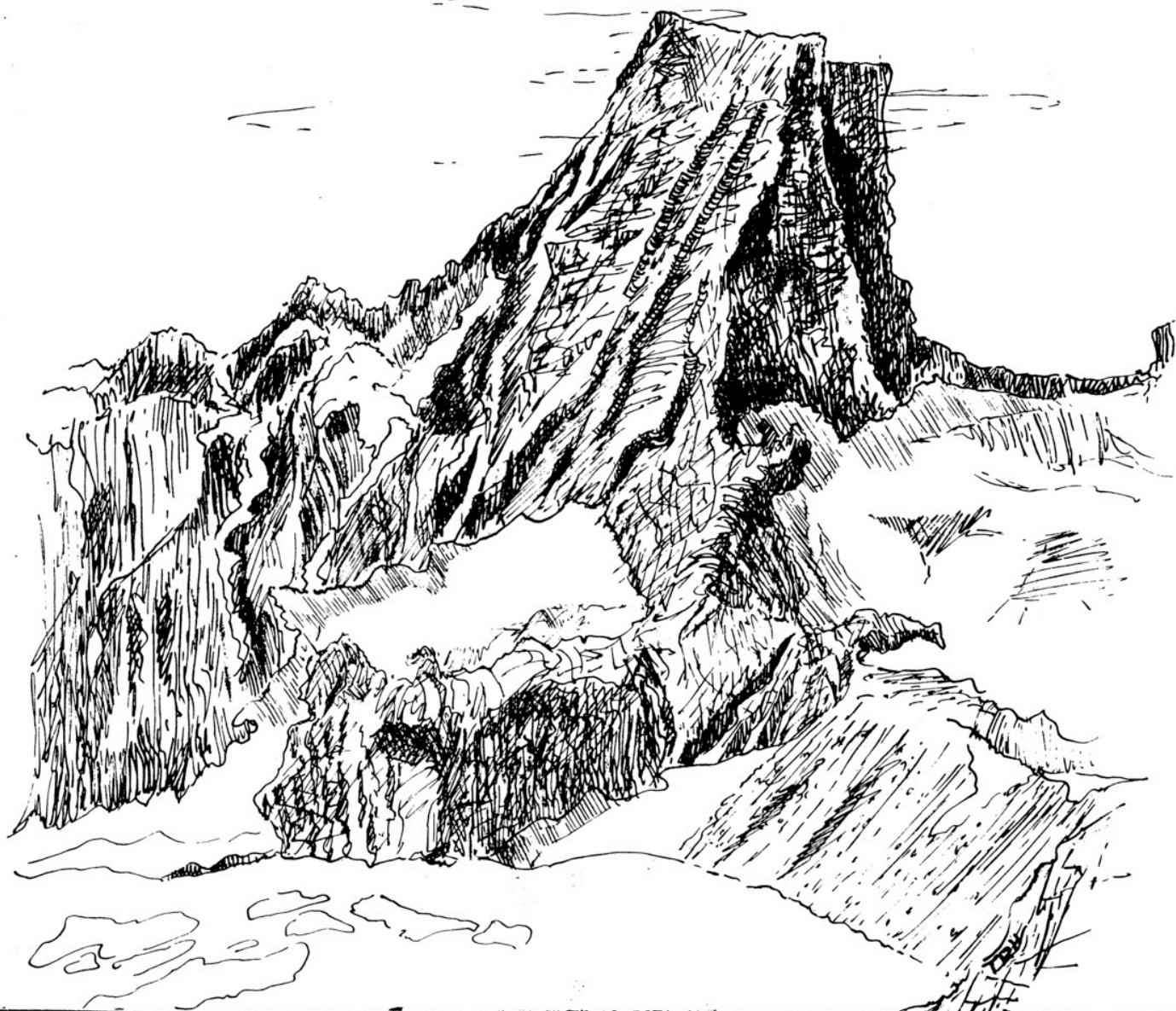


KOOTENAY

KARABINER



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Tom Charlton



KOOTENAY MOUNTAINEERING CLUB

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CHAIRMAN'S REPORT

"And this our life, exempt from public haunt, finds tongues in trees,
books in running brooks, sermons in stones, and good in everything."

-- Shakespeare.

In spite of its slow beginnings, it really was not such a bad winter after all. There was some excellent skiing on the hills and as this report goes to press, we are looking forward to some good ski touring in April and May.

To date, as far as the ski touring trips go, we seem to have been completely out of phase with the weather and have been forced to turn back on every occasion by poor weather and snow conditions. However, in spite of the weather, all who went on the trips enjoyed the outing. I would like to say a special thank you to the ladies who turned out in such good numbers to make it a one-to-one ratio with the men.

This year, the executive set up a number of committees to spread the work load and to get more people involved in the work of the club. This seems to be working well. Our hard working social committee has provided us with four evenings of slides, movies, folk dancing and refreshments. The summer camp committee has spent considerable time in planning a summer camp. I hope their efforts will be rewarded with a good response from club members.

The results of the K.M.C. questionnaire published in the 1969 Spring Karabiner showed that, on the average, members did not take an active part in club activities and 50% of those who completed the questionnaire felt that there should be a greater number of fishing and 'easy' camping trips included in the summer schedule.

This year, the summer schedule and trail cutting committee have come up with a very varied and busy summer programme. There is something to suit every taste, so here is hoping for a good attendance on all trips.

The Conservation Committee has prepared a brief to have the Mulvey, Evans, and Beatrice Lakes area set aside as a Class A Provincial Park. This brief is now in the hands of the powers that be in Victoria and it will surely need all the support we can give it.

For the second year, the Snow Survey Project for the Provincial Governments Water Investigation Branch under Dave Parfitt has been carried out successfully, with three measurements completed to date, and three more to go. Our thanks go to the hardy ski tourers who carry out this job and contribute half their remuneration to the Club. Roy Hopland will take over while Dave is away.

Thanks to Dave's untiring efforts, negotiations for the "Ridge Cabin" on the way to Old Glory for use as an emergency shelter have come to a successful conclusion. The Water Investigation Branch will pay the \$20.00 annual rent and it will be up to us to look after the cabin.

This winter, the K.M.C. was asked by School District No. 7 (Nelson) Adult Education, to sponsor a course on Winter Camping. This was done and consisted of two indoor sessions and one field trip with 12 people participating. A full report on this venture is carried elsewhere in the Kootenay Karabiner.

Bert Port will be organising the "Rock School" this year and taking Dave Parfitts place on the Rescue Team. Bert has had considerable experience in this field and we are fortunate that he has joined the Selkirk College staff.

Our best wishes go with Dave and Janet for their ten months holiday 'down under.' Happy day for you when you go, happy day for us when you come back.

A Climbers Guide to the Interior Ranges by W.L. Putnam is being revised for publication in June 1971, by which time it looks as though current supplies will have run out. Your Chairman has been asked by the author to provide information on the mountains south of the Upper Arrow Lake, i.e. the Gold Range, Goat Range, Kokanee, the Valhalla's and Valkyre, etc. I have co-operated Bob Dean and Father Smith to help me as they have already been involved in this. If anyone has any information on access or routes, etc. into these areas, I would be very grateful if they would contact either one of us. It would seem fitting that members of the K.M.C. should have a hand in updating the information on the mountains in the Kootenay area.

There will be no social get togethers during the summer, but with the rock school sessions and a trip scheduled every weekend, communication should be good. While we may not be able to find 'books in running brooks' or 'sermons in stones' at least we can go to the mountains and 'find good in everything.'

-- Helen Butling.

COVER PICTURE

View of Mount Gimli and the largest of the Mulvey Lakes from the summit of Mount Gladheim. Drawing by Terry Halliwell from photograph taken by Dave Parfitt.



MOUNTAIN SHEEP IN BRITISH COLUMBIA

- by Ian Smith & Ray Demarchi
Fish and Wildlife Branch

There are few outdoor experiences to match the thrill of spotting a wild mountain ram outlined against the sky, which explains why probably no other North American mammal is as eagerly sought by camera enthusiasts and hunters alike. Massive of horn, agile of foot, and elusive in habits, the mountain sheep symbolizes that which is alluring about the outdoors.

Distribution and Appearance

From the mouflons of the Mediterranean to the desert bighorns of Mexico, the wild sheep form a broken distribution through mountainous areas of Southern Europe, Asia Minor, South Central Asia, and Western North America. Two of the five main types are found in North America -- the thinhorns of the north and the bighorns of the south. British Columbia contains representatives of both species, which are further divided into four subspecies. The California and Rocky Mountain bighorns occur below the 55th parallel, while the Stone and Dall thinhorns are found north of that line.

The Rocky Mountain bighorn occurs naturally in two separate locations in British Columbia -- on the slopes of the Rockies from the International Boundary to Golden, and in scattered bands north of Mount Robson. In addition, small bands have been established from introductions at Squilax and Spences Bridge. The California bighorn is confined to the Okanagan, Similkameen, and South Chilcotin regions. A small introduction was also made north of Kamloops Lake.

The two bighorn subspecies are very similar in appearance, being brown with white on the belly, the insides of the legs, and the rump. Part of the muzzle usually is also white. The tail is small and dark, contrasting strongly with the light rump. The most distinctive feature of the mature male is a set of massive horns which spiral backwards from the top of the head, curling down

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around the small ears and then upwards above the nose as the animal grows older. Unlike the antlers of members of the deer family, which are shed annually, the horns of sheep consist of a bony core and an outer sheath which continues to grow throughout life. Because growth stops for part of the year, annual rings occur on the horns of both males and females, through which age may be calculated. An old male may have horns that complete a full circle, although the tips are often broken or "broomed." The record British Columbia bighorn, shot at Sheep Creek in 1920, was broomed, and yet the horns still measured 49 1/2 and 48 1/2 inches around the outside of the curl. The horns of female sheep are much less impressive, being thin and erect, much like the horns of female domestic goats. A large ram will stand about 42 inches at the shoulder and weigh in the vicinity of 300 to 325 pounds. The California bighorn tends to be smaller than the Rocky Mountain variety, and often has a more open curl to the horns.

Smaller still are the thinhorns, which range the northern part of the Province. A large Dall ram may reach 200 pounds, while Stone sheep average about 20 pounds heavier. The Dall sheep is found mainly in the Yukon and Alaska, but it occurs in the far north-western part of British Columbia as well. The pure form of the Dall sheep is found only in the St. Elias Range in this Province, while some Dall characteristics are found in sheep that inhabit the mountains adjacent to Teslin Lake. Dalls are the only white wild sheep in the world, but they are not true albinos since they posses the golden eye common to all mountain sheep. The horns of the male generally have a much more spreading spiral than those of the bighorn and are relatively less massive. The hoofs and horns are pale with a yellowish tinge and present a striking contrast to the white pelage.

Completing the Province's sheep population are the Stone sheep, which tend to be very dark except for white on the face, abdomen, insides of the legs, and rump patch. Their horns are midway in colour between the brown of the

Continued...

bighorns and the yellow of the Dall. In the northern-most parts of their range, Stone sheep may be much paler because of mixing of Dall and Stone characteristics, and sometimes only the saddle, tail, and lower legs are dark. These saddle-backed thinhorns are often referred to as Fannin sheep, and in the past were regarded as a separate subspecies, although they are not accorded this status now.

Habitat Requirements

Mountain sheep occupy a wide variety of habitat types, but several features are common to most of them. They prefer grasslands, which generally occur in the rain shadows of mountain ranges. In addition, in winter, sheep require areas of light snow so they may obtain food easily. Such ranges may be found on low-elevation, wind-swept, south-facing slopes or on high rounded alpine ridges where inversions cause warm temperatures and frequent strong winds keep the range relatively free of snow. Most sheep ranges are within easy reach of rugged cliffs interspersed with avalanche chutes and talus slopes, which the sheep use to escape from predators. This rugged terrain, adjacent to the winter ranges, also often doubles as the lambing-ground. The ewes and rams may occupy the same winter range but tend to remain somewhat separated.

Where possible most herds occupy distinct summer and winter ranges which may be up to 20 miles apart. Summer ranges are typically rugged alpine cirques, basins, and mountain ridges, and generally mature rams will occupy different ranges than the ewes, lambs, and young rams. The areas utilized by rams may be less rugged than the ewe ranges, but they are often close to heavy timber, which is used for escape from danger.

Food Habits

Unlike deer and moose, which are primarily browsers, the sheep tends to be a grazing animal and is therefore dependent upon grasses and grass-like

plants for a healthy diet. Wheatgrass, bluegrass, and Junegrass are preferred, but many types of grass will be consumed if available. Even under ideal grazing conditions, however, perhaps 25 per cent of the diet may be browse, but extensive use of conifers is an indication that the animals are close to starvation and unable to obtain more desirable food.

During the summer migratory sheep are able to vary their diet to include nutritious and succulent alpine species such as dwarf willow.

Breeding Habits

The mature rams rejoin the ewes and lambs in time for the rut, which is so timed that lambs are born during the earliest favourable month. Thus the height of the rut varies with elevation and latitude. Thinhorns tend to breed late, from mid-November to mid-December, while the Chilcotin bighorns mate from mid-September to late October.

Gestation lasts approximately 180 days, so that some lambs from early-breeding British Columbia bands are born in late April. The lamb may weigh only 7 pounds at birth, but will gain weight rapidly if conditions are right. While twinning may be frequent in healthy herds, twins are relatively rare in many herds in this Province. A false impression of twinning is often provided by the fact that lambs tend to play together, often without the mother close by.

Sheep become physiologically capable of breeding as yearlings, but normally ewes do not breed until after their second birthday, and rams do not take an active role in reproduction until after they are 3 years old.

When a ewe enters oestrus, she is immediately sought out by males of the herd, and the case is on. Often up to six rams will run full tilt after a receptive female, with the most dominant male usually the closest. Sometimes the lead ram will break off the chase momentarily for a short fight with a rival, during which time a third male will often take advantage of the lull to breed

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the ewe. These chases are characteristic of the rut, with the males pestering the female until she becomes receptive. Often the ewe will appear to be fleeing as fast as possible; however, if for some reason the chase is broken off, she will often stop and wait for the rams to become attentive to her again. Since the ewes tend to come into oestrus singly rather than together, there is a maximum chance of pregnancy.

The males normally do not appear to suffer from their vigorous head-knocking fights during the rut. Typically, fights occur only between closely matched rams; if one has an inferior set of horns, he generally gives way to his adversary without a fight or with only a token tussle. However, when two evenly matched rams tangle, a terrific and lengthy contest may ensue. After some initial inspection, the rams will start to walk away, but suddenly will wheel about at a distance of perhaps 40 feet and race toward each other on their hind feet, lunging forward at the end in perfect synchrony to meet with a combined speed of 50 to 70 miles per hour and an estimated force of 2,400 pounds. To withstand such blows, sheep possess a double layer of bone at the point of impact. Rams have been known to blast each other in this manner over 40 times in a day. The object is to establish dominance in the herd, and therefore a ewe need not be present for such an encounter to take place. Thus these fights may occur at any time of the year, but they are more common during the rut. The winner of such fights assumes a dominant role in breeding.

Causes of Mortality

Mortality in big-game populations is a subject which requires a great deal more research. However, because of their unique life habits, a considerable body of information is available on the causes of sheep mortality. Like all wild animals, mountain sheep undergo a steady depletion of numbers, which results in very few individuals reaching the maximum life span of approximately 16 to

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18 years. Most of this mortality occurs during the first year of life, and probably only 30 to 60 per cent of lambs survive their first year. However, once a lamb passes its first birthday, the chances are good that it will live to be 7 or 8 years old, after which mortality rates again increase. Of the sheep that die each year, most succumb on the winter range, so that whether the immediate cause is cold, predation, disease, or some other factor, there is a good reason to suspect malnutrition as the main predisposing factor.

Malnutrition is associated with most mortality, whether the mortality is the normal type that occurs annually or some sort of die-off such as happened in the East Kootenay from 1965 to 1967. Most wild cloven-hoofed animals are limited by their food supply, so that some deaths due to causes associated with malnutrition may be considered natural each year. However, in many areas the ranges also support domestic stock, and thus can carry fewer wild sheep. When the ranges become too overgrazed, die-offs are inevitable, and mountain sheep herds have declined in most areas where the sheep are in competition with domestic stock.

Malnutrition was definitely a predisposing factor in the East Kootenay die-offs. The food supply had been critical because of overgrazing for a number of years, and during the 1964-65 winter there were abnormal snow conditions which led to near-starvation. The actual cause of the die-offs, however, was a disease syndrome, the pneumonia-lungworm complex. Lungworms are normally found in wild sheep, but that winter the infestations in the East Kootenay bighorns were abnormally high. In addition, a Pasteurella bacterial infection swept through the herds, and its spread was probably enhanced by the poor condition of the animals. As the infection spread, however, its effects gradually decreased. While the Bull River herd, the first to be affected, suffered over 90 per cent mortality, over-all losses for the East Kootenay

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population was estimated at approximately 50 per cent.

Predation is not an important mortality factor, since the animals taken by predators tend to be very young, very old, sick, or crippled to some extent, and therefore likely to die anyway. Predators include coyotes, wolves, cougars, and very occasionally bobcats, bears, and golden eagles.

Sheep Management

The management of sheep differs considerably from the management of other British Columbia big-game species because of two factors. First, the behaviour of sheep renders them more liable to decimation by uncontrolled hunting than are most other species. Whereas it would be impossible for hunters using normal methods to eliminate the deer and moose of this Province, it would be comparatively easy for shooters to cause the depletion of the more accessible bands of sheep. Since the numbers of bighorn sheep are already low (an estimated total population of 1,200 Rocky Mountain bighorns remaining after the East Kootenay die-off and an estimated 2,000 California bighorns), conservative regulations have been in force for many years. The second way in which the management of sheep differs is in the objective of the harvest. Whereas abundant species such as deer and moose are managed to provide the largest number of animals in the kill, sheep are managed to provide the largest number of trophy animals. Because, unlike many other big-game species, sheep mortality rates decline sharply after 1 year of age, it is possible to produce almost as many rams under a three-quarter curl restriction as under an any-curl law.

Sheep behave similarly to other cloven-hoofed animals, however, in that they will overpopulate their environment if given the chance. Where civilization has upset normal balances by changing habitat and removing natural predators, artificial control is often necessary. It is possible that had the

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surplus ewes been removed from the sheep ranges in the East Kootenay, the die-offs might have been lessened or even prevented.

Because of the limited numbers of bighorn sheep, there have been a number of proposals advanced to increase the herds. Since these animals are basically limited by the amount of grazing area available to them in winter, these proposals have centred about methods of increasing winter range. One method would be to reduce competing animal species, such as cattle; another would be to change the present vegetative cover by some method such as burning followed by seeding. Because sheep occupy extremely small winter ranges, each idea is quite feasible. Considerable research has been devoted to this topic with an aim of better understanding the needs of the sheep so that the most appropriate action may be taken.

TRACKS

- by Lodene Brown Hathaway
The Rotarian

Last night's snow has left my yard a blank,
Unmarked by even one short line,
Or track of any living thing,
To show that aught has crossed this plot of mine.

More grievous it will be if I
Leave not a single work of tongue or pen
That, furrowing a portion of my brain,
Proves worthy thoughts have crossed it now and then.

THE LITTLE LAKES AND WHERE TO FIND THEM

- by Helen Butling

The fourth in a series of articles on the mountain lakes and how to get to them.

LOST LAKE

This was truly a "Lost Lake" for two fisherwomen, Anne and Maxine who tried twice to find this lake, coming to the conclusion that it was indeed well named.

On June 23, 1962, for the third time for them, and the first time for me, the three of us set off determined to find this elusive lake. This time at least we knew two places where it wasn't.

Ten miles South of Nelson on the Ymir road cross the Hall creek bridge and then turn right, up the Hall creek road. Follow this for a couple of miles looking out for the trail which the road crosses several times and keeping to the left whenever there is a decision. When the road seems to be taking off too much to the West leave the car and take to the trail which contours round the ridge to the South. The trail is rather overgrown but like all old trails it is still very good underfoot. The trail eventually comes out into an open area where it now veers to the West skirting another ridge and past some old mine workings. Here one should head South over the ridge at its lowest point and the lake will be visible to the South West. There is really no trail after the mine workings but you are now in open country and can pick your way over and round the windfalls quite easily.

Lost Lake is a completely circular lake at an elevation of 6,000 ft. and at this time of year the anemones were at their best. I also remember a beautiful patch of Trilliums on the way in. There was still snow round the South end of the lake where it faced North.

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There seemed to be plenty of fish in the Lake but for some reason or other they would not bite. You know how it is, there is always some reason. However, I do know parties who have had good catches out of this lake. Hiking time is about three hours in and two and a half hours out.

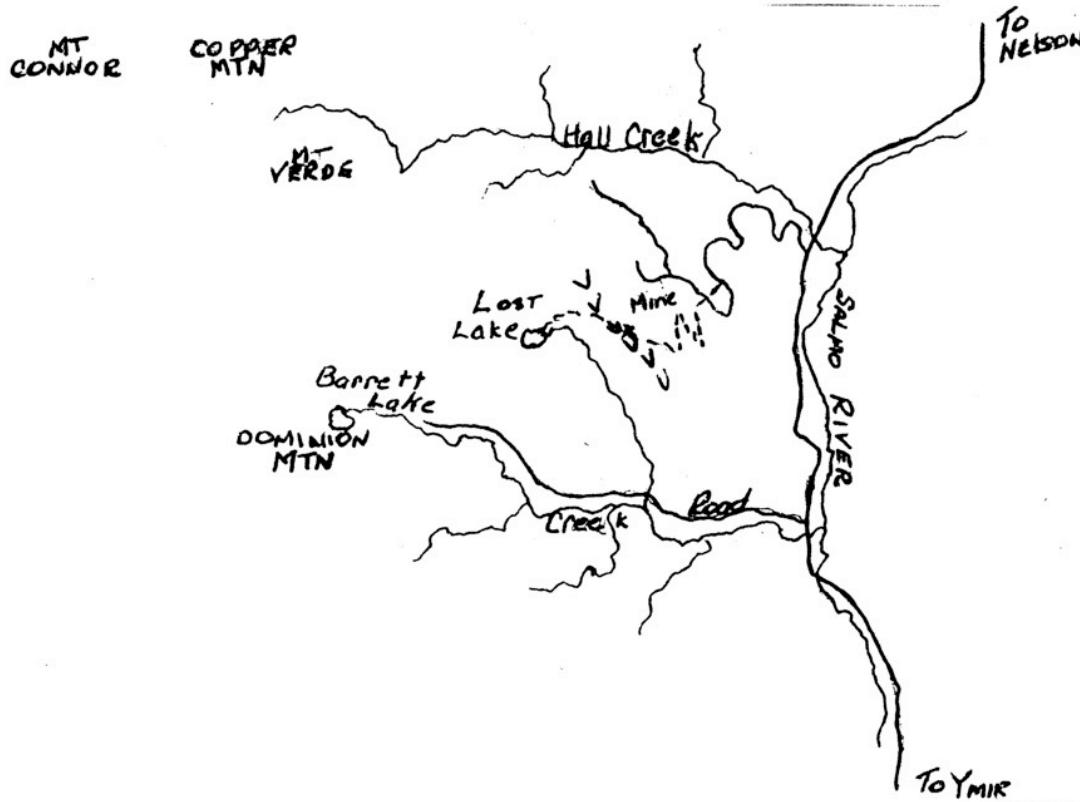
In spite of the fact that we came out empty handed we had a most enjoyable day and felt pleased with ourselves that we had eventually found the "Lost Lake".

Footnote:

The logging road up Hall Creek has been extended and changed somewhat since 1962 and may continue further in the direction of the lake so the above directions may be slightly inaccurate. However, knowing the general direction of the lake I don't think one should have any difficulty finding it.

Since the above was written I've learned that a jeep road has been built into Lost Lake from the Barrett Creek road. It takes off to the right about four miles up the Barrett Lake road from the highway.

This seems to be the story of most of the Little Lakes these days.



NATIONAL AND PROVINCIAL PARKS ASSOCIATION

As the Kootenay Mountaineering Club is supporting this organization, your Editors feel that a brief report on the NPPAC would be appropriate.

Although the National and Provincial Parks Association of Canada is only 5 years old it has achieved a prominent place in the conservation field in Canada as several members are participating on a number of Government advisory groups relating to existing or potential park lands in Ontario, Alberta, the Yukon and North West Territories. Both the President and the Executive Director have been invited to give addresses to and participate in conferences and seminars.

In 1969 the Association in cooperation with the University of Calgary organized the 2nd International Conference on National Parks which was attended by delegates from seven foreign countries.

During the past year the NPPAC made several submissions to various Provincial Governments as well as to the Federal Government on such matters as the need for more National Parks while there is still land available; the creation of a park around the east arm of Great Slave Lake including part of the Lockhart River and Artillery Lake; the rumored return of part of Wood Buffalo National Park to the province of Alberta for possible commercial development; and objections to large scale spectator events such as the Winter Olympics in National Parks, especially when other suitable areas exist.

One of the most important developments was a meeting in Toronto last March attended by representatives of six of the most active conservation and wildlife organizations when they were able to reach a consensus on all major points discussed so that a united effort can be directed to the preservation and protection of National Parks and similar reserves and the greater control over environmental pollution.

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The future success of NPPAC will depend on the continued support of conservationists and those interested in the outdoors and in cooperation with other conservation organizations.

The mountains can be reached in all seasons. They offer a fighting challenge to heart, soul and mind, both in summer and winter. If throughout time the youth of the nation accept the challenge the mountains offer, they will help keep alive in our people the spirit of adventure. That spirit is a measure of the vitality of both nations and men. A people who climb the ridges and sleep under the stars in high mountain meadows, who enter the forest and scale peaks, who explore glaciers and walk ridges buried deep in snow -- these people will give their country some of the indomitable spirit of the mountains.

Wm. O. Douglas

The mountains are the oldest descendants of the creator god, Prajapati. They had wings, with which they flew about, alighting where it pleased them. Indra cut off their wings and made fast the earth with the mountains. The wings which had been cut off became storm clouds, which is why they float above the mountains, for that is where they belonged.

Toni Hagen

WHAT CAN I DO?

- by the B.C. Wildlife Federation

Perhaps the most frequent question we are asked is, "What can I, as an individual, do to help the cause of conservation?" Our first answer is always, join one of the clubs in the Federation and become an active member in it. Often, however, the questioner is already a keen member of a conservation organization, who feels that the group effort is not enough, that there must be something more that he personally can do. And there is.

In Canada natural resources are common property, belonging to all the people, consequently the largest share of responsibility for ensuring their good management falls to government. Whether our resources are managed wisely, with conservation in mind, or whether they are instead permitted to be exploited for short term profit with little attention being paid to the principles of conservation, depends very much upon government policy. Government policies in turn, depend upon what the people demand of their legislators.

Often conservation is absent from the political forum. But if that is the case it can only be so because the people who have made their pressure felt on political parties have not shown enough interest in conservation to make it an issue. To succeed, any political party must have support from well organized sectors of society, and party platforms naturally reflect the views of the parties' strongest supporters. It is partly to offset the influence of powerful self-interest groups that organizations like the B.C. Wildlife Federation have come into being. One of their functions is to operate as a pressure group exerting an influence for conservation on the legislators, just as the Alpine Club, the National Wildlife Federation, and other similar organizations do, and as manufacturers associations, trade unions, and industrial affiliations do in

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both Canada and the U.S. One way in which an individual can make his voice heard where it counts, therefore, is to support an organization that is echoing his own views.

Politicians, even though they realize they cannot afford to ignore organized groups, tend to regard them with a touch of cynicism. As a result most politicians pay a lot of attention to the spontaneous reactions they get from individual constituents. Few of them put much stock in petitions. A sincere, unsolicited letter from an individual citizen to his elected representative, on the other hand, carries a lot of weight. It takes time and effort to write a letter and the politician who receives it realizes that here is a constituent who really must be concerned or he would not have taken the trouble to write.

Writing your elected representative is, without doubt one of the most effective things that you can do as a private individual. There is, of course, a right and a wrong way to go about it. Don't just write saying "I protest". Get as much information as you can on the matter you are concerned about, then write the best letter you can on the basis of the information. Address it to both your local elected representative and to the particular cabinet minister responsible in the area of interest you are talking about. Write your letter in such a manner that they will recognize your concern and will be convinced that you feel they have a job to perform on your behalf. You need not be abusive or insulting to get your point across. For all the writer knows, his representative may be neutral, kindly disposed to the same point of view, or completely in favor of it. At any rate, abuse is not going to make him sympathetic toward your viewpoint, and though there is a lot of cynicism in politics, there is a good measure of sincerity too.

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During election campaigns you should make your views known, and help create an awareness in politicians that people are conservation-minded. You can do this simply by participating in public meetings and questioning candidates about their views on the matters that concern you. Once the election is over make sure that you as an individual, and your outdoor club keep in touch with your elected representative and perhaps all the parties involved in the elections. We're not suggesting a club should show any partisan bias here, we're simply suggesting that since politicians make the decisions it's your job to keep in touch with all of them.

Don't forget, of course, that decisions affecting the interests of everyone interested in the outdoors are made at all levels of government -- municipal, provincial, and federal. Many M.L.A.'s, M.P.'s and municipal councillors aren't even aware that there is a group in their community that is dedicatedly interested in the outdoors. If a municipal council is dithering about a sewage by-law it might very quickly make up its mind if it realized that there were 300 individuals in the community who through their rod and gun or other outdoor club would get out and help convince the rest of the electorate of the need for proper sewage treatment. The same could apply to parks proposals, zoning by-laws, and any other municipal issues that have a bearing on conservation and resource management. This type of problem gives the individual a chance to be really effective close to home.

When politicians make decisions they have everybody to worry about -- the old lady up at the end of the road who couldn't care less about conservation is a voter, too. All too frequently, outdoorsmen spend far too much time talking to one another -- those who are already converted -- and not enough

Continued...

time talking to the general public.

What else can you do? Well, that old lady at the end of the road is a voter, too. So are most of the people you associate with at work, and in your various social clubs. The guy next door who wonders how any idiot can get up at four a.m., to go out and sit in a freezing duck blind or to hike up a mountain, is just as important to any politician as you are. You have to convince people who may not have too much interest in the outdoors that your concern for the preservation of outdoor values, your concern for conservation, your concern for long range resource planning and management, is important to everyone.

We are not suggesting that you get yourself embroiled in partisan politics -- what we are suggesting is that you have to recognize that government is not some vague nebulous "they" in the municipal hall, Victoria, or in Ottawa. It is "you". If there is a lack of sound conservation and resource planning in government it is because you and the vast majority of your fellows fail to let the politicians know that you are as interested in conservation as you are in a few extra miles of blacktop, bigger and better power dams, or another \$10 on the homeowner grant.

Now ... about that letter you were going to write?

From a release by the B.C. Wildlife Federation.



THE WHEEL AT FORT STEELE

- by Mabel E. Jordan

The gigantic wooden water wheel recently reconstructed at Fort Steele Historic Park in the East Kootenay is the largest of its kind in North America. It is unique not only for its size but also for its comparative youth in relation to the general history of placer gold mining for which it was constructed. Water wheels were common over 100 years ago during the early gold discoveries in B.C., especially in the Cariboo and Wild Horse districts, but they were much smaller. Some drove pumps to drain the placer diggings and some pumped water to bench operations to wash the gold-bearing gravels.

The large over-shot wheel at Fort Steele was originally built in the 1930's on Perry Creek in the Purcell Mountains, scene of a gold rush in 1867 following the one on Wild Horse Creek. After the surface gold had been taken and the creek bed itself well worked, any deep-down gold remained more or less elusive because of too much water and a band of quicksand which deterred miners from sinking a shaft.

Then during the economic depression of the early 1930's an aggressive group of men got the idea of sinking a shaft to bed-rock where the coarsest gold lay. This big wheel was part of the plan to enable the men to mine the pay dirt 100 feet below. The purpose of the wheel was two fold: to provide cheap power for pumping water from the shaft and to by-pass as much water as possible from the creek to minimize seepage. Unlike the water wheel now preserved at Quesnel, this one was to operate high-speed modern pumps. The Cariboo one was actually part of the pump, the beam of which raised and lowered the plunger.

A company was incorporated with the late George M. Bell of Calgary as president. Mr. Bell went to considerable pains to make the venture a success in those difficult times. His son, G. Max Bell now well known as a

Continued...

highly successful newspaper publisher and race horse owner, had just graduated from McGill University. His first job was to be general overseer of the Perry Creek operation, including the construction of the big wheel.

To eliminate the problem of quicksand which had defeated the early miners, a 150-foot shaft was sunk in the solid rimrock. While this was being done the wheel was built. The millwork parts for the wheel itself were cut to pattern by Cranbrook Sash and Door Company, a pioneer East Kootenay firm. All the rough timbers and lumber for the large flume which was 1,840 feet long, 4 feet wide, and 3 feet deep, were cut from the nearby hills by an improvised mill. Into this flume most of the creek flow could be diverted except during high water. Control gates fed sufficient water to operate the wheel, the rest was diverted downstream some distance from the mine.

The trial run of the wheel took place in 1934, but there were problems. Principal troubles were warping out of true, uncontrollable speed, vibrations, and other breakdowns caused by bulging of the inside perimeter from pressure of water in the buckets. This inner perimeter was strengthened by two laminated wooden rings, and others were added to the outer rim of each side.

When it was finally ready to operate it was so well balanced that even though it was nearly 100 feet in circumference and 7 feet wide, a child could turn it by hand. Its 72 buckets each had a capacity of 70 gallons, and at peak efficiency it drove two pumps with a combined capacity of 1,500 gallons a minute. The water discharged into a sluice box to wash the pay dirt as it was hoisted from the mine.

The crew averaged about 15, with the camp similar to bush camps typical of the depression era. It comprised the usual rough bunk houses and a cook house. The cook was the most unlikely person one would expect to find in such a remote place. He was Alne Cameron, a young man just graduated from Royal Military College at Kingston. For his board and room and \$40 a month he managed

Continued...

to produce three meals a day and still find plenty of time to relax with his books. In fact it was suggested frequently that if he spent less time reading and more time cooking, or learning to cook, there would be fewer complaints about the meals. The crew included the usual assortment of characters who kept things lively. There was a straight-laced Englishman, a French-Canadian, an Italian coal miner or two, Swedish tie hacks, Canadian bushmen, placer miners, and so on.

The wheel operated successfully during 1935 but heavy snow and severe icing conditions in sub-zero temperatures forced a halt during the winter. Work continued the following year but then occurred the untimely death of George Bell. His son moved to Calgary to take over the newspaper, the Albertan, and the wheel turned no more. Although the operation itself was short-lived and not particularly profitable, it did provide employment when jobs were extremely scarce.

Where the unusual cook went when the mine closed has remained a mystery but the wheel remained an object of curiosity for nearly 30 years. With each year, however, it decayed more and seemed destined to become a pile of rubble. Then restoration efforts were made by the East Kootenay Historical Association who hoped to retain the wheel on its original site on Perry Creek. However, the estimate for such a project far exceeded what the Association could undertake. It was then brought to the attention of the Provincial Government. Realizing its potential as a tourist attraction, the Fort Steele Restoration Foundation came to the rescue. This group is in charge of restoring Fort Steele to a typical Kootenay pioneer community and they recognized that the historic wheel would make an ideal exhibit. It was moved in 1965.

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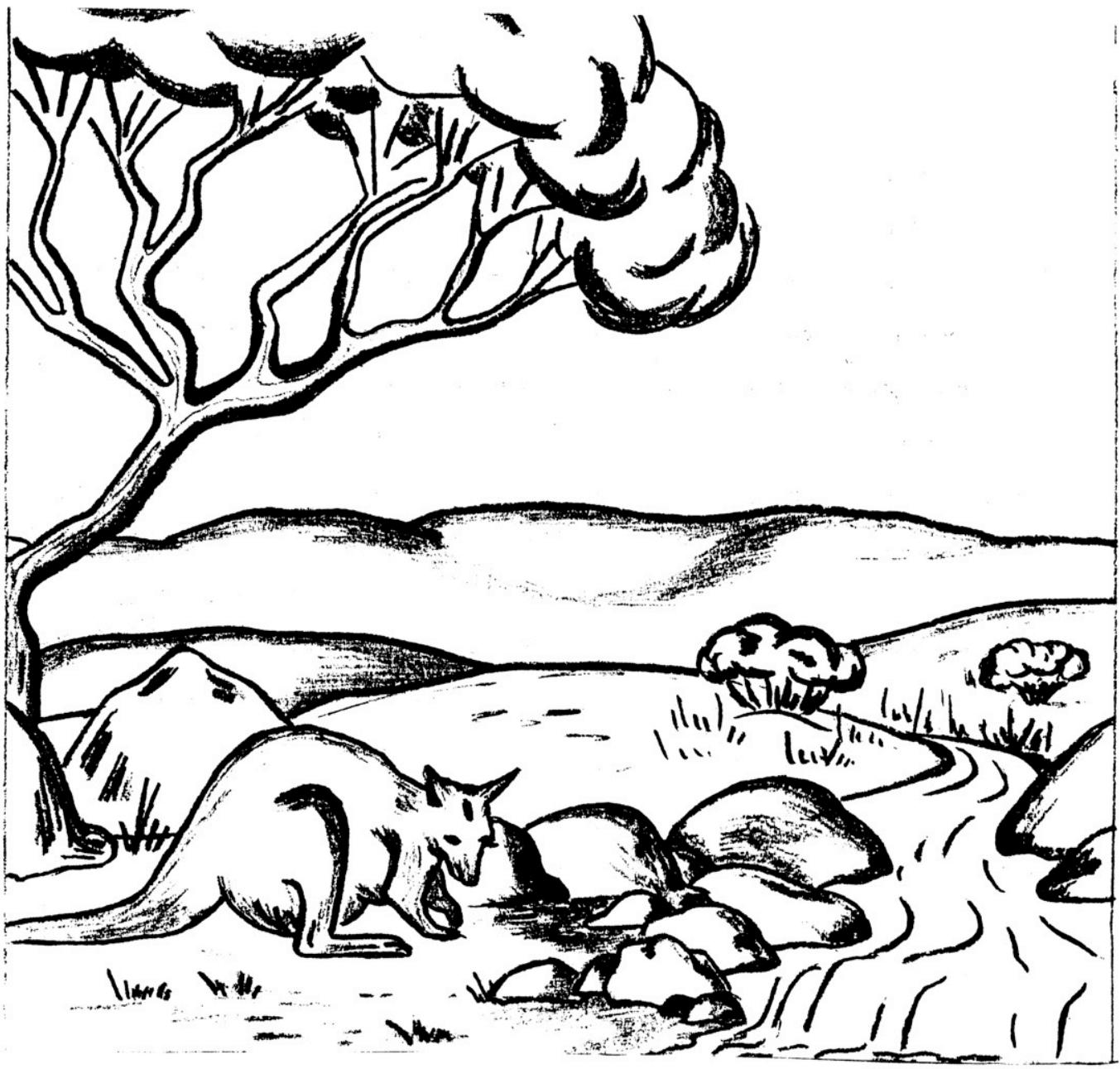
Although the original construction was considered a feat, moving it was equally so since it had deteriorated and was in danger of falling into the creek. It had to be dismantled, moved and re-erected with extreme care to preserve as much of the original material as possible. Expert carpenters, with the aid of the Department of Highways, took it apart and in eight sections it was trucked to Fort Steele -- literally from the Purcell Mountains to the Rockies.

Today the "Big Wheel," as it is popularly called, stands as a sort of guardian at restored Fort Steele, scene of the Wild Horse gold rush of 1864.

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The following list of climbs made by Kootenay Mountaineering Club members was prepared by Bob Dean. The first number is the Karabiner volume number and the second is the page. Volumes 1 to 9 were published by the Kootenay Section ACC and volumes 10 and 11 by KMC. Volume 12 contains no stories on climbing activities other than the 1970 schedule.

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AUSTRALIA

by - Barbara J. Deane

Australia - the land of opportunity and harsh beauty, of stocks that rise from 20¢ to \$200 in six months, of wild surf crashing onto miles of sandy beaches, and distances of 300 miles to reach the snow. I arrived in Sydney after eighteen great days on the ship, and headed for the snow, it being June and the start of winter. Jobs were scarce and the waiting expensive, so I decided to return to Sydney and make a quick million playing the stock market. I worked on the floor of the stock exchange which has got to be one of the rougher places in Australia, and then for a stock broker who had offices on the 33rd floor of a viewy building that had such fast elevators that a

tranquillizing girl was employed to calm the little, old ladies on the ride up and down. Then spring arrived and it was time to move on.

We hitchhiked to the northern town of Cairns after stopping off at all the beaches - too beautiful to resist - watched the sugarcane being burned and swatted flies as we sat in the heat praying for the next car to come and rescue us. Many of the houses here are built on stilts to allow a breeze to blow through and cool them. We checked over the Great Barrier Reef, and then joined a "camping and do your own cooking" bus tour into the outback. This was a real experience - miles of nothing but brown, baked earth, a few gum trees that managed to survive the bush fires, and aborigines with their huge feet and wide friendly smiles. We slept out under the vast Australian skies, cooked over an open fire, and every day we were given our own ration of water. After Darwin, we headed back through the Center to Alice Springs, a place which is either having droughts or floods.

Then on to Cooper Pedy on roads thick with red dust that seeped into everything. Cooper Pedy was the hot spot - 132 degrees - and when you arrive in this town there are only two garages and one restaurant to be seen. This is one of the major opal fields and everyone lives underground to keep cool. Strange to see furnished homes below the ground, pictures hanging on the walls, and when someone comes to visit, they simply dig another room. Even with all the heat during the day, most nights were reasonably cool, though I can remember a few nights sleeping on top of our air mattresses in bikinis. Then we wound our way back to Sydney and our first real bath in three weeks.

Over to New Zealand for Christmas and it was as lovely as ever with lush, green farms dotted with sheep. Quite a contrast to Australia. Almost everything closes down for three weeks over the Christmas holiday period so the resort towns are very active. New Zealanders take their holidays

Continued...

seriously, much more important than money. P & O came through with a berth towards the end of January and I was headed home by the Orient. Fantastic is the only way I can describe this trip. We spent five days in Sydney, up to Darwin, and three days in Singapore which was so different from anything I had seen before. The very rich, the very poor, throngs of people hurrying, bargaining, begging, - people having a communal bath in the main street fountain, a wild ride in a rickshaw, the noise and kafuffle of a teeming city. Then Hongkong with its magnificent harbour, the little sampans coming out to meet us, the white houses built high on the hillsides, and the shops. A wild, shopping spree with everything so cheap and so much to chose from. Food markets where you buy a live chicken and strangle it yourself. The water people as those who live on the boats are called, all jammed together. Fabulous place. Japan was next and we left the ship and travelled overland. Visited Kyoto which is a little village full of temples covered with gold, and then we caught the Express train down to Tokyo, a train that refunds part of your fare if it is late.

Tokyo was overpowering in size, but the Japanese people are extremely pleasant and helpful. To cross a street, you pick a flag out of a box, and bravely strike out into traffic, the flag held high. Japan is very ski conscious, everywhere posters and skiers heading for the mountains. And finally it was time to leave the wonderful East and head for Hawaii and we were back to the humdrum of North America. A week later we sailed under the Lions Gate bridge to the welcome sight of Vancouver with clear skies and snow-capped mountains and I was home!

VITUS GERMAN'S ACCOUNT OF HIS TRIP FROM
HOWSER TO THE 1959 A.C.C. CAMP IN THE BUGABOOS

- by Leo Gansner

Having arrived in Howser on Duncan Lake on Saturday night, July 17, 1959, I stayed at Billy Clark's place. The next morning I left Howser at 6 a.m. by boat, crossed the lake for the starting point and arrived at Behrman Creek, a tributary of Howser Creek, late that evening and camped there. The next day at 8 a.m., I left Behrman Creek, arriving at the junction of Howser and Rory Creeks by early afternoon. There is a bad section of trail past Behrman Creek, but I don't remember the exact location. (It was somewhere past Tea Creek that Vitus said he had to use his rope to pass along a cliff above the main stream.)

After two attempts to place a tree across Howser Creek above the mouth of Rory Creek, I succeeded on the third try. It got hung up on a log jam across the creek, but stayed two feet under water. By then it was dark and there was no hope of crossing that day. At 4 a.m. next morning I had a look at the stream. The log was still there, with only ten inches of water running over it; so I took the chance of crossing it, narrowly escaping a fall into the river. I finally made it, and after getting my feet warm and having a big breakfast, started off again. I crossed Sluicebox Creek before noon with little trouble and decided to follow the ridge rather than the creek because of slide alder. Climbing Quintet Peak in the late afternoon, I then descended to Bugaboo Pass and camped for the night just north of the pass at 8,000 feet. On the morning of July 21st, I continued north (east of Howser Peak) over Rock Ridge and Anniversary Peak, descending via the N.E. Ridge, crossing Bugaboo Creek just below the glacier. Then I ascended the north lateral moraine and followed the trail east into the A.C.C. Camp arriving there by early afternoon.

CONSERVATION COMMENT

- by Graham F. Kenyon

The Kootenay Mountaineering Club have expressed an opinion on two provincial issues, neither of which directly affect us as mountaineers but both of which are of grave concern to us as British Columbians.

The Skagit Valley controversy prompted letters to appropriate cabinet ministers and to Mayor Wes Uhlman of Seattle. The issue is the proposed raising of a dam below Ross Lake in Washington State to provide additional peak power capacity for the City of Seattle. This would result in the intermittent flooding of ten square miles of the Skagit River Valley in B.C. This is a comparative wilderness valley with excellent recreational potential within 2 hours drive of Vancouver. As such it will fill a vital need as the lower mainland megalopolis continues to expand. A fluctuating power-peaking reservoir is useless for recreation and is an unsightly mess most of the time.

The history leading to this present situation is quite complicated. However, probably as a result of the public outcry in the State of Washington as well as in B.C., a new civic administration in Seattle has rescinded a previous commitment to raise the dam. The Mayor acknowledged our letter, promising that the project will be completely re-evaluated with ample opportunity for all parties to express their views through public hearings. The B.C. Wildlife Federation will be doing that. Mayor Uhlman wrote an excellent letter echoing our concern for the quality of the outdoors; a concern we should expect to hear expressed by our own elected representatives.

The other issue is the possibility of oil drilling in Georgia Straight. It is rarely that the B.C. Wildlife Federation has categorically opposed a specific resource development. In the case of drilling for oil off the west coast, the hazards and the potential destruction of the marine environment are too great

Continued...

to permit this to proceed. We have joined the Federation in opposing any plan for off-shore oil drilling in the Gulf of Georgia. Once again we are presented with a situation where an enormous outdoor recreational resource could be jeopardized for the sake of a single-minded pursuit of immediate gain. The Federal Minister of Fisheries claims jurisdiction over the area and has stated that drilling will not be allowed. The Provincial Government also claims jurisdiction over the resource. Meanwhile, apparently unconcerned by the Federal Government's stand or by the Federal-Provincial squabbling (or perhaps encouraged by it) the oil companies continue their prospecting.

Finally our brief to the Minister of Recreation and Conservation, Mr. Kenneth Kiernan, proposing the establishment of Valhalla Provincial Park was sent on 1 April. I believe we have a good chance to get the park since other known resource values are at a minimum. A map of the proposed area is included in this issue of the Karabiner.

Thanks to Peter Wood, Miss Lesley Anderton, Winston Churchill and Tom Charlton for their contributions to the brief, and to those people who loaned their photographs of the area. Your individual contribution to the Valhalla Park could well take the form of a letter to the Hon. Kenneth Kiernan, Minister of Recreation and Conservation, Parliament Buildings, Victoria expressing your support of our proposal.

SOME NOTES ON CLIMBING TECHNIQUE

- by John Carter

Movements on a climb should be rhythmic, poised and relaxed to conserve energy.

Most people can develop a good technique if they follow certain principles from the very first.

Climb "on the feet" as much as possible, using your hands to keep the body in balance above your feet rather than to pull yourself up the cliff.

Keep your body away from the rock. It is easier to see foot-holds, and your feet will grip their holds more securely. Try not to use your knees--balance is ruined and the next movement is restricted.

Keep your hands fairly low, avoid stretching full length for high handholds. Make a few small movements of hands and feet to gain height rather than one long move. Be prepared to use small intermediate holds which are in a better position for your balance.

Move slowly but steadily, planning a few moves ahead, perhaps resting occasionally on good holds to think out a difficult move. Move smoothly, without jerkiness, and move one hand or foot at a time, keeping in safe balance with the other three limbs. Fit your method of approach to the holds available, and, as useful holds may lie hidden around a corner, or within a small crack, search for possible holds on a difficult section before moving. Plan your footholds carefully, and the handholds will seem to come almost automatically.

Learn to climb down anything that you can climb up, and how to reverse difficult moves. If there are small rock outcrops near your home use them as a practice ground before going on to bigger cliffs. By climbing up, and down, boulder problems, even though they may be only a few feet from the ground, your muscles will get used to the unusual movements of climbing, and you get the feel of your boots.

Continued...

Rose Hip Jam

Valuable for its high Vitamin C content. 2 cups of fully ripe frost-nipped rose hips. Wash and place in 4 cups of boiling water. Boil gently until soft, mash with a wooden spoon, and strain through a jelly bag overnight. Measure the juice, and add water up to 3 cups. Wash and cut up 3/4 lb. green apples. Cook gently to a pulp, then rub through a sieve. Mix in the rose hip juice and bring to a boil.

Stir in 4 cups sugar, and when dissolved, boil rapidly to the jelly stage. Seal at once in hot sterilized jars.

Emergency Camp Medicines

- | | |
|----------------|---|
| Bleeding | - Use fine dust from dry puffball to stop bleeding from cut or nosebleed. Avoid getting into your eyes. |
| Colds | - Drink tea made from young spruce tops. |
| Coughs | - Soak inner bark from chokecherry or pinchberry bush for two days in water, then boil vigorously, add sugar.

- Cut up jackpine needles and boil until turns red color and water half gone. Add honey. |
| Kidney Trouble | - Brew juniper berries and drink resulting tea. Pretty soon no run all time. Trouble better. |
| Diahrroea | - Make a tea from raspberry leaves and strawberry runners. Soon stop trouble. |



"Kind of like a second honeymoon, ain't it? You'll find th' coffee and stuff in th' pack!"

HOW TO PAN FOR GOLD

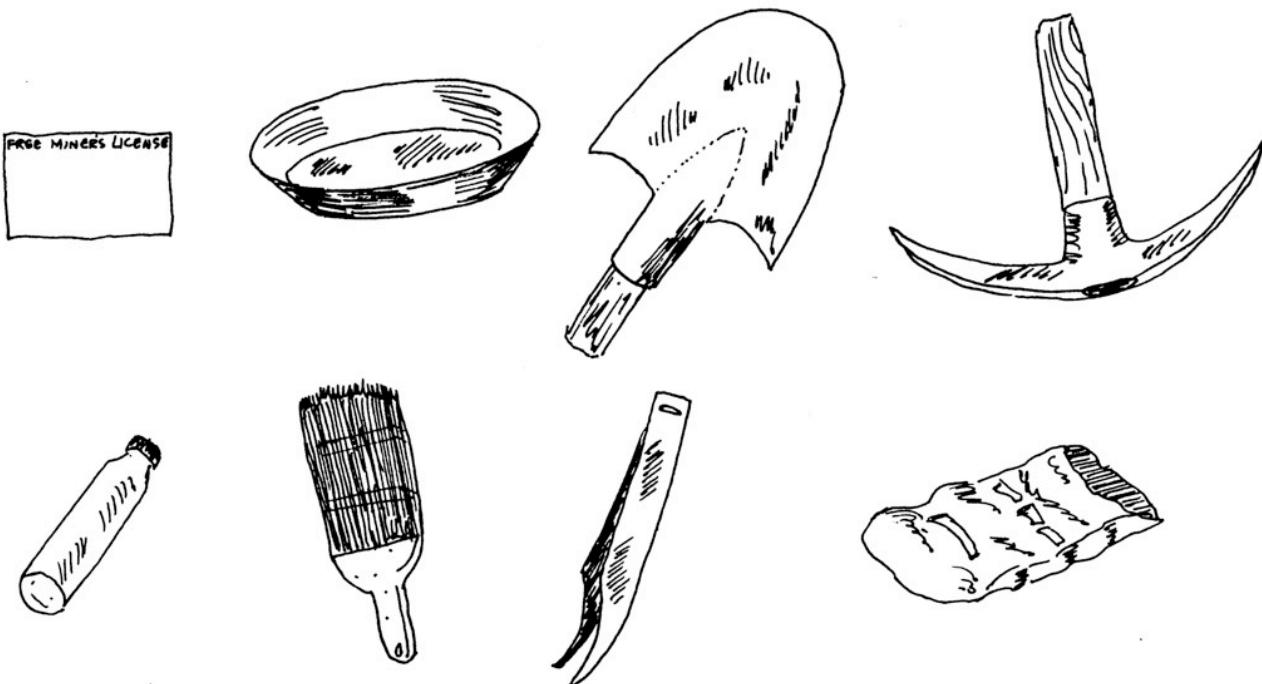
Panning is one of the oldest and simplest methods of recovering gold. It is also one of the few pastimes which can be both inexpensive and rewarding to the individual - even to-day there is still a special fascination in working the gravels along an old gold creek.

Fortunately, British Columbia is probably the only region in Canada where there are numerous placer creeks which may still be worked with sometimes encouraging results by the beginner gold panner.

It is highly unlikely that the amateur will ever find another Williams, Rock or Wild Horse Creek for these were illustrious gold creeks, rich from surface gravels to bedrock and it is most improbable that placer streams of this magnitude still exist undetected in even the most remote regions for experienced prospectors have ranged all through the province in their diligent search for rich placer creeks.

Continued...

Basic Equipment



There are, nevertheless, still ample opportunities for the beginning prospector. There are undoubtedly still some lesser streams which have not yet been discovered in the more accessible areas and in known placer creeks there often exist a number of possibilities; sections of the stream which have not been worked for a number of reasons-- deep bedrock, seemingly low paying gravel, accidentally missed sections and ancient, undiscovered channels. The learning panner may also choose to snipe along old streams, recleaning bedrock or rewashing tailings which have previously been carelessly worked.

Sometimes, on some rivers like the Fraser, certain bars will yield gold each year as high water deposits new gold on them and they may then be worked in extreme low water.

Therefore, a number of opportunities still exist for the novice who is prepared to spend some time, effort and a degree of intelligence in his search and with a generous measure of good luck they may indeed find his own Eldorado.

It is necessary to procure a Free Miner's License and these are always available at the Provincial Government offices of most towns and cities of British Columbia. The cost is \$5.00 and you must be at least 18 years old to qualify. There are no other restrictions.

You will probably outfit yourself for under \$18.00 if you buy your equipment carefully and if you start out with only basic equipment.

Panning

The standard gold pan is approximately 16 inches in diameter, varying in depth to about 3 inches and with a slope of around 38 degrees. There are smaller pans available but this size is the most useful.

If the pan is new simply heat it over a fire until the greasy film of protective covering is burned off.

Once at a place you wish to pan you should fill the pan with gravel and submerge it in slowly moving water then rotate it back and forth with a slight circular motion while maintaining the pan in a horizontal position. This action mixes the water thoroughly with the material in the pan and also allows the gold to work to the bottom of the pan. If clay is present, break it up with the hands.

In the next step the larger rocks and pebbles should be scooped out by hand and discarded.

By now the residue in the pan should consist mainly of smaller rocks, pebbles and fine gravel.

Continue to dip the pan in the water and tilt if slightly forward to allow the lighter material to wash over the lip of the pan.

By repeating the operation a number of times the gravel in the pan will gradually be reduced in volume.

As this residue in the gold pan becomes smaller care should be taken as too much haste will sometimes allow finer gold to escape over the lip of the pan.

Once you have panned down to the material in the pan which is primarily magnetite (black sand) it would be a good time to cease panning and pick out the visible gold pieces by hand and the smaller flakes and colours with brass gold tweezers.

The remaining material in the pan should now consist of extremely fine particles of gold. In order to save this also, simply dump the black sand into

a canvas bag and separate it from the fine gold at home by drying the residue and then blowing of the sand on a flat pan which, if done carefully, leaves only the very fine particles of gold.

Finally, gold is easy to recognize in a pan because it is the same colour as a gold ring although it will occasionally take on a coppery or brassy hue because of the presence of other minerals. Platinum, like gold is also a "noble" metal and therefore does not tarnish either, it is silver in lustre and has a high lustre also.

Some of the better known placer creeks in the West and East Kootenays are Salmo River, Pend d'Oreille River, Lardeau River, Duncan River, Forty-nine Creek, Bull River, WildHorse (Creek) River, Boulder Creek, Moyie River, Perry Creek, Palmer Bar Creek and Weaver Creek.

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PENI-LYNN

WINTER CAMPING COURSE

-- by Helen Butling.

In December 1969, when I was asked by School District No. 7 (Nelson) Adult Education if the Kootenay Mountaineering Club would sponsor a Winter Camping Course in February and March 1970, I blythely agreed, not thinking for one minute that I would end up conducting it. However, I learned a lot and enjoyed the field trip immensely.

The course consisted of two indoor sessions in February and a field trip in March.

At the first session, the three necessities for winter camping were covered, i.e.

1. Warmth
2. Shelter
3. Food

1. Warmth

Keeping warm is of great importance and a knowledge of how our heating system works will avoid the discomforts and dangers of getting cold. The body's heating mechanism works like a thermostat to keep the body temperature at approximately 98 degrees. In a cold environment, heat is produced by food and exercise and can be conserved by means of suitable clothing. There is a saying, "If you want to keep your feet warm, put your hat on." This may sound far-fetched (from your feet anyway) but it is true. If your head is uncovered and exposed to a cold wind, the heat loss will exceed the supply and your body will automatically draw the blood away from the extremities to keep the trunk warm where the all-important organs must be kept operating.

Several layers of light weight clothing, such as wool and down, that will trap the air is the best way to conserve heat. Clothing should be draught-proof, especially at the neck, wrist and ankles, as heat can be lost very rapidly from these areas.

Sweating must be avoided at all costs, as this can be the cause of a considerable amount of heat loss. If the sweat should migrate out to the last layer of clothing and come in contact with the cold air, it will wick the cold back to your skin with an ensuing loss of heat. While you are still moving, your body will probably be able to generate enough heat to overcome this, but as soon as you stop you will get chilled. If you feel yourself sweating, immediately open your jacket, take off your hat or slacken your pace until you feel the balance has been restored.

It is most important to keep dry. This cannot be stressed enough. Wet clothes or boots will eventually freeze. If on the body, this will cause chilling and, if off the body, it will be virtually impossible to get them on again.

Fatigue should be avoided as the body is unable to produce as much heat when tired. Alcoholic drinks also slows the bodies heat production mechanism and should never be taken shortly before or during exposure to cold.

Avoid touching cold objects with your hands. Practice putting on your skis or snow shoes with your gloves on.

For sleeping, a down sleeping bag is a must, preferably with a hood and with stitching that does not go all the way through. Two and a half pounds of down is enough for the average person for winter camping. All round zippers are colder than three-quarter length ones or better still none at all. Avoid putting plastic or space blankets over your sleeping bag. You will wake up to find your bag soaking wet. If there are no boughs available, a foamie or en-solite pad for insulation will be necessary.

For greater enjoyment of the great outdoors in winter get used to a cooler temperature in the house during the week especially at night. It is also considered advisable not to soak in very hot baths as this tends to wash away

too much of the natural oils of the skin which help to conserve heat.

2. Shelter

For winter camping some form of shelter is necessary. This can take the form of a snow hole, cave or igloo, a lean-to or a tent. I would say igloos should be left to the experts and a snow cave is usually dug into a bank and needs lots of snow. A snow hole is easily dug out with a light shovel and for reasonable comfort should allow room for sitting. A sheet of plastic will be required for the roof, supported by poles, preferably raised in the centre to take care of the run-off.

Tents should be light weight, without perpendicular walls (which catch the wind) and with a waterproof floor extending four to six inches up the sides. Too many guidelines, etc. have no place in winter camping. A vestibule for cooking is a good asset to avoid catastrophies in the tent.

a) Choosing a Camp Spot

Usually for winter camping it is best to choose a small knoll or rise one to two hundred feet above the valley floor. Cold air often lies in the hollows and it will be several degrees warmer higher up.

A large rock or group of trees will provide a good windbreak. However, to avoid the discomfort of wet snow falling on the tent do not camp directly under the trees.

3. Food

If you are a calorie counter you should count on an average of 4200 calories a day to keep you going, planning your menu of course to supply a balanced amount of protein, fat, and carbohydrates. Avoid cans or bottles and any food with a high water content such as eggs, oranges, apples, etc. as this is not only unnecessary weight, but these foods are liable to freeze.

For supper what is known as a one-pot meal is best; making use of freeze dry or dehydrated meats and vegetables, packaged soups and rice, spaghetti, macaroni, etc. Fruit cake, dried fruit, chocolate and nuts are all good for 'afters.'

For breakfast, make up a mixture at home of oatmeal, salt, chopped bacon or any meat, chopped hard boiled egg, powdered milk, sugar, etc. Heat water, pour over mixture and make desired drink with the rest of the water.

Lunches should be prepared at home. Sandwiches of rye crisp or similar light weight carbohydrates with a moist filling of cheese and meat and jam or honey will fill the aching void without breaking your back. Total weight of food per man day should be about two pounds.

For utensils, a bowl, spoon and cup and two nested cooking pots are all you will need. It is always best for two or three people to double up and use the same pots. Avoid metal cups or bowls as these cool off the food too fast and can cause damage to lips and tongue from being too hot or too cold.

Heat for cooking is best supplied by one of the many good little gas stoves on the market today, with a small square of wall board or similar insulating material to stand them on. Also the stove will need shelter from the weather or the heat will dissipate so fast that the gas will be gone before the water boils. When melting snow for water do not fill the pot with snow. The heat will draw the water away from the bottom of the pot causing scorching and giving the water an unpleasant taste. Also, snow melts faster if you melt a small amount of snow in the pot and then keep adding snow to the hot water.

Even if there is a good supply of dead wood at the campsite, a fire is not very practical as it very quickly disappears into a crater in the snow. The only way to avoid this is to cut green poles four feet long, lay them horizontally on the snow and use this as a base on which to build the fire.

Session No. 2 was taken up with going over equipment, answering questions, and cooking up a one pot meal on a primus stove and finalizing arrangements for the field trip.

THE FIELD TRIP

When my three passengers and I left Nelson at 7:45 a.m. on Saturday, 7 March the weather was anything but promising for a camp out. It was drizzling, windy and generally miserable. Driving conditions on our way to the rendezvous at the Salmo-Creston Summit were dreadful, wet slush on ice. However, eventually everyone arrived, but not without one car going off the road. It was snowing at the Summit which was infinitely better than the rain and justified our decision to camp above the six thousand foot level. We were twelve, ten on snow shoes and two on skis, three young married couples, three teenage boys, three lone women, and Teo, (Mexican for uncle) one excited German shepherd dog. Such was the group that shouldered their packs and set off for the hills with nary a track ahead of them.

It soon became apparent that most of the snow shoes could not quite go where the skis could go, so we headed up a draw to the lowest point on the ridge and then up the ridge slightly to the west where we found a delightful camp spot amidst a stand of evergreens. On the way up, it was soon obvious which were the best snow shoes and that a toboggan was not really the best way to transport ones goods and chattels on a trip like this.

By noon everyone was in residence and the afternoon was spent setting up camp and enjoying the peace and quiet of our new surroundings. It had stopped snowing on the way up and for brief periods, the sun would come out. We were surprised how warm it was and then to remind us that it was still winter it would disappear again.

Five tents were set up and two snow holes dug out all well supervised by Teo. The blue, orange and yellow of the tents made a colourful contrast with the snow. The snow shoe'rs made a beautiful job of smoothing out the snow all round the camp site, but the skiers had to spoil it all by sinking in up to their knees in their big boots.

The one pot suppers were cooked and eaten and pronounced satisfying and tasty.

After supper it snowed at least two inches in half an hour, large gently falling snow flakes that sent some of the company cavorting down the slopes in company with Teo who thought this was great sport. Also to the detriment of one snow shoe that came apart at the frame. A spoon handle and a boot lace were sacrificed to repair this vital piece of equipment. The snow stopped as suddenly as it started and as the light faded, one by one the stars looked down on us.

Believe it or not, by 7:00 p.m. everyone was in their sleeping bags, quiet conversations could be heard coming from every tent till one by one, we all dropped off to sleep and all that could be heard was the soft padding of Teo's paws as he made his rounds during the night.

Some thoughtful person had brought a thermometer which registered 26 degrees above zero in the tent when we last looked at it about 8:00 p.m. We were fortunate that there was no wind during the night.

The boys were up at 5:30 a.m. and told us that it gave promise of being a beautiful day.

Chalked up to experience were the frozen boots and gloves, the wet sleeping bag under the space blanket, the fire that disappeared five feet down in the snow, the eggs that were frozen solid, including a hard boiled one and the tin cans that had to be carried out because there was no means of burying them.

After breakfast, seven of the party went up the 1,000 ft. to the high point on the ridge which sports a large cairn. By the time we were ready to come down, the weather had deteriorated, but on the way up it was sleeves rolled up and frequent stops to take in the magnificent panorama all round us. On the way down, as we topped the rise above camp, it was a pleasant sight to look down and see the colourful little tents looking very much at home amongst the trees.

After lunch, we packed up in a snow storm, but it was a happy group that romped down through the snow to the frozen lake and back to the snow covered cars.

EVALUATION

On the way home, we stopped in Salmo for coffee and took time to evaluate the trip.

Snow Shoes - There were quite a variety of snow shoes and harness. The consensus of opinion seemed to be that the metal ones were not suitable and that the heel strap must hold the foot firmly in the harness.

Boots - For snow shoes, the rubber boot with the buckle fastener was good. They should be large enough to allow for two pairs of socks and a felt insole. Make a heel out of a second insole. For skis, a soft or ski-touring boot is best.

Tents and Shelters - The large snow hole for two was good, but necessitated a lot of work to dig it out. The small hole for one should have been larger, not enough elbow room, snow fell on the sleeping bag. The large tent was very comfortable, but was a little on the heavy side (8 lbs.) and would have absorbed water if it had rained. The four other tents were all fairly satisfactory, though not perfect. One had window flaps which let in the draft, only one had a vestibule for cooking and it was a little small for two.

Sleeping Bags and Insulation - Those without down sleeping bags were a little chilly and the half foamies took top marks for insulation and comfort.

Food - The food all seemed to work out well on the two pound ration,

Clothing - Gaiters, long or short, are a great help in keeping feet dry. N.B. Though the skiers were more mobile on the slopes, they could have done with a small pair of snow shoes round camp to prevent sinking in up to their knees.

CONCLUSION

After all this we asked ourselves:-

a) What really is the point of camping out in the snow?

- 1. To reach further into the hills for ski touring and mountaineering and snow shoeing!
- 2. To get away from it all and find a renewal of spirit in the winter wonderland!
- 3. To prove that you can do something different.

For whatever the reason, it's fun -- try it sometime.

SKI TOURING ON THE SKYWAY

Our ski touring season started on Sunday, February 15th with an intended route starting from the Creston-Salmo Summit, then by way of the ridge to the peak and down through the bowl and back to the highway.

There were twelve of us who ventured out of a warm bed on that very wet, dreary morning - Leslie Anderton, Ted Baker, Helen Butling, Bill Dyke, Leo Gansner, Knut Langballe, Bill Michaux, Janet Parfitt, Sue Port, Lee Ringheim, Fred Schwindt, and myself. We met in the parking lot on the Summit at 9 A.M. It was snowing heavily at higher elevations but we were sure it would soon blow over and clear. It blew over alright! After traversing up the first small hill and looking up at the ridge (what we could see of it) we realized that we would be in a raging blizzard if we continued our intended route. After a short conference we changed our plans so as to have the shelter of the ridge. It was disappointing but sensible. By this time 6 to 8 inches of new snow had fallen. Breaking trail was taken in turns. Knut gave a little excitement to our day. He was leading us across a very steep section when suddenly the snow gave way and there was Knut, riding gracefully down on a small avalanche on his cross-country skis. Then there was a voice in the background (I think it was Janets') "That's enough for me, let's turn back - one, two, three, kick". However, we all stayed together and skied on until we came to a sheltered spot for lunch. The snow and ice had built up on several trees and formed a good windbreak. A fire was suggested and someone shouted out "good idea, whose got wooden skis?" Fortunately there were lots of branches and snags and after they were put in a pile for the fire, Leo produced a "cats' tail" from his pack. Knut lit it and we had a fire in quick time and Leos' magic saved the wooden skis! After lunch we started down the lower part of the bowl and through the trees to the highway. Our trip was short as we did not attempt to reach the peak. We all enjoyed a glass of wine at the end of the stormy trail. Our day concluded with an invitation by Leo for a coffee in Salmo.

Although our weather conditions were adverse we did enjoy the powder snow in alpine surroundings -- and something else-all the cobwebs were blown off!

ROCK SCHOOL 1970

The rock school is being set up for novices rather than for climbers who only need to work out the winter stiffness.

TIME AND PLACE: - Kinnaird Bluffs - 6:30 p.m. until dark to May 6 thereafter beginning at 7:00 p.m.

EQUIPMENT:

- nylon rope (not polypropylene), 1/4 or 5/16 inch: one 6 ft. length and one 20 ft. length - available at hardware stores
- locking carabiner if you have one
- leather work gloves for belaying
- heavy shirt, long pants
- if you do not have rock climbing boots, wear sneakers

COST:

- \$2.00 per person, to defray the cost of lost and damaged club equipment. Payment of the fee neither guarantees successful completion of the course, nor implies acceptance of responsibility by the Club or instructors.

SCHEDULE:

- | | |
|----------|---|
| April 29 | - Care of rope, basic knots (bowline, figure eight), chest harness, friction, moving with coiled rope, three-point contact vertical stance. |
| May 6 | - Review of previous instruction. Boulder problems, ascending and descending easy slabs with top rope, climbing signals. |
| May 13 | - Review of previous instruction. Setting up belay, fisherman's knot, static and dynamic belay. Practise dynamic belay. |
| May 20 | - Review of previous instruction. Moderately exposed and difficult cliff climbs, demonstrating rhythm, smoothness and balance in climbing up and <u>down</u> . Includes belaying and rope handling. |
| May 27 | - Setting up rappel point, "classic" rappel at moderate angle, descent by sling and carabiner. Continued practice of previous instruction. |
| June 3 | - Strenuous moves (layback, mantleshelf, opposition moves, jamming) exposed cliff climbs. Continued emphasis on safety. |
| June 10 | - Prussik knot, ascending fixed rope, Bilgeri ascent, lowering with carabiner brake, free rappel. Participation in these techniques will be limited to those who are fit and competent. |
| June 17 | - Continued practice in weak techniques and check-out by instructor. Possibility of this session being held at a new area to allow route finding practice. |



Peni
Lynn

Summer Tour Schedule

Victoria Day Holiday
May 16-17-18

- Ski-tour to Slocan Chief Cabin on Friday evening May 15 if road ploughed to Gibson Lake with helicopter lift of food. Alternate start early Saturday morning carrying all gear and supplies. Limit 20 KMC members. If over subscribed, preference to those with touring gear. Check list to be sent to all signing up for the trip. Co-ordinator Helen Butling. 825-4384

Sunday,
May 31

- Day trip to 8500 ft. Outlook Mtn. in Kokanee Glacier Park. Easy snow climb. Ice axe or ski pole or skis. Approach via Kokanee Creek road. Meet at Helen Butling's at 7:30 a.m. No limit. Leader Helen Butling.

Sat. - Sun.
June 6-7

- Valhalla Hut via Mulvey Trail - A moderately strenuous trip. Meet at Bob Dean's home about 7:00 a.m. June 6. Leader Bob Dean 359-7759

Sat. - Sun.
June 13-14

- Overnight at Slocan Chief Cabin. Easy snow walk from Kokanee Creek road. Snow school Sat. P.M. Return over the Glacier, with climbs of Giantsknee Cap (9134 Ft.) Easy rock climb, Esmeralda (9150 ft.) Easy rock scramble and Mt. Cond (9200 ft.) Easy snow climb for those who wish. Those not wishing to traverse glacier can take the low route. Meet 7:30 a.m. Sat. at Leader's Helen Butling Limit 20.

Sunday
June 21

- Mt. Baldy - Moderately strenuous - Details later. Leader - Howie Ridge 359-7577

Sunday
June 28

- Mt. Connor 7900 ft. - easy walk, part snow. Meet Royalite station at junction Blewett Road and Granite Rd. (Hwy. 3A-6) No limit - Leader Olwyn Ringheim 825-4311

Wednesday
July 1

- Joker Lakes Trail clearing. Meet Keene Creek road 4 miles west of Kaslo Ian Hamilton 365-6749

Sat.-Sun.
July 4-5

- Mt. McQuarrie (8820 ft.) Kokanee Glacier Park. From Woodbury and Silver Spray Creek roads. Car camp or on trail Sat. nite. Meet Woodbury Creek bridge Sat. P.M. - time to be set later. No limit Leader Helen Butling. 825-4384

Sunday
July 12

- Family trip to Old Glory.
Leader Bill Dyke 368-9794

- Sat.-Sun.
July 11-12
 - Mt. Patricia in the Argenta area. Car camp. Moderately strenuous. Leader Howie Ridge.
- Sat.-Sun.
July 18-19
 - Mt. Kane (9200 ft.) in Kokanee Park. Moderate snow and rock climb. Ice axe needed. Hard hat useful Take Keene Creek road 4 miles south of Kaslo on New Denver road to Joker Mill site. Meet at Keene Creek turn off 10:00 a.m. Saturday 18 July. Bring Chicken wire. Limit 9 for climb - no limit for camp. Leader Bert Port 365-5716
- Sat.-Sun.
July 25-26
 - Mt. Dolly Varden and other nearby peaks. Moderately strenuous 2 days. Leader Gerry Brown 365-5730
- August 1-9
 - Annual Summer Camp in the Royal Group - see separate story
- Saturday
August 1
 - Mt. Ludlow in Valkyr Range. Moderately strenuous. Details later Graham Kenyon.
- Sunday
August 9 By
Arrangement
 - Family trip to Pilot Point. - across the Bay to Saw Mill Bay by boat (boats will be there for crossing over) Meeting point 8:30 a.m. at Ferry Landing. By special arrangement some members can go to Saw Mill Bay on Saturday evening. Rudi Fischer 229-4692
- Sat.-Sun.
Aug. 15-16
 - Mt. Thor (9400 ft.) Strenuous 2 day trip. Meet at Galena Bay - details later Leader Bob Dean 359-7759
- Sat.-Sun.
Aug. 22-23
 - Mt. Brennan and other nearby peaks. Moderately strenuous. Overnite camp. Leader Bill Michaux
- Fr.-Sat.-Sun.
Aug. 28-29-30
 - Snow Crest (9400 ft.) in southern Purcells long hike and snow climb. Ice axe needed. Leave Friday evening. Leader Jack Steed 352-2196.
- Sat.-Sun.-Mon.
Sept. 5-6-7
 - The Steeples - in the Rockies southeast of Fort Steele. Strenuous hike and rock climb. Leave Friday evening Leader Bill Hurst.
- Sat.-Sun.-Mon.
Sept. 5-6-7
 - Mulvey Mini Camp and Valhalla Hut moderately strenuous. Leader Rob Mills
- Sunday
Sept. 13
 - Enterprise Ridge - Kokanee Glacier Park via Enterprise Creek road from Hwy. 6 about 10 miles north of Slocan. Car camp Sat. nite Leader Leo Gansner 352-3742.
- Sat.-Sun.
Sept. 19-20
 - Paddy Peak and Utica Mine Basin. Not a strenuous trip. from Hwy. 6 near Silverton Leader Tom Smith 362-5541

- Sat.-Sun.
Sept. 26-27 - Big Sister Mtn. moderately strenuous Leader John Carter
 365-7472
- Sunday
Oct. 4 - Ladybird Mtn. Easy one day trip Leader John Carter
 365-7472
- Sat.-Sun.-Mon.
Oct. 10-11-12 - To be announced later
- Sat.-Sun.
Oct. 17-18 - Slocan Chief Cabin Work Party Leader Helen Butling
- Sunday
Nov. 1 - Huckleberry House work party. Meet at 9 a.m. at the
 Rifle Range turn off (14 miles south of Nelson)
 Co-ordinator Rudi Fischer 229-4692

TRIP PROCEDURE AND POLICY

All who wish to go on a Club trip must:

1. Have proper and adequate equipment for the trip.
2. Notify the trip leader or one of the directors named below at least 2 days before trip.
For limited trips at least 5 days notice necessary.
3. Accept the right of a leader to refuse to take any member on a trip if, in the leaders opinion, the member is too inexperienced or inadequately equipped for the trip.
4. Any member in doubt about equipment or experience should consult the trip leader or a club director.

Trip Information Directors:

Nelson	-	Helen Butling	825-4384
Slocan	-	Bob Dean	359-7759
Castlegar	-	John Carter	365-7472
Trail	-	Bill Michaux	367-7284

Kootenay Mountaineering Club Camp 1970

Description of the Area

The Royal Group is north east of Canal Flats at the headwaters of Queen Mary and Fynn Creeks in the East Kootenays of B.C. The area is well shown on the Kananaskis Lakes Sheet (82J11), available from the Dept. of Lands and Forests, Victoria, B.C. for \$1.00.

There are eight individual peaks climbable in this area. Several may be first or second ascents for us. These eight peaks, named after royal persons, are between 9300 feet and 11300 feet.

It is planned to camp at a small lake on the western side of the Palliser River below Mt. Prince Edward, 2400 feet above the Palliser. There is good fishing in the Palliser River. The surrounding country abounds in fauna and flora. If climbers wish, they may cross the Palliser and climb some of the peaks on the B.C. - Alberta border.

A very good history and account of big game packing and guiding in this area is told in R.M. Pattersons' book, The Buffalo Head.

Date

August 1 to August 9, 1970.

Meeting Place

Canal Flats, Saturday morning August 1, 1970

Approach

Leave Canal Flats and drive up Kootenay, Palliser, and Albert Rivers for 37 miles, to the Crestbrook logging camp. Leave cars here and hike along Palliser River trail to Joffre Creek and up to lake; approximately 18 miles.

At the present time it is expected the hike will take about a day and a half or perhaps just one long day. We plan to fly in all food and twenty pounds of personal gear per person by helicopter. All personal gear will have to be packed out at the end of the camp.

For the hike in each person will carry a day pack with provision for spending the night on the trail, (food for supper and breakfast, sleeping bag, and plastic sheet for shelter). At the campsite climbers are expected to have their own tents, hopefully in groups of two or three per tent.

We will advise you later of such details as exact times and places of meeting. Because we cannot provide guiding services, it is important that all participants have climbing experience and proper equipment. A full list of general equipment and clothing will follow at a later date.

EQUIPMENT CHECK LIST

DAY TRIP

Clothing: mitts or gloves
rain jacket
rain hat
extra sweater
spare shoe lace
handerchief

First Aid Kit: moleskin, bandaids
tape, gauze pads
salve, toilet paper

Pack Sack:

Map & Compass: air photos optional

Lunch: plus emergency rations

Chapstick or screen

Suntan lotion

Knife

Flashlight

Waterproofed matches

CLIMBING GEAR

Ice Axe

Crampons

Rope

Slings

Carabiners

Pitons

Piton Hammer

Hard Hat

Rock Drill

Expansion Bolts

Rope Ladder

OVERNIGHT TRIP

Day trip equipment plus:

Sleeping Bag

Food

Primus stove and fuel - optional

Cooking Utensils, dishes, cutlery

Shelter

Extra socks, pants

Camp shoes

Foam or air mattress

A ski pole (minus the basket) can some times be used in place of an ice axe. Helen Butling has several old ones.

For overnight trips its a wise idea to take along chicken wire to protect your tires and brake lines from the voracious porcupines.

The KMC has two ice axes and two pair of adjustable crampons to rent to members at 50 cents per day. Available from Helen Butling at her home near Willow Haven near Nelson.

CAMPING HINTS

A good billy can be made from a 4 pound jam or peanut butter tin. Coat hanger wire makes a good handle. A wooden spool can be fastened to the lid with a bolt and nut for a handle.

Sausages are a good breakfast item. Precook at home and wrap in foil. Place near fire to reheat.

When measuring oatmeal at home add salt at the same time.

Donnaconna (2" x 2" size) soaked in melted paraffin wax makes a good fire starter. To use shred on pile of dead twigs then light.

ACKNOWLEDGEMENTS

We wish to record our grateful appreciation to all the members who contributed material for this issue of the Karabiner.

Our special thanks are extended to Mrs. Peni Lynn Burt and Mrs. Win Brennan for their sketches and to Mr. Terry Halliwell for the cover design and the sketches of the mountain sheep. We are again indebted to Mrs. Cheryl Gallamore and Mrs. Lida Gambin for the typing and proofreading.

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APPLICATION FORM

I wish to attend the Kootenay Mountaineering Club Camp in the Royal Group.

I enclose \$10.00 deposit and will pay the remainder of the cost, \$50.00, calculated at a minimum of 15 climbers, not later than July 1, 1970. This \$50.00 covers food and helicopter lift of food and 20 pounds of personal gear. My deposit will be returned only if I cancel before June 15, 1970.

I am an active climber and a member of _____ Club.

I will bring all my own personal equipment.

SIGNED _____

NAME _____

ADDRESS _____

DATE _____

Send form and deposit payable to:

Kootenay Mountaineering Club
Box 60
Robson, B.C.

We require your deposit immediately to ensure enough climbers for a successful camp.

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