their heads. Only the chickadees are active all day long, feverishly gathering food to fuel their quicker metabolism.

The river continues to drop, and the ice, descending with the water level, gives great thunderclaps as it cracks when buckling downward under its own weight.

Then the cold begins to let up a little; the ravens, more active now, punctuate their patrols up and down the river with many raucus calls. Once in a while in the middle of the day, they forget themselves by prematurely giving the tinkling mating song that sounds like icicles falling on a frozen surface. Crossbills, waxwings and grosbeaks begin to make their slow, tree to tree swing through the coniferous forests North.

There comes a day in March when the sun has a little warmth to it, and the brown of the foothills is shining through the white here and there when we say, "Hush," and listen. From across the river comes the sound of a small motor starting up, slowly at first, then accelerating to an abrupt stop; a ruffed grouse drumming . . . . soon answered by another downstream. And in the early mornings when the hillsides are still veiled in mist the faint hoots of the sharp-tailed grouse mating dance drifts down to us from the higher elevations. Soon the drumming goes on day and night as life is awakening to the call of early spring.

There is snow on the ledges of the rock bluffs on the shadow-side where the golden eagle nest is, a great mass of

branches in a strategic spot. One sunny afternoon we see the eagles back from the coast doing their acrobatics on the air currents around mountainsides and sparring with each other. We watch the nest; the eagles are inspecting it, each sitting on one side, then staring out in our direction, then bending over into it and straightening out its furniture. We now keep daily watch to see their progress.

The snow on the hillsides melts still more and wildflowers pop up almost overnight, pasqueflowers first, rapidly dotting open spots. During the daytime warm breezes turn the river ice into a watery blue and open leads begin to form where the current skirts the cutbanks and sandbars. Snow buntings in shiny white flocks and all kinds of sparrows in disjointed bands flit everywhere; yellowshafted flickers serenade us in the mornings with a tattoo on the cabin roof re-establishing the territory of their nesting area in the hollow aspens on the island. We hope that the mountain bluebirds will make up their minds about the nest box on the antenna pole before the tree swallows arrive and chase them off. Any day now someone will come home with reports of fresh tracks of a bear chased out of his den by pangs of hunger and a dripping roof . . . . Mourning cloak butterflies which overwinter as adults dance through the days.

Then comes May with the great migration and spring symphony. Robins return in number to sing their hearts out while building nests; woodpeckers ratatat wherever they find a vibrating branch handy; frogs hold nightly concerts in the shallow ponds back of the sloughs while grouse provide background drums.

Overhead, huge flocks of lesser sandhill cranes wheel in the thermal currents to gain altitude, filling the air with their raucous call. When they reach altitude the leader gives a longer, whistling sound and the circling birds form a long vee as if pulled by an invisible string, wings spread out rigidly, slowly gliding to the next updraft to repeat their performance. At night they plane down for a rest on the sandbars where they stand on one leg, head tucked in wings, like some giant grey plants, occasionally breaking out in excited spurts of sound when something alarms them. Geese, ducks and swan come in for brief rests in the ponds on the riverbars or in the sloughs and sometimes stay over for a few days. The eagles have decorated the rim of their nest with fresh spruceboughs, a sure sign that they are seriously planning a family.

Tree and violet-green swallows congregate on the antenna wire and succeed in driving away the bluebirds again; all kinds of sparrows are furtively rustling around in the undergrowth trying to hide their nesting activities on the forest floor. At dusk the hermit thrush sounds its mysterious little note.

Then the creeks have gathered enough meltwater from the hills to overflow their banks and, pouring into the river, lift up the icesheet, breaking it up and sending it crashing down the valley, jamming, causing the water to rise, the pressure breaking the jam, rushing downstream again and jamming once more until the whole valley has flushed itself and the river again runs free. Then the boats come out and summer has begun.

Now the warm weather starts in earnest. The little creeks become torrents and soon the river rises, filling every slough and channel with silt-laden water, constantly picking up logs and deadwood from upstream only to deposit it again on a bend or back-eddy lower down, scouring the riverbars clean, undercutting the banks until moss hangs over the edges in great blankets, sending large pieces of soil with trees still rooted in them perpendicularly down the silt-bluffs to be washed clean in the flood. The trees, exposed roots sticking up like masts, are like strange vessels set adrift to sail the river until they too run aground, to lay the foundation for a new driftpile.

The aspens burst into leaf almost overnight and on the now bare hillsides large patches of vivid colour betray the blooming of many alpine flowers. In the valley wild roses are in bloom everywhere. An odd grouse family with many chicks gives itself away by mother's anxious clucking and on the Yukon a moose and calf swim the river just when we pass by. The eagles are taking turns on the nest; it is hot in the sun's reflection off the rockface. They seem to be hunting more actively, following the contours of the hills, close to the ground, their shadows racing ahead of them; the piercing call of ground squirrels—their prey—sometimes drifting down to us. Then two little white spooks show over the edge of the nest—eaglets—and the same day we see the parents bringing home leafy aspen branches to put up a fence and provide shade.

Now it is time again for the drama of the salmon migration, when the king salmon come all the way from the Bering Sea, back to the rivers and creeks where they first saw life, to spawn. The sun is already past its highest point of the summer solstice but the nights are still so short that it seems to be light all the time. Young birds are everywhere, accompanied by anxious

Center and right: *Pasque Flower* (*Pulsatilla ludoviciana*); *left*: *Lungwort* (*Mertensia paniculata*); *top center*: *Anemone* (*Anemone multifida*)—*Mickey Lammers*

parents; fat young robin youngsters scream for attention and the nest tree of the flickers erupts in an angry buzzing when we approach and scratch at it, but three hungry youngsters crane their necks out of the hole when mother approaches. Wild strawberries are ripe and we see a porcupine, earnestly and delicately sucking the little fruits off their stems.

The eagles have grown up to awkward fledglings precariously wobbling around in the nest while the parents are foraging far and wide to still their huge appetites. The parents fly in low, under the brow of the hill so as not to show against the sky and give away their secret, then glide upward to land on the nest. The young scramble impatiently while the prey is torn apart; a quick rearrangement of the nest, a long staring look in our direction, and away again for more food.

One day the nest is deserted, and we know the season is beginning to draw to a close. It is only the middle of August but the days are taking on the transparency of autumn and the leaves are of a different hue, still green but no longer the green of summer. The swallows again sit on our antenna wire, now with their young, and are gone soon after. Nighthawks give their aerial displays at dusk, together with sound effects, and the kestrels and their young are feasting on grasshoppers in the short dry grass of the lower hillsides and in the meadows. Cranberries, currants and rosehips are ready to be picked for jams and jellies; soon a frost will kill the last flowers.

Then one day, fall has come. The aspens in the valleys and in the draws are a palette of colour, gold and red contrast with the dark green of pine and spruce, the violet of distant hills, and the blue sky. Interspersed by flocks of sandhill cranes all the spring travelers of just a few short months ago are on their return journey, now with their families. Juncos, warblers, thrushes and sparrows all travel through in a steady procession, accompanied by the small predatory birds who prey on them enroute. The young eagles are learning to fly, always late, and lounge on the river bars where they find an easy meal of dead salmon that were left there by the falling water after they spawned.

Bull moose begin coming down from their summer grounds at the higher elevations and now frequent the valleys, swimming from island to island in search of a mate. Grizzlies are feasting on salmon in the sloughs and black bear forage berries in the underbrush.

Around the cabin a family of sharptailed grouse, the chicks as big as the mother, never seems to run out of things to peck at

and they stay in touch with each other by an infinitely sweet flute-like song, initiated by one and repeated by each in turn. In the background at regular intervals there is the thrilling sound of flocks of southward bound sandhill cranes, and the abrupt call of geese, but the great migration is petering out and soon only occasional stragglers are coming through.

A killing frost takes care of whatever green was still alive; the nights are almost all below freezing and ice begins to form, slowly at first, in the sloughs and along the shores. With the first snow drift ice will be coming down the river. Northern lights draw their streamers across the skies and one night our Siberian lifts his head dreamily when a wolf howls on the ridge behind the the cabin. The next morning we see in the snow where the wolf sat on his haunches surveying our habitat; where he went down the trail there is a series of huge footprints.

The river steams, as the difference between water and air temperature is still great, and the slowly turning floes grate their way downstream, building white ridges of pulverized ice on their perimeter, gradually becoming round like giant lilypads. The trees are covered with thick hoarfrost and the early morning sun shinning through the veils of mist transforms the landscape into a fairyland, every ice crystal a rainbow, to the steady rustling and sliding background noise of the ice floes gliding by.

Then, one morning we wake up and the river is quiet. The floes have ceased to move and, tightly packed, have filled up the channel. Soon we shall be able to walk on the river again and for many months few people will know the stillness and beauty of the Yukon wilderness.

We have trouble pinpointing our location for people. When we say we live in the Yukon the reaction quite often is "Ahh, Alaska!" or "Oh, yes, the Northwest Territories!" The truth lies in the middle; the Yukon or "Yukon Territory" is situated exactly between the Northwest Territories and Alaska. But relatively easy as this explanation may be to the geographically wise, it is more difficult to enlighten others who react to the word Yukon with a mixture of "North," "Arctic," "Northland," followed quickly by "barrens," "Igloos," and the inevitable statement: "It must be cold up there . . . ."

Well, yes, sometimes it is. Just now when I am writing this, where we live in the central Yukon, it is 66° Fahrenheit below zero and that is cold indeed. But in the feeder just outside the window, two chickadees are busily eating their "low temp" diet, ground walnut meat. That way they don't have to hack away at large

chunks but can eat bite-size morsels; they don't get cold feet that way. But, with or without the feeder, they survive.

To get back to our subject, to us the Yukon is "North" and "North" is the Yukon. When someone says "Arctic" we think—at leâst in the Yukon—of a really quite small area that lies in a narrow strip bordering the Beaufort Sea to the North of the Territory, the same narrow strip which also contains the only Arctic tundra we have. The other type, called "mountain tundra" can be found at the higher elevations throughout the Territory. For the purpose of this article we are dealing with the Yukon Territory only and when I say "the Yukon" I mean the Yukon Territory unless, to make it easy, I'm talking about the Yukon River.

The Yukon is probably the least widely known and ecologically understood area in the North. Almost everyone has a fairly accurate picture of the large area of arctic tundra lying to the North of the Eastern provinces and of the Arctic Islands together together called "eastern Arctic", and associates them correctly with snow and ice, icebergs, whales, polar bears, igloos and the like. But the Yukon, where these things are not found at all, they just don't "dig."

What many people DO know about the Yukon is the result of the hordes of gold seekers that clawed their way into it at the turn of the century. With almost no exception the literature produced after the gold rush deals only with the more sensational and gaudy aspects of human behavior at that time of mass greed. It fails miserably in describing the great beauty and natural diversity of the country and the serenity and sense of well-being it produces in those who live in it or, I should say, have learned to live with it.

By and large the news media continue to propagate the gold rush aspects of the Yukon, and lately the oil and mineral stampede in progress, both of which are strictly short-term financial gain projects, a rape of the country, ignoring all other values.

THE COUNTRY

The Yukon is a land of infinite variety. Within its boundaries it contains the headwaters and major tributaries of the Yukon River, cutting their way through a mountainous landscape. There are many lakes, large and small, the greatest number to be found in the Territory's south. With the exception of the tundra, the dry grassy plains of the interior and swampy lowlands, most of the

Yukon is forested with a mixture of coniferous and deciduous trees such as lodgepole pine, white and black spruce, balsam fir, trembling aspen, balsam poplar, alder, birch and many species of willow.

Its flora is quite extensive, with numerous species that begin flowering at the first moment in spring when the sun is warm enough to create hothouse conditions under the snow. Fauna also is extremely varied from the smallest overwintering mammal (pigmy shrew) and bird (boreal chickadee) to moose and grizzly. Yearly runs of king and chum salmon still come up the Yukon River all the way from its mouth at the Bering Sea, 2,500 miles away, to spawn in the Yukon. The lakes and rivers, by and large, still abound with fish such as lake trout, whitefish and grayling. For the main part waters are unpolluted, so that the canoeist merely has to reach over the gunwhale with his cup to get a lovely drink of clean water.

The climate, while certainly cold in winter, is not as harsh or inhospitable as is generally believed, but only if one is prepared to anticipate its whims. Being a semi-arid land climate, the summers usually are hot (frequently in the 90's in the central Yukon) and dry (yearly precipitation ten to twelve inches), and the winters cold with an average snowfall of only two feet. In the interior, at least, winds usually are light, especially during periods of extreme cold, and blizzards of the prairie or midwest type are virtually unknown.

The difference in altitude and latitude throughout the territory and conditions of exposure to sunlight create a wide variety of sub-climates throughout the region. This explains partly why in the Southern part of the Yukon the average frost-free period is 45 days or less while in central regions farther North it may amount to an average of 75 days. At our location, 1969 had 27 while 1967 had no less than 117 frost-free days.

Certain lakes or rivers may be quite warm enough to swim in at the height of summer while others (the majority) are so cold that a short immersion is sufficient to bring death from exposure although the weather at the time may be "hot" and the landscape may make an impression similar to that of a warm Southern climate.

In certain areas—mostly depending on soil type and exposure, with exposure really being the more important of the two—kitchen gardens can be grown quite successfully with a surprising variety of vegetables. Even farm crops such as grains can be matured in certain areas, though by no means as a rule. It must

be understood that the climate of the southern and interior Yukon can be termed "quite habitable" and "productive" in the sense of the southern connotation of these things only if one is prepared to take the ups and downs of the climate as they come, the downs being in the majority, both literally and figuratively speaking.

To take the Yukon land or climate as being inducive to and capable of sustained productivity of products that require cultivation by man is a mistake. Where the winter may not be always extremely cold, even by more Southern standards, it is long. The climate is so dry that in places there are semi-deserts. Soil building activity therefore is extremely slow. It is probably true that in many areas all available nutrients in the soil are taken up by the vegetation cover. Hence, this cover, once destroyed either by man or fire may not regenerate for a very long time indeed. Reappearance of this cover or whatever succeeds it will have to keep pace with the extremely slow, largely bacteriological processes that manufacture plant nutrients in the soil. This is why it is said that the ecology in the North is fragile and sensitive. Undisturbed ecosystems are capable of maintaining groundcover which sustains a surprising number of animals whose populations are in balance and ebb and flow with the cycles that govern them. However, even the slightest disturbance by man in such a country has great consequences.

To picture the Yukon, as is often done, as a rugged country is completely incorrect. The country is fragile and delicate, yet it also is friendly to the sensitive resident or visitor. The term "rugged" perhaps should apply to those who derive a feeling of well-being from living in it, but then only in the sense of being experienced in dealing with the moods of the climate and the capability of living with it rather than against it. To me there is no place where the unity between man and nature becomes more palpable than in the Yukon. It is difficult to explain why, but the expression "the spell of the Yukon" is very apt to describe the feeling and seems to belong to this northern country.

Perhaps the profound impression this country makes on the sensitive human being who finds himself in it either as a permanent dweller or a casual visitor is brought on by its loneliness. Not a loneliness in terms of what one feels in the middle of a crowd to which one cannot relate, but a loneliness that seems to bring about an immersion in surrounding nature and a corresponding insight into our affinity with it. Robert Service, as crude

as some of his rhymes may be, struck a very sensitive note when he wrote "the Spell of the Yukon," saying:

> Have you ever been out in the great alone
> when the moon was awful near
> And the icy mountains hemmed you in
> with a silence you 'most could hear

In the middle of winter, when it is cold—not the smelly soggy somehow dishonest biting chill of winter in the city, but a clear straightforward cold in an almost glassy atmosphere with azure sky and radiant sun—it is glorious to walk on pure snow and watch the sun, low on the horizon, create delicate shades of colour at every variation of the landscape. Early in the afternoon the lower elevations of the mountains turn a mysterious purple leaving the higher reaches bathed in a delicate shade of pink that slowly recedes to the top, allowing the first stars to show in a darkening sky. When the full moon comes up over the rim, transforming the landscape into a hushed pale fairyland where the strong contrasts of the day have been washed out and the cold closes in around one's body with an almost physical presence, only the very insensitive will fail to get at least a glimpse of understanding that man is indeed but a very small quantity in the overall scheme of things. When a wolf howls in the slough downriver and howls again and again at his own echo returning from the hills, man has heard the essence of wilderness.

HISTORY

Very little is really known about the history of the Yukon. Its early days are lost in some sketchy knowledge and conjecture derived from archeological research. There seems to have been a West-East movement of people thousands of years ago across the Bering Sea from Eastern Asia, perhaps via a then existing land bridge, into what is now called Alaska, from there spreading over this continent.

Settlement of the North (mainly Alaska and that part of the Pacific Coast now called the Alaska Panhandle) by white men probably began first with Russian traders in fairly recent times, in the same West-East fashion. White settlement from the East probably commenced as the Hudson's Bay Company's quest for fur finally brought Robert Campbell into the Yukon on his historic voyage down the Pelly to its confluence with the Yukon River in 1843.

Some say that there are indications of Russian traders having been in the interior Yukon before that time. Campbell's fur trade with the interior Indians disrupted their existing trade patterns with the Coast Indians to such an extent that the latter in 1852 burned down Campbell's post at the confluence of the Yukon and Pelly. Campbell got away unharmed but the post was not re-established.

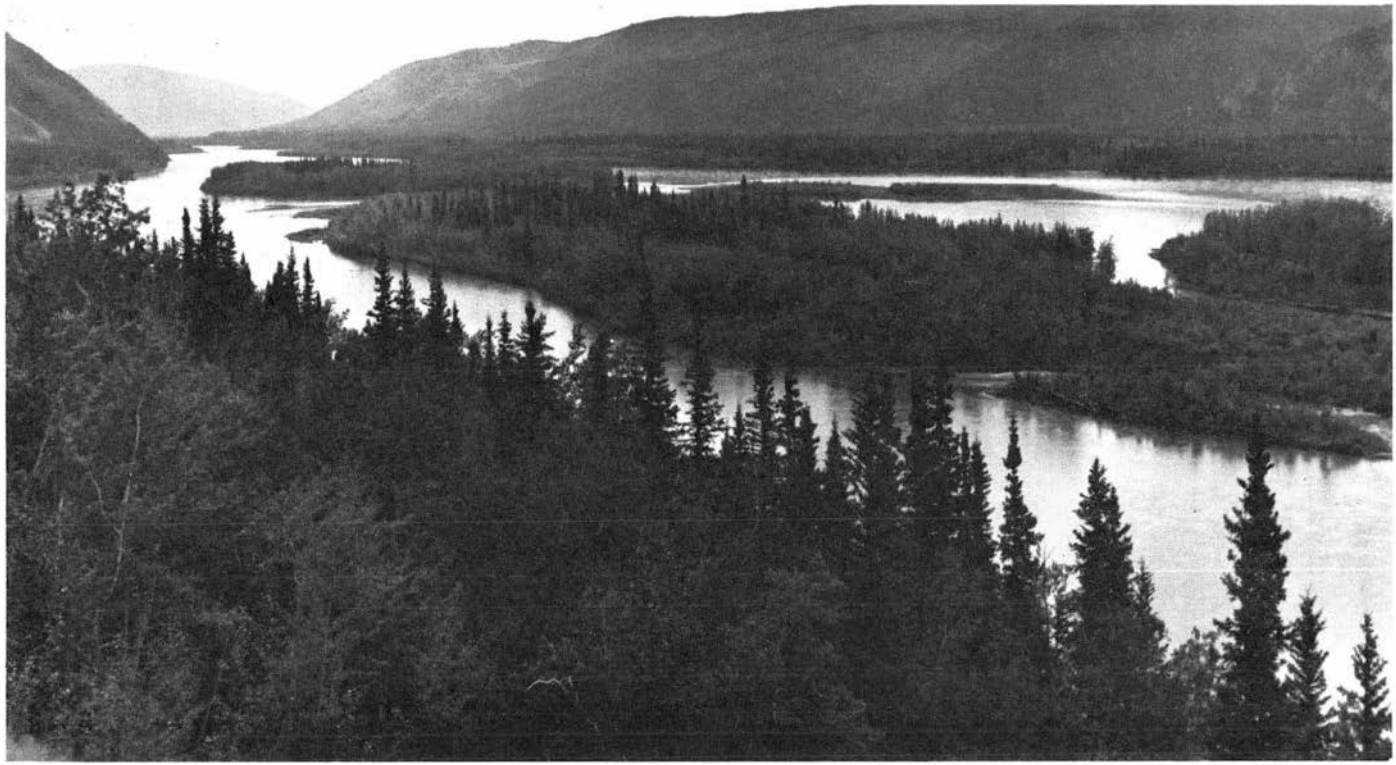
Little appears to be known of life in the Yukon between that time and the '98 Klondike gold rush. It seems almost certain that white men slowly moved into the interior by way of rivers. Campbell mentions in his diary as early as 1853, that steamers ascended the Yukon River for a distance of 1,200 miles from its mouth on the Bering Sea to Fort Yukon, only 200 miles short of the present Alaska-Yukon border.

Two well-documented reconnaissances were made of the major Yukon rivers, Schwatka in 1883 and Dawson in 1887, both of whom mention meeting white men who lived among the Indian population which was then chiefly found along the river banks. By 1880 probably a fair number of propectors could be numbered among them as it is known that on the Stewart River, between 1880 and 1885, gold was being recovered from the river bars.

But when gold was found in quantity in the Klondike at the end of the 19th century, the gold rush that followed shattered the comparatively placid life that went on before as thousands of fortune seekers swarmed into the territory from all directions, chiefly from the South via the Chilkoot and White Pass trail.

In the years following they explored large parts of the Territory so thoroughly that signs of their presence can be found in the most remote places, astonishing when one considers the tremendous transportation problems they faced and their lack of the vast technological support man now requires to survive in less remote areas.

In the years that followed a narrow-gauge railroad was hacked out of the coastal mountains from Skagway to Whitehorse at the head of the navigable part of the Yukon River, a distance of some 100 miles from tidewater which the first gold seekers had to walk at the peril of their lives. Large sternwheelers with supplies first came all the way up the Yukon from the Bering Sea, to be replaced by similar locally built boats operating from Whitehorse when the White Pass railroad was in operation offering a shorter and cheaper route. In a few years time the riverboats plied all navigable waters in the Territory and the rivers became its veritable highways. Many settlements, large and small, sprang up



Yukon River near White River—John Lammers

along the riverbanks and Dawson, then the capital, in the heart of the goldfields was a truly swinging town.

In winter, when the rivers were frozen, some overland transportation was needed and first this took place on the river-ice where possible, but soon winter roads were cut through the forests and horse-drawn sleighs hauled passengers, freight, and the all-important mail during the cold winter months. The best known is probably the Dawson trail, all the way from Whitehorse to Dawson. Stretches of this trail (for the larger part abandoned in 1924) are still quite visible and here and there even passable, in itself an indication of the extremely slow growth in this country.

Roadhouses were kept in operation every twenty miles for a change of horses and to accommodate passengers. With few exceptions the roadhouses have collapsed as have practically all the log buildings of the oldtimers along the trails and the rivers. Some may barely have the walls standing, the sod roof collapsed on the long rotten floor inside. Here and there a milepost is still defying the elements along the trail, but so rotten at its base that a light touch will topple it. Bear and moose have taken over suitable parts of the trail as their private highways.

And that was the way the gold rush went. It was another classical example of the utter folly of short-term exploitation of a single natural resource.

The best gold claims were soon depleted and when the dreams of overnight riches began to pale, people left the Territory, no longer impressed enough to endure the hardships. On the lesser grounds, gold mining activities, now with more refined methods such as water power and giant dredges, were still taking place—mostly financed by companies with capital—but the fever was gone.

Trapping was a flourishing trade; "meat-hunters" shot moose and caribou to feed the settlements. The cutting and transportation of firewood for the steamers and settlements was a major industry. By and large, the Indian population also was well occupied with these endeavours, in a manner most suited to their traditional way of life.

The country settled into a period of quiet which by many still is remembered with nostalgia. From the accounts one hears, even the depression was not the scourge it was everywhere else; nobody was getting rich but then, nobody was very poor either. Life along the rivers was lived with the seasons and the coming and going of the riverboats and the wood rafts. By and large

everyone knew everyone else and people did not bother locking their doors at night or, indeed, anytime. Private property was scrupulously respected.

Then came World War II and the Alaska Highway, in one major stroke completely altering the character of the country and spelling doom for a way of life, having particularly serious consequences for the Indian people.

In the Southern part of the Territory the bulldozers quickly ripped their indiscriminate way through virgin territory and opened it up, in one short year, for easy access overland. Soon after, another road to the interior, from Whitehorse to Dawson, was constructed and truck traffic began to replace river transportation. Within a few years time a general decline in activity began in the river settlements; they finally became depressed areas and were vacated one after another. Only a few hardy souls required by lonely placer miners, exploration parties or others like themselves.

The advent of the highways, the decline of the river-based economy plus the influx of a different breed of settler brought with it a decline in the existing social and economic patterns which set the post-war era completely apart from what went on before. The onslaught of modern technology, the decline of the fur trade through increased use of synthetics and of fur ranches, and the coming of people even less prepared to live with the country than the previous gold seekers—but even more desiring to subdue it quickly—created no end of problems for the Indian population. Any ethnic group or culture subjected to the upheavals that took place and were in unbelievable contrast to its previous way of life would find itself in deep trouble. It is well to remember this and think kindly of those who were affected by circumstances not of their making.

Those of us who live in this country and are sensitive to its well-being, experience—be it in a much smaller way—some of the feelings of despair, hopelessness and insecurity in the face of the present worldwide environmental devastation as the indigenous people of the Yukon faced when their world collapsed in the forties.

GOVERNMENT

The political status of the Yukon is much misunderstood. Firstly, it is a Territory, not a province. This means that, whereas a province has self-government and controls its own resources,

the Yukon does not. Its resources are controlled and governed by the Federal government in Ottawa, not by the Territory's residents. Decisions concerning the Yukon's resources—which may deal with small matters such as the sale of building lots, to all-encompassing ones as hydro-power dams, gas and oil leases, mineral claims and timber leases—are handed down from distant Ottawa to the Territorial administration located in Whitehorse, the Yukon's capital. The administration is headed by a commissioner who is appointed by Ottawa and acts as its representative *in situ*. There is a seven man Territorial Council but, although its members are duly elected by Yukon residents, their powers for all practical purposes are nil, except in routine day to day affairs. Even then the government can override their decisions if it so chooses. They cannot influence resource or environmental matters since in the majority of cases they are not even informed of Ottawa's planning or policies until well after these have taken effect.

The Yukon elects one Member of Parliment (M.P.) whenever there is a general election. His influence is of a political nature only, however, and is aligned with the policy of his political party.

It is a moot point whether this type of paternalistic government by remote control is good or bad. The "remote" aspects probably are not good. Decisions made in ivory towers in Ottawa, often by people with only a fleeting knowledge of the territory gathered by occasional short visits by air, can hardly be conducive to results closely adapted to the country's characteristics or subtleties, both in an ecological and economical sense. Such decisions more often than not lack a concern for the land and sometimes even for its people. This concern and deep understanding can only spring from long and intimate association. But there are hopeful—though small—signs that Ottawa may be in the process of lending at least an occasional ear to "grass roots" concern in that area with which I am mostly concerned: environmental quality and management.

It is by no means certain that, more democractic or not, the Yukon's environment would fare better at the hands of local politicians if they had the power of their contemporaries in the provinces. The Yukon's 207,000 square miles (twice the State of Colorado) harbour only a scant 18,000 people, a large number of which (one-half to one-third) can be termed transient, with a two to three year turnover. It is well saturated with an exploitation mentality which is aided and abetted by government and local commercial interests. The conservation ethic or, better, "land-ethic" does not find much fertile soil here. There is no apparent desire to take care of the land and what lives on and off it; the

atmosphere is pretty well one of usage, and the quicker the money rolls in, the better.

So, although this "colonial" type government is quite obnoxious at time, in the long run Ottawa's reign may well be kinder, ecologically speaking, than what a small, local, exploitative population would produce. Ottawa states that it is developing the North for "all of Canada." It stands to reason then that it will react more to pressure brought to bear by the public in "all of Canada" than a local Yukon government would. This is why it is so extremely important that organizations in the conservation field in the rest of Canada become fully informed about what goes on in their North and make sure that it becomes part of their overall fight.

Two areas of government where the elected men of Territorial Council have authority, or are said to have authority, are "tourism" and "game." But the funds for their administration —quite insufficient—are allotted by Ottawa and Council has no jurisdiction over the environment and habitat on which their mangement depends. Hence the authority is more theoretical than real.

LAND POLICY

When discussing land policies in the Yukon, two things must be kept in mind.

The first is that ownership of all Yukon lands (which includes forests, lands, waters and minerals) is vested in the Crown. Responsiblity for these lands and authority to dispose of them or of the rights to their exploitable resources rests with the Minister of Indian Affairs and Northern Development.

The second is that mineral exploration and exploitation (metalic minerals and fossil fuels) has complete and utter precedence over any other form of land or resource use in the Yukon. At the moment there is not one, even small, part of the Yukon where mineral exploiters cannot stake their claims and forthwith, by means of whatever procedure they choose, dig, tunnel, blast and scrape to their hearts content. Whether this is done in important wildlife habitat, a watershed, an area of scenic or recreational value, it matters not. If this is done next door to some other property which may thus be ruined, that it all right too. Only when his operations actually overlap another's property must he pay damages, but the law dictates that the owner must accept

damages and must relinquish his property in favour of mineral development.

The Yukon has not one Park, whether a National or Territorial one. It has no plan whereby certain lands are designated for certain types of use. "Multiple use" is an expression often used by the authorities but its meaning has never been defined. Wilderness areas, national forests, and wild rivers are unknown entities. There are a few game sanctuaries but little is known about them in the absence of an agency to properly manage them, and, with the possible exception of the Kluane game sanctuary in the Southwest, they are so in name only.

In short, the exploiters have it all their way and in this day and age, with great mobility and the unlimited capacity of giant equipment to inflict colossal damage in jig time, the prospects for maintaining environmental quality in the Yukon seems to be meagre.

If exploitation were always bona fide the situation might not be too bad, but many of the "developers" are promoters only, willing to go to any length to make a fast buck. As regulations in this respect in the provinces become tighter, the Yukon becomes their last remaining haven.

Although the government for years has been surveying National Park sites in the Yukon and on and off makes halfhearted proposals for the establishment of such Parks (something it has the full authority to do overnight, if it so chooses, without asking anybody's leave) it steadfastly lets itself, for political reasons, be intimidated by the mining lobby who scream that parks are "sterilization of resource potential. The mining lobby openly declares that it will veto such proposals in perpetuity.

It is obvious that the government not only condones but openly encourages crass speculation in mining claims and mining ventures. Anyone can go and stake 8 mineral claims (400 acres) wherever crown land is unoccupied by other claims and declare that he is sitting right on top of a valuable mineral deposit. He may even go ahead and ruin the land surface in looking for it. If he doesn't find it or if the whole show was simply performed in order to make others part with their money to support his venture, he can simply pack up and go, leaving the mess he made as is. Nobody worries about it.

But the situation is quite different when someone wants a piece of land for a residence, a summer cabin or a business. He can go ahead and stake the land of his choice but he then must contend with a land policy which, on the government's own admis-

St. Elias Mountains near Slim's River, Yukon Territory—John Lammers

sion, will not be made known to the public. And, unfortunately, nobody can force it to do so under the circumstances. These surface rights to Yukon lands are dispensed on the basis of "Tell me how much land you want, where it is, what you want it for and how long you will take to do it." If the unfathomable internal government machinery grinds out a favorable verdict on one's application in that manner, you probably receive a short-term lease with option to buy the land at the end of that term provided you have indeed done with the land—*i.e.*, building on it— what you said you intended to do.

Now, although the secrecy surrounding these decisions is irksome, smacks of paternalism and occasionally drives people fighting mad, the policy certainly prevents gross speculation in lands, something that is responsible for much of the environmental blight elsewhere. So, provided the government's guidelines in this matter are honorable—and are discharged likewise—I personally cannot find too much fault with them.

But it is hard to understand why the government so drastically restricts disposal of lands' surface rights yet encourages in every manner possible gross speculation with mineral rights. I can only come to one, disturbing, conclusion and that is that it wishes to put as little hindrance in the way of unbridled mineral exploitation as possible.

Lately there also is more interest in the exploitation of Yukon forests and the government appears to be letting out leases for timber tracts to companies wanting to export logs or timber overseas. But proper research in Yukon silviculture, especially the all-important aspects of forest regeneration and forest soils has never been done in the Yukon although it is known that, with the exception of a few small areas in the South, growth is extremely slow. Here also, no other considerations of environmental management seem to play a role. There is no reforestation program and the excuse for the logging is the same as foresters use everywhere: "the trees are mature and must be harvested."

Then there is a whole new crop of businessmen, the international water merchants, who have their eyes on the Yukon's waters, proposing their use for various gigantic power development schemes, for export to the South to help dilute pollution there, or both. All these plans have one thing in common: ecological considerations do not play a role.

There never has been an attempt at a wildlife census or scientifically warranted wildlife mangement in the Yukon. Even if

there were proper legislation in this respect there is not the apparatus to enforce laws.

The government is at present engaged in formulating "land-use regulations" and water quality legislation, but in both cases the philosophy is strictly one of use and does not make any provisions for or concessions to non-use. Here again, enforcement of such regulations would require a vast apparatus, establishment of which is nowhere in sight and, costly as it would be, is unlikely to be financed in this time of austerity. Moreover, the land-use regulations deal only with "un-occupied crown lands" meaning that the many thousands of square miles that are taken up by mineral claims are still unprotected anyway.

The picture is gloomy and distressing to anyone who realizes the tremendous values other than heedless mineral exploitation the country has to offer in abundance. But the overall philosophy is one of short-term gain. It is hard to believe that policy-makers and politicians do not realize the implications and dangers of such policy; there certainly are enough horrible examples about, but they seem firmly determined to, as one cabinet minister put it, "dig out the mines and cut down the forests."

It is highly doubtful that the Yukon will ever muster sufficient number of vocal and knowledgeable residents to effectively resist the present trend and either guide or force the government into a policy of careful land and resource management rather than the present sell-out.

There is no doubt that a certain amount of resource development is necessary, if only to pay for road construction that is required to make the recreational potential available to the public. Carefully planned extractive resource use COULD be compatible with other uses of the environment, especially recreational use, but it requires multi-discipline planning and careful execution.

If the cost of preventing environmental damage by such things as destruction of scenery and pollution is so great that it would prohibit extractive resource use immediately, then such use should be put off until a time when it can absorb this cost. The long-range viewpoint should always prevail. However, the economic climate is one of mass hysteria when it comes to developing a new ore find or oil potential and nothing seems to be able to stop the feverish rush of immediate, here and now exploitation at the expense of everything else.

" The Narrows" between Aishihik and Otter Lakes in the Southern Yukon—John Lammers

POPULATION AND SETTLEMENT

The 207,000 square miles of the territory contain some 18,000 people, over half of whom reside in its capital, Whitehorse. The remainder are spread out in small settlements and mining camps throughout the territory. Whitehorse, whether we like it or not, is the voice of the Yukon and as some cynics—including myself—will have it simply considers itself THE Yukon! It has all of the Territory's news and opinion-forming media, no less than two radio stations, two TV stations and two newspapers, one of which is a daily.

The town is completely resource oriented. Its residents are employed either directly by the resource industry, associated service industries or government, a situation that is not conducive to outspokenness in a field such as conservation, a stand on which, in this atmosphere, is almost antisocial.

Then, the transient character of the population hinders the growth of a deep and sustained feeling for the land. Ottawa officials and others who are responsible for policy making seldom, if ever, come in contact with the land itself. They jet to Whitehorse where they invariably are intercepted by the regular local group of boosters and taken in tow. They may see a few of the highlights of the town and may even fly to some of the mine excavations around the Territory. By and large they fail, however, to get a meaningful, grass roots impression and leave again with warped notions.

At the present there does not seem to be a discernible pattern to settlement of the Territory. Some of its communities continue to grow, others are in decline, mostly depending on the fortunes of the mines. Occasionally a whole new community springs up, such as the Faro townsite on the upper Pelly River, tightly linked with the development of a large lead-zinc mine. With the exception of Whitehorse and Dawson which have city status, all of the other communities are unorganized. having at best a community club to try and deal with local affairs. Highway maintenance camps and roadhouses along the highways serve as foci of small populations.

The one overriding fact of importance in Yukon population distribution is that there is an almost complete absence of rural population. Except for seasonal recreationists, exploration parties, and a handful of hardy souls who live by themselves, the Yukon's hinterland is empty. In the meantime a vast part of its area is

taken up by mineral claims and oil leases where oil and mining companies are active, and the number of rough bulldozer roads pushed into virgin areas without concern for other values—and with government subsidy—increases almost monthly.

For the time being, anything goes. While the absence of a rural population is conducive to the wilderness character the territory still offers the recreationist, it also means that there is nobody around to complain about the exploitation enthusiasts.

And such is the present state of the Yukon.

It is a beautiful country, at once awe-inspiring and friendly, holding myriads of delights for the nature lover and recreationist, more of whom are discovering its wonders every year. But the pace of uncontrolled exploitation is increasing even faster and the tragedy is that this takes place at a time when the need for a pure natural environment is being felt so deeply by those who live and work in the decaying atmosphere of the cities and lands to the South.

Is there a solution?

One despairs. The problems here are no different than those elsewhere; the Yukon simply is in an earlier stage on the road to environmental corruption. Its problems too are essentially those of too many people and too many people demanding too many "things" they don't really require, on a worldwide basis.

One can blame the industrialists and scientists for discharging and creating poisons that ruin our environment, and take the politicians to task for allowing it. Most certainly they have failed to show true leadership and therefore are most grievously at fault.

But we, the people, have not asked very many questions for a long time either. We demand that forests be cut, minerals dug, and rivers dammed in even the most remote corners of the world because we want the right to unlimited procreation and unlimited consumption. And while we are busily creating more people and more "things" which together we call "prosperity" we are building a debt in poison, waste and destruction so colossal that it threatens to overwhelm us in our lifetime.

Where there is a demand, some businessman will find a supply to satisfy it. And if there is no demand he will create one if you and I are gullible enough.

So, in the final analysis it is You and I who are the problem.

It is so sad to contemplate that the imagined need for unlimited tissue paper, two cars, three television sets and any number of children will ultimately cause the Yukon to die too.

Climbing in the Yukon

By M. E. ALFORD

Of the Yukon's 207,000 square miles, one tenth may be classified as high mountain terrain. The ranges are widespread and offer the potential climber a great variety of climatic conditions. The Yukon may be described as a right triangle, with its base adjacent to the 60th parallel, its vertical side near the 141st meridian, and its hypotenuse the height of land between two great watersheds, the Yukon and the Mackenzie.

In that part of the triangle containing the right angle, the extreme Southwest, we find a smaller triangle. Sharing a common base and vertical side with the larger Territorial triangle, but with hypotenuse the Alaska Highway, this three-sided figure is a high mountain environment of some 8,000 square miles. It is a most spectacular high alpine region, containing a great expanse of ice and snow, the Icefield Ranges and the St. Elias Mountains. These are the highest mountains in Canada, and together form the largest group of great peaks in North America. Many of the great mountains look massive from all directions. Mount Logan, Canada's highest peak at 19,850 feet, is one of several peaks that have their birth in a large mountain massif, the Logan, which ranks as one of the largest in the world. It is in the St. Elias Mountains that the mountaineer may experience high mountain exploration, involving expedition logistics and high altitude snow-ice climbing. Where it is bared, the rock is badly shattered so that the patience and ability of the climber will be sorely tested.

Traveling north but holding close to the 141st meridian, we find, between the Klondike River to the South and the Peel River to the North, the Ogilvie Mountains. Named after William Ogilvie, a surveyor who explored the region in 1888, this range has peaks that rise to 8,500 feet ASL. Many have an impressive stature and are in main part unclimbed.

While the Yukon map shows many small ranges located at various parts of the Territory, some only 70 miles from its short arctic coast, only a few will interest the mountaineer. I will confine my description to those areas. On the Eastern border of the Yukon, at approximately latitude 63 degrees 50 minutes, we find

Mt. St. Elias from the east—M. E. Alford

in the Selwyn Mountains several peaks of interest to the climber. These are located in the Hess Mountains and the Itsi Range.

I have now pinpointed in a general way the three most attractive areas in the Yukon to the mountaineer. To consider them in greater detail:

The Icefield Ranges and St. Elias Mountains

This area offers the greatest challenge and variety of climbing. To accept one of the major peaks as an objective is, because of their relative remoteness, altitude and climatic environment, to engage in a mountaineering expedition of near Himalayan proportions. For this reason many climbers, particularly Japanese, find in these mountains a suitable stepping stone, training ground if you like, to the ranges of the Himalayas. The larger peaks are the most remote from the highway network, and while it is possible to reach them by traveling on foot or skis over the several glaciers that have termini near the Alaska Highway, such a process is often too time-consuming to be practical. For these reasons, fixed and rotary-wing aircraft are usually employed by expeditions. The cost is high, but the party wastes no time in getting to grips with the mountain and may spend their available time climbing. Unfortunately for Canada, there are at present no companies specializing in glacier-flying based in the Yukon. Some bush planes have been used by special large-scale expeditions who have been able to offer sufficient flying to keep aircraft on ski-wheels beyond the date of normal changeover to floats. Normally light charter aircraft operating in the Yukon change from skis to floats in the middle of May, and it is a very costly and inconvenient operation for them to change back again for a few flights in mid-season. Because of this regrettable situation, which I hope will rectify itself in due course, helicopters are presently being used by many parties with attendant high cost.

Most, if not all the major peaks in the St. Elias have now been climbed at least once. Today, climbers are entering the region to find new and more difficult routes on the named peaks and to make first ascents of the many secondary peaks of which there are a great number.

The Yukon Alpine Advisory Group, P.O. Box 2703, Whitehorse, serves to advise the Commissioner prior to the issue of an exploration permit. Parties are expected to be experienced, possess adequate equipment and supplies, have suitable logistic support and be a minimum of three in number. In 1969 there were six expeditions visiting the St. Elias; four of these were Japanese,

varying in size from three to ten men. Because the regime is essentially a snow-ice one with a sub-arctic environment, parties may expect temperatures to -30°F. in summer, and storms of several days' duration. A map to a scale of 1:250,000 is available, entitled Mount St. Elias, Sheet 115B-115C (E½). Such a map may be obtained from the Federal Building at Whitehorse, or from the Map Distribution Office, Dept. of Energy, Mines and Resources, Ottawa. In addition to this sheet, special maps have been prepared of the Hubbard Massif (Mounts Hubbard, Alverstone and Kennedy), and the Centennial Range. The Massif of Mounts Hubbard, Alverstone and Kennedy is the title of the map produced by the National Geographic Society to a scale of 1:31,680. The map of the Centennial Range, MCR7, is available to a scale of 1:250,000 from the Map Distribution office.

For those wishing something on a more alpine scale, the peripheral ranges of the St. Elias Mountains offer excellent one-to-three-day climbs, with many opportunities for first ascents. Peaks in the Kluane and Donjek Ranges rise to near 10,000 feet ASL and are accessible from the Alaska Highway by treks of up to 15 miles.

The Ogilvie Mountains

The part of the Ogilvie Mountains likely to be of most interest to climbers is that region 35 miles northeast of Dawson City that lies between the Chantindu River on the West and the Dempster Highway on the East. The pertinent map in this case is to a scale of 1:250,000, entitled Dawson, sheet 116B and 116C (E½). There has been very little climbing in the area. Several unnamed peaks rise to just under 8,000 feet with many of them possessing an impressive vertical exposure. Mount Tombstone is one of the most inspiring with interesting faces on its north side. Neighboring peaks offer jagged spires and exposed faces. Access to the area may be gained by walking in a distance of 15 miles from the Dempster Highway, a branch of the Klondike Highway.

The Selwyn Mountains:

These are located at Yukon's middle latitude near its eastern border. Within the Selwyn Mountains lie the Hess Mountains, and of these the most impressive undoubtedly is Keele Peak, which rises to an elevation of 10,000 feet. The map to which you may refer is the 1:250,000 entitled Niddery Lake, sheet 105-0. Access is not easy and one may expect to use air support from Ross River, which is 170 air miles to the south. Keele Peak stands isolated from its neighbors, and as a result gives an impression of great majesty and loftiness. The peak has a perpetual

The Logan Massif from the north—M. E. Alford

snow cover and several glaciers occupy its upper reaches.

Due west of Keele Peak, across the Hess River, lies an unnamed peak of interesting proportions. To the writer's knowledge, Keele Peak has been climbed twice, and the unnamed one is no doubt a virgin summit. Forty miles south of Keele Peak lie the Itsi Mountains, offering climbs of 8,500 feet. The mountains in this range have virgin summits and may be reached by trekking in from the Canol Road a distance of 8-10 miles.

The Yukon is obviously a good place for the mountaineer to practice his skill, whether on the crags of the Ogilvies or the high snows of the Icefield Ranges.

The Last Great Wilderness

By WILBUR M. MILLS

Beyond the Yukon River in northern Alaska lies a vast, little-known wilderness of nearly 200,000 square miles. These arctic and subarctic lands constitute the largest remaining expanse of undeveloped country in the United States. Opportunities for wilderness preservation are unexcelled.

Massive oil development is, however, altering large areas of the Arctic. Within one year a wilderness the size of Massachusetts has been destroyed. More will follow. The Trans-Alaska Pipeline is slated to cut right through the heart of the Arctic and could have disastrous effects on much of its wildlife, particularly the migrating caribou.

Conservationists should demand an immediate moratorium on future development until the entire Arctic can be studied and a comprehensive land-use plan formulated. In spite of the development which has occurred so far, the Arctic is still the last great, wildlife-rich wilderness frontier we have. Large areas of it should be preserved from exploitation. Wildlife and wilderness values are so fantastic that preservation must not come as an afterthought. Wilderness should be the dominant land use in the Far North.

Presently only the 13,900 square mile (less than 7 percent of the total area) Arctic National Wildlife Range is set aside for the intended purpose of preserving wildlife and wilderness. Established in 1960 by executive order of Secretary of Interior Fred A. Seaton, the Arctic Range is situated in the northeastern corner of Alaska. Bounded by the Canadian Yukon on the east, the Range extends along the Arctic coast nearly 125 miles to the Canning River (from the Canning the oil rigs at Prudhoe Bay lie just a few minutes flying time westward). North to south across its 150-mile span the Range includes samples of the three major physiographic provinces of northern Alaska: the treeless expanse of the coastal plain, the glaciated peaks of the Brooks Range and the spruce-birch forests of the interior.

The Arctic Wildlife Range adjoins *de facto* wilderness which should become part of an even greater reserve. Together with the adjacent area of Canada and the lands south of the

present boundary, an ecologically self-sustaining wilderness of unprecedented quality, size and diversity could be perpetuated. This international wilderness would stand unique as an embodiment of the wild frontier which not so long ago stretched across all of North America.

Such a reserve is far from reality, however. Much of the Canadian area is already leased to oil companies, and expansion of the Wildlife Range into the potential oil-bearing lands of the Yukon Basin would undoubtedly meet with opposition. Developers have more than a passing interest in the Wildlife Range itself. Geologic structures on its north slope indicate a strong possibility of oil, and there may be mineral deposits within the mountain region.

Still the area's greatest asset is its wilderness, which must be protected. It is not too late to establish a great Arctic wilderness, but time is running out. The Arctic Wildlife Range is being degraded by oil activity. Under the terms of the establishing order, the Secretary of Interior allows certain types of exploration to be carried out. I observed its effects during the summers of 1968 and 1969.

Last May 29 (1969) I landed at Peters Lake on the north slope of the Wildlife Range. Literally hundreds of 55-gallon drums and 10-gallon crates of aircraft fuel for the summer's exploration work were already stacked on the north shore. A picturesque Arctic lake had been turned into a common storage yard. The supplies belonged to four major companies which would be operating from the Lake during the season.

From June 5 through July 2, I was camped on the Arctic Coast in the calving area of the porcupine caribou herd. I was here to observe the spring migration and fawning, and experience the solitude of Arctic wilderness. Several times helicopters passed near my camp. These aircraft give easy access to almost any terrain and are widely used in exploration work. Men and equipment can be transported to a remote area, a camp established and geology work carried out. In my travels I came upon the remains of one such camp. A jumble of empty gas cans and smashed crates marked its location atop a windswept tundra ridge. I recorded the information stenciled on the crates and later reported it to the Fish and Wildlife Service in Fairbanks. They checked it out and informed me that the debris was left by an oil company contractor during exploration work in 1968. The company was doing this work under a permit which specified that all trash be removed from the Wildlife Range!

Extensive debris from an old Pan American Petroleum camp was present at Lobo Lake in the Sheenjek River valley when I was there in July 1968. According to the Fish and Wildlife Service, the company had verbally agreed to remove it. It was still there in August 1969. How much other trash has been abandoned in remote areas of the Range by oil crews?

Probably the most abused spots in the Wildlife Range are Peters and Schrader Lakes. Lying at the foot of the high mountains of the Brooks Range, these large natural lakes provide excellent airplane access to both the mountains and the Arctic foothills. The accumulated trash of many years blights this outstanding scenic area. One could not hike a hundred yards along either lake (they have a combined shoreline of over 30 miles) without encountering litter. Barrels, cans, wooden crates and planks, canvas, plastic, steel pipe and aircraft remains were among the junk which marred the shoreline.

Last summer two companions and I devoted over 200 manhours to the cleanup of the lakes. We walked the entire shoreline collecting litter and assembled it at a central location where the Fish and Wildlife Service will arrange to have it removed. It was impossible to identify sources of all the material collected. Some of it was quite old, some was very recent. Many recent pieces bore names of oil companies that have carried on exploration in the area. It was apparent that the names were not merely the company brand of fuel, but were identifying names stenciled on the containers. Unopened crates of helicopter fuel belonging to the Standard Oil Company were found. In the spring of 1968 these crates were mistakenly stacked on the ice instead of on shore. When the ice melted they went into the lake, many drifting to distant shores.

Oil companies were operating in the Schrader Lake area while I was there in 1968 and 1969. In 1968 Standard Oil and Union Oil established camps on the Lake prior to my leaving on July 15. There was extensive aircraft activity during the last two weeks of my stay.

Last summer operations were even more extensive. Atlantic-Richfield was there prior to my arrival on July 3. On July 12 Phillips Petroleum established a large camp. A week later Conoco came. By July 19 there were at least five helicopters operating daily from Schrader and Peters Lakes. Helicopters of oil companies not camped at the Lakes often visited the area to refuel. Cargo planes arrived regularly to supply the camps. There was not a spot within reasonable hiking distance where one could

escape the roar of aircraft. They were active constantly during the day, and often well into the evening.

Exploration permits for the Arctic Wildlife Range were issued to six oil companies for the 1969 season. Separately and independently they each establish their camps and conduct their exploration work. Work which could be done once, on a cooperative basis, is duplicated many times over because of the secrecy associated with oil exploration. In the meantime the wilderness is suffering.

The Phillips and Conoco camps were located on a flat neck of land between Schrader and Peters Lakes. Many oil companies had camped there in past years. Hundreds of five gallon cans littered the area. Some were quite old, others had hardly begun to rust. Many were full of fuel, their seals having never been broken. It is impossible to pinpoint responsibility for this debris, so it continues to accumulate. The area contained several large, shallow pits where camp garbage had been burned. A battered engine cowling, from a cargo plane which had fallen through the ice several years ago, had become a toilet for the oil companies. Of course the ubiquitous 55-gallon drum was present in varying degrees of deterioration. Large areas of tundra had been completely denuded of vegetation from burning and from heavy and continued use. Fragile Arctic tundra cannot take the intensive type of camping which oil companies seem to require.

The collection area for our lake cleanup project was adjacent to the Phillips and Conoco camps and we visited them on several occasions. Our observations serve to illustrate the incompatibility of oil activity on the Arctic Wildlife Range. The Phillips camp consisted of seven large tents, 12 feet by 12 feet in floor size. The Conoco camp nearby had five similar tents. Approximately eighteen people occupied the two camps. Although garbage burn pits existed nearby, Phillips had created another in front of their cook tent. The vegetation was completely burned over an area 5 feet by 4 feet.

We had cleaned the shoreline across from the camps before the companies arrived. On July 22 we found fresh debris on this shore consisting of two five-gallon gas cans, a water-logged egg crate, a large plastic bag and a sleeping bag carton marked "North Slope Sales-Sagwon." On July 27 we found a carton and styrofoam packing for a portable generator with the name "Phillips Petroleum" hand written on it. On July 29 we found a wooden gas can crate. The day I left Schrader I noted some empty gas crates at the edge of the Lake directly in front of the camp. They were

Barren ground grizzly stalking the beach along the frozen Arctic Ocean—Wilbur M. Mills

partially in the water and would soon very likely be carried to the far shore by wind.

In a casual conversation, an oil company employee told me they had recently chased a wolf with their helicopter. "It was a large black one and saliva was dripping from its mouth as it ran under the machine," he said. From the manner in which he spoke, it was evident that he felt nothing was wrong with such action. Another employee said that the oil companies often used helicopters to chase grizzly bears away from their camps, running the animal until it was exhausted. Undoubtedly the bears were attracted by camp garbage which, if properly handled, would not be a problem.

Using helicopters, an oil company can explore extensive areas in a single season. In addition to the Schrader Lake camps, another large base camp was located at the abandoned DEW line site at Demarcation Point. From these camps geologists would make daily and sometimes overnight trips. Oil crews had recently been in the Hulahula, Kongakut and Firth River valleys and they planned to conduct surface geology in all major river valleys on the north slope of the Wildlife Range that summer.

Contrary to the establishing order, part of the Range has already been leased for oil activity. In 1965 Secretary of Interior Udall signed an order making available several blocks along the Canning River. Currently 37,000 acres are under lease and applications are pending on other areas. Included in the acreage are places of special value to the Wildlife Range. Among them are Shublik Island and Shublik Springs. I visited these spots last summer. They support a unique North Slope plant community and are well used by moose and grizzly bear.

The Arctic Wildlife Range was established supposedly "for the purpose of preserving unique wildlife, wilderness and recreational values," according to Secretary Seaton's executive order. As managing agency, the U.S. Department of Interior has been remiss in carrying out the intent of that order. The presence of extensive commercial activity is disturbing the natural environment and preventing visitors from experiencing fully the values for which the Range was set aside. To those who value wildlife and wilderness, the present management policy is intolerable.

There is ample evidence of oil company misuse of the Range. Based on my own limited observations, I can only assume that the misuse is even greater than I have stated it. They are littering; they are damaging terrain; they are disturbing wildlife. It would be naive to think otherwise. With the highly competitive atmos-

Newborn caribou fawn on the Arctic Coastal Plain—Wilbur M. Mills

phere that prevails in Arctic oil development, could a company be expected to carry out their garbage if they knew they could get away with leaving it behind? Could their personnel, who are unfamiliar with the principles of ecology, be expected to avoid harassing such curiosities as a wolf or grizzly with aircraft?

In the vast open spaces of the Arctic, the possibility that someone might be watching is very remote. This is especially true since, on both the state and federal level, funds and manpower for policing the North Slope have been lacking. As of August 1969, the Fish and Wildlife Service has never had any funds specifically designated for management of the Arctic Wildlife Range.

The Arctic is a very fragile land. Too little is known about the impact of man's activities on its ecology. Inventories of its wildlife have not been fully made. The productivity of faunal species per unit area of habitat is not known. Such information is essential if we are to preserve rare species like the wolf, the tundra grizzly, the peregrine falcon and the gyrfalcon. The Arctic Coastal Plain contains the calving grounds of the largest remaining caribou herds in North America. What long-term effects will massive oil development have on these herds? We do not know.

Most of Arctic Alaska is already committed to oil development (specifically the Prudhoe Bay area and the Naval Petroleum Reserve). It is essential that we keep some of our Arctic lands, particularly a portion of the Coastal Plain, in a natural state. The Arctic Wildlife Range should be managed as an undisturbed wilderness, a control area against which we can measure the effects of development elsewhere in the Arctic. It should be a critical part of a planned, integrated program of Arctic resource and environmental management. Such a program should include extensive areas which are closed to oil development.

Prompt, decisive action is required by concerned citizens and the Department of Interior if the values of the Arctic Range are to be preserved:

1) *The Arctic National Wildlife Range closed to all oil and and mineral leasing, exploration and development until Congress can review the area under the terms of the 1964 Wilderness Act. Hearings are scheduled for October 1971. Existing leases cancelled.*

2) *Adequate funds provided to the Fish and Wildlife Service for management of the Arctic Range and for enforcement of regulations which protect its wildlife and environment.*

3) *Studies initiated to develop an overall management and land use plan for the Arctic Range, to inventory important wildlife populations and identify specific areas of significance to wildlife.*

4) *Debris at Schrader Lake, Lobo Lake and other areas which receive recreational use be removed from the Range.*

5) *The southern boundary of the Arctic Range reviewed for possible inclusion of such important areas as the complete drainage of Old Woman Creek and the entire length of the Sheenjek and Coleen Rivers.*

6) *Efforts initiated with the Canadian government toward establishing a wildlife reserve in northwestern Yukon Territory adjacent to the Arctic Wildlife Range. Such a reserve would afford protection for the Arctic Range caribou herd which migrates across the international boundary to winter.*

The Arctic Wildlife Range needs help from those who love the land and the life that evolved in harmony with it. Only with strong public support can its special qualities be perpetuated. Its immediate fate is in the hands of Secretary of Interior Walter J. Hickel; he sits in a big office in the Interior Building, Washington, D.C. 20240.

1969 Mountaineer Outings

COMPILED By LORETTA SLATER

Following is a complete list of 1969 outings. Not every outing could be given a write-up, because of severe space limitations. Outings to infrequently-visited areas are given complete coverage; others are summarized.

June 28—July 13; Brooks Range, Alaska: Neruokpuk Lakes, North Slope; Sean Rice, leader.

July 12-20; San Juan Islands, Washington; Bicycling San Juan, Orcas, Shaw and Lopez; Howard and Michele Church, leaders. This was the first major outing for the new bicycle group, and the San Juans proved "an ideal safe place for future bike travels."

July 19-27; Cascade Crest Trail, Washington; Cascade Pass to Suiattle River; Joe Cockrell and Chet Haven, leaders.

July 26-August 10; Olympic Peninsula, Washington: Car camping on Hood Canal, Elwha River and Kalaloch Beach; Robert and Francis Boley, leaders.

July 27-August 8; Little Yoho National Park, British Columbia; Don Dooley, leader. Most memorable experience of this summer outing was to awake to snow on the morning of August 5. (For information on the area, see the account of a previous outing to Little Yoho, *The Mountaineer* 1962).

August 2-10; North Cascades National Park: Park Creek Pass; Stan Jensen, leader. A snowstorm, and thundershowers, plus difficulties in route-finding, made this the Park Creek Pass Outing which didn't get to the Pass.

August 9-24; Mount Rainier National Park, Washington: Wonderland Trail; Gardner Hicks and Graeme Blake, leaders.

August 16-24; North Cascades National Park: Hannegan Pass to Diablo Lake; Henry Shain, leader.

August 16-24; North Cascades National Park: Northern Picket Range; Marc Bardsley, leader.

August 16-September 1; Bowron Lake Provincial Park; Canoe circuit. Fran Flerchinger, leader. The first major outing for the new canoe group.

August 21-September 1; Olympic National Park: Obstruction Peak, Dose Meadows, Deer Park; John Stout, leader. Backpackers'

August 30-September 1; Mount Baker: Mountaineer Lodge Trips; John and Hester Davidson, leaders. Trail Trippers used the Mount Baker Lodge as base for the weekend, while exploring trails in the area.

November 15-December 14; Australia and New Zealand. Andrew Bowman, leader. Special outing.

November 28-December 1; Olympic National Park: Lake Ozette, Cape Alava, Sand Point; John Stout, leader.

Neruokpuk Lakes — Brooks Range

"The Brooks Range! Where's that?"

"What are you going up there for? It's nothing but snow and ice."

Remarks such as these reveal a lack of knowledge of Alaska's Arctic wilderness that is, sadly, too prevalent today. Typified as a stark, dead land, constantly covered by snow and devoid of life, this "land of light" in reality abounds with quantities of intensely-living plants and animals. Fish and flowers, birds and bugs, caribou, wolves, bear, lemming, foxes and wolverine: all live in delicate symbiosis.

During the summer of 1969, fourteen Mountaineers journeyed to the Arctic for a two-week outing. We wanted to learn about the Arctic for ourselves and to discover possibilities for future outings to bring a wide variety of wilderness-seekers to the area.

The area selected for our trip was within the Arctic National Wildlife Range, which occupies the northeastern corner of Alaska, from the Canning River to the Canadian border and from the Arctic Ocean south beyond the crest of the Brooks Range. Set aside in 1960 for its unique wilderness and recreational potential, the Wildlife Range is an ecologically self-sustaining unit of nearly nine million acres. In addition to being the permanent home of all species of Arctic wildlife, it provides the summer range and calving grounds for one of the largest remaining herds of caribou in Alaska, the Porcupine herd, which numbers about 140,000 animals.

Located in the western sections of the Wildlife Range, at the foot of Mount Chamberlain and only 40 miles south of the Arctic Ocean, the Neruokpuk Lakes were chosen as the site for our base camp because of their accessibility. "Neruokpuk" is an Eskimo word meaning "big lakes," and the lakes are big: Lake Schrader, the northernmost, and Lake Peters are each over five miles long. Nearly all forms of Arctic terrain are present along the lakes, from mountain to tundra.

The distances involved in reaching the lakes are impressive: 1,500 miles from Seattle to Fairbanks, 250 miles from there to Arctic Village and another 150 miles over the crest of the Continental Divide to the lakes.

The biggest problem in our preparations was holding our weight and bulk to a minimum for handling by our bush pilots. On June 28, we boarded Alaska Airline's Convair and left for Alaska. Our flight was smooth and we enjoyed occasional scenic views of Ketchikan, Wrangell, Glacier Bay, and Mounts Fairweather, Logan, St. Elias, and McKinley.

Newspaper reports and even information from the plane's captain failed to truly describe the smoke from the forest fires raging in the Yukon Basin. In Fairbanks visibility was just over a mile. Over a million acres of forest were being consumed by man-caused flames.

Our arrival marked the beginning of two days of worrying whether the smoke would dissipate so we could get to the lakes, or settle in and confine us to the south slope. We whiled away most of the time sight-seeing around Fairbanks. Visibility dropped to less than three-quarters of a mile at times and our hopes dropped with it.

Monday, with conditions still looking grim, we had pretty much agreed to give up going to the lakes. We were terribly disappointed at abandoning our plans, but finally settled on an alternate area. When we returned to Metro Field with maps of our alternate site, we were told to get our gear together. Wind and rain in the Yukon Basin and on the South Slope had thinned the smoke. We were going to the lakes, after all!

The two-hour flight to Arctic Village impressed us with the immensity of Alaska and its varied interior. First, the White Mountains: jagged gray pinnacles and rocky knobs looming through the rain and low-lying clouds, the valleys beneath carpeted in dark spruce. Next, the vast Yukon Basin: green, boggy, dotted with ponds and lakes and streaked with tortuously-winding streams. We crossed the Arctic Circle and saw below us the

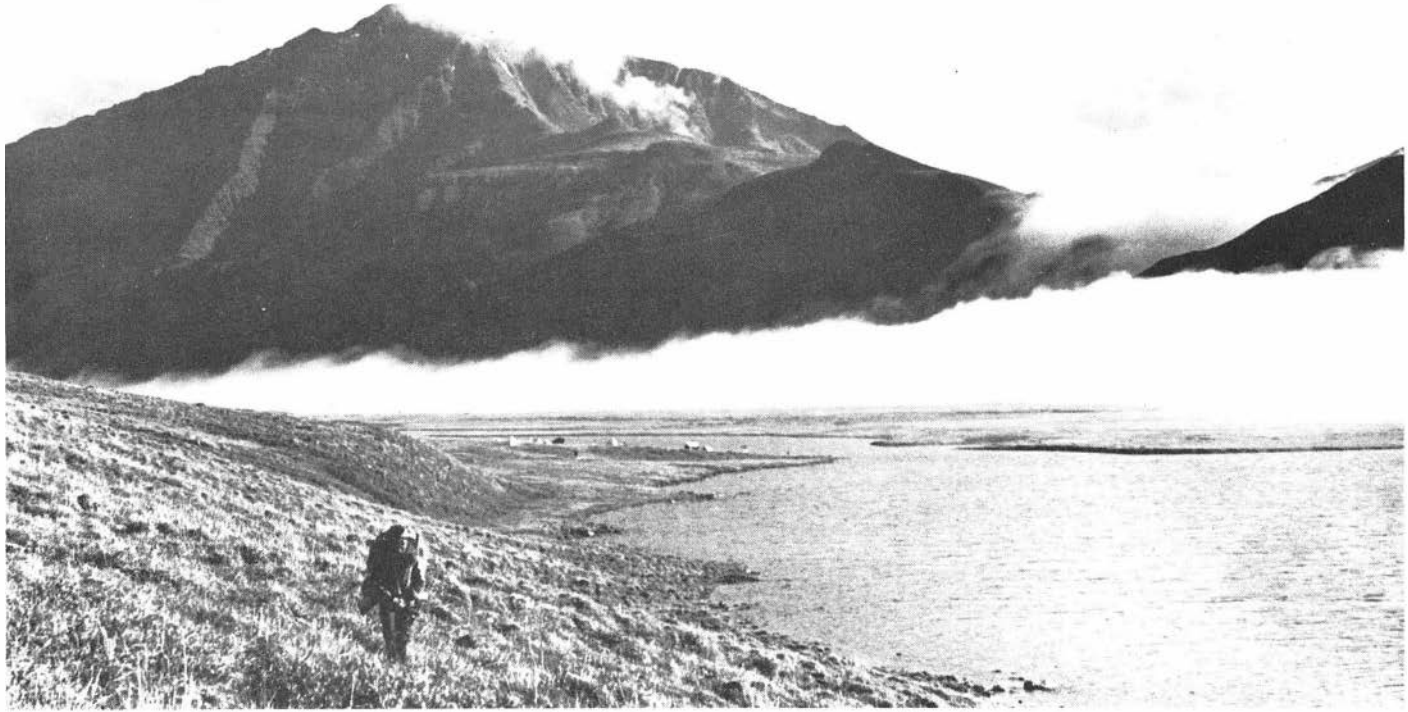
mighty, muddy Yukon, historic highway through the interior. On and on, taiga and occasional ponds passing beneath us. We detoured west over the Chandalar River to dodge a boiling black thunderstorm. Finally, a bouncy landing on the rutted dirt landing strip and we were at Arctic Village.

We unloaded the wheel planes and carried our packs down to the river. On the bank, we helped refuel the float planes, then climbed into them for the last leg of our journey. After an exciting takeoff from the curved river channel, we made a long climb up the Chandalar River valley to 7,000 feet. It was dark and gloomy as we flew past increasingly desolate mountainsides, but we could see clear sky ahead through clouds that hung over the pass. Over the last ridges we flew, through the pass that marked the crest of the Range and into the sunlight of the North Slope. Clouds blanketed the high peaks as we flew down the Hulahula River, but the foothills were golden brown in the light of the low Arctic sun. We passed over a bench, headed west, and ahead lay the ice-covered north end of Lake Schrader.

The appearance of so much ice alarmed us; perhaps, after coming so far, we would be unable to land. We banked around the end of Kelly Ridge and saw to our relief that Lake Peters was almost free of ice and that there was a narrow open stretch of water along the southeastern shore of Lake Schrader. Dropping lower, we circled the delta of Whistler Creek, then, with the metallic hiss of water on the pontoons, we landed.

At first we could see no suitable place to beach the planes for a dry landing. Some hardy volunteers, anxious to set foot on real Arctic terrain, carried gear and other passengers ashore through the cold waters. While waiting for the next group, the first arrivals located a sandy beach suitable for drier landings, as well as discarded fuel crates which were speedily converted into a warm campfire. The arrival of all fourteen of us was spaced over several hours since each of our two planes had to make three round trips. The last flight arrived at 1:30 a.m.

We unloaded the rest of our gear and the planes departed, leaving us to our Arctic solitude. We gazed about: a brilliant rainbow, glowing against its background of dark clouds, arched into Lake Peters. North and west, unnamed peaks were sharp and clear in the light of our first midnight sun. The silence was broken only by the lapping of waves on the shore and the muted tinkle of ice on the lake.



Lake Schrader, Arctic National Wildlife Range—Ken Davis

The open treeless terrain invited our exploration in all directions. An easy hour's hike to a bench on Kelly Ridge, just behind camp, gave rewarding views in all directions. From here, we could see past Mount Weller to the distant gleam of the Arctic Ocean. On this bench, we also encountered most of the caribou we actually got to see.

A hike north along the shore of Lake Schrader took us into the marshy tussocks of the Coke Creek delta. Here, screeching, close-diving jaegers warned us of the presence of their nest. We clambered onto and across piles of ice pushed onto the shore by the wind. Some of us continued further to the north end of the lake and followed its outlet, the swift-moving Kekiktuk River, for a distance. Others fished, with occasional success. A few times we were able to borrow a boat and cross the narrow channel between Lakes Peters and Schrader. Once across, we splashed along Whistler Creek and climbed the ridge between it and Lake Peters.

The "sunsets," as the sun dipped to its lowest point in the Arctic sky, were the most rewarding bonus of our campsite. Tents were nearly all faced north so we could enjoy them in comfort. The show would begin about 11 p.m., as the sun began its descent behind Otiotak Peak and would last until nearly 2 a.m. The changes in light and the moving clouds, like the sunsets, were absorbing and would make different features of the surrounding terrain stand out sharply in contrast to shadowed backdrops.

One of our most violent wind and rain storms approached from the north, also. From the safety of our tents we watched as the gray streamers of rain and dark black storm clouds advanced with amazing swiftness across the foothills between the Sadlerochit Mountains and Lake Schrader. We were startled by the force of the wind as it struck, driving the big drops of rain solidly against our tents.

From a nearby burrow, a family of young ermine periodically emerged. Once they tumbled playfully right up to our tent door, completely unconcerned with our presence. Lemmings scurried along their runways and, more than once, into our tents. They were easily captured by hand, their distaste for such familiarity evidenced by a few quick nips with sharp teeth. Nearby was "Siksik Hill" where we amused ourselves observing and photographing the activities of parka squirrels.

We discovered the nest of a Lapland longspur the first day we arrived. During the next two weeks, the nervous mother bird became almost neurotic from the photographic attention given her brood. Young ptarmigan darted from our paths whenever we

Tundra, north end of Kelly Ridge facing west, Arctic National Wildlife Range—Ken Davis

went for a hike and we always had to be careful not to step on a nestful of young birds. Our bird watchers had ample opportunity to observe golden and semi-palmated plovers, Arctic terns, old squaw ducks and other birds not frequently seen in the "South 48."

A major disappointment was the general absence of the larger wildlife we had hoped to see. A few of us glimpsed small bands of caribou, but others saw none. The largest band we sighted held fewer than 20 animals. Two wolves had been shot for bounty by employees of the Arctic Research Laboratory at Lake Peters. We looked at the wolf pelts hanging in a shed; they were a pitiful substitute for the sight of these great hunters pursuing their ancient quarry, caribou, across the hills.

Another disappointment was that we were not quite alone, as we had hoped to be. ARL personnel had, besides their rifles, a motorboat with the usual noisy outboard engine. A U. S. Geological Survey team using the ARL facilities at Lake Peters clattered by in their helicopter nearly every day. Atlantic Richfield Oil Company had a larger, noisier helicopter which they used frequently. Phillips Petroleum established a camp on the north end of Lake Peters, about one and one-half miles from our camp. Interior Airways delighted in using our brightly-colored tents as a guide for their landing approach; every flight for an entire day passed directly over our camp.

Although the air traffic was annoying to us, we can well imagine the feelings of the Bavarian group who arrived the week after we left. They had come all the way from Munich seeking a truly remote, isolated wilderness with none of the racket of civilization and wound up in "Kennedy Airport North." We are convinced that these aircraft and the noise they made drove off most of the wildlife we had expected to see.

Many of us had carried ice axes, crampons and ropes all the way to the Arctic and felt duty-bound to climb a mountain. Mount Chamberlain, the highest and nearest, was the logical objective. Elevations vary from map to map; but, at about 9100 feet, Mount Chamberlain is one of the three or four highest peaks in the Brooks Range. With our goal selected, we spent the better part of a warm, sunny day shifting camp to the shore of Lake Peters.

The next morning at 5 a.m., we left our tents, circled the marsh behind camp and hiked to the mouth of Chamberlain Creek canyon. The north side of the canyon offered the easiest travel and we followed it, sometimes along the very edge of the creek and other times in the boulder fields above it. Where the canyon

leveled out, just below the snout of the Chamberlain Glacier, we crossed the creek and began ascending rockslides toward the crest of a rocky spur.

Part way up the slides, we encountered a dall sheep ewe and her lamb. The lamb was nearly as interested in watching the antics of these strange creatures as we were in trying to get some photographs of him and his mother. She showed no preference for our company and led him up the slides and away from our path.

About two hours later, we reached the crest of the spur ridge. From our vantage point, we enjoyed an impressive view of the north and northwest faces of Mount Chamberlain. Directly across the Chamberlain Glacier from us was a large triangular rocky face which bore a marked resemblance to the upper sections of the Eiger. Both the rock face and the steep crevassed glacier descending from the summit offered more challenge than we were prepared to accept; besides, the first signs of a storm could be seen approaching.

Our spur was connected to the main west ridge of the mountain by a steep ice slope. We followed the crest of the spur south to the last rocks, where we roped up and donned crampons. The slopes that we had guessed to be snow proved to be crystalline ice. In addition to being moderately steep, the runouts in both possible directions of fall were most uninviting. Our crampons were definitely needed and we chopped several steps. Occasional rock outcrops poked through the ice and we clambered alternately over these and up connecting sections of ice for about six hundred feet, finally emerging at the "dome."

The "dome" was a prominent bump at about 8100 feet on the west ridge. This was our first real vantage point and we had an excellent view of our sections of the Range. To our north were the Sadlerochit Mountains, last high terrain before the long stretch of tundra. Beyond the Sadlerochits, we could see this vast plain reaching north and, on the horizon, the shine of water and ice on the Arctic Ocean.

Far below, we could see a small pale-green patch of Lake Peters. Above and beyond the lake, the high peaks of the Brooks Range marched west into the distance. The view to our south made, perhaps, the deepest impression. Like the North Cascades, row after row of peaks stretched into the distance. None of us had anticipated the ruggedness of the terrain and we were struck by the number of possibilities for truly outstanding climbs. One steep

Summit ridge, Mount Chamberlain—Ken Davis

and crevassed ice face appeared to rise nearly 2500 feet from base to summit.

To our east rose the broad summit ridge. Filling our water bottles from pools of deliciously cold water, we studied our route. We could see a few crevasses on the upper part of the ridge and decided to stay roped. In other respects, the ridge appeared to be fairly easy.

The appearance was not deceiving and we reached the summit about an hour and a half later. The only crevasse which we had to cross was just below the summit. The last five hundred feet were on rotten crunchy ice which gurgled occasionally with water. The runout, in the event of a fall, was somewhat uninviting here, also.

On the summit, our hoped-for view of Mount Michaelson and other peaks to the east failed to materialize. Clouds had obscured all but the lower slopes of the peaks on the far side of the Hulahula River. Nevertheless, we congratulated ourselves and took the usual summit photographs, then moved out hurriedly for the descent. Great streamers of rain, illuminated by low slanting rays of the sun, were approaching down Carnivore Creek.

We retraced our steps to the "dome" and carefully negotiated the ice and loose rock to the spur ridge we had climbed earlier. During the descent, we were spattered by the first squall of the storm. Steps we had chopped on the ascent proved quite helpful in descending the last ice slope.

Once off the ice, we removed crampons, coiled ropes, and clattered and scree-slid down the rockslides. Again the heavens opened up and water poured down. During the day Chamberlain Creek had risen, forcing us to locate a new crossing and make a couple of detours. After 17 hours, the last climber returned to camp. The little information available on previous climbing history indicates that our group was the largest to reach the summit and included the first woman and both the youngest and oldest climbers.

During the climb of Mount Chamberlain, three of our group explored up Carnivore Creek. After a detour around the marsh and a tricky crossing of Chamberlain Creek, we stayed high on the hillside. A mile of contouring and we were past the worst of the marshes and could descend to the valley floor. Hoping to avoid mosquitoes, we worked our way out to a gravel island in the middle of the braided river to eat lunch. No use—the bugs followed.

After lunch on the island, we followed the canyon further until we were stopped by a wide glacial stream. Peering up its canyon, we could see the steep icy glacier that was the stream's source. Barred from further progress, we returned to camp, savoring the Arctic solitude and the views of the surrounding mountains.

After returning to Lake Schrader, five of us made a three-day trip toward Kikiktat Mountain. This peak is neither high nor spectacular; rather, it represented a northernmost point for us to visit. We spent our first night at Coke Creek, hoping for an easy morning crossing of this swift-moving stream. Next morning we crossed it and hiked around the north end of Kelly Ridge. As we headed east along the ridge's lower slopes, we found easy travel; the ground was firm, relatively dry and free of the tussocks which can challenge the strongest ankles. The gentle rolling tundra was broken by rocky ribs and several streams had carved small gorges for us to cross.

We crossed the first two forks of Karen Creek and followed the third south, toward Mount Chamberlain. We wound our way up the rocky narrowing canyon, forced to cross the creek several times. Once, we paused to watch a golden eagle glide soundlessly overhead, his nearly motionless wingtips almost brushing the canyon wall. We realized the gorge was leading us nowhere and decided to retrace our steps. Part way down the canyon, we climbed up a side gully to a broad saddle. In this saddle, we pitched camp again.

The next day was bright, but overcast. After climbing east to another saddle, we had an excellent view of Mount Michaelson through the clouds beyond the Hulahula River. We enjoyed this view, then turned north again, crossing rolling tundra toward Kikiktat Mountain. Our senses suddenly went to full alert when we ran onto a grizzly bear trail worn 18 inches down into the ground. Further on, as we passed a lonely tundra pond, we again were "dive-bombed" by a family of irate jaegers.

Quietly, we ate lunch in this remote, peaceful spot. Our bush pilots were scheduled to pick us up the next day, so we agreed to begin our return hike to Lake Schrader. This return trip, ending in a soggy squelching slog in the rain, required another overnight camp.

After a day's delay, brought about by bad weather over the Range, the two Cessna 180's were able to take twelve of us out. The remaining two and a small mountain of gear were left behind.

Refuse at Lake Peters, Arctic National Wildlife Range—Ken Davis

From Lake Schrader conditions to the south looked fine for flying; next day we found, appearances to the contrary, that the clouds had socked in around the pass.

The day after the first group left was sunny and warm. We left-behinds enjoyed a relaxed vigil until a single float plane appeared in the afternoon. Leaving most of the gear for a later flight, we departed. Flying over now familiar terrain, we looked for landmarks and speculated on new trips for future outings to the lakes.

Up the Hulahula we flew, past Mount Chamberlain and other peaks. Again we dodged clouds and ridge-hopped our way through the pass. The high bleak crest of the Range fell behind us as we flew down the Chandalar, past the broad canyon of the Junjik and over patches of "overflow ice." An hour after takeoff, we landed at Arctic Village.

After refueling and making two futile attempts to reach Fort Yukon, the pilot decided that the forest fire smoke was too thick to permit safe nagivation. We returned to Arctic Village and strolled along its dirt paths. The village consists of about thirty small wooden buildings, fashioned from logs and boards, and includes a church, store and post office. Dog teams were staked out by some of the houses and gave us a noisy greeting. They relished any attention we gave them.

The young couple from Montana who ran the village school invited us to supper. Ham and moosemeat made a welcome change from our usual fare. During supper, they and our pilot entertained us with anecdotes of "bush" life.

After spending the night in the local "bunkhouse," we found conditions sufficiently improved to permit an early morning flight to Fort Yukon. This village on the north bank of the Yukon River sits almost on the Arctic Circle. An air Force radar site provides the work which gives the village the appearance of greater prosperity: sturdier homes, more stores and improved dirt roads.

Our group scattered in all directions almost as soon as we arrived in Fairbanks. Some of us had jobs to return to and could barely change clothes before flying back to Seattle. Others remained behind to sort and ship gear and to return to Seattle in a more leisurely manner, via Mount McKinley Park and Sitka.

Since our return, we have heard much about the oil-inspired development of the North Slope. The media depict the Slope as a barren wasteland; as one U. S. Senator has been quoted, "there are no living organisms on the North Slope." We went there not to develop and exploit, but to see and learn and understand. We

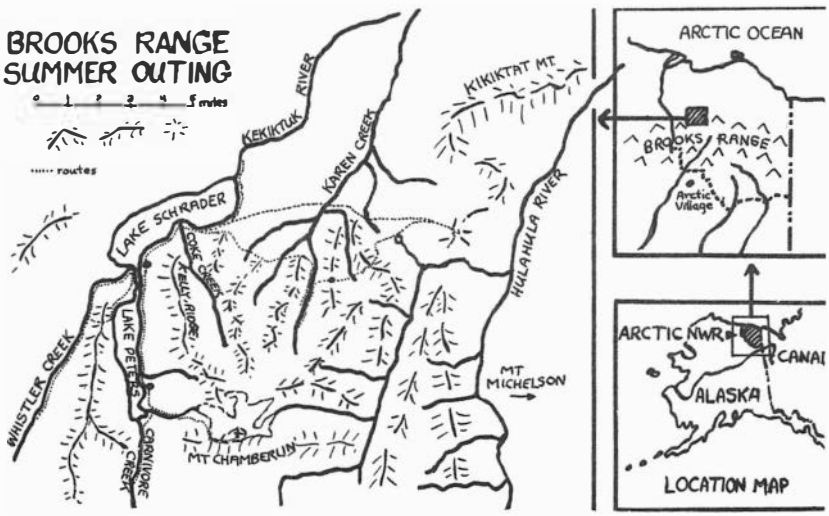
saw and learned and came to understand a little about a different Arctic, a vast, varied treeless land; not empty and desolate, but teeming with intense, exciting life. We saw beyond its harsh, implacable outer face to the shy, delicate beauty, and left richly rewarded by what we had seen. We learned that even man can find a place there. We came to understand that the real challenge is to avoid destroying the delicate balance that exists beween all other forms of life presently there.

We were privileged: we saw the other Arctic.

Sean Rice, leader; Harry Burlingame, Ken Davis, John Harlin, Lois and Ward Irwin, Larry and Wilma Peterson (Tacoma), Glenn Riehl, Jay Snodderly (Ketchikan Alaska), Bob Swanson, Cathy Vail, Harry Vail, John Walker (New Canaan, Connecticut).

Mount Chamberlain climb: H. Burlingame, K. Davis, J. Harlin, L. Peterson, W. Peterson, S. Rice, J. Snodderly, J. Walker.

Kikiktat Mountain: H. Burlingame K. Davis, J. Harlin, L. Irwin, W. Irwin.



Suggestions For Planning Your Trip To The Arctic

Clothing and equipment will be determined by the time of year. Since most groups will plan trips there between early June and late August, equipment discussed below is suitable for this period. Temperatures during this time will generally vary between 10° and 70° F. During the winters, temperatures will drop to -60° or colder.

As usual, wool is always a good choice for day-to-day clothing. A down-filled jacket or heavy wool sweater is a must. During the early and late parts of the season, and whenever space and weight limitations permit, both should be taken. A pair of medium-weight longjohns is worth taking, also.

If the primary interest is climbing, regular climbing boots will be satisfactory; however, expect to get wet feet when traveling through the tundra. For tundra-walking, after spring break-up, rubber pacs are the most suitable. Fishermen's waders could be useful in the really soggy areas. Bring enough good wool socks to last through the trip. For leather boots, toss in a can of boot grease.

The Arctic is a relatively arid part of the world: annual precipitation averages less than 12 inches. But don't leave raingear behind. The ideal fabric for an outer parka should be both wind-and waterproof and should be able to "breathe." Rainchaps are lighter and less bulky than rainpants.

Don't make the mistake of planning wood fires for cooking on the North Slope. Bring good stoves and enough fuel to last through the trip. On the south side of the Range, some timber grows in the low country. But trees grow slowly in the Arctic, and in the interest of protecting the country and the trees in it campfires are not recommended.

Any good tent should be satisfactory. Be sure to bring a rainfly. When the weather turns bad, a large tent is more comfortable than a small one. A waterproof floor is highly desirable and mosquito netting is essential. A sleeping pad that provides good insulation is also necessary since the permafrost is only a foot or so below. The nearness of the permafrost necessitates sturdy tent pegs. Short broad pegs may give better holding in the tundra than skinny ones that easily melt or pull out.

Camp sanitation and latrines are a real problem in permafrost country. The permafrost prevents water from soaking into the ground, so it runs along the surface and finally enters streams, ponds, rivers and lakes. Obviously, great care is demanded in placing the camp, locating latrines and selecting a safe water supply. Small parties, using care and changing campsites frequently may be one answer to wholesale pollution of the water supply. If large-scale recreational use of the Arctic becomes a reality, the only answer may be the use of chemical toilets and airlifting waste materials out. *WARNING*: Take extreme caution in drinking or cooking with any water found near oil drilling, prospecting, and road or pipeline building campsites.

Remember what was said about treeless terrain? There aren't any big buolders to hide behind, either, so build a portable privy shelter and bring it along.

With a few exceptions, rock peaks in the Brooks Range are no place for the technical rock climber. Many centuries of frost action have caused generally loose, crumbly rock in the central and eastern portions of the Range. Notable exceptions are the Arrigetch Peaks and the Igikpak area, both in the western part of the Range. Except for known rock-climbing areas, leave the hammer and pins behind. Toss in a few jam nuts, just in case.

During the bug season, have plenty of bug dope and a headnet. Don't go to the Arctic in the summer without them. The mosquitoes are plentiful and vicious. They're persistent, too; they followed us to nearly 8000 feet on Mount Chamberlain.

Maps of many areas in the Arctic are now available in the 15-minute series as well as the 1:250,000 series. The nearest office of the U. S. Geological Survey has supplies.

The "jump-off point" to the Brooks Range is Fairbanks. It can be reached by car or bus on reasonably good roads, but most people with limited vacations will have to fly. Two airlines offer regular service direct from Seattle. Two others fly to Anchorage and connect with local flights to Fairbanks. For sightseeing, you could fly to Juneau, then transfer for a flight to Fairbanks via Whitehorse; or take the Alaska Railroad from Anchorage.

Fort Yukon Air Service (P.O. Box 3054, Faribanks) proved satisfactory. Tom Olson has a number of aircraft and good pilots working for him. His service is generally restricted to the South Slope and Yukon Basin areas and he prefers smaller parties.

At this time, Interior Airways (Fairbanks International Airport) provides the best service to North Slope points. They feature daily commercial flights from Fairbanks to Sagwon. From

Sagwon, they can furnish charter service to just about any point on the Slope. Most of their operations are for the oil companies, so it would be advisable to write to them and get some reasonably firm commitment.

Other bush lines operating out of Fairbanks will be listed in the Fairbanks telephone directory, usually available at your local phone company or city library. For further information, especially regarding the Arctic National Wildlife Range, write: Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Arctic National Wildlife Range, 1412 Airport Way, Fairbanks, Alaska, Attn: Refuge Manager.

Climbing and backpacking are the main activities that most readers of this article will be interested in and the possibilities for these activities are endless. Wildlfe photography when the oil prospectors aren't buzzing the terrain, can produce some extraordinary photos. Wildflower photography can also be pursued here, with an endless variety of flowers available. Photographers will find telephoto and close-up lenses quite useful. Binoculars or a telescope should also be taken.

Arctic lakes and rivers offer fishing for trout, arctic char, and grayling. A boat brings best results in the Neruokpuk Lakes, but one of our group caught an 8 lb. trout from the shore.

River-running in kayaks and foldboats may become a major Arctic recreation. All rivers, except the Sagavanirktok, flow predominantly through wilderness and few offer unusual hazards. The North Slope rivers are shallower and more rocky than those on the south side of the Range. The Sheenjek is an ideal river for a kayak or rubber raft trip.

Loop trips or "drop us here—meet us there" jaunts may prove most rewarding to backpacking groups. Be certain that you can reach your pick-up point in time and that your bush pilot will be able to take off from it with you and your gear aboard.

One of the large animals whose habitat is the Arctic is the "barrenlands grizzly." Generally, bears will leave you alone unless cornered or frightened, or unless their young or their food are threatened. Keep your camp area clean and yourself free of food odors (don't wipe your hands on your shirt after eating bacon with your fingers). Unless you are absolutely positive of first-shot kills, don't even take a gun for shooting bears. If the worst happens, you're more assured of survival being mauled by an annoyed bear than receiving the attentions of an injured, furious grizzly.

The Arctic is not just a land for tough, adventurous young men. Members of our outing included 3 women, a 13-year old and a few people in their 60's. Within the limits imposed by terrain and weather, all were able to take part in those activities most appealing to us. Visitors should do some basic research on the area, have proper equipment and be experienced in its use.

In *Two In The Far North,* Mrs. Murie states that the maximum size for groups in the Arctic should be six. Our experience supports this view. The land is vast, but incredibly fragile. Too large a group camping together and following the same paths will cause long-lasting or permanent scars to the land, no matter how much care is exercised. Used carefully and considerately, the Arctic can provide marvelous recreational facilities for many small, widely-spaced groups for years to come.

Selected Reading:

Arctic Wilderness, R. Marshall. Describes authors explorations north of the Yukon between Wiseman and the Arrigetch.

Arctic Wild, L. Crisler. Wolves and caribou in the Killik River area in the western part of the range.

A Naturalist in Alaska, A. Murie. Wildlife in Mount McKinley National Park.

Two in the Far North, M. Murie. Explorations in the Arctic, especially into the present Arctic National Wildlife Range.

"The McCall Glacier Station, Brooks Range, Alaska." *American Alpine Journal,* 1960.

"Mount Chamberlain, Franklin Mountains and Ascents in the Romanzof Mountains," *AAJ*, 1964.

"The Granite Towers of the Arrigetch, Brooks Range, Alaska," *AAJ,* 1965.

Hannegan Pass to Diablo Outing

By FLORENCE OCHSNER and LELA QUICKSTAD

On a somewhat bright Saturday morning, 23 Mountaineers, with packs, boots, and ice axes, took a bus to the end of the Hannegan Pass road, 130 miles north of Seattle via Bellingham, Deming, and Glacier.

After a quick lunch, the group donned packs and headed for the Pass, 5963 feet, and the first night's camp. A fairly good four-mile trail lead up Ruth Creek past views of Ruth Mountain. At the Pass at 3: 30 p.m., grassy slopes were inviting and views from the campsites were excellent. There were ample water supplies both due east and one-fourth mile west of the Pass.

A few ambitious climbers changed to day packs and headed for 7106-foot Mount Ruth. And later in the evening a short trip to Ruth saddle provided a complete view of the area to be explored in the coming week. Visible were Icy Peak, Easy Peak, Mount Fury, Bear Mountain, Mount Redoubt, Shuksan, Nooksak Tower and the Northern and Southern Pickets.

Sunday was clear and sunny, and the group was ready to leave by about nine. At the Copper Mountain Lookout trail junction, about two-thirds of the party changed to day packs and headed for the mountain. The other one-third proceeded to U. S. Cabin and an early camp. The climb to the Lookout was fairly steep, but the trail was good. Water was scarce the last two miles. The views were well worth the effort. From the lookout it was five miles to U. S. Cabin along an easy trail.

Monday brought the first cloudy weather. We began hiking, and in a mile were stopped by a wide river crossing. The trail was brushy and wet and in need of clearing. A quick lunch at Greybiel Shelter and we headed up and on.

We arrived at Tapto Shelter thoroughly soaked, but anxious to reach Whatcom Pass just one and a half miles away. We waited at Tapto until the weather cleared, drying our clothing. Three members elected to go on to the Pass and arrived there at 4: 00 p.m. The weather broke and they enjoyed views of Whatcom Peak and Tapto Lakes. In an hour it was again stormy.

Good weather did not materialize on Tuesday. Although we waited at the Pass as long as we could we had to content our-

selves with the split second views of craggy peaks and hanging glaciers that occasionally peaked through clouds.

By noon we started the steep descent down Whatcom Pass to the valley of Little Beaver Creek. The trail is extremely steep but in good condition. The views of the ice fields and glaciers of Challenger Peak are spectacular. Four miles of travel from Tapto Shelter brought us to the comfort of Twin Rocks Shelter. Lots of wood gave us another chance to dry clothes, cook a good dinner and enjoy a batch of popcorn given to us by a group of Boy Scouts just leaving as we arrived.

A bright sun in the morning gave us all the lift necessary to cover the next six miles to Beaver Pass. We left our view and dropped down into the river valley and a level trail. We crossed the Little Beaver at Stillwell Shelter via a fallen log over a swift stream. The trail to Beaver Pass was steep but in good condition. Beaver Pass Shelter was comfortable with plentiful water and wood. An attempt was made to reach Eiley and Wiley Lakes but the terrain was too brushy and steep.

The route from Beaver Pass to Big Beaver camp on Ross Lake is 13 miles of up and down trail with little view and lots of tree frogs and flies. Felled trees and ponds formed by beaver dams were much in evidence. The camp on Ross Lake—with a swim in the lake—made the mileage worthwhile. One-half mile from the camp, by trail, is a well developed camp with toilets, tables and fireplaces.

Our last hike followed Ross Lake for about three miles. The group again separated with six members taking a side trail to Sourdough Lookout. The rest of the party continued another four miles to Ross Dam. A camping area was located on the far side of the Dam and about a mile down the road leading to the powerhouse. The powerhouse crew allowed us the use of their facilities any time we wished.

It was dark before the climbing members returned from Sourdough Lookout. All were tired after 17 miles of trail, but the views from the Lookout included Ross and Diablo Lakes, Pyramid, Colonial, Snowfield, and What's the Matterhorn. The trail to the Lookout is dry, the last part on rock and a few snowfields.

Sunday morning, our trip was almost over. We met the 9:15 work boat and loaded our packs aboard, laughing and chatting as the boat headed out into the lake.

A Visit to the High Solitaries

By LARRY LEWIN

In January, 1969, Marc Bardsley, Bill Powell and I began to talk about a trip to the Northern Pickets. Marc and I were members of a party that visited the area in 1967. During the early planning stages Marc was asked by the Mountaineer Outing Committee to lead a climbers' outing to the area, which he agreed to do. Our party soon grew to seven members with the addition of Paul Bergman, Randy Peeters, Paul Robisch and Gordon Thomas.

We scheduled the trip for August 16 to 24 and planned a pack-in of supplies for the weekend of August 9 to 10. The plan was to use the same approach route as in 1967, Hannegan Pass-Easy Ridge. To make the pack-in a little easier, Bardsley, his noble wife Lynn, and Bergman carried a load of supplies nine and one-half miles to the Chilliwack River during the weekend of July 26 and 27. On Saturday, August 9, the full party hiked to the cached supplies with relatively light packs. There we loaded up and began the brutal task of carrying ourselves and our gear up the trail toward Easy Peak, about four miles away and 4000 feet above us. After several hours we all arrived at the summit. We discussed going further, but defeated the idea, and secured the supplies just east of Easy Peak. We spent a comfortable night on Easy Ridge and hiked out the next day.

Six days later the main trip began. Hiking up the Easy Peak trail was easier this time with lighter packs. When we reached the cache, we loaded up and staggered eastward toward the large fault below Perfect Pass (Perfect Impasse). There was considerably less snow in the deep gully than we had hoped. The crossing was moderately difficult, but all of us managed to make it by dusk.

Sunday morning we hoisted our packs for the 1300-foot climb to Perfect Pass. Carrying hefty loads enabled us to haul all the gear up in one trip. Our objective was to establish a base camp on the west side of Phantom Peak in order to be in a good position to try Mount Fury. From Perfect Pass the route proceeds eastward across Challenger Glacier to a notch between Challenger's middle and west summits, then across the notch into a large snow basin

and southward to the campsite. This leg of the trip was estimated to require about eight hours. Lack of energy dictated that we postpone the final push until Monday, but we decided to ferry some of the supplies to the notch Sunday afternoon. We would regret this decision a few days later.

In mid-afternoon we started hiking across Challenger Glacier. About half way to the notch, the food can strapped to Bardsley's pack came loose and rolled down the glacier into a large crevasse. Fortunately it landed on a ledge about 30 feet down. Bergman climbed down, tied the can to a rope and we readily hauled it up. Since this episode consumed about one hour, we decided to cache the load at a flat spot on Challenger's west ridge, short of the notch. The glacier was rather broken up, so we returned to camp via the ridge. We went to bed Sunday night with the idea of reaching our final base camp the following day, but the weatherman had other plans.

When we awoke Monday morning, we were engulfed by a wind-and-rainstorm that blasted us for three and one-half days, except for a few hours Tuesday afternoon. During the storm Powell's wind gauge gave readings of gusts up to 60 m.p.h. By Tuesday morning the wind had bent the top segments of the A-frame poles supporting the tent Robisch and I occupied; one tent stake was also bent. The rainfly was punctured at both ends by the poles and one of the rainfly's ties was ripped out. The other two tents in the party fared considerably better. Because we had not planned to stay at Perfect Pass beyond Monday, it was necessary on Tuesday to retrieve some food from the cache on Challenger Ridge. The cards were cut and Robisch and Thomas "won." While they hiked to the cache, the rest of us patched up the camp. Bardsley and I moved the battered tent to a more leeward location. Powell got the repair kit and made the rainfly as good as new. It was amazing to see Bill sitting on a rock nonchalantly sewing the rainfly in the downpour; my own hands were far too numb to hold a needle.

Soon Robisch and Thomas emerged from the fog with the food and we all had lunch. For unknown reasons everyone was jovial. About 2:30 p.m. the skies cleared and everyone went wild. We spread gear out to dry and basked in the open air, which had warmed up to a balmy 42°F. Later Peeters and Thomas celebrated by climbing Whatcom Peak, while the rest played cards and rested. About dusk the rain resumed; it continued the next day, thus ending all hopes of trying Mount Fury. Somehow the hours passed as we played cards, ate and endured miserable, forced

trips outside the tent. Sometime Wednesday night the rain stopped, but the persistence of wind and fog ruled out any climbing on Thursday. Instead, the five who were spared a trip to the cache on Tuesday ferried the remainder of the supplies back to camp from Challenger Ridge. We then had another clothes-and-gear-drying session. By mid-afternoon the weather was much improved and the sun shone. Bergman, Powell and Robisch climbed Whatcom Peak. They left a register on the summit and returned just before sunset.

Friday represented our last opportunity to do any climbing. Late Thursday two parties were formed—Bergman, Peeters and Thomas for Challenger; Bardsley, Powell, Robisch and myself for Crooked Thumb. The next morning dawned bright and clear and the word was "go." Along Challenger Ridge we all stayed together, entering the glacier just west of the west summit. The two parties then separated, the Challenger group continuing eastward and the Crooked Thumb group turning southward.

In the Challenger group Bergman and Peeters shared the leads on upper Challenger Glacier; Peeters led over the final obstacle, a fairly difficult 50-foot rock pitch. A register was placed on the summit and the group headed back toward camp, stopping on the way to climb the middle summit.

Meanwhile the Crooked Thumb party reached the notch between Challenger's middle and west summits and climbed down to the glacier on the south side of the notch. From there we could see the west face of Crooked Thumb across a large snow basin. At the foot of a large gully on the west face, where the route begins, we encountered a nasty moat surrounded by steep, hard snow, making the first lead difficult. It took us about an hour to pass this obstacle. Bardsley led, using two safety pitons. The rockfall danger in the 450-foot gully was extreme. At one point, while I was bringing up the rear, a large load of rocks came down. I was in a safe place at the time and watched the thundering spectacle go by. Later I was informed that the others thought I was being buried.

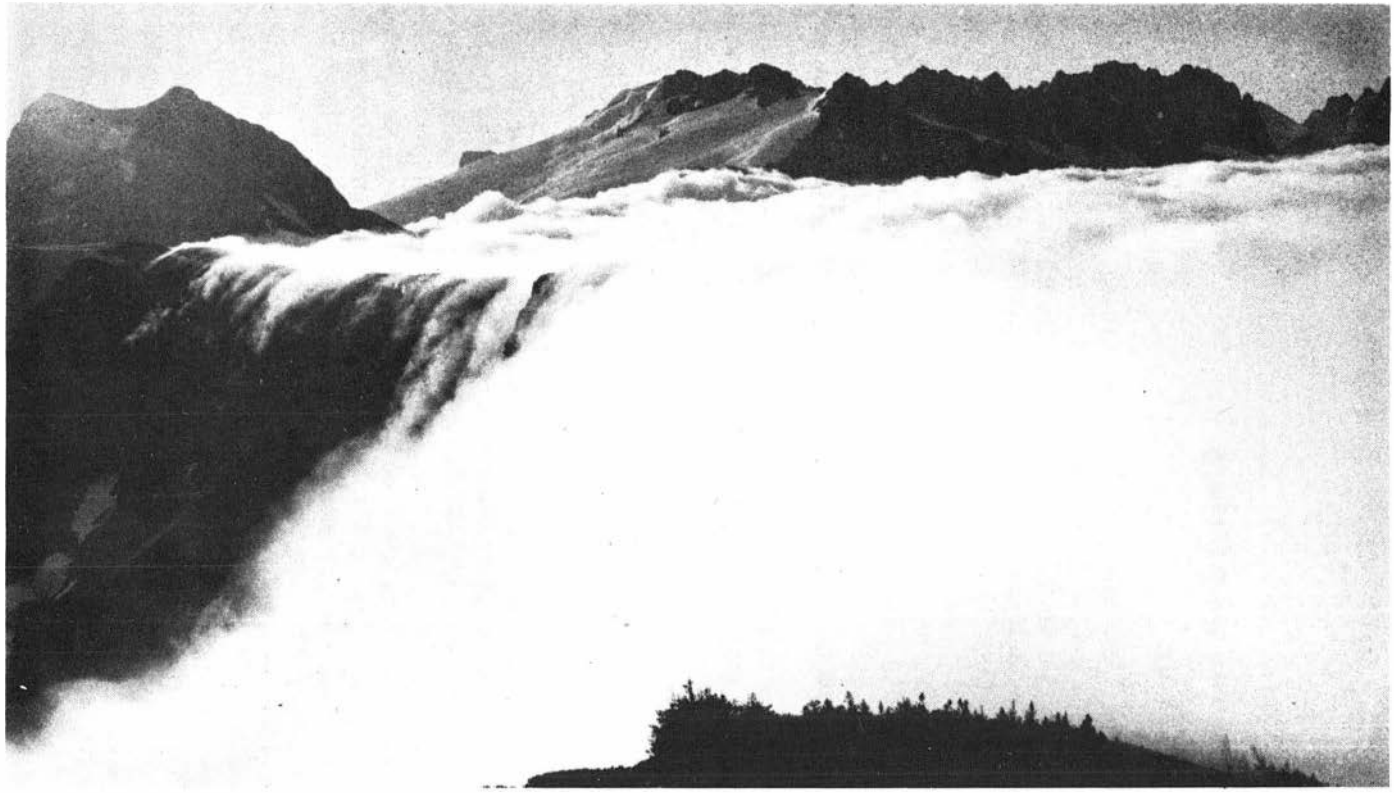
We reached the top of the gully at 1:30 p.m.; time was becoming important. Powell and Robisch, on the lead rope, took off in high gear; Bardsley and I followed. At the top of the gully we were treated to a magnificent view of the Luna-Fury cirque. From this point the route proceeds up Crooked Thumb's north ridge. The first lead is very exposed, although good holds are plentiful. One begins by climbing down into a small notch and up the other side. After Powell had completed this part of the

lead, the rope spanned the notch and the breeze blew it into a shallow horizontal arc. I found this sight bizarre and terrifying, but managed to keep quiet. Beyond the notch the exposure lessened. Powell and Robisch reached the summit considerably sooner than Bardsley and I. The view was superb, but there was little time to savor it. Finding that the original register was gone from its container was a keen disappointment. We left a Mountaineer register on top and started down. Ours was probably the sixth or seventh ascent (the fifth ascent was made by some members of the previously-mentioned party of 1967, including Bardsley, who, as far as we know, became the first person to climb Crooked Thumb twice).

Soon after reaching the bottom of the gully we were benighted. However, because the weather was mild and the moon gave considerable light, traveling across the snow basin accompanied by our moon-shadows was almost pleasant. The wands we placed earlier came in handy. Bardsley led us through the crevasses and Powell led the pitch across the notch on Challenger Ridge without difficulty. On the north side of the notch flashlights were necessary, as the ridge blocked out most of the moonlight. We arrived at camp at midnight and promptly woke our sleeping companions. After a generous dinner we turned in, feeling rather good, although the prospect of packing out the next day hardly seemed inviting.

The last of us left Perfect Pass Saturday at noon. While crossing Perfect Impasse we had a bit more excitement. Pieces of the snow bridge covering the floor of the gully caved in first under Bergman and then under Robisch. Bergman's ice axe broke as he slid under the snow. Robisch pendulumed into the wall of the gully. Both escaped with minor scrapes. Robisch was spared possible serious injury when Bardsley alertly grabbed the fixed line to which Robisch was tied and took up the slack. This prevented Paul from going down the gully.

At day's end we camped on a heather bench about a mile west of Easy Peak. Powell and Thomas bathed in a nearby tarn where the water temperature was 65°F. All enjoyed this festive occasion, which was topped off by a beautiful sunset. By 3:45 p.m. Sunday afternoon we had all reached Hannegan Campground, where our trip ended.



Early morning clouds spilling over Easy Ridge, Northern Pickets—Randy Peeters

The Bowron Lake Outing

By ALICE THORN

Bowron Lake was a mass of gray rolling waves, whitecapped by a south wind, when my husband and I first saw it. We noticed a canoe far out on the lake, appearing almost like some tiny bark driven into shore, at the mercy of wind and wave. We did not know then that the wind and that canoe epitomized much of the trip which lay ahead, that we would be more at the mercy of weather than we had ever thought possible. Novices that we were, we had hope that this storm would blow itself out, that the rain would clear, that the next two weeks of the 1969 Bowron Lake Provincial Park canoe expedition would be serene and sunny.

But it rained hard that night of Sunday, August 17, and we woke to a gray, chilly Monday. Since the entire canoe party would not meet until that night, we had two portages and a lake to travel on our own, and we were a trifle apprehensive.

We chose our rental canoe, a 16-foot aluminum, from large racks on the lakeshore, and my husband received instruction in how to carry it for portages. We then drove the half mile from the lodge to the government parking lot where portage trail one began. We unloaded the car and arranged our gear for the first hike, and were slightly cheerful as we started down that trail.

The Bowron Lakes Wilderness Park circuit is a geographical "natural." On the maps, the Lakes form an almost perfect parallelogram, its sides made of long narrow lakes, and its corners made by the shape of the lakes or by rivers connecting them. When we left the government lot, we were walking east and somewhat north along the first side of the parallelogram. Our destination was ultimately Indianpoint Lake, but we had first to walk a two-mile portage, then to canoe small Kibee Lake, then to portage another one and one-half mile trail.

We could not carry all our gear in one trip, so we hiked each trail twice, for a grand total that first day of ten and one-half miles backpacking and one and one-half miles paddling. Those who wanted to avoid this arduous section could be luxurious. For $25.00 (in 1969 at least) they could hire a seaplane to take their persons and their gear to an Indianpoint Lake camp spot.

Gear and people were stowed cosily in the plane's cabin, while the canoe was fastened to one pontoon.

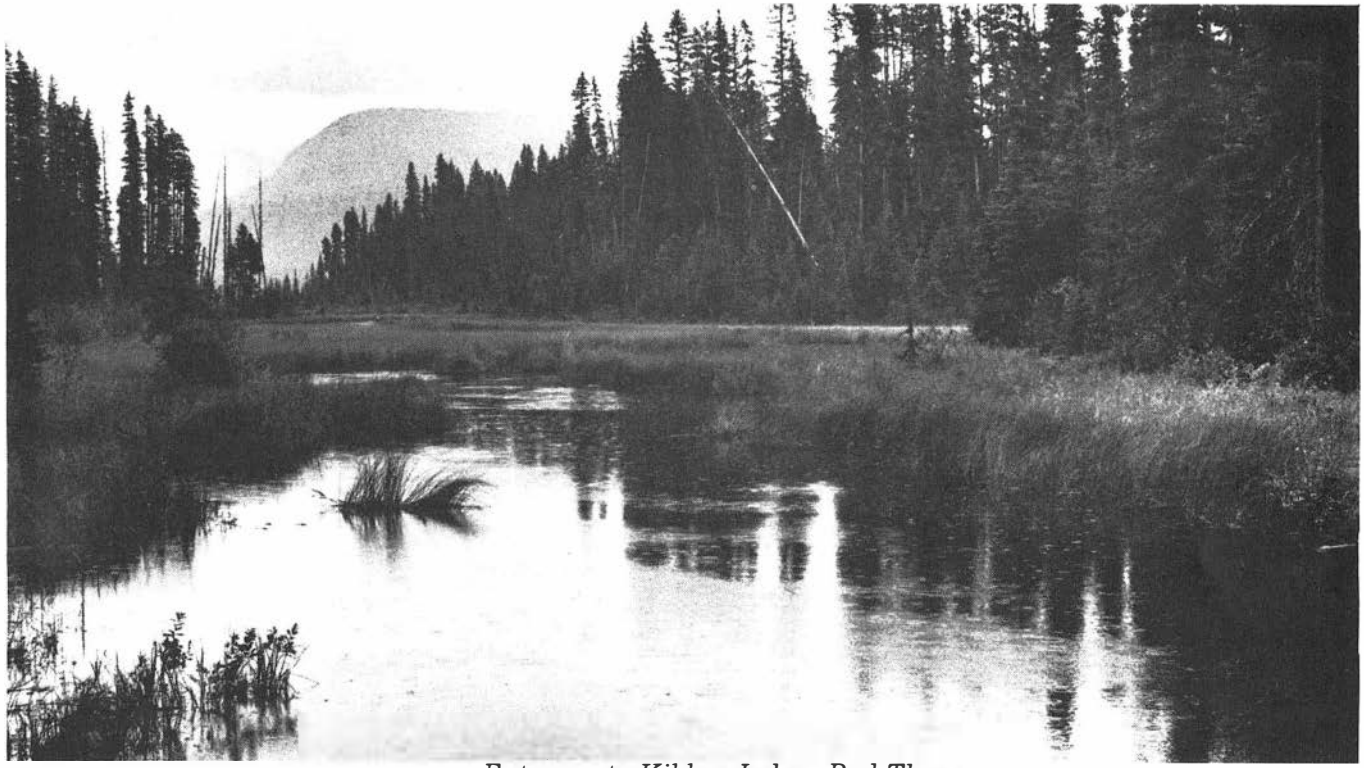
We, however, were walking. We did the first portage in good spirits, in spite of the difficulty on my husband's part of learning that a 16-foot, 65-pound canoe is not like a mountaineering pack, and that no amount of struggling would move the trees from the trail, or cause the canoe to bend. We decided that for portaging the ideal canoe would be highly flexible, and that no one would portage anything but a foldboat if he had his druthers. (Out on the large lakes was quite another thing; then we were glad of every foot of canoe we could muster. One of our party used a 14-foot canoe; it was too small for the gear and for rough water.) We grew used to the portage posture — a bent-over figure, swaying drunkenly under the awkward weight and length, a sort of latterday Quixote, tilting not at windmills but at trees.

We learned the cameraderie of the portage trail, for with everyone taking at least two trips we could meet the same people coming and going. We learned at least one French pronunciation: all the Canadians said, "por-tazhe" with the second syllable stressed. We became grateful for commiseration, for any encouragement, however false, that there wasn't much trail left.

This first trail was in decent condition, and had split log planking over the muddiest spots. We made good time, and though we were tired at the end, we could go on cheerfully.

On Kibbee Lake we began to experience that particular delight for which we had come. Though it was raining by now, we could enjoy the water, for the way wound out through green reeds, then onto the lake. After our long drive, after today's trail chatter, after the physical effort of carrying gear, the lifting, and settling in, after donning ponchos—after the noise, here was the great contrast of a wilderness lake, silent to us until we began to hear wind through evergreens and a river in the distance. Water ran against the canoe prow, and raindrops fell on my poncho—as though I sat warm and dry under my private roof, secluded from all the world, hearing the constant crackle of rain.

We felt utterly alone. Another canoe, red against the dark shoreline, merged into the landscape. Even my canoe partner was for the duration only a motion—lift, dip, a slight surge. The lake was calm, and we watched concentric patterns form and reform, tiny circles from the rain, larger circles from our paddles, ridges angling from the prow of the canoe.



Entrance to Kibbee Lake—Rod Thorn

The silence was broken as we reached the east end of Kibbee and prepared for our second portage trail of the day. Our enthusiasm was slightly dimmed by now, in a direct ratio to sore muscles. Though this second trail was supposed to be shorter, it seemed longer and muddier. With so many people going back and forth carrying canoes and gear, it was torn up as badly as a horse trail. We went through the more familiar routine of emptying the canoe, trying to rig dry places for our gear. We loaded on a pack, and began plodding. Some hikers wore tennis shoes and socks which were soon soggy black. Our hiking boots were almost unrecognizable, and we began to dream of the hikers' temptations in the wilderness—hot showers, dry clothes, innerspring mattresses, a hot meal.

Instead, we reached a crowded, muddy campsite on the shore of Indianpoint Lake. All the people who had been strung out along the portage trails were concentrated here, like so many sheep huddled against the barrier of the lake. We joined other members of our party, and began trying to set up a decent camp among the crowds and in the mud. As we struggled to drive tent stakes and to tie lines, rain fell, and we were engulfed by our first thunder and lightning storm.

We were grateful to huddle under a tarp, by a fire, to have a refuge from the storm. Here was the other end of the spectrum of wilderness experience—on Kibbee Lake there had been utter serenity; here "lightnings enlightened the world; the earth saw, and trembled." At times we were within a half mile of the storm's center, and once, we saw lightning flash straight down into the lake. The thunder from it seemed to crack within our heads. Thunder reverberated among the mountains like so many antiphonal kettledrums. Someone occasionally pulled on the tarp, dumping collected water; we could feel the tarp pull and surge like a sail in the wind.

It rained most of the night; someone in the campground had to move a tent which he had unknowingly placed in a drainage ravine.

Though we awoke to a calm lake the next morning, winds came up again before we were ready to leave. Most of us were awkward about camp routines, and soaked gear hindered packing. Paddling into the winds was tough work; weary from portaging, most of us went on reserve strength. Though Indianpoint was only about three miles long, we made one stop along the way to join the last two members of our party, who had been ferried by the seaplane. Our party now numbered 6 canoes—the maximum, we

decided, that should go together on this trip.

Here we heard our first stories of marauding bears. On the trip, real bears proved as elusive as good weather. We heard stories, but never saw more than a footprint. Still, each night we were faithful in hanging our food packs high, a ritual to appease Ursas Major and Minor. Our camps sometimes looked like a lynching party had been held, with those great sacks swinging eerily in the dark. The bears were evidently satisfied by our sacrifices.

Since this was the first meeting of our entire party, we held a short council while we rested. Then we loaded back into canoes to paddle to the end of the lake.

By now the weather changed again, and we moved into driving rain and hail. It was cold, and though our bodies were dry under ponchos and tarps, our hands and arms were not. At lake's end, we had difficulty finding the channel through reeds, then we reached a tiny landing on a muddy slope. There was little room for canoes and gear, less for us. A tarp and fire were not enough to warm us thoroughly or to get us dry. Lunch helped; but no trail food could counter the cold or wet, or raise our spirits through that afternoon's portage.

Though this trail was mercifully slightly shorter, it was pure mud, without even the occasional plank walks which had helped through the others. Footing was never solid, and canoe carriers had not only problems of balance and weight, but also of sliding slightly back for every step forward. By now bare feet seemed only sensible, since we were likely to sing up to our ankles in mud with every step. (We heard later that a Boy Scout party had a TV cameraman along. He used 50 feet of movie film on feet plodding through that mud.)

Our only help was that the rain stopped and the sun came out. As we staggered to the end of the trail with our last loads, we were able to bask in the warmth, and to dry out on a plank dock —the only dry area outside the cabin.

We were now on the west tip of Isaac Lake; our spirits and energies wanted to camp at that spot. However, the spot itself sent us on, for the shelter cabin was surrounded by piles of garbage—may the inventor of the tin can receive his just reward—and the spot was marshy, with no sites for tents.

With gear fairly dry, we reloaded. It was by now late afternoon, for everyone had been too tired to pretend to any efficiency on this portage. By the time the last canoe was packed, and we were prepared to line the canoes down two log chutes into Lake Isaac, the weather had prepared a welcome. Just as one canoe

slid down a chute, a loud clap of thunder announced further hail and lightning. Pulling our canoes into shore in the inlet, we huddled under ponchos and tarps until this storm, too, should pass.

We could see down Lake Isaac, on whose waters hailstones danced, could see steep wooded slopes disappear into swirling cloud. Mounds of hailstones collected in the valley of our tarps, until each canoe held a miniature snowy landscape. Thunder cracked and reverbrated in the hills, lightning flashed through clouds. In my aluminum canoe, floating on that lake, I was shivering with more than the sudden cold. "In short, I was afraid."

The storm ended. Shivering and hungry, we set out to find a home for the night. Because of the crowds of people ahead of us on the lake, we thought the few developed campsites were likely to be full. Therefore, instead of following the recommended waterway down the left side of the lake, we turned this time to the right shore. The banks were usually rather steep, and finding terrain for tents was not easy, but we landed in a birch forest, by a rushing rock-choked creek. The ground was soggy, but at least flat enough to pitch a tent among the devil's club. We lost no time unpacking, building fires and preparing supper, though the soaking wood made firebuilding unusually difficult.

Had I not known that those three portages lay between us and our cars, I would have gone home.

But the sky cleared, and from our lakeshore camp we at least saw the mountain-surrounded lake we had been told we would see. On the highest peaks fresh snow had fallen, but with food on our stomachs we could face the prospect with reasonable equanimity. We surely had to have known the worst this trip could possibly have in store. From now on, things had to improve.

We awoke on Wednesday the 19th to clear skies, sunshine, and the luxury of a day in camp. We stayed close to home, as we did on all our layovers. Some of our members had planned to try a climb or two, but when they saw conditions, realized that this would be difficult. The interior of the park is undeveloped, purposefully so, as it is a game refuge. Any interior hiking would be cross-country bushwhacking, a prospect none of us had energy for on this day, in these soggy forests. And we needed to dry our gear—spinning clothesline webs everywhere to effect that end.

Rains came again that night, but at least we had dry socks, and a wood supply, and a shipshape camp.

On Thursday we practiced a lesson which the weather had taught us—that we should be out onto the lake early in order to be far away before the daily winds came up. We set a schedule

which we tried to use throughout the trip: up at 6 a.m. and out by 8 a.m.

On this morning our leader could instruct us novices in the finer points of paddling, and we could learn to conserve our energies. The lead canoe set our paddling pace, and led us along the lake shores, into coves and around points. We watched the passing shorelines, saw kingfishers flash blue among the trees, glimpsed a solitary loon swimming ahead, or, once, saw the head of an otter bobbing a few canoe lengths away.

We noticed that many canoe parties were more interested in efficient and swift paddling than in our poking along, for we saw them going down the center of the lake, making time to the next campsite. We thought that in such a case a power boat would have done, that to come to the wilderness only for speed seemed a waste of wilderness. We saw odd parties: once a canoe with four adult males wallowed down the lake, looking cumbersome and all too low in the water. And we saw interesting parties: for a while we were playing portage leap-frog with two families, one of which included two gradeschool-age children. The children sat in the center of the canoe, side by side, usually snugly swathed in plastics, with gear stowed around them. Their parents then paddled. It looked like childhood's dream, somehow, to be carried so easily over the water—better than all the rafts on the Mississippi Mark Twain could devise.

After lunch, we learned that we had yet more to learn of weather, for winds came up, again against us, and by 1:30 p.m. we were struggling into one and two-foot waves. After tricky maneuvering around a point of land, we were able to pull behind a sand bar and into a camping spot. It was about 2:00 p.m. and bitter cold as we set up camp and built fires. We barely had tents up when the storm gained intensity and rain drove us under tarps to watch a wild lake and to hear thunder and see lightning once again.

The first storm blew past us, going northeast—the direction from which we had just come. There was a lull, then we realized the winds had changed direction 180°, and that we could see rain and choppy water coming now *from* the northeast, heading towards our camp. We stood again under the tarps and watched the dark gray patch move over the water, prepared this time for the rains which fell. It may have been after this storm, or between these two storms, that we had gale force winds blowing steadily at us from the lake, drying our tents in a half hour's time, and

telling us only too surely that winter on Isaac Lake would be bitter.

It was during one of these storms that a party of eight—men and boys—joined us, having swamped two of their canoes in the high waters through which we had come safely. They joined us under the tarps until the rains and winds let up enough for them to unpack canoes and make some semblance of drying their gear.

The campsite was exceedingly crowded by this time, and we bumped into someone continually while we tended fires, made meals, and tried to find a private spot—under these conditions perhaps the most difficult part of it all. This was another campsite where garbage—and signs of random elimination—were particularly obnoxious. It was a pity, because it was one of the few lowland spots along the lake, a sort of sandspit, formed by a marshy stream which cut it off from marshy grasslands just behind.

We had our usual pack-hanging ceremony that night, enlivened by the obvious mystification of the Canadians until they learned what we were doing. Then, because we had taken all the "hanging trees," they anchored their gear in the lagoon in a canoe. (We saw and heard no bears that night, but when we saw our campsharers' food the next morning we were glad they had anchored far from us, for they carried dozens and dozens of fresh eggs in the cartons, and pounds and pounds of bacon, all evidently unscathed by the swamping.)

And though storm clouds still billowed against the mountains, we had a magnificently colored sunset. Clouds turned gold, and the wild lake was colored now gold, now purple, now pink, as waves washed the colors onto the shore where we stood.

Friday the 21st was our first sunny canoeing day as we paddled smoothly down the south half of Isaac Lake. Once again we looked up to snowy mountains. And we could appreciate the variety of the water itself, glassy smooth, indigo or emerald, sometimes yellowed green, often so clear we could see snags and rocks far below us, thickly covered by water plants, like rather dull-colored, underwater moss. Sometimes the water would ripple with a slight breeze; if the wind quickened we paddled into a greater chop; at points of land we cut through swells, then moved into still, dark coves. We slid, now through light, now through dark.

Sometimes we could see how the hillsides themselves continued down into and under the water. We passed over heaped-up logs, flung there by past avalanches, and we could imagine the force with which they had come down. We could look up at the gash

in the hillside, now covered with scrub brush, and usually with a waterfall down its center. There were dozens and dozens of waterfalls, over worn rock, through dark evergreens, splashing into the lake; sometimes a full creek sent its current out to turn the bows of our canoes.

And we gave ourselves over to the rhythm of dip, pull, lift, forward, dip, pull, lift—an easy continuous stroking, regular, slow, no interruptions for minutes, even hours. On and on, easy, slow, sliding past the shores, through waters, away from noise, from rush, from time, each aware of the incomprehensible beauty.

By early afternoon we reached the south tip of Isaac Lake, having traversed its 26-mile length, the longest lake of the trip.

Here was our first river running. Isaac River flows east out of the lake for 50 to 100 feet before making a right angle bend and flowing south again. It is a navigable rapid here, and the right angle bend makes an exciting run. We stood on the high bank and watched other canoers practice; it looked easy, but bystanders told us that three canoes had swamped that morning, two because the canoes carried full loads of gear and couldn't turn quickly enough through the bend. Members of our party tried the rapid several times, carrying the canoe back on the portage trail after each try. There were no mishaps that day, and we set up camp in the largest camp area we had yet seen, among moss-covered fallen logs on flat, relatively dry, surfaces.

On Saturday we had the entire sunny day for the Isaac River run. Those who did not run the rapids began portaging from the campsite, along a trail for about a half mile. The trail ran on a bank above the river, and we walked through deep forest with heavy moss, brilliant green, everywhere. Sun filtered through high hemlocks we could see the blue green river below. We came to cascades, where the river narrowed to a rocky falls, and we knew the meaning of "wild river" as we saw, heard, and felt it pound water into foam. Below the cascades we eventually regrouped, putting the canoes into the river for a short run before taking them out again above Isaac Falls.

Most of our party had at least one run through the rapids. Only one canoe went through loaded, and we watched as it shot through the V of the current, found the slot, and turned quickly, almost tipping as a dropped paddle sent it on an awkward angle. But the canoists pulled out of the turn, and we cheered as they pulled to shore to bail out.

After that, and after the portage, our short run on the river was idyllic—following green waters around gentle bends, over

deep pools, until we pulled into shore above the log jam caused by Isaac Falls. We heard the roar, and large red letters warned, DANGER: ISAAC FALLS. Someone told us that one year the sign was removed by vandals, and that two canoists went over the falls.

We had left the left bank of the river for our run, and now entered the portage on its right bank. Here, behind the log jam, there was room for only one or two canoes to load or unload at any one time, and we were slowed. This portage around the falls was short, perhaps only a quarter of a mile, but went straight up a steep muddy bank for 50 feet or so, across a ridge, and down the bank again to the river. There were few handholds up the bank, and footing in the mud was slick.

We learned that one could portage the entire river on its east bank, but that the trail was rather faint in places. Later we met people who were doing the lake circuit "backwards" by starting on Bowron Lake, and who portaged the entire Isaac River trail. We did not envy them.

The camping area on this west bank of the Isaac was good, with a lovely view of the mouth of the river and McLeary Lake. But like all portage camps, it was crowded, so we crossed the river and canoed into McLeary. Here we camped among hemlocks and devil's club.

The sunshine held for a Sunday in camp. Some of us plunged into the ice cold lake waters. Some scrounged for wood—for the first time we did not find the ready-sawed logs which park help had supplied to all other developed campsites. Fishermen tried to tempt denizens of the deep, only to learn that these particular denizens were so well fed they langorously ignored bait dangled over their eyes.

Canoers explored a shallow lagoon and old overgrown beaver dam. Hikers took a short trail back up the river to the Falls, and walked over thick moss to the river's edge.

In late afternoon, we hurried back to camp as we felt a storm gather. We scrambled for ponchos, which by now shaped themselves to us, so much had they been worn. The storm broke, and we were in a too-familiar scene: on a lake shore, under a tarp, inundated by rain, thunder and lightning. Our sunny skies had turned prematurely dark, and the hills opposite were lit by two lightning fires, two trees burning like giant torches in the mist until extinguished by the rain. After the storm passed, we heard lingering rumbles in the hills.

Our isolation had been ended by a party of about 18 boy scouts who descended on our campsite just before the storm. We learned that they were part of a group which totaled 75 persons, the rest mercifully having dispersed to other campsites. We were crowded by the time they had pulled several canoes into the camp area to form sides for tents. But they became one of the stormy night, for they all wore army surplus green ponchos, and as the heavy rains fell, and the night grew dark, they looked like some demonic monastic order, weaving in and out among the smokey fires.

On Monday, August 25, we were up for the longest day of paddling yet. Because we had learned where the 75-member party planned to camp, we were to go farther and outrace them to a campsite.

We crossed McLeary to the Cariboo River, where a bend to the right sent us west along the third side of our parallelogram. Unlike the Isaac, Cariboo was gray with silt, though shallow, and was difficult to read. It was swift, and numerous streams fed into it. We kneeled in our canoes, watching each current and eddy, seeing snags seem to swim out to us. We novices were grateful to the lead canoe, for we could follow it through swift channels. In places we could relax as the river broadened and we drifted past wooded banks. Again it narrowed, or another creek flowed into it, and we learned to angle our canoe to merge with the entering current.

Eventually the river broadened still more, we paddled through grasses, and were out onto Lanezi Lake, the second longest of the circuit. We were back into high mountain country with steep lake sides. Once we saw a gracier cirque high above us, with hanging glaciers disappearing into the clouds.

Though the rain had largely stopped when we awoke this morning, it fell again on Lanezi. So we huddled under our rain gear and paddled as straight a course as we could, now through heavy downpours, now through light rain. By lunchtime we reached the lake's end where it became the Cariboo River again for a few hundred feet. We looked back at high mountains, then were onto Sandy Lake.

In this trip of endlessly different terrain, Sandy was like a valley after the heights. The lake itself was shallow, and we missed the depths of blue and green we had known on Isaac. Shorelines were now low wooded ridges with long stretches of sandy beach and reeds. Here we relaxed, and basked in returned sunshine. We defiantly doffed our ponchos, though clouds merged

and dispersed constantly overhead.

Sandy Lake narrowed and became the Cariboo River once more. Here was a wide serene stream, and for two to three miles we simply drifted with the current. Tired, and under the spell of slow movement and mild winds, we laid back, with now and then a push of the paddle to point us forward, in silence for the most part. Once we drifted under a high fir snag, and could see the still form of an eagle on it. His shrill cry followed as we drifted below, then beyond his perch.

We made a broad left turn, following the bend of the river. Here the Cariboo River flowed southwest, over its own large falls, while the last side of the circuit proceeded northwest. Our night's stopping place, Unna Lake, was to our left and slightly off the main circuit. We could hear a chorus of loons laughing—that indescribable sound—as we entered.

We set up camp in a pine and birch wood on the sandy lakeshore. Then, though we had come so far, we paddled the half miles across Unna to the trail to Cariboo Falls. Here we walked through twilight in a lodgepole pine forest. As we neared the falls, we heard the rumble as though a perpetual train passed near by. The Isaac River falls had been 35 feet high, and these were 80. We could hardly see the entire falls at once, for the trail was just above it. We could feel the spray blown toward us by wind currents, and we walked on heavy moss once more.

That night we experienced the classic campers' scene of a full moon over the lake. From our tent we could see black silhouettes of twisted pines on the lakeshore, and we were slow to go to sleep in that beauty.

Tuesday we woke to thick fog, in which the far lakeshore was visible only as a dark shadow. We could hear the eagle cry nearby, but in the fog the sound of the falls seemed muffled. Then, as the sun rose, the lake became like a steaming cauldron, with wisps rising to evaporate all across its surface.

Leaving Unna Lake, we paddled a short distance against the current of the Cariboo to get back onto the last side of our circuit. We turned into the entrance to Three Mile Creek, which led toward Babcock Lake. We had been told that here we would line the canoes, occasionally pulling them over beaver dams. However, lining wasn't quite descriptive of that stretch of travel, for the creek was much deeper than usual.

We began tamely enough, paddling toward the first beaver dam. Then the creek twisted sharply; we reached the first shallow spot but found little shore to walk along for lining. So began our

travel: in and out of the canoe, now walking in one-foot water over gravel, only to plunge suddenly into a pool, getting wet first to the knees, then the thighs, finally up to the waist. Gone was our fine technique—here anything that would move the canoe was welcome: pushing, pulling, lifting, straining, poling—always keeping the gear dry, and the canoe from sliding rashly.

The dams were another matter. They were slick; there were few handholds, and certainly no handy slides over which to drag the canoe. Once we tried to go around a dam in particularly deep water, only to find that a creek's current increases ferociously when narrowed to a foot-wide channel. We were driven back, and from dubious footing in a deep pool, persuaded the canoe to go up and over.

Bruised and scratched though we were, we laughed. This was exhilarating, and we crossed the last beaver dam in a gasp of energy. We were now in a shallow marshy stream, and could paddle, moving slowly through a jungle-like area, out onto Babcock. A short rest here, as we waited for the last of our party to defeat the obstacle course, then across the lake to our last portage.

Babcock, like Sandy, was surrounded by lowlands, and shallow. And like Sandy, it was less clear, for the silt of the Cariboo carried even this far. As we glided across, two loons sang a duet, one calling, the other answering. we tried to get closer, but the birds dived under us, emerging far behind our canoes. When we were safely away, we heard them cry again, that peculiar warble and whistle combined.

The last portage was hardly worthy of the name, for perhaps half a city block of wide sandy trail lead to Skoi Lake. This had once been a rail portage, with cars to carry the canoes across, but the equipment had rusted out. We could see a jumble of wheels, rails and cable on the lakeshore.

From the far side we paddled through a curving path which looked as though it had been chopped through the thick mat of reeds. As we poled along, we saw the stems of the grasses going down into the water, almost as though we were looking at a cutaway of the earth rather than at brown water. The grasses above water were high enough that we could barely see other canoists' heads, and they looked disembodied, floating ephemerally over the grasstops.

Across Skoi with a breeze blessedly at our backs, then through a minuscule canal, evidently cut through to replace the other rail portage whose trail we saw a number of feet up the beach. There was barely enough water to float a canoe here, and we poled

through. Then we lined canoes down a chute equipped with log rollers and were out onto Spectacle Lakes, into murky, rusted yellow waters.

The breeze which had pushed us so gently across Skoi had quickened into a real wind on Spectacle, and several canoists rigged sails before which they could travel swiftly. Sailing was a joy to the stern paddler, who could idle in sloth. The bow paddler, however, had to hold the sail, and this could be harder on the arms than paddling, even if he tied a crosspiece to his extra paddle as one sail-maker did.

By the time we reached what we thought was our campsite, the wind had whipped up one to one and a half-foot waves reminiscent of those which had driven us off Isaac long ago last week. These waves were behind us, however, and we had the wind's help. Still, we were glad to land our canoes on an isthmus which jutted almost across the lake here, forming a sandspit. The area was perhaps twenty feet from shore to shore, and parties camped farthest out on the tip would be forced to walk through the camps of all other parties to reach any privacy.

Therefore we turned back along the shore we had just followed, finding a more secluded campsite on a nearby bluff. This was a lovely site, for from the bluff you could look far up the lake. However, except for a small cleared area the site was covered with low blue-huckleberry bushes, and while the fresh berries were a delight, the mosquitoes were not.

On Wednesday we paddled to our last campsite. There was a sharp breeze and some canoists again raised sails, while others moved leisurely down the left side of Spectacle, along marshy shores, looking again for wildlife. There was little demarcation between Spectacle and Swan, except that a rather sizeable island seemed to divide Swan into two channels. We chose the narrower channel up the right of the island, and eventually reached our last night's campsite.

Our leader had rejected one designated spot on the far end of Swan because of its immense garbage pit. So once more we found an undesignated spot, and under chilly gray skies set up our last camp. We borrowed an idea from the boy scouts this time, and pulled our canoes onto land, turning them onto their sides to use as tables.

And, of course, it rained. Back to ponchos, to huddling under a tarp, to cooking over an eye-stinging fire. By now every Lipton dinner tasted like every other we had had. By now we reeked of smoke through every pore, to say nothing of other accumu-

lations which one bath in two weeks had discouraged not one whit. By now we were rather weary of grandeur, and of moving our beds and belongings. Byy now we were bone weary of rain.

On Thursday, our last river run was the Bowron, which carried us gently around broad curves, through marshlands, and onto Bowron Lake. Drawing our circuit to a close, we had our last rainstorm. It grew bitter cold again, our hands were wet and chilly, our ponchos dripped onto our canoes—all that we had known in the last ten days somehow accumulated in this ride.

And just as we had seen a canoe riding over the waves toward the lodge, so now we rode a canoe over the water, toward the shore, wondering why the shore moved so slowly toward us, yet wanting this movement and this experience not to end.

Entering Skoi Lake—Rod Thorn

Oh, British Columbia!

By FRED BECKEY

In the halcyon days of exploration, Sir Alexander Mackenzie crossed British Columbia to reach Bella Coola in 1793, the first man to complete the overland journey of the North American continent. Probably more than any later explorer and adventurer, he understood what a vast and varied region Canada's great western province is. Wilderness still dominates British Columbia; here is a region where alpine adventure celebrates individuality. In an age where there are no unclimbed summits in the Alps, and no alpine peaks unconquered even in the contiguous United States, Western Canada abounds with major peaks that have never seen the mountaineer. A sampling of the climber's treasure follows.

Famed European guides like Conrad Kain, Hans Fuhrer, and Ernst Feuz, were behind the conquest of some of the most difficult peaks. Early Canadian explorers like Coleman, Palmer, Wheeler, and Munday were instrumental in penetrating the ranges, then making exploratory ascents; they followed David Thompson and other early explorers and surveyors who undertook the explorations of many ranges. Many of the most difficult summits have fallen to Americans—such peaks as Waddington, the Asperity-Serra-Stiletto peaks, Kates Needle, Mount Ratz, Snowpatch Spire, and the South Tower of Howser Spire. And, climbers from the United States have constantly accepted the challenges of the unclimbed route. Fortunately for those interested, the future seems endless.

One should be aware of various topographic maps available at different scales. The National Topographic Index allows one to choose the desired scale (index) and map number. Maps can be obtained from the Geographic Division; B. C. Lands Service; Parliament Buildings; Victoria, B. C.

The Rocky Mountains

This range extends from Montana to the Liard River, some 800 miles, and is usually thought of as part of Alberta. It is true that most of the better-known peaks are on the Alberta side of the provincial boundary, which in its southern half tends to follow the continental divide. But since the range trends northwest,

some 400 miles of the range north of Jasper National Park lie wholly in British Columbia. The Rockies are high in altitude, and as an interior range are not subjected to Pacific moisture; much of the climatic influence is from the Arctic and from the plains of Alberta. Cold winters and semi-moist springs have sufficient snowfall to produce large glacier and icecap systems, abetted by the comparatively low permafrost line. Peaks stand out bold and austere, with a mantle of vegetation softening river valleys. Lakes and rivers have a light blue-green tint that must be the loveliest of colors.

For mountaineers, the Italian and French Military Groups contain the first truly important summits from the south end of the range in Canada. Mount Joffre, at 11,316 feet, and located between the White River and the Kananaskis (about 50 miles south of Banff) is the undisputed monarch here. It is closely rivalled by Mount King George (11,226 feet), highest of the "Royal Group" between Albert River and the upper Palliser. This group, anchored by King George at the south end and Mount Queen Mary at the north end, is about 6 miles long, and located about 20 miles southeast of Mount Assiniboine. Rock is typically sedimentary, yet some good climbing has been found, and much is left. A logging road up the Palliser River makes the region more accessible than the former route from Spray Lakes in Alberta.

The region on the provincial border closely north, between the Kananaskis and upper Palliser Rivers, which features Mount Sir Douglas (11,174) is far better known, as is the Mount Assiniboine area. The latter peak (11,870) is so famed for its appearance that it need not be discussed here. New climbing routes remain among these peaks, but it will be the fortunate party that finds a line with sound rock. A number of parties have had the best success in unsettled, colder weather; certainly rockfall is at a minimum then, and surface slopes are less likely to slide. Cold, clear weather is the ideal condition, as in most temperate mountains.

The most famed section of the Rocky Mountains is that near Lake Louise and Lake O'Hara, and again is so well known it need not be covered here. The entire region has vast climbing opportunities and is at its best when snow/ice is firm; rock is generally brittle, with exceptions—even bands of firm rock on peaks which have generally friable surfaces. While new routes are left, they generally call for special forms of risk.

Lying west, and wholly in British Columbia are the rugged and many mountains lying within Yoho and Kootenay National Parks. This is a less-frequented yet fine area for generalized mountaineering. Many new routes remain to be done: Mount Foster and the two Goodsir Peaks (the south peak at 11,686 is one of the dominating summits for many miles) are noticeable objectives. Mount Balfour (10,741) is a marvelous ski ascent.

The freshfield group, and its icefield which is the source for the Howse River, has been visited by outing groups, but the great ice peaks here are only occasionally climbed. It is a marvelous alpine area, dominated by Mount Freshfield (10,945). Mount Lyell (11,495) and its icefields mark the continental divide in the region between the Bush and Alexandria Rivers; not far distant is Mount Forbes (11,902 and the fifth highest peak in the Rockies), first climbed in 1902. On the western edge of the Columbia Icefields stands Bryce (11,507); it flanks the gloomy gorge of the Bush River, wholly in British Columbia. It was first climbed in 1902 by James Outram and the guide Christian Kaufmann. Mounts Columbia and King Edward in the icefield area are astride the border, and offer snow-and-ice routes on the B. C. side. Columbia (12,294) is also known as the highest peak in Alberta.

Of great interest is the region of the Clemenceau Icefield. Maps of the headwaters of the Sullivan and Wood Rivers which flow to the Columbia are still incomplete, but it appears that this is the largest icefield in the entire range, with at least 40 square miles of ice. Clemenceau was unknown until Coleman's 1892 expedition penetrated the valley of Chisel Creek and climbed Mount Brouillard. Early travellers on the Columbia River do not mention the great nearby mountain mass, and even the Boundary Commission did not penetrate up the Wood River and Clemenceau Creek until 1920. Mount Clemenceau (12,001), the fourth highest peak in the range, was not climbed until 1923. Such inaccessible peaks as Tsar (11,232), and more centrally located giants as Ghost, Duplicate, Shackleton, and Chisel Peak all offer new challenges.

The region has been visited in past years by helicopter, probably justifiably here, for the deep rivers, high passes, and rough glaciers make customary approaches expeditionary. To the northwest of Clemenceau are wild peaks such as Bras Roche and Serenity (the latter in an extremely wild region 7 miles west of Fortress Lake and hard to approach). The Brown Icefield is seldom visited; it is generally on the Canoe-Brown watershed.

The "Ramparts" form the provincial border southwest of Jasper, and house the headwaters of the great Fraser River. Simon Peak is the highest summit in this region, but Mount Geike (10,854) and neighbors such as Barbican, Turrett, and Casemate, all lie wholly in B. C. and offer technical climbs. The region is comparatively civilized, with trails and cabins, and the rock is generally sound quartzite. Several alpine ascents have been done, but the surface is just scratched. Surveyors who christened these the Ramparts thought of them as a castellated range and bestowed the medieval names they bear.

Yellowhead Pass, not discovered until 1826, is the lowest depression crossing the continental watershed between the International Boundary and Peace River Pass. When the Canadian National Railroad began operating through it in 1914, it opened the region of Mount Robson. Neither the origin nor significance of the name is known, strangely. The first white men to approach its base were organized by A. P. Coleman, who led an attempt in 1908; in 1911 A. O. Wheeler made the first circuit of the great peak.

The creased and furrowed ice faces of Robson, highest of the Rockies, are no longer a mystery. Rising 10,000 feet above its immediate base, it was first climbed in 1913 by Conrad Kain, A. H. MacCarthy, and W. W. Foster. An entire volume could be written on its topography, glaciers, and climbing history. Routes vary from strenuous to severe; while new lines may exist, there are safer ones to be found elsewhere.

Less well known is the Sir Alexander group, some 75 miles to the northwest. Here is an area of 35 square miles of ice, dominated by 10,740-foot Sir Alexander. Its deep footings make it a large mass. The float plane is used to reach such groups, as well as those in the northernmost sections of the Rockies. Only slightly lower Mount Ida is 12 miles north. These peaks offer new routes. Here one is 340 air-miles from Mount Joffre, yet expanses of lesser-known portions of the range extend onward. The Lloyd George Mountains, east of the Finlay River and southwest of Fort Nelson are among the best known groups in the northern expanses, yet they were only climbed in 1947 by a group organized by Henry Hall. New routes remain; an approach is by plane from Fort St. James on Stuart Lake.

The Selkirk Mountains

The interior ranges were discovered only after the Rocky Mountains were crossed. David Thompson's map called all the the ranges in the Columbia loop "Nelson's mountains," for the

Ramparts and Tonquin Valley, British Columbia-Alberta boundary—Harry Rowed

news of Trafalgar had just arrived in 1807. Thompson not only crossed the Rockies via Howse Pass that year, but he made the first circuit of the Selkirk Mountains. The system of mountains known by this name extends between the 48th and 52nd parallels. They are bound by the Columbia River and Arrow Lakes on the west and by the Purcell trench on the east. They have a total length of 300 miles and an average width of 40 miles, but only the northern third reaches maximum development. While both the Rockies and Selkirks are mainly sedimentary, the higher peaks are largely schists and quartzites. There are 22 peaks over 10,500 feet and 40 over 10,000.

Walter Moberly made the government exploration for the railroad route that eventually crossed the range and is now also the route of the Trans-Canada Highway. In 1890 Swiss alpine club members appeared, and were involved in some of the first climbs, notably Sir Donald. No peak in Canada has a longer and more interesting history than Sir Donald, which was named for Donald A. Smith, who drove the last spike of the Canadian Pacific Railroad in 1885. Two members of the Swiss Alpine Club, Emil Huber and Carl Sulzer, with a porter (Harry Cooper), made the first ascent in 1890 via the southwest face and southeast arete; the now-famous northwest arete was climbed in 1909.

South of Sir Donald is the rugged Dawson Range, with Dawson and Selwyn being two of the four distinct peaks over 11,000 feet. Ice and rock faces still await the technical climber. The Bishops Range and, further south still, the Purity Range (with 11,023-foot Mount Wheeler) have impressive alpine summits. There are striking south face routes remaining on Augustine and Wheeler, and the east face of Selwyn still stands aloof. The Albert Peaks to the west offer new routes.

Perhaps the most exciting region in the intricate Selkirk system is the Battle Range, midway betwen the Canadian Pacific Railroad line and the northeast arm of Upper Arrow Lake. These granite mountains were named in honor of a legendary combat between a prospector and a grizzly. No party had reached any valley heads until 1947, when Norman Brewster, Betty and Andrew Kauffman arrived by the bushy Incomappleux and climbed what is now Mount Ishmael. In 1914 Holway, Gilmour, and Butters made the first ascent of the peak now known as Mount Butters. While Sugarloaf, Duncan and Beaver are the highest summits between the "Purity" groups and the true "Battle Range," and are slightly higher than any of the latter, the spectacular peaks of Butters, Moby Dick, and Ishmael deserve more

Mt. Sir Donald, north face—Edward C. Porter

attention. The Badshot Mountains southwest of the Battle Range are spectacular, but rock is reported as poor (John Dudra and party in 1951 made the principal first climbs). The little-known Kokanee group, between Slocan and Kootenay Lakes appear to have many new route opportunities on sound rock; the summits and access are easy. The area is only 20 miles north of Nelson; Mount Cond (9200) is highest here. The nearby Valhallas are located between Slocan Lake and lower Arrow Lake.

North of Rogers Pass, which divides the southern and northern Selkirks, the Hermit Range is the first of a wave of summit groups; it is well known and rock is sound quartzite, much like nearby Sir Donald. The Moloch group, south of Tangier Pass, has deformed sedimentary and metamorphic rock intruded by a granite stock; the west face of Moloch appears to be interesting and unclimbed, and Mount Holway has a steep east face that is still unclimbed. From the area of Tangier Pass, one can reach the peaks of the Sorcerer group (all via Flat Creek approach), which again offer possibilities.

King of the Northern Selkirks' is Sir Sandford (11,590), conquered after five years of effort, in 1912 by E. W. D. Holway, Howard Palmer, with guides Edward Feuz and Rudolph Aemmer. East of Moberly Pass, between Palmer Creek and the Gold River, it is surrounded by the Sir Sanford, Haworth, and Silvertip Glaciers, all inter-connected. Great walls on the Blackfriar Peaks are on the ridge between the Adamant Glacier and the Silvertip, just southwest of the Adamant Range (see Putnam: *Peaks and Routes of North Selkirk Range;* Appalachia, June 1954).

The granitic Adamant Range, north of Sir Sandford, is known for still largely unclimbed walls. In addition to the Blackfriars, Austerity, Turret, Adamant, and the Gothic Peaks present formidable opportunities. The entire northeast side is drained by the Gothic and Granite Glaciers, and this is the flank used by the normal approach from the Columbia River and Swan Creek to Fairy Meadow.

Adamant Peak (10,950) is the highest, and was climbed in 1912 by the same Sir Sandford party, from the south. It was climbed again from the north in 1950 by Andrew Kauffman and David Michael. In 1948 Turret (10,910) was the highest unclimbed peak in the Selkirks; it was done then by Wexler, Hubbard, and Hendricks. Among other sheer faces, it has a slope of 60 degree ice and hanging glaciers—all problems for the future.

Cariboo Range

An interior range as important as the Selkirks, but less-known, is the Cariboo, which lies within the immense bend of the upper Fraser River. An icefield estimated at 40 square miles exists here, at the converging upper reaches of the Rausch, Canoe, and North Thompson Rivers. It contains the highest mountain in the interior ranges in Sir Wilfred Laurier, (formerly the "Titan") at 11,750. Its first climb was made in 1924, led by Allen Carpe. Great eastern faces, with a dangerous hanging glacier, remain for the climber. Rock is mostly mica schist. The first mountaineering and exploration were done in 1916 by A. J. Gilmour and E. W. D. Holway. The Mundays made the ascent of Mount Sir John Thompson in 1925, and on several rough expeditions Raymond Zillmer explored the headwaters of the Canoe and North Thompson.

Purcell Range

The Purcell Range is the eastern-most of the interior ranges, separated from the Rockies by the immense Rocky Mountain trench—the long valley containing the heads of the Kootenay, Columbia, Canoe, and Fraser Rivers. Inside Canada, the Purcell Range is approximately 200 miles long and 60 wide. Although this figure is not final, of the known peaks between 10,000 and 11,000 feet, the Purcells have 53, and the Selkirks 42. Eight summits are over 11,000 feet: Farnham, Farnham Tower, Jumbo, Eyebrow, Delphine, Karnak, Peter, and Sir Charles.

The north-most "group" is known as the Dogtooth Group, located in the converging angle between the Purcell and Rocky Mountain trenches. Immediately south is the Spillimacheen Group of which part was the last unclimbed area of the range. Here are the peaks of the "Carbonate" and "Crystal" ranges, where there are certainly some fine unclimbed summits including the "Steeples" (only the north peak of the Crystal peaks has been climbed). Expeditions led by Peter Robinson traversed this region, entering from both Vermont Creek and the Spillimacheen River; two of their best ascents were the Wedge Peak and "Sugarplum." In 1933 Conrad Kain and I. A. Richards made the first ascent of Conrad (10,650), center of an icefield interrupted by jagged summits. Varying names here are confusing; the region south of Conrad was publicized as the "Bobbie Burns" group of peaks, whereas Bobbie Burns Creek actually drains the Carbonate Range. This group now has been mapped as the "Vowell group" and rightly so, for Vowell Creek drains its north flanks.

Conrad Kain returned with A. H. MacCarthy and made the first ascents of some granitic Vowell spires fringing the Conrad Icefield (which has 9 outflow glaciers). This region requires backpacking access, but offers much for the rock climber: the east faces of Spear Spire, Snafflehound Spire, Mount Kelvin, and Wallace Peak.

The "Bugaboo group" derived its name when mining claims in the area proved a "bugaboo" after a minor gold frenzy in 1906. The earliest record of the spires which became such a mountaineering mecca is 1910, was when they were seen by T. G. Longstaff and A. O. Wheeler, while crossing the range.

The Bugaboo group culminates in Howser Spire (10,950), a broad, jagged granitic peak with its magnificent detached south tower. Marmolata, Pigeon, Snowpatch, and Bugaboo Spires form an almost parallel line to the east. The ascent of Bugaboo Spire in 1916 was an anachronism; this difficult rock climb led by Kain stood for a quarter of a century as the most important made in the Purcells, and one of the finest in all of North America. Not until 1933 was the first sketch map of the "country or giant spires" made by the explorer and historian, J. M. Thorington. His Book, *The Purcell Range of British Columbia* is the bible of the region.

To chronicle the many climbs in this region is impossible here: certainly the notable achievements were the first ascent of Howser Spire in 1916 (led by Kain), the first ascents of Snowpatch Spire and the South Tower of Howser in the early 1940's, and the great wall climbs by Becky, Mather, and Chouinard. New lines remain.

Less known nearby groups are the Ethelbert and Horsethief peaks. Rock is generally solid in the Horsethief-Stockdale area. Certainly fine unclimbed walls remain on Sally Serena, Stockdale, and Jumbo. Possibly Stockdale and Camp Peak are unclimbed.

In the Farnham group, south of Horsethief Creek, the walls of Farnham Tower offer problems as do perhaps the faces of Farnham, highest in the Range. In the Toby Group, where the peaks arc around the head of Toby Creek and its icefield, there are new routes, as there are on Findlay and its icefield; little has been done here since the first ascents.

The "Leaning Towers" group, west of Mount St. Mary and some 15 miles east of Kootenay Lake are pinnacles of granitic rock that offer major face climbs; summits such as Tyrell, Block Tower, Pulpit Tower, Wisdom Tooth, and Molar Tooth are still

apparently unclimbed. The area can be reached by boat from Kaslo, and a partial trail approach either by Fry Creek or Campbell Creek.

Coast Mountains

The Coast Mountains in British Columbia extend from the Fraser River northward to the Yukon border, roughly 760 miles.

Between Harrison Lake and the Fraser, in an area known as the Lillooet Range, are peaks, the highest of which is Skihist (9660); little climbing has been done here.

Between Harrison and Stave Lakes are several summits; certainly the rough-looking Judge Howay (7396) has unclimbed faces. Garibaldi Provencial Park, the best-known area of this mountain system, needs no introduction; however, at its northern end the highest peaks exist (Wedge and Weart, both over 9000 and likely little-visited).

West of the Squamish River and east of Salmon Inlet and the Clowhom River is the Tantalus Range. The summits of Tantalus and Dione (about 8500) offer fine rock climbing. Approach to Lake Lovely Water needs a boat to cross the river, and a trail guide; the hut recently placed at the 7,000-foot level on the northwest side of Serratus is an excellent shelter and base for climbs.

Major icefields exist between the Elaho River (a continuation of the Squamish) and the Lillooet River, roughly west of Pemberton Meadows. The Lillooet Icefield has been well explored, and offers small alpine climbs, as does the region about Mount Tinniswood, at the head of Jervis Inlet. Monmouth (10,480) is the major summit beyond the northern end of the icefield. Good Hope, slightly higher, dominates the peaks just west of magnificent chilko Lake. The many glaciers of the Lillooet and Compton Icefields continue north to Mounts Gilbert and Raleigh, which are east of the Southgate River (draining into Bute Inlet). These peaks are the high spots; though the major summits have been climbed, dozens of explorations await. The entire region from the Tantalus Range to the Homathko Icefield is reminiscent of the North Cascades, with far more existing glaciation.

Mount Grenville, just over 10,000 feet, stands guard at the south end of the Homathko Icefields, which average between 8,000 and 9,000 feet on a semi-plateau. Estimates claim some 400 square miles of ice exist here. Queen Bess (10,870) stands on an extension ridge northeast of the icefield, and is a major summit of serious proportions. It was not climbed until 1942, and then by Henry Hall and the Mundays. The south face appears nearly

vertical, and is untouched, as are faces on nearby peaks. The same team climbed Reliance, an important peak to the northwest, a few years later.

Between the upper Homathko and its branch Moseley Creek, is the little-known Nuit Range, with dozens of outstanding summits. Among them are Pagoda Peak and Ottarasko Mountain. Both first ascents and new routes abound here; recent parties have done further exploration and found fine climbing.

In 1864 Alfred Waddington projected a road from Bute Inlet up the tumultuous Homathko River. The road fortunately did not materialize, but his name now honors the great peak the Mundays and others had long called "Mystery Mountain." Although the summit is only 25 miles from tidewater at the northeast end of Knight Inlet, high sub-ranges on all sides tend to hide it from the channels of the Inside Passage.

Great peaks including Tiedemann (12,559), Asperity, Geddes, Remote, and Bell enclose Waddington. Great glaciers such as the Franklin, Tiedemann, and Scimitar armor the land (the Franklin is about 19 miles long). The area is the climax of the Coast Mountains and a mountaineering wonderland.

Since the year 1925, when the Mundays first began their explorations, the region has yielded to many historic ascents: Mount Munday and the northwest summit of Waddington by the Mundays; Waddington by Wiessner and House; Tiedemann by Fuhrer, Hall, Gibson, and Hendricks; Asperity by Matthews, King, Beckey, and Magoun; Serra Four by Sowles and Kauffmann; Stilletto by Long, Bettler, and Steck. The 1947 Harvard expedition organized by Putnam and Beckey succeeded in making 24 important first ascents; the 1950 Sierra Club group climbed two new routes on Waddington (one of these has become the standard route), the Southeast Rock Tower of Waddington, and both Serra Two and Three. Later, a Canadian team scaled the inaccessible Serra Five.

North of the Waddington group is the Pantheon Range, with striking granitic summits such as Astarte, Osiris, and Vishnu. Great new climbs exist.

The great Klinaklini region northwest of Waddington has contiguous ice for over 30 miles, surrounding Silverthrone Mountain. It is nearer the Pacific than the Waddington area, and likely more affected by the related moisture.

Mount Monarch (11,720) dominates the area west of the Klinaklini River. The great mountain, which was first climbed by Hans Fuhrer and Henry Hall in 1936, harbors an area of ice

some 30 by 15 miles. The major icefield, between Monarch and Mount Jacobsen, has now seen considerable mountaineering on adjacent peaks. Summits such as Snowside, Jacobsen, and Saugstad were important major ascents; these and others still offer new routes. The 1953 expedition led by Broda and Dudra proved the value of skis in this region, and found the lake now suitable for a float plane. Ape Lake is the advisable alternative to the rough approach from the Bella Coola valley via Noosatsum Creek and the upper Noeick River.

Atna Peak (9040) in the Tahtsa Range, lies east of Douglas Channel, in the region of many unclimbed summits between Ootsa Lake and Terrace. While the Babine Range, east of Smithers, is relatively well explored, the Sicintine Range to the north is largely a mystery; here are icefields and peaks up to 8,000 feet. The Nass and Skeena Rivers drain the area of the Skeena Mountains, a region over 150 miles in length, with manv peaks around 8,000 feet.

East of Hyder, at the end of the long Portland Canal, is the Cambia Icefield, the first major one north of the Monarch region. North of the Portland Canal, and west of the Nass River are virtually countless apline peaks and networks of glaciers. Pattullo (8968) is perhaps the most important summit here, and it may be unclimbed.

A new road is planned from Dease Lake through to Stewart; this will open the large area of Skeena Mountains west of the Nass River in the Boundary Ranges of the Coast Mountains; it will make accessible the exciting area between the Iskut and the Stikine (a span of some 40 miles with such 9,000-plus peaks as Hickman and Edziza to headline an array of unclimbed summits). The airdrop, float plane, and helicopter are almost a must for future climbing parties here, for brush and rivers make lowland travel disastrous.

Nothing can surpass the grandeur and mystique of the Stikine icecap, a network of glaciers between the Stikine River and the Pacific. Great ice and rock peaks, already scaled, such as Kates Needle, Devil's Thumb, Burkett, Ratz, and Mussell—all difficult —jut into the oft-stormy sky. These peaks, either on the international boundary or just within British Columbia, extend north ward to the glaciers of the Whiting and Taku Rivers. An unclimbed giant here is Noel Peak (10,040); the icecap glaciers on the Dawes and North Baird reach its west side; Noel is in Canada, but only 23 miles from the sea at the end of Endicott Arm. A float plane landing on Chutine Lake might be practical to ap-

proach this peak, as well as Sheppard and Owens Peaks, among the slightly lower unclimbed peaks to the north. The Sawbuck Range, a sub-group of peaks to the northeast, appears to be entirely unexplored and unclimbed, and I can testify to their attractive and spectacular nature.

The Juneau Icecap, much of it the 7000-foot plateau of the Taku-Llewellyn glacier system, is a wonderland of glaciers and rugged rock peaks between Taku Arm and Atlin Lake. Devil's Paw is the most famed peak in the icecap area, and has been scaled only once; nearly a third of the peaks have not been attempted and some will be quite difficult. Less-known factors are the peaks near Berner's Bay, Mount Ogden (south of the Taku), and the Cheja and Chechilda Ranges well east of Taku Arm in B. C.

Perhaps the Tulsequah Peaks and region about Mount Nesselrode is best reached via boat from Atlin Lake. Further climbing remains. The Chilkat Range, in the strip of B. C. between the Yukon and Alaska, has seen several expeditions; again, there are unclimbed peaks and despite their generally low altitudes, the rock and ice are rugged.

In the region west of Haines and north of Glacier Bay, there are many ice-clad summits within the province that are still unclimbed. A few can be singled out: Very sharp peaks exist in the region near the Tsirku River (some climbing has been done). Low, but sharp peaks which are unclimbed exist between the Rendu and Carroll Glaciers, some ten miles north of Rendu Inlet. The upper reaches of the Grand Pacific, Riggs, and Casement have summits that deserve attention. The boundary extends to Mount Fairweather and north to the Alsek Range. Such boundary points as Mount Jette may still be unclimbed.

To understand the entire ice-wilderness from the Stikine River to the St. Elias Range is it well to study aerial photographs, maps, the Reports of the International Boundary Survey, and such classics as Tarr and Martin, *Alaskan Glacier Studies*.

Any climber who is excited about exploration, high adventure, and remote alpinism, should at some point in his life undertake some of these challenges.

Coast Mountains in British Columbia. Left to right: Mt. Ratz, Mussell Peak, Noel Peak. Aerial from the northeast—Austin Post, U. S. Geological Survey

Mountaineering Notes and Technical Climbs

EDITED By JOAN FIREY

The Valhalla Range, Southern Selkirks, B. C.

Mulvey Meadows in the Valhallas offers a magnificent base for climbing. The Kootenay Mountaineering Club (KMC) has cut a trail to the meadows, which are reached by a road and a six-mile trail from Slocan, B. C. The last 1500 vertical feet into the meadows involve climbing a headwall. This part of the trail is somewhat indefinite and definitely unpleasant; it lies along the northern border of the headwall. The KMC erected a comfortable hut at the meadows last summer. The hut has a stove, saw, axe, some cooking gear, foam pads and room for about twelve people. For details about this hut contact custodian Bob Dean, Crescent Valley, B. C. Although Bob Dean has hiked in to the hut in well under four hours without a load, it is reasonable to allow a full day, especially with a load.

The Meadows area is about a square mile and contains more than thirteen lakes. The peaks around it offer climbs of all degrees of difficulty and of varying lengths. The technical climbing is primarily on rock although there are some steep snow slopes. Many of the finest climbs in the area remain untried. However, the first recorded ascent of Gladshiem was by a magnificent ridge. The faces which rise from the valley floor below the Meadows are about 4000 feet high and relatively smooth.

In August of 1969 when the hut was erected most of the remaining unclimbed peaks in the area (the Main and Middle Peak of Mount Prestley and The Bat, a minor peak above the Meadows) were climbed. Several new routes were established (see the Climbs and Expeditions section of the *American Alpine Journal* for 1970 and the KMC *Karabiner*). But the eastern satellite peaks of Gladshiem are still unclimbed and none of the really serious routes in the area have been attempted.

Peter Renz, AAC

Cathedral Peak, South Face

Cathedral Peak is a prominent "horn-type" summit of sound granodiorite in the Pasayten Wilderness 35 miles due north of Winthrop. The Canadian Boundary crosses one mile north of the peak. In this portion of the Wilderness, drained largely by

the Ashnola River, Cathedral is the most striking summit in an upland area of timberline basins, pocket lakes, and meadows.

The south face is approximately 1,000 feet high, quite steep, but well cracked by both vertical and horizontal crack systems. By trail, the face is some 20 miles from a road on the U. S. side, but the face itself begins only several hundred feet from the trail. As a climb, it is a combination of interesting problems on the best of rock. The first climb of the face took a central line, to end directly on the summit. Difficulties ran to 5.8 and a short section of direct aid; total pitons about 35. Others investigating this east-side region will be surprised at the climbing potential.

Climb completed September 28, 1968 by David Wagner, John Brottem, Doug Leen and Fred Beckey.

Fred Beckey

Inspiration Peak, South Face

This 1000-foot face in the Southern Picket Range was first climbed on June 18, 1969. The ascent began at the lower left corner of the face where a rock buttress meets the glacier. One F7 lead was followed by several hundred feet of scrambling which brought us to a diagonal ramp system that cuts across the center of the south face. This was followed for three leads to where the ramp branches into an upper and lower system. About 50 feet beyond the fork, the great jagged gash which is plainly visible from base camp on the east side of Terror Basin meets the upper ramp. The gash ascends the vertical face for 400 feet to the skyline just west of the summit. We climbed along the ramp for 40 feet past its start and entered the gash by doubling back and up around an F6 corner. Three leads of inside face climbing and chimneying (F8 maximum) brought us out under a chockstone just below the easy summit. We used about 20 pitons and nuts, and the climb and return to camp took twelve hours. This route should become a classic with the combination of excellent rock, continuous exposure and challenging but never severe climbing. NCCS 111, F8.

Mike Heath, ACC

Little Mac Spire

On June 19 Bill Sumner and I made the first ascent of the unnamed pinnacle immediately east of East McMillan Spire in the Southern Pickets via its 500-foot south face. Broken rock and ledges with steeper belayed pitches up to F8 difficulty were encountered. We rappelled into the notch west of the summit, then climbed the upper 400 feet of the east face of East McMillan Spire. Descent was via the steep couloir between East and West

McMillan Spires. About 20 pitons and nuts were needed; six hours were required for the ascent and another four for the rather complicated route down. NCCS 111, F8.

Mike Heath, ACC

Approach to South Side of Southern Pickets

Tabor and Crowder's excellent handbook *Routes and Rocks in the Mount Challenger Quadrangle* had some further "field testing" during the summer of 1969. Two parties used the proposed Ross Mountain approach that lists travel time as ten hours to base camp. Our slow party took two days and, with a full week's pack, encountered cliff scrambling and bushwhacking. We found an occasional flag, placed by an exceptionally hardy crew who had cleared a platform 1500 feet or more above the valley floor—we imagined for a helicopter supplied relay station. One section required roping up packs, after the first ascender removed all the moss footholds from the rock.

We descended via standard Mountaineers route which is vague near the top of the ridge. It is classified as V2 or V3 (Vegetable grades 1, 2, 3) depending on your choices (or errors). We found one 90-foot rappel that was a bushwhack for the first half, then free over the mossy cliff. The time listed for this route is thirteen hours, probably a good average. Stronger parties can do it in nine or ten. It would be worthwhile to rework this way-trail into such a great climbing area. It was last blazed over ten years ago.

A route for access to Mount Terror and the Crescent Creek group proceeds up Terror Creek on the opposite (west) side of the valley. Approach the same as Mountaineer route (spar tree now down and trail a great deal more brushed) and continue upstream, crossing where convenient, gaining about 400 feet to steep cliffs that mark base of The Barrier at about 2000 feet. Climb brushy cliffs to ridge top where it levels at about 3500 feet. This is a strenuous climb with full pack but at top of Barrier it is an easy walk through huckleberry bushes to base camp in open basin below Pinnacle Peak. Time is eight to ten hours from car. Ref. *Mountaineer* 1962.

Joan Firey

Mount Triumph, North Ridge

Joe and Joan Firey, Frank Tarver and I climbed Mount Triumph by a new route following the north ridge. The approach was the same as that described for the northeast ridge as far as lower Thornton Lake (*Mountaineer* 1966). We crossed the outflow of that lake and ascended west to a point slightly below the peak marked 6234 on the map. From this point we followed the

ridge north until we could easily descend on the west and contour below Damnation. Buttresses and ribs of Mount Triumph make it impossible to contour directly to Triumph Pass. We stayed fairly high and climbed a grunge gully to a fairly level bivouac spot just below 6000 feet. This level spot may easily be seen on the map west and slightly south of the summit of Mount Triumph.

The next day we climbed to the saddle at 6400 feet on the north ridge, crossing the west face diagonally. We roped up a short distance above this point and climbed to a comfortable ledge just below an impressive step in the ridge. From this point we explored the ramps and ledges leading onto the north face, but gave them up as bad bets. The next lead went to the right and upward to a rib. Though this rib is steep the holds lie nicely and once it has been reached the difficulties are over. The summit is gained by 400 feet of scrambling from the top of the step. A small selection of nuts and pitons is ample.

The descent was initially by the route given in the guide book. We noticed that the cannon hole had disappeared. We found that one cannot scramble easily down the west face of Mount Triumph to the valley floor (the last several hundred feet are quite steep). Thus we returned via the rotten gulley. Our exploring netted us a magnificent scenic bivouac above higher Thornton Lake. In our opinion the east (northeast) ridge of Triumph offers the best climbing and the easiest access.

Peter Renz, AAC

Forbidden Peak, South Face Direct

In August 1968 Jim McCarthy and I climbed the south face starting directly from the slabs above the glacier. The route followed a line near the left side of the face for two leads; traversing right below a roof on the second. The next lead nailed the roof and went up some easy cracks to a ledge. From here the possibilities were unlimited. We followed a line near the 1950 South Face Route for 6 more leads gaining the ridge about 300 feet west of the summit. NCCS III, 5.8, A3.

Jim Langdon, unaffiliated

South Early Winter Spire, Direct East Buttress

July, 1968; first ascent by Doug Leen and Fred Beckey.

The route on this prominent 1,100-foot buttress follows a long line from its foot directly to the summit, always staying on its outer edge. The ascent was done with two bivouacs, considerable time being required to place some 26 bolts and 4 additional skyhook holes; in addition, approximately 70 pitons and a number of aluminum chocks (nuts) were employed. With the

ascent groundwork now done, a fast party could probably be done in one day.

Fred Beckey

Ragged Ridge

In the rainiest August in Washington's history (1968), we began our 18-mile trek from Diablo Lake up the Thunder-Fisher Creek trail to the foot of the hitherto overlooked Ragged Ridge. Base camp was established at the 500-foot level in the plush Fisher Creek Basin meadows. Climbing began with the first ascent of the Ridge's second highest peak (8680') which was dubbed Mount Holyoke. The ascent was made northwest from camp to a ridge which ends in a stump-like knoll extending south from the east shoulder of Mount Holyoke. This ridge was then followed to within 200 feet of the main crest where a traverse northwest led to the summit. Class 3. Time: 4 hours from camp.

We then dropped to the 8200 foot col east of this peak and climbed a new route up a winding couloir on the west ridge to a second ascent of Panther Peak (8795') a name suggested by the Fireys who with the Meulemans made the first ascent here in 1966.

The next day we topped the previously unascended 7945-foot peak three-fourths of a mile north of Mount Arriva, naming it Little J-Berg because when viewed from Easy Pass it is an amazing look-alike to Mount Johannesburg. Our route was up Fisher Creek Basin, angling back (west) after the face cliffs were bypassed to a 7200-foot col on the main ridge one-half mile southeast of the summit. Class 3 rock on the south side led to the top.

To the east of Panther Peak are lesser Ragged Ridge summits: Cub Peak (7985') and Don't Peak (8003') which were first ascended and named with snow falling (in August!) on our final day in the area.

John and Chris Roper

Vesper Peak, North Face

Broken by a large ledge system about two-thirds of the way up, this 1200-vertical-foot face lacks any "classic" lines. Between the Vesper Glacier and this ledge are many equally good routes waiting to be done. Above the ledge are two slabs, the east one rising at an angle of 65 or more degrees to the summit and a lower angle one to the west. Here the future will be determined by ethics, since cracks are rare.

On August 3, 1969, Mike and B. J. Heath, Tom Oas, and I left the glacier between Vesper and Big Four Mountain near the lowest point of the face and climbed up for 4 leads (F5 to F8).

We scrambled several hundred feet and belayed one lead (F6) to the scrub tree at the lower right-hand corner of the high-angle slab. Next we climbed a small overhang (F4) and up and right along a heather ledge to its end. Climb up and right to the edge of the slab on broken blocks (F7). The next two leads are the crux of the climb. Climb up with poor protection to a bolt (about 50 feet) and then up and right with no protection to a belay bolt (F7). The next lead is about 70 feet with weak protection (F8) and generally follows the west edge of the slab to the summit. Jim Langdon, who we later discovered had traversed out onto this upper slab in 1968, climbed further to the left and encountered similar problems on these last two leads.

If you want first ascents of a pedestrian nature or simply some superb practice climbs on excellent rock, take about 20 pitons (one and one-half inches to 3 or 4 knifeblades) and some nuts and follow the Sunshine Mine trail over Headlee Pass to Vesper Peak. Our climb from the glacier took about 6 hours. NCCS II or III, F8.

Bill Sumner, unaffiliated

Bedal South Peak, South Face

This 600-foot solid granite face was done by Bill Powell and Bruce Garrett. It is accessible from three and one-half miles along the Sloan Peak trail.

The route begins in midface at a right-leaning open book and proceeds to a heather pedestal 140 feet above (5.4). The second pitch zigzags up about 80 feet on steep rock, then goes left on a sloping ramp to another pedestal directly above the first. Two difficult bulges (5.7) must be passed. Follow a crack directly up for 70 feet, with an interesting exit to a long ledge (5.5; 3 runners on horns). From this ledge traverse 300 feet left on easy slabs and climb two leads directly up, just right of the whitish, overhanging wall on Class 3 to 5 rock. There is a short, difficult crack just below the summit. Time: 4 hours. Rappel off the west side of the summit and traverse south, then east to the starting point.

Bruce A. Garrett

Approach to North Side Chimney Rock and Overcoat Peak

In 1968, I discovered a new approach route to the small glacier separating Chimney Rock and Overcoat Peak. The route described in the *Climber's Guide to the Cascade and Olympic Mountains* is partially shown as a trail leaving the Middle Fork of the Snoqualmie River about one mile north of Dutch Miller Gap (Skykomish Quadrangle, 1902).

The description of the new approach follows: Shortly after the Middle Fork Trail crosses Crawford Creek (about 3300 feet) travel through light brush and cross the Middle Fork on available logs. Climb the timbered rib to the east of the open rockslide visible from the trail near Crawford Creek. Follow game trails to the lowest of several cirques leading to the glacier. These cirques are normally filled with snow until mid-August. Later, easy rock scrambling may be required.

This route offers a much shorter, relatively brush-free approach to a seldom visited area. Since its discovery the approach has been used to make one-day ascents of Overcoat Peak and Chimney Rock.

Jim Mitchell

Prusik Peak, South Face

First ascent of this 700-foot, clean granitic face was in 1963 by Fred Beckey and Dan Davis; first free ascent July 5, 1969, Mike Heath and Bill Sumner. Body-jam a deep chimney at bottom center of the face for 50 feet until able to exit left in a crack and block system leading past a small pine. The second lead works up and behind several small trees, then right over awkward blocks and up to the start of a steep gulley. Climb up until able to enter a wide chimney cutting up the west side of the face. Continue until about 30 feet below a prominent chockstone blocking the chimney, then make a difficult (F8) exit right into a slanting crack that leads to a long traverse across the center of the face. Belay below the steep crack system that reaches up and slightly left for two leads to the deep cleft on the east side of the summit block. Climb a shallow diedre on thin holds (F8) until forced to move up and right to a pillar-like detached block. From the block step across left into a rounded crack and move over the bulge (F9). 50 feet of easier climbing above reaches a good belay ledge, then follow the crack and chimney system to the notch. Drop down a few feet and step around the northeast corner of the summit block to a two-foot wide ramp (F7) that leads to easy jam-cracks and the summit. Take about a dozen assorted blades and angles to one and one-half inches plus a good nut selection. The rappel route down the north face and back over Prussik Pass is short, and klettershoes are recommended for the 6 hours of technical climbing. NCCS III, F9.

Mike Heath, AAC

The Boxtop, East Face

On July 6 Tom Oas and I did the east face of this tower. Approach via easy ledges from the north or south to the top of

the Mount Temple ridge east of the peak. A steep crack and block system from the right-hand base of the face leads fifty feet up and left to a wide mantle shelf. Climb an awkward bulge above a sharp-edged block at the left-hand edge of the shelf. An easy jam-crack leads twenty-five feet to a large platform. We used a shoulder-stand to enter the right-hand of two overhanging jam cracks, then stemmed a wide chimney for thirty feet to the summit. About five angles up to one and one-half inches plus several nuts will be useful. NCC II, F8.

Mike Heath, ACC

Cashmere Crags, The Blockhouse and The Rhombic

From a high camp on Mole Ridge near The Hook, on September 1, 1968, Al Errington and I climbed a new route up The Blockhouse via its north ridge. The route began at the start of the standard northwest face route and followed the ridge line for three pitches, then rejoined the standard route for the final pitch to the summit rim. Wet lichen and a cold wind forced us to use aid on most of the climb. At the rim we decided to attempt a first ascent of The Rhombic, a spectacular tower whose base is about 75 feet lower and 100 northwest of the summit of The Blockhouse. We learned later that this tower had been named The Rectiloid by the first party to climb The Blockhouse. Ascent involved 30 feet of A3 nailing up a solitary crack that ended 10 feet from the top of the tower. Darkness and a strong wind frustrated attempts to throw a rope over the top from the highest piton. We rappelled and climbed down to camp in the dark. Clear and warm weather next morning prompted us to climb the standard route on The Blockhouse, following which we completed the first ascent of The Rhombic on September 2 with the aid of a couple of bolts we had left in camp the previous day.

Jim Mitchell

South Face of Little Annapurna

Last fall, Laurance Campbell and I climbed in the Enchantment Lakes region of the Eastern Cascades. Near the end of our pack-in (eight miles up Ingalls Creek, then up Crystal Creek) we enjoyed a glancing view of Little Annapurna's steep south side. This occurred 1000 feet below Crystal Lake in a frustrating bowl graced by the attributes of a beautiful lake: grass along a well-defined shore, clean sandy bottom, and sheltering trees. Of water, however, there was not a trace.

Later in the week, approaching from Crystal Lake, we dropped 200 feet from its outlet and traversed the angle-of-repose scree slope to a system of gullies which we ascended to the level of the

col below the south face. Ambling along, it required nearly three hours to reach this seldom, if ever, visited col between Little Annapurna and North Pennant Peak. After observing how rock debris scoured the sides of the gulley below the col to the east, we were convinced our approach, high above "Fake Lake," was best. From the col there appeared to be a multitude of routes on the left half of the face if one didn't mind an overhang or two. Near the middle of the lower face is a southwest-facing furrow which creates a prominent shadow until about noon. About twenty feet to the right of this is a group of thinner cracks leading to a promising ledge near the eastern edge of the face. We chose a crack and scrambled to its beginning.

The first roped pitch followed the crack as it zoomed up and then curved right (east) as the cracks converged into a shallow ledge. The next pitch was the shortest but probably hardest of the climb as it continued a few feet to the end of the crack (where the spectacular view down the southeast side inspires well-placed pitons) and then up to the long generous ledge with grass, a large bush, and more view. To reach the ledge one has to either squirm up a steep, dirty, fifteen-foot inside corner with good protection and moderate exposure (hard fifth or easy sixth class) or employ balance to ease up an equally short wedge with so-so protection and great exposure (middle fifth class). We sauntered forty feet left (southwest) to begin the third pitch which followed an obvious route up to a comfortable gravel-covered platform on the right of one of the squat towers that decorate the face. Two more delightful pitches, with no detours, brought us straight to the highest of those intriguing edifices on the summit that seem to have been constructed, block on block, by a well-meaning giant.

In the register we found interesting menus, accounts of sibling rivalry, and the high altitude exploits of dogs, but no record of previous activity on the steep side. Although there may be no easier routes on this 500-foot south face there are others which deserve attention because of the sound rock, aesthetic exposure, and glissades back to camp on the northeast snowfields.

Eiichi Fukushima

Mount Rainier, Nisqually-Gibraltar Chute (Winter)

On February 22, 1969, the following party reached the summit of Mount Rainier after making the first winter ascent of the Nisqually-Gibraltar Chute: Jim Mitchell (leader), Ed Boulton, Chris Chandler, Larry Clark, Al Errington, Heinz Graupe, and Jerry Newgard. The ascent was made in variable snow conditions

and excellent weather. The summit temperature was 2° F. wth a light wind.

Jim Mitchell

Mount Rainier, Fuhrer Finger

In the second week of March, 1969 the first recorded winter ascent of Fuhrer Finger was done. The party took four days and made two camps with supplies being hauled on two previous weekends. Party consisted of Jim Haneline (leader), Mike Bialos, Jan Anthony, Marc Bardsley, Bob Knowles, Bob Kastana and two others.

Marc Bardsley

Rock Climbing Summary

Rock climbing in this area has greatly increased the last two years. Climbing classes offered by The Mountaineers and the University of Washington have had much to do with this. Younger people have pushed its physical limits farther and farther. To some extent these climbers have different philosophies of climbing, but all love the aesthetic qualities of life, physical well-being, and nature.

Some of the more recent climbs and new routes of interest:

Liberty Bell: Madsen's 'Thin Red Line"[1]: two repeat ascents by Ron Burgner and Don McPherson; Jim Langdon and Al Givler. Liberty Crack has been repeated five or six times.

Squamish Chief[2]: University Wall, Tantalus Wall, and the Grand Wall have had many repeat ascents; University Wall, a most enjoyable climb.

Index Town Wall: Many new routes on the upper wall: 'Golden Arches'; Langdon and Weigelt's route to the right. The lower wall is an excellent practice area.

Midnight Rock[3]: New free ascents: Black Widow, Easter Overhang, Twin Cracks, Roller Coaster Chimney Direct, three different Wasp cracks, and South Ramp. Two new routes: JAM Session (5.10), and Super Crack (5.10) which has not been completed.

[1] *AAJ* 1968

[2] *A Climber's Guide to the Squamish Chief and Surrounding Areas,* Glenn Woodsworth, Varsity Outdoor Club, (UBC) 1967.

[3] *Guide to Leavenworth Rock-Climbing Areas,* Fred Beckey and Eric Bjornstad, The Mountaineers, Seattle, 1965.

Castle Rock and Peshastin Pinnacles are the most popular area especially with new climbers. One problem is the danger of rockfall. Someone will be seriously hurt unless people are more careful.

Snow Creek Wall: Three new routes: Mary Jane Dihedral between Orbit and Galaxy; McCarthy's route between Orbit and Satellite; and White Slabs Direct. All routes on Snow Creek Wall have been done free. Outer Space was climbed under winter conditions in two and a half days in December '69—January '70 by Ron Burgner, Mark Weigelt and Mead Hargis.

Ron Burgner and Don McPherson did a direct west face route on Mount Stuart and some new climbing has been done in the Cashmere Crags.

Royal Columns: A new area across the White Pass highway from Elk Feeding Station about a mile east of junction with Highway 123 from Cayuse Pass. This columnar basalt area has had many new climbs put up it.

This description has been brief; any person desiring information on routes or climbing areas should call LA4-3008 in Seattle and ask for Mead, Heinz, or Mark. Or call Al Givler at SU9-1062. Al Givler and I are preparing a new Lowland Rock Climbing Guide to be published by The Mountaineers and would appreciate route information and/or exceptionally good climbing pictures.

Mead Hargis, unaffiliated

Index Town Wall, "The Ave"

In August 1969, Mark Weigelt and I set out to climb a new route through the overhanging section to the right of the Golden Arch Route on the Upper Index Town Wall. The first lead was fifth class to a huge platform. The last four leads were almost entirely aid climbing. After starting the third lead I looked up at a 100-foot seam between two smooth planes of rock crisscrossing 40 feet up. After some very marginal pitons, I played it safe by placing some bolts. Farther up there are excellent piton cracks hidden from below. There is a hidden passage through the overhangs so that one has only to climb one small overhang. The middle three leads are exceptionally clean and interesting. We used about fifty pitons, three bolts, and eight nuts and a cliff-hangar. Some of the bolts may need replacing. NCCS IV, F8, A4.

Jim Langdon, unaffiliated

M and M Wall

In September 1969 Mead Hargis and I climbed an interesting wall about one mile south of Cutthroat Creek near the new cross-

state highway, not far from Liberty Bell. The wall is about 600 feet high and has low angle slabs near the bottom with a huge cave near the top. Our route, mostly mixed free and aid climbing, followed a complicated dihedral system on the lower slabs and naturally passed by the cave. Our descent route was the gully on the north side of the wall. We returned to the car just before dark. The climb consisted of seven leads. We used about ninety pitons and one bolt. NCCS IV, 5.8, A4.

Jim Langdon

Witch Doctor Wall

Weathering and scouring by the elements and ancient ice have produced some spectacular valley walls south of Darrington. Exposed granitic slabs in the valley of Squire Creek attract the eye, but have not yet appealed to the rock climber, perhaps because of the approach and the scattering of brush on the walls. The main valley and several forks of Clear Creek contain massive slabs, the most impressive being the east face of a northern spur on Helena Peak.

A close investigation of the face in October, 1968, confirmed its size and steepness, unique in this portion of the Cascades. Two investigations netted only two pitches before an onslaught of rain halted activity for the season. The face, being over 1000 feet in height at seventy-five degrees, was shy on crack lines, but we decided it would be possible in two dry days.

David Wagner, Thom Nephew, and I completed the ascent on July 17 and 18, finding the rock better and less brushy than expected. To the technical climber, the wall is a Grade V, about half aid and half free climbing. Roughly 100 pitons were employed, but no bolts. The wall can be reached in less than two hours from a new road; water and wood are abundant. Descent, in our case, proved a problem; there may be a better way than ours, which was a series of rappels west of the spur.

Fred Beckey

Little Ole: The Not-So-Light Route

First ascent: April, 1969, by Al Errington and Jeff Colehour. Classification: 5.7 A4.

Little Ole is located near a small restaurant across the Blewett Pass Highway from the Ingalls Creek Guard Station road. The Not-So-Light Route begins at the base of a prominent dihedral on the southwest side of the rock. The base of the dihedral forms a chimney which can be stemmed for ten feet to a point where a fine crack on the wall proper can be used for direct aid (tied-off knifeblades) for fifteen feet. At this point traverse left fifty feet (5.7) to a small pine tree. From here the route ascends fifty feet with mixed aid and free climbing using bongs, artificial chockstones, small angles, and knifeblades. From a belay spot at this point a fourth class lead will attain the summit.

A. Errington, unaffiliated

A Himalayan Journey

By MICHAEL D. CLARKE

In November 1968 I went to the Central Nepal Himalaya with a Sierra Club group led by Dr. William Siri.

After meeting the fourteen other members of the group at San Francisco we flew via Anchorage to Tokyo. The next day we flew over Viet Nam and made brief stops at Hong Kong and Bangkok before touching down in the subcontinent of India at Calcutta. In the afternoon we boarded an F-27 of Royal Nepal Airlines for the 400-mile flight to Kathmandu. Leaving Calcutta the plane gained height over the muddy Ganges, then headed northwest over the brown dusty plains of West Bengal. The passengers sitting on the right hand side of the plane soon saw a long line of cumulus clouds stretching along the horizon. Through binoculars, the giants of the Himalaya appeared, piercing the clouds. After flying for some time we could unmistakably see the black pyramid of Everest and the dazzling whiteness of Nuptse and Lhotse.

At last the plane started to lose height and we passed over the jungles of the Terai and the steep 10,000-foot hills of the Mahabharat. Terracing emphasized the contours of the area and we could see many steep and winding trails. Then the flat, cultivated Vale of Kathmandu appeared, with medieval-looking houses dotten about. Suddenly the runway flashed into view and we were down at Kathmandu, at about 4300 feet elevation.

We were driven enthusiastically through the narrow streets of the capitol to the famous Hotel Royal, an old Rana palace. This rambling building has great charm and the food is excellent. It has been the starting point of many Himalayan expeditions.

We had hardly recovered from flying nearly halfway around the world when, the next day, we were back at the airport for our 90-mile flight to Pokhara in an old, but well cared for, DC-3. Our gear was lashed down along the middle of the plane and we sat with our backs to windows. (On our return flight one of the climbers was surprised to find that the bathroom at the back of the plane contained a goat!)

Once again the view from the right hand windows was spectacular: a great wall of jagged white peaks — Manaslu,

Himalchuli, the Ganesh Himal and the length of the Annapurna range, some 30 miles long and scarcely dipping below 20,000 feet, drifted by.

Touching down at the sunbaked landing field at Pokhara (2800 feet) our eyes were arrested by the magnificent Machhapuchhare (22,942 feet), Nepalese for Fish's Tail. It stands like a giant Matterhorn and is considered a sacred mountain.

At the airfield we met our 25 or so Sherpas and one Sherpani. The Sirdar was Nima Dorje who had climbed Dhaulagiri with the Swiss in 1960. Then began a pleasant introduction to Himalayan travel; six days of walking through villages, up steep hills, down steep ravines, across picturesque bridges, getting tantalising glimpses of the peaks.

A typical day would see us up at about 6 a.m. when the Sherpas brought each Sahib a bowl of water to wash in. Then we ate a light breakfast of tea or coffee, porridge, biscuits, cheese and jam. The porters packed up the camp while the expedition members did such onerous chores as loading cameras and cleaning teeth. Then, with the cook boys in the lead everybody went at his own pace. Some five or six miles along the trail we reached the lunch site. Vast quantities of tea, cookies and cheese awaited hungry hikers while the cooks prepared lunch. Soon a good solid meal consisting of bacon, eggs and potatoes, followed by pancakes or charpatties, and tea or coffee, was ready for us while the porters ate their traditional tsampa.

Very often curious villagers and hoards of bright-eyed children would congregate each time we stopped. The children would be entranced with small toys, candies or balloons while their elders might receive long needed medical attention for illness or accident.

We resumed marching after an adequate rest period, and covered several more miles, often with thousands of feet of ascending and descending before we reached the day's campground. Once again tea awaited the hikers, and porters set up the tents and started a big campfire. The main meal of the day was prepared—soup, rice, chicken (bargained for during the day), and fruit cocktail. Talk round the fire and, occasionally, singing and hot drinks (often fortified) preceded bed at 8 or 9. Finally silence would reign except for low talking and laughter from the porters' direction.

On the fourth day we left the last village at 6700 feet and entered the upper reaches of the deep gorge of the Modi Khola

which drains the Annapurna Sanctuary. We passed through thick forests and at 9000 feet traversed miles of bamboo forests.

The sixth night out brought the only bad weather of the trip—rain, freezing rain and snow down to about 11,000 feet. However, the next day proved to be glorious with blue skies and warm sun and we entered the Sanctuary (unexplored until 1957) in time for breakfast.

In the evening we established our base camp at 13,000 feet on a beautiful grassy site near some house-sized boulders at the edge of the South Annapurna glacier. From here we could see a little of our objective, Tent Peak (about 18,250 feet) situated in the middle of the Sanctuary.

The next day we descended the steep 200 ft. high lateral morraine, crossed the rock covered glacier and climbed the other side where the rocks sometimes tumbled down without warning. After traversing a grassy plateau for about a mile the route turned upwards. There we encountered the very steep grass slopes that the Himalaya are famous for; they were made trickier because of frost. At last we found a good place for Camp I, just above the snow line at 15,400 feet. The porters had carried wood so we were able to enjoy a good fire.

A tremendous panorama surrounded this camp. The walls of the Sanctuary completely encircled us, nowhere dropping below about 19,000 feet. To the south Machhapuchhare dominated the scene as it turned yellowish gold in the setting sun; to the west were Modi peak and Hiunchuli, soon to block the sun from us. And to the north! The great wall of the Annapurna Himal stood, with the summit of Annapurna I looking infinitely remote at the top of its tremendous south face. To the east Tent peak blocked the view.

Soon the golden glow on the Fish's Tail paled and with the setting of the sun the temperature dropped to about 12°F. The Himalayan night descended and myriad stars glowed in the sky. A deep silence enveloped our little camp; the outside world seemed very far away.

The next morning six of us with two Sherpas set out to establish a high camp on the Tent Peak glacier. We found a site near some big snow-covered crevasses at 17,200 feet.

After an uncomfortable night due to headaches we awoke to a cold day with -1°F. and a late start. We set out for the ridge between Tent and Fluted peaks. The route lay up a typical Himalayan snow fluting and we easily kicked steps. Having

gained the plateau at the top of the ridge we had a marvelous view to the east and ate a leisurely lunch.

From the plateau the north ridge rose up to the summit of Tent Peak, which was out of sight. While only about 50° at its steepest, we soon found that the snow was not good. A crust which would not support one's weight covered about 2 feet of loose snow which poured out at each step; under this there was ice. Owing to the lateness of the day and our slowness we turned around at a little over 18,000 feet and returned to Camp II just as dusk was falling.

Back at Camp II we had hoped to find hot drinks and a large meal being prepared but discovered that neither of the Primus stoves would work. We made new plungers from a piece of leather from one end of a climber's belt.

One more night at high camp, then we returned to base camp where we found that one member was suffering severely from an ulcer. The doctor had already sent a Sherpa runner to Pokhara to radio for a helicopter. A few days later while hiking down the Modi Khola gorge with the sick man we heard the helicopter approaching. By a great stroke of luck the pilot's attention was attracted just when we were near the only level ground for miles around. We prepared a landing area by hastily demolishing a shepherd's hut while the helicopter was hovering, and in a few minutes the invalid was flown off to Kathmandu.

Later on that day our Sherpas obtained a goat, which our doctor killed with an ice axe. In the evening we enjoyed a fine barbecue during which the entire goat was consumed by climbers and porters.

We recrossed the Modi Khola and ascended the hills on the other side, passing through impressive rhododendron forests. Some of the rhododendrons were 50 to 60 feet high and as much as 5 feet in diameter. There were many beautiful orchids.

Passing once more through a bamboo zone we reached the Deorali, a 10,000 foot pass. From its summit a magnificent view of the great Dhaulagiri massif appeared. At our feet were magnificent pine forests and the dry, barren Valley of the Kali Gandaki. Rising above the valley the brown hills swept up to the great white triangle of Dhaulagiri I, the White Mountain, 26,811 feet high.

The main trade route between Tibet and India lies along the Valley of the Kali. We joined the route at Tatopani, a village where there are hot springs. Here we were able to luxuriate in 110°F. outdoor "baths."

Going up the Valley we passed many pack trains of horses, mules and later, yaks. First came the lead animal with a red plume on its head, then a straggling column of animals whose bells made a melodious tinkling and chiming. At the rear the trader himself appeared, very likely a Tibetan with long hair and big colorful boots, driving his animals with shouts and well aimed rocks. His animals might be carrying brown and white striped bags containing salt which he would trade for grain.

At Dana our trekking permits were again inspected and I met a Nepalese official who remarked during a conversation, "India, China, Russia, America—all our friends."

The trail now passed through a narrow gorge and on one side it clung to the cliffs and in places was even cut into overhanging rock. Further up the Valley several Tibetan camps of large tents stood near the trail. The refugee Tibetans were large, tough, jovial men who were rebuilding the trail and bridges after the disastrous monsoon floods of 1968.

Above the gorge the valley widened out until it was about a mile across, and the river meandered down it. Many Ammonite fossils were to be found in this area, and the Sherpas were adept in discovering them. The valley was dry and barren, being in the rain shadow of Dhaulagiri, and the wind often raised dust clouds. But there were pine forests on the hillsides.

We arrived at Tukche where the Tibetan influence was evident. The square buildings huddled together, their flat roofs contiguous so that it was possible to walk from one end of the town to the other on the rooftops. A notorious trader, Dr. Mangal Sing, has a temple in Tukche and we spent an interesting lunch period talking and bargaining with him for butter lamps and prayer sticks.

At the next village, Marpha (lying at nearly 9000 feet), we camped in a stable courtyard. The village is distinguished by rather unsanitary conditions and a large number of prayer flags. We visited a typical Himalayan tavern here. Entering through a low door into a gloomy interior one gradually discerns the outlines of people sitting around tables eating and drinking in the dim light of oil lanterns. On the floor near the entrance stand two charcoal braziers upon which food and drink are being prepared. One can have Rakshi (a spirit) or tea with butter floating on top. Also there are various meat dishes such as the very hot and spicy momos. In the courtyard behind the tavern some men are preparing other foods as they clean and fill yards of animal entrails piled high on the ground. One leaves refreshed.

We paid a brief visit to the partially walled village of Jomoson where there is a rough airstrip and another check point; we were allowed no further north. The valley of the Kali Gandaki continues to rise gently until it merges with the Tibetan plateau.

Returning to Marpha we packed up camp and set off for White Peak (17,200 feet) which is part of the southeast arrete of Dhaulagiri. An argument about where we were to stop for the night caused an minor porters' strike. Eventually a compromise was reached and, after passing through the quaint covered streets of Larjung, we camped on that village's polo ground. Here our doctor treated a man who had fallen off his horse two years previously! Many times we met people who were suffering from lack of any medical attention.

The next day we toiled up to the yak pastures at 12,000 feet on the lower slopes of Dhaulagiri and, after passing through a herd of yak, we pitched camp.

A bright, clear morning found us climbing the long snow slopes above. The slopes, at first gentle, gradually steepened and the snow became deplorably soft. In about six hours we had climbed 5000 feet and gained the ridge between White Peak and Dhaulagiri, which consists of mixed snow and rotten rock. Soon the summit of White Peak appeared, and we had possibly made an easy second ascent.

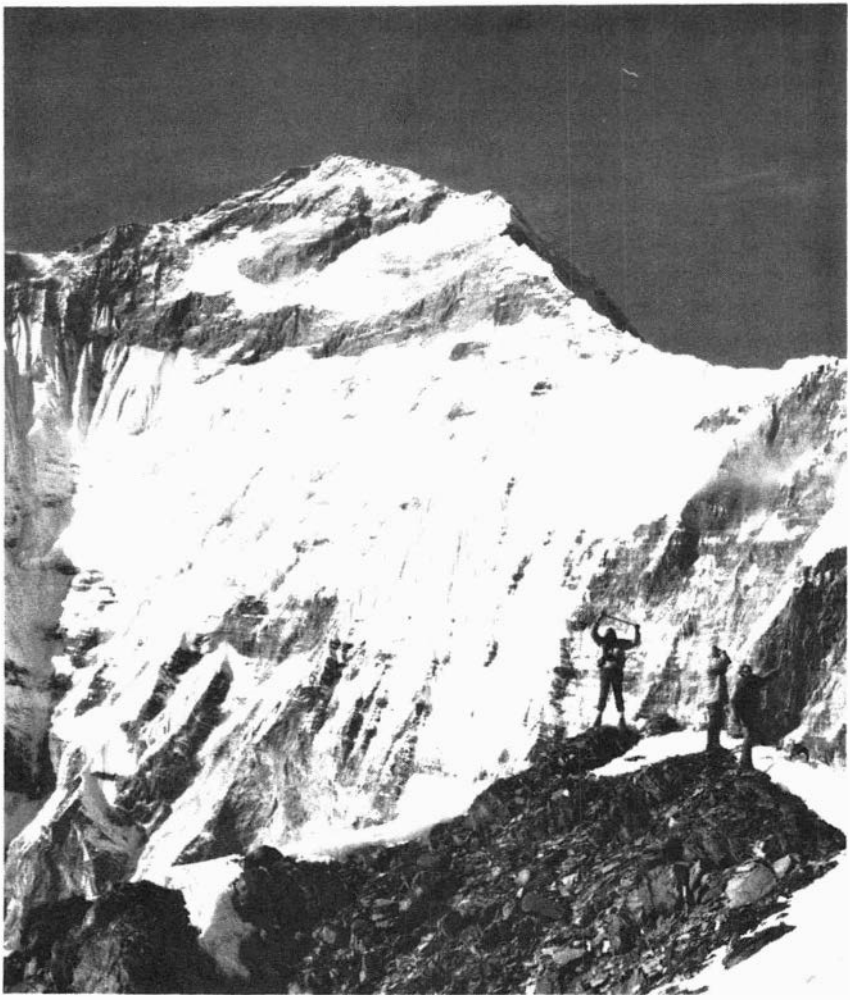
The weather was perfect and the view magnificent. Blocking the sky to the northwest was the huge south face of Dhaulagiri sweeping up uninterrupted for 15,000 feet while between us and the summit lay the ferocious 5-mile-long southeast ridge upon which the Boyd Everett party met disaster in 1969. To the southeast the horizon was dominated by the Annapurna range. We were able to identify the route, "The Pass of April 27th," that the French took in 1950 on their first ascent of Annapurna. As we descended, the great triangular shadow of Dhaulagiri slowly crept up the valley and across the mountains opposite until it was finally lost in the far horizon in Tibet.

The next week was spent in returning to Pokhara. We passed through many quaint villages and obtained yet another marvelous panorama of the Annapurna Himal and Machhapuchhare until we dropped down to our final camp near Pokhara. We spent our last night in camp recording Sherpa songs. Long after darkness had invaded the valley the High Himalaya glowed red and gold in the setting sun.

We spent a day touring Kathmandu and the nearby famous temples in Badgaon and Bodhnath before driving up to the

viewpoint of Nargarkot from which a fine view of the Everest area was obtained.

Thus ended a visit to Nepal—a land, yet unspoiled by modern technology, of fantastic mountains and charming people.



Dhaulaghiri I, south face from White Peak—M. D. Clarke

Administration Reports

November 1, 1968 — October 31, 1969

COMPILED By NEVA KARRICK

Administration of The Mountaineers is still in a period of transition, but hopefully we have reached the time to consolidate past major changes. The combination of Howard Stansbury and Ted Murray as part-time Business Manager and full-time accountant has put the club on a firmer footing and increased the efficiency of handling our affairs. This applies both in financial matters and in club operations. This past year has proved that combining professional and volunteer workers can operate satisfactorily.

The position of Business Manager has developed service to the club in two main areas: (1) the financial aspects of the Literary Fund, including sales, promotion, collecting poor accounts, and obtaining bids for printing; and (2) general responsibilities, including management of the office and staff, building management, membership retention, purchasing, services to the Divisions and Committees. The original concept of the Feasibility Committee that the position would pay for its additional cost by savings and efficiency has been justified.

Although some of our affairs need to be handled by a professional staff, we are a volunteer organization. All activities and many administrative jobs are handled by volunteers.

This year a hard-working committee converted membership records to a computer operation. These records were then used to prepare the roster.

A Bicycle Committee was formed; the Film Study and the Equipment Research Committee were dropped. The Safety Committee became more active and an *ad hoc* committee was formed to recommend what should be the function of and the extent of involvement of The Mountaineers in the testing of mountaineering equipment.

We worked with the North Cascades Conservation Council and the American Alpine Club on recommendations for trails and trailless areas in the North Cascades National Park. A Trail Planning and Development Committee was formed to represent The Mountaineers on a state committee, to make recommendations concerning the State Trails System, and to coordinate recommendations of interested Divisions and Committees in The Mountaineers.

The year ended with a planning conference at Rhododendron Preserve. The periodic meetings of the Board and Division Chairmen are valuable from several standpoints. They give an opportunity to consider our future, to explore some of our problems in depth, and to examine the direction we are going. The emphasis at this conference was on the Business Manager position, the Literary Fund, the Rhododendron Preserve, membership communication, and Mountaineer leadership.

Conservation Division

The Conservation Division implements conservation policies of The Mountaineers.

During 1969 the increased concern with our environment was shown by the number of bills introduced and passed in the legislative session to improve our environment. The Mountaineers worked with the Washington Environmental Council on many of these bills. This year was a beginning; much remains to be done.

Problems of State lands were of great concern and a three-pronged approach is being used: (1) encourage the Department of Natural Resources to broaden its scope to include educational, scientific, and recreational use of the land; (2) have recreational lands transferred to the State Parks Commission; (3) require the Department of Natural Resources to give first right of refusal to the State Parks Commission whenever the Department wants to sell land.

Other actions and areas of concern included:

1. Opposed taking any national, state, county, or city land already set aside for park purposes for uses other than parks.
2. Endorsed and co-sponsored the Wilderness Plan for Olympic National Park as drawn up by the Olympic Park Associates.

3. Expressed concern over transportation problems and need for a comprehensive and overall plan including mass systems as well as freeways and bridges.
4. Opposed any invasion of Wildlife Refuges that will disturb the natural habitat. The immediate aim of this was to oppose underground atomic blasting on Amchitka Island, a Wildlife Refuge in the Aleutian chain.
5. Opposed plans of City Light for increasing the height of Ross Dam and for building Thunder Creek Dam.
6. Opposed fill (including garbage fill) of ravines in natural City parks.
7. Supported the endeavor of the Seattle Park Department to create an urban greenbelt and bridal trail system.
8. Opposed the proposed mining road to La Bohn Gap.
9. Opposed the proposed National Timber Supply Act as written. We favor the principal of applying intensive management to permit optimum yields of wood products from National Forest lands, but oppose any legislation that does not allow major consideration for other multiple use values on such land and that does not include provisions to allocate lands that might be set aside in the future for park or wilderness purposes.

Alaska and its unique problems have been a major concern and will be the object of continued work.

Indoor Division

The *Annual Banquet* was held on Saturday, April 26 at the Seattle Masonic Temple, with approximately 240 in attendance. The program featured the new North Cascades National Park, with Roger J. Contor, Superintendent, as speaker. Morris Moen received the Mountaineer Annual Service Award, for his many years of creative service to the club. Future banquets will be held in October.

The *Dance* committee completed an eight-month season of first Friday dances with an average of 163 in attendance, and a total of 1291 paid admissions. A Uher tape recorder was obtained, and it was hoped that the remainder of the public address system could be renewed during the 1969-1970 season. Taping of many available dances was started, and a good-sized collection begun by Jim Lesniak in lieu of an orchestra.

Dinner meetings took us around the world with a closer look at the Far East, India, West Pakistan, Greece and Mexico. Slides of the "Old West" were shown as well as slides taken on last summer's outing in the Wind River Range in Wyoming.

Music Makers, formed in late August, held the first successful meeting by the end of October with about 38 attending at Louise Marshall's "barn" for potluck lunch, fun and work. The group performed at the December monthly meeting, and there were more work and fun parties in the following months, climaxed by a weekend backpacking trip to Sheep Lake in the Chinook Pass area.

The *Photography* committee had trouble finding someone to take command for the year, but eventually an *ad hoc* committee received expressions of interest through a notice in the Bulletin. In March, a program was presented on Jasper National Park, with an evaluation of slides by Mrs. Grace Lanctot.

This year's offering of the *Players, a* musical play *Calico Cargo,* was a success. This may be attributed in part to the subject matter (the story of the Mercer girls), the weather (no rain), the cast, and the cooperation among various committees in The Mountaineers.

Because of interest in the elections, *Program* meetings of September and October were devoted to political talks. Other meetings were on diverse subjects: Paul Williams showed slides of Mount Aconcagua in Argentina. Movies of successful climbs of Mexico's Orizaba, Popocatepetl, and Ixtaccihuatl were shown. Joan Firey described ski-touring in the Candian Rockies. Sherry Ballard discussed Ecology and Survival in Nature. Slides were shown of the Alpine Lakes area. The last program meeting gave a preview of summer outings. Attendance during the year was low in spite of the high caliber of programs.

Outdoor Division

Bicycling came into its own this year when a *Bicycle Committee* was added to the Outdoor Division. Weekly evening trips were scheduled in the Metropolitan area and sufficient interest developed to sponsor a nine-day bicycle outing in the San Juan Islands with 15 persons participating for the entire period and another 13 as part-time participants. Attendance for 9 scheduled events was 121.

The *Campcrafters* Gypsy Tour explored the Olympic Peninsula from July 26 through August 10 with 101 members taking part. The year started out with 139 participants enjoying the lowest tides of the year at Rod's Beach Resort at Copalis Beach on Memorial weekend. The last scheduled event of the year was the Halloween Party at the Snoqualmie Ski Lodge on October 25 and 26 where 91 enjoyed the hiking, costume party, games and folk dancing. Attendance for 7 scheduled events was 535.

Botany outings were well diversified as a result of new leadership. Outings varied from leisurely one-day strolls to mild two-day outings. The outings are group fun and exercise, while plant classification (taxonomy) is left up to the individual. The expanded objectives are ecology, geology, paleontology, marine biology, photography and landscape values.

Deception Pass may become a favorite area as the first outing because of the weather and gentle walk, and because many different plants and some marine species were found. The lectures were held in both Seattle and Tacoma this year, and centered around slide shows of general and close-up photography. The Tacoma lecture emphasized the evolution of flowering plants with slides of the varieties of vegetation in North America. The lectures will not be scheduled again because they will be integrated with courses in the spring. The Boundary Butte outing was an outstanding success in geology and taxonomy. William A. Long, guest leader, pointed out and gave approximate ages of numerous lateral moraines on the butte and in the Leavenworth area. The final trip was at Ingalls Pass and was late enough that the subalpine Larch were in fall colors.

We hope to have an outing that will appeal to almost everyone in the future. The *Did You Know* series will continue, with unique informative subjects that affect the outdoor oriented person.

Participation in Mountaineer activities admnistered by the *Climbing* Committee continued to be high in 1969, with 146 members enrolling in the Alpine Travel Course, 272 in the Basic Climbing Course, and 291 Intermediate students who remained eligible for graduation.

In addition to the Climbing Committee members, who provided a substantial amount of the leadership and instructional talent during the year, 83 Mountaineers and several non-members acted as lecturers and leaders for the Climbing course program. Utilization of the clubroom was estimated at slightly less than 10,000 man-hours.

The Alpine Travel Course, initiated in 1968, was repeated and apparently successful despite a high drop-out rate, most of which occurred at the end of the lecture series. Only 35% of those who completed the lecture attendance requirements also completed the subsequent field trips. The only major innovation in the Alpine Travel Course was the addition of 2 non-credit overnight backpack trips. Response was so low as to discredit the need for this type of activity, probably because of adequate provisions in the other non-technical programs sponsored by Outdoor Division Committees.

One new field trip was added to the Basic Climbing Course. Students were required to attend a half-day session devoted to knot tying, belaying, and rappelling fundamentals at Woodland Park. This practice reduced the time needed for such instruction at Schurman Rock and thereby allowed more climbing practice on the rock.

The problem of overcrowding at Basic lectures was avoided by dividing the Basic Course students into two groups and presenting each lecture twice. This did reduce lecture audiences to a reasonable size, but the additional load on lecturers, the lecture sub-committee and the clubroom was substantial.

There were 89 Basic Course experience climbs scheduled, and 82 were successfully completed, including 13 for glacier or rock credit, 12 glacier climbs, 32 rock climbs and 25 unclassified.

For the first time, to our knowledge, course credit was allowed for climbing done in the Outing program. Climbing Committee-approved leaders were provided for outings in the Park Creek Pass area and Northern Pickets.

An accident on the Basic Experience Climb of Mount Rainier resulted in the death of two climbing course students and serious injury to a third. Club officers appointed a committee made up of current and past Climbing Committee Chairmen, under the direction of the vice president of the club, to investigate and document the event and to formulate an evaluation.

No significant changes were made in the Intermediate Climbing Program. There were 19 Intermediate climbs scheduled and 12 were successfully completed with 57 students receiving Intermediate climb credits.

There were 21 non-credit roped climbs scheduled, and 13 were successfully completed. The average number of participants was 7 plus. A bulletin notice invited suggestions from club members regarding possible climbs. This appeared to have improved interest in the roped climb program.

Of those who registered as Alpine Travel Course students, 27% (39) completed the course. Of the Basic Course registrants, 54% (157) were graduated. The Intermediate certificate was awarded to 15 Mountaineers.

The Mountaineer donations of $50.00 to the Everett Mountain Rescue Unit and $200.00 to the Seattle *Mountain Rescue Council* were submitted again this year. Twelve schedule sheets listing Mountaineer climbs, climb leaders and climbing committee members were distributed to M.R.C. division units.

Seattle M.R.C. participated in 14 operations during 1968. It has inaugurated a drive to increase its membership by at least 30 members. This is needed because of the increase in the number of operations and the age of so many active members. The Seattle council contracted for and filmed a movie on hypothermia. The Mountain Players furnished the cast.

The M.R.C. representative was invited to be a member of the Safety committee.

Outing Coordinating Committee: In order to facilitate and clarify Mountaineer Outing policy, a formal statement was drafted, discussed in the Outdoor Division and adopted by the Board of Trustees on April 3, 1969.

The Committee coordinated the following outings, which are reported under the sponsoring committee: Little Yoho, Yoho National Park, B.C. (Summer Outing Planning Committee, 63rd annual Summer Outing); Olympic Peninsula, Olympic National Park (Campcrafter's 24th Annual Gypsy Tour); Park Creek Pass Outing and Northern Picket Range Outing, North Cascades National Park (Climbing Committee); Hannegan Pass-Diablo Dam, North Cascades National Park (Viewfinders); Wonderland Trail, Mt. Rainier National Park (Backpackers); and New Zealand-Australia Excursion (Special Outings).

In order to encourage and develop different types of outings in varied wilderness areas to suit the abilities and interest of Mountaineers, the Outing Coordinating Committee sponsored 5 outings of one week or more and encourage the summer use of Mountaineer lodges by the Trail Trippers and Bicyclers. As one of a series of Outings in Alaska, 14 members participated in the first Mountaineer Outing to the Alaska Brooks Range—an exploratory outing enabled the group to see an area proposed as an Alaskan Wilderness Area. The Cascade Crest Trail from Cascade Pass to the Suiattle River provided 34 persons with an enjoyable nine-day outing. Many of the same individuals have

been covering consecutive sections of the Cascade Crest Trail each summer starting at Manning Provincial Park in British Columbia and traveling south. A Viewfinder backpack and climbing trip in the Olympic National Park has been scheduled each year for a number of years. This year's outing started at Obstruction Point and went through Dose Meadows to end at Deer Park. Eight people participated; Lost Peak, Sentinel and Deception were climbed.

To further the exploration and study of the watercourses of the Northwest, an outing to the Bowron Lake Provincial Park, British Columbia, was provided for canoes and kayaks. Twelve members participated. On this outing, problems relating to perpetuating a wilderness area that is popular with organized groups were seen first hand.

A seven-man *Safety* committee was organized, and operates with an experienced climber assigned to monitor each Seattle unit outdoor activity. An *ad hoc* committee, separate from the Safety committee function, was formed to determine the extent the Mountaineers should become involved in equipment testing, standards, and related activity on climbing equipment.

Special Outings included a boat and bus trip to Botany Bay on Vancouver Island over the July 4 weekend which attracted 32 participants, and a boat trip aboard the *Propeller II* to Sucea Island, Friday Harbor and Jones Island over the Labor Day Weekend.

There were 19 *Ski Tours* scheduled during the Winter and Spring season. The Ski Mountaineering Course, consisting of 4 lectures and 4 Field Trips attracted 28 people of which 15 completed the requirements and received the graduation certificate.

The *Snowshoe* season started off with 65 participating in the first field trip. There were 38 tours with 563 participating for an average of 15 people per trip. There were 5 trips cancelled due to heavy snow in the Seattle area. The high point of the year was April 12 and 13 when 7 Snowshoers reached the summit of 11,235-foot Mount Hood.

Some unusual Statistics: Highest point reached, 11,235 feet; lowest point, minus 1 foot at Shi Shi beach which was substituted for the Hurricane Ridge trip; highest temperature, 50 degrees; lowest temperature, minus 48 degrees in the Cedar creek area of the Okanogan country.

This year's scheduled *Trail Trips* events numbered 127, almost double last year's activities. Verified man trips total 1649, and

adding an estimated 472 for the other 24 trips makes a total of 2121 man trips.

An analysis of those trips for which records are complete showed that the total verified individuals participating in the program numbered 841. Adding an estimated 250 for the trips not reported and for participants whose names were unknown makes a total of 1091 people.

Several backpack trips were scheduled as an outgrowth of the Trail Trip program. This activity has become so popular that it may be represented by its own committee next year.

The program also included, for the first time, officially scheduled mid-week hikes. Each mid-week trip drew between 3 and 25 participants. No pattern of preferred day was apparent. This new idea was considered a success and will be continued.

The *Viewfinders* scheduled 33 trips during the year, an increase of 2 over last year. There were 495 man trips with an average of 15 per trip. To the leader, the Storm King Mountain trip was too difficult, and should not be scheduled in the future.

The Outing, August 16-24, from Hannegan Pass to Ross Lake was a great success, with Henry Shain providing plenty of action for those who wanted it. A climb of Mount Ruth, a hike (ten miles round trip) to Copper Mountain Lookout, a swim in Ross Lake and a climb of Sourdough Mountain were some of the highlights of the trip.

Publications Division

The *Annual* and the *Bulletin* continued to fulfill admirably their assigned functions.

Our *Library* is gaining steadily in depth and breadth as a superlative collection—the finest of its kind in this area—mirroring the vitality and far-flung interests of the Club's members. During the year, 53 new titles were added by purchase or donation. Subjects represented include mountaineering in all aspects, outdoor life, regional and natural history, and skiing. Conservation is of increasingly vital concern to all, and several significant works in this field have been added. A number of current maps enriched the map collection. For all its valuable (and exceedingly scarce) materials, this is no museum. Rather, it is a working reference library—as shown by the steadily rising circulation and the number of satisfied researchers who find this

varied, unique library a source of information and provocative reading pleasure.

The *Literary Fund Committee* began 1969 by paying attention to winter, publishing *Northwest Ski Trails,* by Ted and Marge Mueller and Bob and Ira Spring (in the "Hikes Series"); and *Snowshoe Hikes in the Cascades and Olympics,* by Gene Prater. With summer came another addition to the "Hikes Series": 50 *Hikes In Mount Rainier National Park,* photos and text by the Springs, maps by Marge Mueller, the book co-published with the Mount Rainier Natural History Association. The year ended with another title in the "Hikes Series": *Footloose Around Puget Sound*: 100 *Walks on Beaches, Lowlands, and Foothills,* text by Janice Krenmayr (author of *Footloose in Seattle*), maps by Helen Sherman, and photos by the Springs. Also at year's end came *Challenge of the North Cascades,* by Fred Beckey—stories of his first ascents over a 30-year period.

Editing was under way on Dee Molenaar's monumental book on the climbing history of Mount Rainier, a number of new hiking and climbing guides from Washington through British Columbia to Alaska, and certain exciting projects which it is premature to discuss as of this writing.

With the guidance of the Club's new business manager and accountant, sales and promotion of Mountaineers books were put on a professional basis. Though unpaid "work-party" labor continues to make the decisive contribution to the publishing effort, the new direction insures necessary fiscal responsibility.

Membership records were computerized in 1969 and, after a two-year lapse, it was possible to issue a new membership *Roster* by this modern method. Thanks to the diligence and hard work of the Club's business manager, enough advertising was sold to more than pay for printing the Roster—and unprecedented occurrence.

Tacoma Branch

Despite its growing numbers, Tacoma Branch has been able to maintain that "personal touch" and continues to attract enthusiastic participants at its regular and special events. About 200 members attended each of the annual events—the June Picnic at Engle's, the September Fair at Budil's, the Salmon Bake and the Banquet in October.

This year's June picnic celebrated Tacoma's Centennial. The ladies wore bonnets and flowing ankle-length dresses while the men sported beards and waxed moustaches and children danced the Virginia Reel. At the Fair the food committee was hard pressed to keep up with the demands for superburgers as unexpected numbers poured in. Guests cheerfully lost their money at games of chance and visited with friends in the enchanting gardens (Mr. Budil confessed it required 2½ hours a day just to water the plants). The Salmon Bake moved to Salter's Point Park in Steilacoom where Seattle and Olympia members joined us for one of those rare October bright blue weather days on the Sound. Did you ever eat such salmon?

The Banquet was highlighted this year by slides and the story of "Denali Endeavor, 1969." In May four Tacoma members, Stan Engle, President, Jim Henriot, Vice-president, Gil Blinn and Paul Gerstmann joined four other climbers, Ronald Beck, Paul Haertel, Larry Heggerness and John Dalle-Molle in an assault on Mount McKinley, North America's highest. For some of the group it was the second attempt, having been turned back 3000 feet from the summit in 1964. Flown in to Kahiltna Glacier by Don Sheldon on May 8, they spent the next three weeks moving supplies and equipment up the mountain, establishing five camps. May 17 Paul Gerstmann became ill and was flown out. That same day manna fell from the skies in the form of oranges, apples, ice cream and beer (basic food for all serious climbers). Who but a previous climber of Denali could appreciate such a treat—Lee Nelson! May 20th a storm raged all night, ripping one tent, and the following day wind blew a snow wall over on the tents ripping another and burying one climber, fortunately uninjured. At Camp IV (14,000 feet) while someone checked the fuel level in a small stove, pressure caused gas to spray out onto a larger stove. Instantly the tent was filled with flames. Three men bailed out, unhurt, and there was minor damage to equipment (shades of Lute Jerstad and Barry Bishop on Everest?). May 29 was THE DAY; the weather cooperated and all seven men made the summit. Two days later they had returned to the landing zone and on June 1 they left Denali, having realized a dream to sustain them the rest of their lives.

Trail Trippers, Campcrafters, Juniors, Photographic, Bridge and Music groups scheduled regular activities throughout the year. Jim Sanford coordinated the Alpine Hiking, Basic and Intermediate Climbing Courses, resulting in 12, 42 and 2 persons respectively completing the requirements. Floyd Raver collected

$2,065.00 on 55 Clubhouse rentals. It was a good year. Stan Engle completed his third term as Branch President and turned the gavel over to Phil Stern, active Board member.

Olympia Branch

The year 1968-69 was one in which all regular activities went forward without fuss, with several special activities having excellent success.

As usual the climbing and hiking courses were the big committee participations. In climbing, 30 out of 42 enrolled were graduated; in hiking, 14 were given certificates of completion. Some of the success of the climbing course is attributed to scheduling the experience climbs through July 15 only and some to the fact that several climbing graduates had previously taken the hiking course.

We had a small but dedicated conservation group working actively in the Hickle appointment, Timber Supply Act, and the Amchitka blasts.

A successful junior outing in the Olympics was enjoyed by nine Olympia juniors. Twelve Olympia members attended the Mount Erie Rescue Practice with the intent of establishing a self-rescue seminar in Olympia.

Trail trips and snowshoeing had an excellent season; club climbs were poorly attended.

Branch meetings included a slide show by Don Marcy of his McKinley climb, and a sentitive look at the forms, textures and color in nature through color slides taken and presented by Vic Sheaffer at our annual banquet.

Four members completed the Intermediate requirements; there were four 6-peak climbers honored and one received his Olympic Peak Pin.

Officers and Trustees — 1969 Term

Officers

President ..... John M. Davis
Vice-President ..... Max Hollenbeck
Secretary ..... Neva Karrick
Treasurer ..... John Osseward

Trustees

Charles Crenchaw ..... Coleman F. Leuthy
Jesse Epstein ..... Harvey Manning
Max Hollenbeck ..... Thomas Miller
Neva Karrick ..... Ellen Brooker Olsen
Robert Latz ..... Roy Snider
Clarence Bond (Everett) ..... Paul Wiseman (Olympia)
Edith Delzell (Tacoma) ..... Jesse Epstein (ex-officio)

BRANCHES

Tacoma

Chairman ..... Stanley Engle
Vice-chairman ..... James Henriot
Secretary ..... Olive Brower
Treasurer ..... John Hoheim
Trustees ..... Philip Stern, Robert Arnold, Lee Nelson, Jack Brown

Everett

Chairman ..... Melvin Bergman
Vice-Chairman ..... John Dow
Secretary ..... Jessie Greatorex
Treasurer ..... Eileen B. Wright

Olympia

Chairman ..... Charles Todd
Vice-Chairman ..... Rolla Sexauer
Secretary ..... Nonie Sexauer
Treasurer ..... Loyal Davis

Committee Chairmen — 1969 Term

Administrative Division

Wallace Bartholomew

Auditing ..... V. Frank Vojta
Budget and Finance ..... Helen Peterson
Duplicating ..... Ruth Bartholomew
Historian ..... Loretta Slater
Insurance ..... Willard S. Peterson
Legal Advisory ..... Joan Hansen
Membership ..... Bill Vail and Richard Weibel

Operations Manual ..... Creta McElwain
Skills and Talents ..... Dorothy Bair and H. Johnson

Conservation Division
William G. Long

Alaska ..... Margaret E. Murie
FWOC Representative ..... Mrs Neil Haig
National Parks and Forests ..... Polly Dyer
Rhododendron Preserve Planning ..... Leo Gallagher
Seattle Parks Department Camping and Outdoor
Education Advisory Council Representative ..... Peter J. Maloney
State-County-Local Areas ..... Faye Ogilvie
Washington Environmental Council Representative ..... Robert Latz
Water Resources ..... H. Marc Bardsley

Indoor Division
Harriet Walker and Miriam Lord

Annual Banquet ..... Daniel Powell
Dance ..... Gardner Hicks and James R. Lesniak
Photography ..... Philip Dickert
Players ..... Royce Natoli and John H. Davidson
Program Meetings ..... Helen Nieberl
Dinner ..... Gertrude Burman
Music Makers ..... Mark Kupperberg

Outdoor Division
Doyle Anderson and Fran Flerchinger

Bicycle ..... Michael Kirschner
Botany ..... Phil Jacobs
Campcrafters ..... Robert and Francis Boley
Climbing ..... Jack Titland
Junior Committee ..... Chris Northcutt
MRC Representative ..... Robert Swanson
Outing Co-ordinating ..... Ruth Ittner
Special Outing ..... Andrew Bowman
Summer Outing Planning ..... Mary Fries
Ski Tours ..... Delbert L. Earle
Snowshoe Tours ..... Walt Entenmann
Trail Trips ..... Louise Marshall and John Davidson
Trails Advisory ..... Ruth Ittner
Viewfinders ..... Rosemary Dunn

Property Division
Robert Sexauer

Crystal Lodge Building ..... Jim McGinnis
Irish Cabin Liaison ..... George Cashman
Meany ..... Ray Nelson
Mount Baker ..... Tony Sobieralski
Rhododendron Preserve ..... Bob Newpert
Snoqualmie Lodge ..... David H. Lee
Stevens ..... Robert H. Cline
Tacoma Clubhouse ..... Dino Lemonides

Publications Division
Grace Kent

Annual ..... Alice Thorn
Bulletin ..... Paul Robisch
Library ..... Anita Nygaard
Literary Fund ..... Harvey Manning
Roster ..... Joyce Magnusson

The Mountaineers

(A Washington Corporation)

Seattle, Washington

Financial Statements

October 13, 1969

The Mountaineers
Seattle
Washington

Gentlemen:

I have examined the statements of financial condition of the

General Fund
Permanent Building and Improvement Fund
Literary Fund
Permanent Fund
Seymour Fund
Property Fund
Haynes Memorial Fund
Pat Chamay Memorial Fund

of The Mountaineers, Seattle, Washington, a Washington corporation, as of August 31, 1969, and the related statements of income and expenses for the year then ended. My examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other accounting procedures as I considered necessary in the circumstances.

In my opinion the accompanying statements of financial condition of the named funds and the related statements of income and expenses present fairly the financial condition of The Mountaineers at August 31, 1969, and the results of their operations for the year then ended, in accordance with generally accepted principles of balanced fund accounting, applied on a basis consistent with the preceding year.

Yours truly,

V. Frank Vojta
Certified Public Accountant

THE MOUNTAINEERS ***Exhibit A***

STATEMENT OF FINANCIAL CONDITION

August 31, 1969

	Assets	*Liabilities*
General Fund		
Cash	$ 7,608.80	
Accounts receivable	2,754.59	
Due from Permanent Building and Improvement fund	10,710.50	
Due from Property Fund	653.26	
Inventory of pins	207.67	
Deposits	125.00	
Prepaid insurance	12.08	
Property and equipment, net—Schedule 1	132,944.25	
Mortgage payable		$ 19,815.20
Accounts payable		8,266.68
Taxes payable		814.23
Dues and initiation fees allocated to branches		2,859.00
Due to Literary Fund		1,232.10
Lease deposits and prepaid rent		1,400.00
Deferred revenue		291.00
Principal of Fund		120,337.94
	$155,016.15	$155,016.15
Permanent Building and Improvement Fund		
Cash	$ 4,330.10	
Due to General Fund		$ 10,710.50
Principal of Fund		(6,380.40)
	$ 4,330.10	$ 4,330.10
Literary Fund		
Cash	$ 22,147.18	
Accounts receivable	14,764.90	
Due from General Fund	1,232.10	
Inventory of books — at cost	43,349.40	
Prepaid expenses	14,425.84	
Investment in Joint Venture with Mountain Rescue Council	500.00	
Investment in Joint Venture with University of Washington Press	2,876.43	
Accounts payable		$ 319.99
Accrued royalties		2,890.83
Due to Joint Venture with Mountain Rescue Council		354.35
Principal of Fund		95,730.68
	$ 99,295.85	$ 99,295.85

THE MOUNTAINEERS
STATEMENT OF FINANCIAL CONDITION

Exhibit A
Continued

August 31, 1969

	Assets	*Liabilities*
Permanent Fund		
Cash	$ 5,000.00	
Principal of Fund		$ 5,000.00
	$ 5,000.00	$ 5,000.00
Property Fund		
Cash	$ 1,044.57	
Due to General Fund		$ 653.26
Principal of Fund		391.31
	$ 1,044.57	$ 1,044.57
Seymour Fund		
Cash	$ 1,694.64	
Principal of Fund		$ 1,694.64
	$ 1,694.64	$ 1,694.64
Haynes Memorial Fund		
Cash	$ 793.92	
Principal of Fund		$ 793.92
	$ 793.92	$ 793.92
Pat Chamay Memorial Fund		
Cash	$ 445.72	
Principal of Fund		$ 445.72
	$ 445.72	$ 445.72

THE MOUNTAINEERS **Exhibit B**
STATEMENT OF INCOME AND EXPENSES

For the Year Ended August 31, 1969

Income		
Dues and initiation fees		$ 48,334.50
Less allocations		
Tacoma	$ 1,582.00	
Everett	638.00	
Olympia	639.00	
Publications	17,250.00	
Permanent Building and Improvement Fund	807.00	20,916.00
NET DUES AND FEES		$ 27,418.50
Sale of publications	$ 20,528.30	
Less cost of publications	22,846.97	(2,318.67)
Committee operations		
Indoor division (Schedule 2)		3,607.60
Outdoor division (Schedule 3)		3,563.86
Property division (Schedule 4)		3,095.70
Interest income		15.67
Miscellaneous income		382.15
TOTAL INCOME		$ 35,764.81
Expenses		
Salaries	$ 21,975.25	
Payroll taxes	1,330.64	
Clubroom building expenses, net—(Schedule 5)	2,843.29	
Professional fees	700.00	
Duplicating	122.50	
Office supplies	876.35	
Postage	1,070.24	
Repairs and maintenance	209.72	
Telephone	652.29	
Insurance	1,641.19	
Depreciation - other than lodges	822.09	
Personal property taxes	133.41	
Library	610.62	
Conservation - net	2,361.03	
Elections	423.53	
Membership	1,346.63	
Mountain Rescue Council	250.00	
Miscellaneous	144.49	
TOTAL EXPENSES	$ 37,513.27	
Less allocated to Literary Fund	5,000.00	
NET EXPENSES		$ 32,513.27
NET INCOME		$ 3,251.54

THE MOUNTAINEERS LITERARY FUND **Exhibit C**

STATEMENT OF INCOME AND EXPENSES

For the Year Ended August 31, 1969

Income From Sale of Books		$102,921.87
Less Cost of Books Sold		
Books on hand, September 1, 1968	$ 64,140.95	
Printing and freight in	36,833.40	
	100,974.35	
Less books on hand, August 31, 1969	43,349.40	
TOTAL COST OF BOOKS SOLD		57,624.95
GROSS PROFIT		$ 45,296.92
Expenses		
Salaries and payroll taxes	$ 3,556.36	
Royalties	16,428.37	
Supplies	189.10	
Storage	340.00	
Advertising	1,246.43	
Postage, wrapping and handling	1,885.30	
Committee	164.83	
Personal property taxes	548.50	
State business taxes	304.71	
Allocation of overhead expenses from General Fund	5,000.00	
Miscellaneous expenses	204.98	
TOTAL EXPENSES		$ 29,868.58
NET PROFIT FROM SALE OF BOOKS		$ 15,428.34
Add Miscellaneous Income — Net		
Miscellaneous income		
Gain on joint venture with Mountain Rescue Council	$ 325.11	
Gain on joint venture with Mountaineering Club of Alaska	206.78	
Interest income	464.53	
Total miscellaneous income	996.42	
Less loss on joint venture with University of Washington Press	164.48	
TOTAL MISCELLANEOUS INCOME—NET		831.94
NET INCOME		$ 16,260.28

THE MOUNTAINEERS **Schedule 1**
SCHEDULE OF PROPERTY AND EQUIPMENT

August 31, 1969

	Recorded Value	*Accumulated Depreciation*	*Net*
Clubroom building	$ 59,755.18	$ 7,864.00	$ 51,891.18
Mt. Baker cabin	13,824.64	7,592.83	6,231.81
Meany ski hut	12,434.96	12,011.10	423.86
Rhododendron preserve	12,219.29	4,900.58	7,318.71
Snoqualmie lodge	24,854.53	19,907.80	4,946.73
Stevens ski hut	10,606.02	10,019.93	586.09
Library	3,595.86	3,032.55	563.31
Clubroom furniture and fixtures	8,493,27	3,192.85	5,300.42
General equipment	3,458.21	2,122.50	1,335.71
Photographic equipment	2,734.07	1,833.28	900.79
Players public address system	597.76	597.76	—
Sno cat	6,007.25	6,007.25	—
Crystal Mountain leasehold improvements	820.00	—	820.00
Land			
Snoqualmie	1,100.00	—	1,100.00
Rhododendron preserve	757.50	—	757.50
Clubroom	50,000.00	—	50,000.00
Linda Coleman Memorial	768.14	—	768.14
	$212,026.68	$ 79,082.43	$132,944.25

THE MOUNTAINEERS
INDOOR DIVISION OPERATIONS **Schedule 2**

For the Year Ended August 31, 1969

	Total	*Annual Banquet*	*Dance*	*Monthly and Dinner Meetings*	*Players*
Income	$ 10,734.18	$ 704.60	$ 2,673.00	$ 9.55	$ 7,347.03
Expenses					
Food and services	1,068.88	685.45	310.05	73.38	—
Program expense	175.82	26.70	104.72	—	44.40
Rent	1,740.00	140.00	1,000.00	—	600.00
Repairs and maintenance	123.49	—	—	—	123.49
Stationery and postage	171.45	—	—	—	171.45
Committee expenses	87.34	12.06	9.52	—	65.76
Taxes	52.64	—	52.64	—	—
Depreciation on public address system	197.76	—	—	—	197.76
Costumes and properties	726.55	—	—	—	726.55
Scripts and royalties	299.10	—	—	—	299.10
Publicity	317.81	—	—	—	317.81
Fees	1,565.49	—	638.00	—	927.49
Transportation	600.25	—	—	—	600.25
TOTAL EXPENSES	$ 7,126.58	$ 864.21	$ 2,114.93	$ 73.38	$ 4,074.06
NET INCOME (Loss)	$ 3,607.60	($159.61)	$ 558.07	($63.83)	$ 3,272.97

THE MOUNTAINEERS
OUTDOOR DIVISION OPERATIONS

Schedule 3

For the Year Ended August 31, 1969

	Total	*Camp-Crafters*	*Climbers*	*Outing Coordinating*	*Ski Tours*	*Snowshoe Tours*	*Special Outings*	*Summer Outing*	*Climbers Outings*
Income	$11,537.72	—	4,592.05	—	75.00	—	1,148.58	5,314.00	408.09
Expenses									
Food and services	4,588.93	—	—	—	—	—	728.15	3,860.78	—
Program expenses	251.48	—	201.48	—	—	—	—	50.00	—
Climbing ropes and gear	484.86	—	401.32	—	—	—	—	83.54	—
Stationery, printing and postage	734.29	—	730.23	34.94	—	—	—	4.06	—
Committee expenses	137.67	19.25	40.34	7.00	—	9.79	—	26.35	—
Transportation	1,616.63	—	—	—	—	—	408.77	944.96	262.90
Allocation to Property Fund	160.00	—	—	—	—	—	—	160.00	—
TOTAL EXPENSES	$ 7,973.86	19.25	1,373.37	41.94	—	9.79	1,136.92	5,129.69	262.90
NET INCOME (LOSS)	$ 3,563.86	(19.25)	3,218.68	(41.94)	75.00	(9.79)	11.66	184.31	145.19

THE MOUNTAINEERS **Schedule 4**

PROPERTIES DIVISION OPERATIONS

For the Year Ended August 31, 1969

	Total	*Mt. Baker Cabin*	*Meany Ski Hut*	*Rhododendron Preserve*	*Snoqualmie Lodge*	*Stevens Ski Hut*	*Crystal Mountain*
Income							
Meals served	$10,278.39	2,613.87	2,619.70	873.58	1,630.35	2,540.89	—
Use of hut or lodge	7,724.13	2,176.75	566.38	602.50	2,610.95	1,767.55	—
Use of ski tow	4,029.81	—	571.68	—	3,458.13	—	—
Use of sno cat	1,019.74	—	1,019.74	—	—	—	—
Concessions	488.70	—	—	488.70	—	—	—
Miscellaneous	130.34	27.34	97.00	—	6.00	—	—
TOTAL INCOME	$23,671.11	4,817.96	4,874.50	1,964.78	7,705.43	4,308.44	—
Expenses							
Food	$ 8,613.84	1,951.54	1,955.50	812.37	2,030.71	1,863.72	—
Fuel	841.82	386.35	13.59	68.57	135.85	237.46	—
Building	846.06	253.20	102.31	78.48	255.17	156.90	—
Ski tow	857.23	—	317.20	—	540.03	—	—
Sno cat	1,100.35	—	1,100.35	—	—	—	—
Committee	253.36	133.10	90.70	7.65	14.01	7.90	—
Light and power	853.47	280.83	61.50	31.07	348.07	132.00	—
Taxes and land use fees	1,392.57	166.34	140.40	496.29	364.04	175.50	50.00
Insurance	1,466.76	321.24	352.80	249.24	296.52	246.96	—
Depreciation	4,102.96	700.00	800.00	610.96	1,387.00	605.00	—
Concessions	231.99	—	—	231.99	—	—	—
Miscellaneous	15.00	—	15.00	—	—	—	—
TOTAL EXPENSES	$20,575.41	4,192.60	4,949.35	2,586.62	5,371.40	3,425.44	50.00
NET INCOME (Loss)	$ 3,095.70	625.36	(74.85)	(621.84)	2,334.03	883.00	(50.00)

THE MOUNTAINEERS **Schedule 5**

CLUBROOM BUILDING EXPENSES—NET

For the Year Ended August 31, 1969

Expenses	
Management fees	$ 98.50
Repairs and maintenance	1,474.03
Janitorial	864.48
Heat	1,418.24
Utilities	758.37
Taxes and permits	2,141.94
Insurance	261.48
Interest	1,278.81
Supplies	248.44
Depreciation	2,839.00
TOTAL CLUBROOM BUILDING EXPENSES	$11,383.29
Less rental income	8,540.00
CLUBROOM BUILDING EXPENSES — NET	$ 2,843.29

THE MOUNTAINEERS - TACOMA BRANCH
STATEMENT OF FINANCIAL CONDITION

August 31, 1969

	Assets		*Liabilities and Proprietorship*
Current Assets:			
Cash, Bank of California.	$ 1,072.94		
United Mutual Savings	3,548.06		
Accounts Receivable	1,582.00	$ 6,203.00	
Fixed Assets:			
Land, Clubhouse	$ 800.00		
Irish Cabin	200.00	1,000.00	
Buildings:			
Clubhouse	$16,878.74		
Less Reserve	4,267.00	12,611.74	
Irish Cabin	$ 2,143.91		
Less Reserve	987.00	1,156.91	
Furniture & Fixtures:			
	$ 4,652.13		
Less Reserve	2,950.00	1,702.13	
Liabilities:			
Crystal Mountain Building Fund			$ 5.00
Net Worth:			
Balance Sept. 1, 1968	$21,016.29		
Increase FY 1969	1,652.49		22,668.78
		$22,673.78	$22,673.78

John J. Hohèim, Treasurer.

THE MOUNTAINEERS - TACOMA BRANCH
STATEMENT OF INCOME AND EXPENSE
Fiscal year ended August 31, 1969

Income			
Dues and Fees — 1969		$1,582.00	
Committees:			
Climbers	$1,392.00		
Less expense	1,182.35	209.65	
Social Committee	$ 21.08		
Less expense	9.92	11.16	
Special events (1)	$ 905.80		
Less expense	838.68	67.12	
		$1,869.93	
Other Income:	$ 88.77		
Interest	1.00		
Misc.	1,222.00	1,311.77	
Donations			$3,181.70
Expenses			
Committees:			
Campcrafters	$ 25.00		
Nominating	5.23		
Pylon	97.81		
Miscellaneous	55.38	$ 183.42	
Clubhouse, Net (2)	$1,191.34		
Irish Cabin, Net (3)	46.28	1,237.62	
Administrative Expense:			
Executive Committee	$ 2.60		
Secretary Expense	83.57		
Treasurer Expense	12.00	98.17	
Donations		10.00	1,529.21
NET EXCESS Income over Expenses			$1,652.49

(1) Special Events.

Thanksgiving Dinner	$ 57.68
Budil Fair	82.29
Annual Banquet	(41.16)
Others	(31.69)
	$67.12

(2) Clubhouse.

Caretaker	$ 729.72
Caretaker payroll tax	39.23
Depreciation	716.90
Heat	251.06
Insurance	222.00
Lawn Maintenance	198.99
Rental expense	102.00
Repairs	84.07
Supplies	405.38
Taxes	357.25
Telephone	77.08
Utilities	337.66
	$3,521.34
Rental Income	2,330.00
NET	$(1,191.34)

(3) Irish Cabin.

Depreciation	$149.58
Insurance	120.00
Repairs	29.46
Supplies	3.88
Taxes	12.36
	$315.28
Rental Income	269.00
NET	$(46.28)

THE MOUNTAINEERS - OLYMPIA BRANCH
STATEMENT OF FINANCIAL CONDITION

August 31, 1969

	Assets	*Liabilities and Proprietorship*	
Cash in Bank	$1,014.63		
Securities (at cost)	577.00		
Accounts Receivable	639.00		
Dividends Receivable	8.27		
Net Worth, Balance Sept. 1, 1968		$1,507.51	
Increase 1969		731.39	$2,238.90
	$2,238.90		$2,238.90

INCOME AND EXPENSE

Fiscal year ended August 31, 1969

Income		
Climbing Course	$ 386.00	
Hiking Course	416.00	
Less cost	158.25	257.48
Net on book sales		9.35
Little Si Sub-lease		45.00
Miscellaneous		14.85
Interest on savings a/c		12.82
Dividends		8.27
Dues and Fees allocation		639.00
		$1,227.92
Expenses		
Rent	$ 18.29	
Travel	60.00	
Stationery, Postage	71.80	
Annual Dinner	88.50	
Supplies Used	22.94	
Donations	195.00	
Dues absorbed (Climbing course)	40.00	496.53
NET EXCESS Income over Expense		$ 731.39

Loyal E. Davis, Treasurer.

THE MOUNTAINEERS - EVERETT BRANCH

STATEMENT OF FINANCIAL CONDITION

Fiscal year ended August 31, 1969

	Assets	*Liabilities and Proprietorship*	
Cash in banks	$2,085.68		
Petty cash	9.98		
U. S. Savings Bonds	565.20		
Accounts reveivable	638.00		
Supplies, pins	43.00		
Inventory, books	50.60		
Accounts Payable			$ 13.50
Net Worth, Balance Sept. 1, 1969		$3,177.06	
Increase FY		201.90	3,378.96
	$3,392.46		$3,392.46

INCOME AND EXPENSE

Fiscal year ended August 31, 1969

Income			
Fees, Hikes and Climbs		$ 7.80	
Climbing Course	$ 198.75		
Less expense	132.22	66.53	
Net on book sales		7.63	
Interest on Bonds		11.60	
Interest on Savings a/c		98.72	
Dues and Fees		638.00	$ 830.28
Expenses			
Clubroom Rent		$ 24.84	
Annual Banquet, Receipts	$ 231.00		
Cost	248.42	17.42	
Salmon Bake, Receipts	$ 115.65		
Cost	.116.47	.82	
Membership Expense		17.10	
Nominating Committee		1.82	
Social Committee		42.96	
Trail Trips Publicity		13.00	
Officers Expense		5.41	
Subscription		5.00	
Donations: M.R.C.	$ 250.00		
Sierra Club	100.00		
Library Film	150.00	500.00	628.38
NET EXCESS Income over Expense			$ 201.90

Eileen Wright, Treasurer.