



O'Hara '95

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Grizzly Research in the Lake O'Hara Region - 1994

Last summer saw the completion of the second year of Grizzly bear research in the Lake O'Hara area. The research was jointly funded by the Lake O'Hara Trails Club, Parks Canada, Lake O'Hara Lodge, the Yoho Burgess Shales Research Foundation, and the World Wildlife Fund.

Only twice this year did rodents chew through the cable systems of the six remote cameras! These cameras, which automatically photograph any warm object that passes by, were mounted inside metal ammunition boxes and installed at strategic places throughout the O'Hara area. The cameras performed remarkably well photographing the presence of: 1 Columbian Ground Squirrel, several Bushy-tailed Wood Rats (Pack Rats), 14 Porcupines, 1 Marmot, 6 Marten, 1 Wolverine, 2 birds, 7 Mountain Goats, 2 Mule Deer, 19 Elk, 1 Moose, dozens of unidentifiable small mammals, 3 Humans, and 4 Grizzly Bears (see photo). A video-camera, programmed to record one second for every thirty seconds of real time, recorded the passage of several goats near the top of the Odaray Plateau.

Through constant reconnaissance of this natural paradise, (yes, it was a demanding and stressful occupation) we documented 435 bear digs and found 101 scats (23 in the core area), left by the bears that were passing through. Grasses, sedges,

Hedysarum roots and Cow Parsnip were the preferred fare in the first half of the summer, with their diet shifting to Crowberries and back to Hedysarum in the fall. Several unfortunate ground squirrels also appeared (reappeared?) in some scats this year.



Sub-adult grizzly bear photographed with remote cameras during 1994 research.

A small sub-adult grizzly was tracked from the Linda Lake/Campground Trail junction up through the Morning Glory Lakes drainage, over the Odaray Prospect, and down into the lower McArthur Creek headwaters. (Only researchers

and designated parks personnel are authorized to enter the closed areas). It likely spent less than a day moving through the area. This grizzly grazed plant matter and dug for Columbian Ground Squirrels in the Duchesnay-Cathedral Basins for part of July and August.

Combining the data from both summers, we are beginning to see some fascinating patterns of bear use developing. High elevation Hedysarum beds (a grizzly's favourite food) located south of McArthur Pass and below the Odaray Prospect were well used by at least one bear. Two more day beds were found in the proximity of one of these plant feeding areas and another in the far Northwest corner of Duchesnay Basin.

We are now aware of at least seven grizzlies that seasonally use the avalanche chutes by the lower McArthur Creek trail in the area closed by Parks last year - at least two of which were photographed by our automatic cameras. Its hard to believe, but this small number (7 grizzly bears), may represent half of all the big bears found in Yoho National Park!

Moose and deer were found in surprising numbers in the Duchesnay Basin and Narao Wetlands with a few travelling back and forth to the lower McArthur Creek valley via the Odaray Plateau. Perhaps most stunning though, was the discovery of tracks and scat of a small pack of wolves that have just recently appeared in Yoho National

Grizzly Research in the Lake O'Hara

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Park!! A wolf sign was found south of McArthur Pass and again in Duchesnay Basin. With some good luck and good management, these essential predators, along with our few grizzly bears, will remain and provide a fundamental component in our Central Canadian Rockies Ecosystem.

Fortunately, we were again able to present the weekend "Bear Talks" at LeRelais. We felt that these talks were extremely beneficial to the area users and so conducted them ourselves in association with Heritage Communications. The Lake O'Hara Trails Club also supported these presentations and generously donated \$1000 which will be used to purchase capital equipment for the on-going Wolf Ecology Project in our national parks.

Plants and Grizzlies - Food for Thought

Understanding grizzly bear behaviour and predicting their movements requires knowledge of what they eat and where they find it. Grizzly bears, surprisingly to many people, are almost entirely vegetarians. As the seasons change from spring to fall, grizzly bears also change their eating habits. This is due to the availability of different flowers and fruit found in each season.

Plants most commonly eaten by grizzly bears are; Horsetails (*Equisetum* species), grasses and sedges (*Graminea* and *Carex* species), alpine sweet-vetch (*Hedysarum sulphurescens*), grouseberries (*Vaccinium scoparium*), buffaloberries (*Shephardia canadensis*), and cowparsnip (*Heracleum lanatum*). Although some selected areas are highly vegetated with these species, most are not abundant or found in high densities in the Lake O'Hara area.

Horsetails require areas with standing water, such as the lower Morning Glory lakes, to flourish in large numbers. These plants build up silica over the season that make them gritty and indigestible by the middle of the summer. Therefore, bears seek these plants out in the spring when they are still young and succulent. Similar to horsetails, grasses and sedges need wetlands but also require full sun to grow abundantly. The best examples are often seen by the small lakes and streams at the base of Mount Odaray in Duchesnay Basin. Grizzly bears feed on these plants in the spring also but avoid them in the fall when they become tough.

Alpine sweet-vetch requires large amounts of direct sunlight and is most often found in the alpine. Avalanches clear trees in slide paths during the winter which allows herbs and shrubs to grow in abundance due to the high amounts of direct sunlight. Examples can be found on the two long avalanche paths below Cathedral Peak but the best examples are found on the numerous slide paths of Mount Owen in the McArthur valley. The vetch roots are high in starch, especially in the spring (before flowering) and fall (as they prepare for winter). Grizzly bears have been known to dig these plants up in the spring even before the snow has melted.

At Lake O'Hara, there are several shrubs that produce a variety of edible berries. The bright green, wispy stalks of the grouseberry produce tiny red berries. These plants are found in the understory of the spruce/fir forest. The forest at Lake O'Hara is dense and does not allow very much light to reach the plants living at ground level. Therefore, not many plants produce enough grouseberries to keep a grizzly bear interested. A much larger shrub, the buffaloberry, produces a profusion of red berries in the fall. Black bears are often seen feeding on buffaloberries on the open slope above the parking lot.

Cowparsnip is a very tall plant with an umbrella shaped profusion of tiny white flowers. Cowparsnips can be found in moist areas such as below the bridge at the north end of Lake O'Hara and the lower section of the Wiwaxy gap trail. A favourite food of grizzlies, they will eat almost every part of this plant throughout the year.

As you can see, grizzly bears depend on different types of plants as the seasons progress. By being aware of the habitats in which these plants are found, and the season in which grizzlies are eating them, we can avoid these areas and minimize the possibility of a bear encounter. Simply watching the flowers is an essential part of understanding the complexities of nature around us.

Loony Ravens

It is common in Native mythology to encounter stories of the raven acting as trickster. Some observations made at Lake O'Hara last July show that the raven continues to surprise its observers.

A raven that walks along stream-sides piercing the glassy water with its sharp eyes is an unusual sight. When it jumps into the water and starts wrestling with a 20 cm long trout it is a significant sight indeed. There is no documented account of a raven fishing for trout. This is about to change.

Last summer observers recorded a single raven actively fishing the creek that connects Mary Lake to Lake O'Hara. The raven was first spotted during a conspicuous battle with a large trout. After the first fish escaped the raven continued to fish and soon caught a 10 cm long rainbow trout. After carrying the fish to the shore and poking it for a minute, the raven swallowed the perplexed fish head first. Afterward the bird paused to wipe its bill off on a twig.

Behavioral observations like these remind us that new discoveries are waiting to be made anytime, by

anyone lucky enough to come across something unusual. Often new discoveries involve the most common and familiar species. Whether or not you are trying, by being a sensitive observer you are sure to come across some of nature's secrets anytime you are hiking. Keep an eye on those ravens.

Turbulent Waters for the Harlequin Duck

Yoho National Park hosts a rare summer resident known to run whitewater rivers, dive into ocean surf and perform head bobbing displays on Lake O'Hara. It is the harlequin duck, a small seabird that has been known to nest near streams on Lake O'Hara.

In the past, 4 to 8 pairs of harlequin ducks have been seen each spring, courting on Lake O'Hara. They have also been recorded at

putting this group on the Canadian Endangered Species List. The Pacific population of harlequin ducks has always been considerably larger and it is not yet known if they are suffering as severe a decline as their eastern cousins.

A healthy harlequin duck population is one indication of a pristine ecosystem. They are the only North American waterfowl that breeds almost exclusively along turbulent waterways.

Like trout, they need clear water with an abundance of aquatic invertebrates. In winter, they dive for small shellfish, roe and aquatic insects in heavy coastal surf. Specialized breeding and feeding habits such as these, make the harlequins prone to many environmental threats, including coastal oil spills, water pollution, silting in streams and heavy recreational use of rivers during the nesting season. They are particularly sensitive to human disturbance on breeding ranges.

On the Maligne River in Jasper

wintering grounds where habitat protection may not exist.

If you see harlequin ducks in Yoho National Park, please tell park staff. Verify your sighting with a field guide and note the bird's behaviour, number of ducks, the time and location. If the duck is out of the water, look for a coloured leg band with a two digit code. The Canadian Wildlife Service has banded hundreds of harlequins for study purposes. Your report will help them learn more about the habits and ranges of local populations. You can also help protect harlequin ducks by contributing to wildlife protection efforts. Sign the Canadian Wilderness Charter at the Field Information Centre or join a conservation group that works to protect natural areas.

Four Mountain Parks Five Year Plan Update

"The parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment ... and such parks shall be maintained, and made use of so as to remain unimpaired for the enjoyment of future generation."

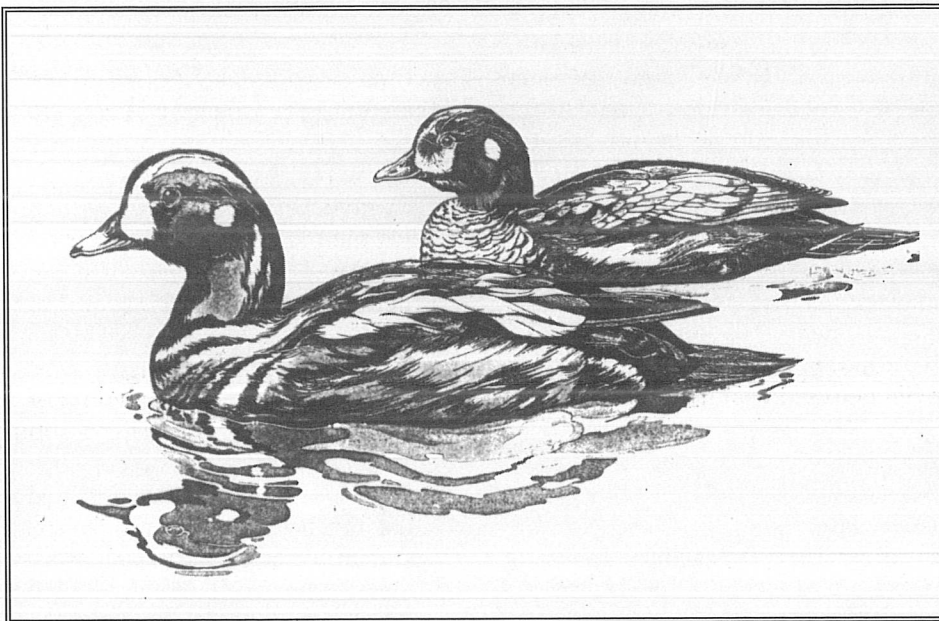
National Parks Act 1930

When J.B. Harkin, Commissioner of National parks from 1919 to 1933, sat down to pen a mandate for Canada's national parks, he knew they would need protection if they were to remain special. He knew that cultures, values, government and landscapes change.

Harkin was truly visionary when he charged all of us who use and enjoy Canada's national parks to leave these special places unimpaired for future generations.

Canada's national parks do present one face of wilderness today, but they are considerably different from sixty years ago. Stewardship of Canada's national parks, a publicly owned resource, is a huge responsibility. The Rocky Mountain ecosystem is complex, and part of a

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Dennis Budgeon

Mary Lake, the Moor Lakes on the Opabin Plateau, and Wapta Lake. But since 1985, the harlequins have mysteriously disappeared with no sightings recorded in the O'Hara valley.

Until recently, biologists knew very little about harlequins. Recent studies show a dramatic drop in the Atlantic harlequin population,

National Park, declining numbers of harlequins may correspond to increased river use by fishermen, hikers and river runners. No one knows why the harlequin ducks have not returned to Lake O'Hara. Could the cause be human disturbance in Yoho? Perhaps. It is also possible that the ducks are experiencing difficulty in distant Pacific

Parks Plan Update

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larger natural world. The face of wilderness shown here is known world-wide, and draws visitors from parts of the world where wilderness is only a memory.

In 1989, after extensive public consultation, fifteen year management plans for Banff, Kootenay, Yoho and Jasper National parks were completed. Integral to those long term management goals are five year reviews, opportunities to evaluate how the plans actually work.

The first review year, 1994, was a busy year for people who are involved with these four mountain national parks. Newspaper, television and radio messages told people how and where they could get information about the 1994 review. Newsletters were sent out to people who participated in the 1989 plans, and distributed in Visitor Centres. Open houses were held in communities in, and around the parks. Interested groups arranged discussion sessions and organized letter writing campaigns for specific issues. People not able to attend open houses, or discussion groups wrote submissions.

The result?

There is overwhelming support for ecosystem based management, an approach that recognizes the connection between the environment, people and the economy. People support Parks Canada working with provincial governments on land use issues. They want Parks to encourage low impact ecotourism, but restrict or prohibit developments like malls, golf courses, pools and ski hills. People see that parks must be financially responsible, but not at the

expense of the environment.

The management plan updates will be presented to the Minister of Canadian Heritage for tabling in Parliament in 1995. Copies of the final Four Mountain Parks Plan Update will be available in the spring of 1995 in libraries and from Parks Canada. If you want a copy of the plan, please write to:

Public Consultation Coordinator
Department of Canadian Heritage
- Parks Canada
P.O. Box 2989, Station M
Calgary, Alberta
T2P 3H8

1994 Trail Work

Last summer, your donations to the Trails Club went into the much needed reconstruction of the Lake Oesa switchbacks. Many of the steps and water bars were old and falling apart. In previous work, logs were used as water bars with wire holding rock steps in place. This time round these materials were avoided so that the trail would retain a more natural appearance. Rocks from the area were used to construct steps, water bars, a retaining wall and bridges. The total cost for reconstruction was \$12,932.00

There were also two major projects completed by the Parks Canada Trails Crew last summer. First, there was the widening of 2 km of trails from Morning Glory Lakes into Duchesnay Basin. These trails, previously narrow and prone to flooding, are now easy to walk on. Secondly, many trees and shrubs were trimmed back along trails to improve sight lines and hopefully decrease the chance of a surprise

encounter with a bear. Work was done along the trails to McArthur Pass, McArthur Lake, Grandview and the Cataract Brook.

Last but not least, the gravel carried to collection sites by volunteers along the Adeline Link Memorial trail (the Lake O'Hara circuit) was used to cover wash outs and improve drainage. Thanks to all of you who helped out!

We Need Your Help!

Your donation to the Lake O'Hara Trails Club will help further the preservation of Lake O'Hara and its trail system. The Trails Club is a registered non-profit organization and will issue a receipt for income tax purposes. You may donate directly at Le Relais, or mail your donation to:

The Lake O'Hara Trails Club
Box 1677, Banff, AB T0L 0C0

Would You Like to Join Us?

Life membership in the Lake O'Hara Trails Club is available at Le Relais for a mere \$25. For this you will receive this newsletter annually and help support club activities in the Lake O'Hara area. Interested in becoming more involved with the Lake O'Hara Trails Club? We need your help. Drop us a note at the above address.

ANNUAL MEETING

The 1995 Annual Meeting of the Lake O'Hara Trails Club will be held at Le Relais at 8:30 p.m. on Monday July 24.



*Preservation
through
Appreciation*

Produced by the Lake O'Hara Trails Club in cooperation with Yoho National Park.

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