

# The Urgent Need to Protect BC's Ancient INLAND TEMPERATE RAINFOREST

## A Valhalla Wilderness Society Conservation Report

Public Information Bulletin No. 47

November, 2008



Garth Lenz

Photo: Proposed Kane Creek Addition to the Goat Range Provincial Park

Many scientists and environmentalists agree that all the old-growth forest (140 years or older) in BC's Inland Rainforest Region should be fully protected. (See the petitions, accords and letters at [www.vws.org](http://www.vws.org).) This region is the home of the endangered mountain caribou and the rare Inland Temperate Rainforest. But these forests, the result of high precipitation, are scattered over 14.3 million hectares of mountains. A great deal has been logged, and much has been reduced to small fragments. So for conservationists, without maps to show the clearcuts, the remaining old-growth and other aspects of the forest, it was impossible to locate all of the remaining intact ancient rainforests fast enough to keep them from being cut down.

Such maps did not exist. However, in 1998 the Valhalla Wilderness Society's former chairperson, Colleen McCrory (who passed away last year), got together with several environmental activists and native people and started the Inland Rainforest Project. Within five years Baden Cross of Applied Conservation GIS had mapped the forest cover of 14.3 million hectares, and Dr. Lance Craighead of the renowned Craighead Environmental Research Institute from Montana had used that and other data to create a state-of-the-art Conservation Area Design. The project area is called the Inland Rainforest Region. Several First Nations are now using the maps in their treaty negotiations and management of their territories. Meanwhile sev-

eral expert lichenologists — Toby Spribille based in Germany, Curtis Björk and Trevor Goward in BC — were doing painstaking field and laboratory work that would radically revise scientific opinion about biodiversity in BC's Inland Temperate Rainforests. All these technical experts donated the vast majority of their mapping, analyses, field and laboratory work.

Dr. Craighead's analysis showed that 85% of the region must be managed to maintain biodiversity and 55% must be fully protected to maintain such species as grizzly bears, mountain caribou and salmon. After consulting with First Nations and many environmental groups in the region, the result was the map on the right, showing the areas with the highest conservation values for biodiversity in light green. Recently the Valhalla Wilderness Society has taken the project another step forward by identifying explicit boundaries for 19 proposed new or expanded parks or similar designations. They are shown on the larger map on the inside page. This publication highlights the three proposals that have significant areas of intact old-growth: the Central Selkirk Mountains, Cariboo Mountains, and Robson Valley.

The ancient Cedar-Hemlock forests of British Columbia's Inland Rainforest Region are gravely threatened. They commonly have trees up to 500 years old. The wettest of these forests are true rainforest, with trees up to five metres thick and up to 1,800 years old. This is the only Inland Temperate Rainforest in the world. Elsewhere, Temperate Rainforest occurs only in coastal areas.

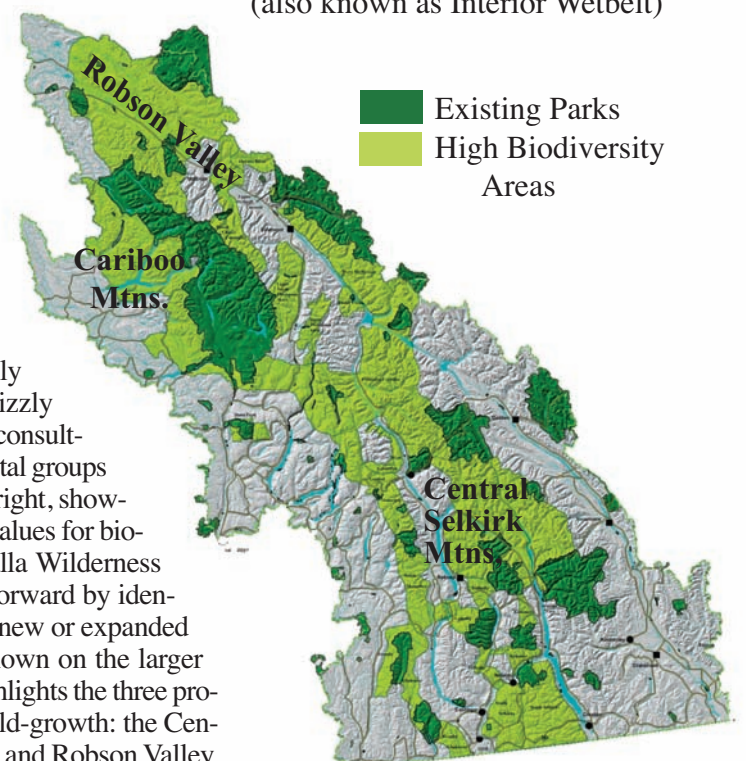
Some scientists say that Inland Rainforest is richer in biodiversity than Coastal Temperate Rainforest. For 40 years these forests have received little protection in parks while logging companies clearcut the most accessible sites and the largest trees. The hallmark species of the region, the mountain caribou and innumerable rare rainforest lichens, are under threat of being wiped out.

Shockingly, these forests are still being cut down to make posts and rails for fences, shakes for roofing, and patio decks. The BC government wants to plant young trees in cities like Vancouver to offset global warming by absorbing carbon dioxide from the air. This is good, but then why are we returning tons of carbon to the air by logging 250- to 1,800- year-old trees?

For the last ten years a small network of scientists, environmental organizations and aboriginal people has been working together to document the location of the surviving old-growth Interior Cedar-Hemlock (ICH) forests. Ecosystem mapping sponsored by the Valhalla Wilderness Society shows that there are still outstanding areas of these magnificent forests left to save.

The Inland Temperate Rainforest is one of very few major biomes in Canada that occurs exclusively in Canada. It is entirely up to Canadians to ensure its long-term preservation. No one else can do it for us. The ongoing destruction of these forests is a loss, not merely to Canadians, but to the world. Please turn the pages to see the photographs, and join us in the effort to rescue these ancient legacies from destruction.

### Inland Rainforest Region (also known as Interior Wetbelt)



### Valhalla Wilderness Society

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# Top Priorities for Increasing Core Protection in BC's Interior Wetbelt

In the mid-'90s the BC government set up a public planning process with a mandate to double the park system. Within a few years there were several hundred new parks. But the new parks were heavily weighted towards high elevation landscapes that were unprofitable to log, leaving most of the rich low- and mid-elevation forest to be clearcut. These were the forests with by far the highest biodiversity.

The government designated forest conservation zones (i.e., caribou management zones, old-growth management areas, etc.) where small patches of forest would be retained in areas that were to be logged. These were supposed to support those species that needed old-growth forest, but in reality, far too little forest was retained for that purpose. As well, these areas allowed logging roads to be pushed immediately into the backs of many previously intact valleys, connecting clearcuts like a chain of beads. This is why some of the new areas proposed for preservation today contain some clearcuts and roads.

These fragmented valleys turned out to be deadly to mountain caribou, which were concentrated on the isolated forest patches where wolves and cougars could easily find them and chase them down, using logging roads to speed their search. The rate of logging was not significantly reduced by any of this protection, so the fragmentation happened rapidly. Now the logging roads provide the infrastructure for the final liquidation of the protected patches, which in some areas could happen with the stroke of a pen if the government chose to do so.

The long-term result has been the threatened extinction of the mountain caribou, the loss of unknown numbers of lichen species, and the threat of losing a whole constellation of species associated with low- and mid-elevation old-growth forest. But, as insufficient as those 1990s protected areas were, today they form the backbone of a vision of a future park system that is more ecologically complete.

What is needed is another simultaneous protection especially for low- and mid-elevation old-growth forests throughout the Interior Wetbelt. A big planning process is not needed. BC government planners, the environmental community and scientists such as Dr. Lance Craighead have worked hard for many years to delineate and map the top priority areas for protection, both from the standpoint of wildlife and old-growth In-

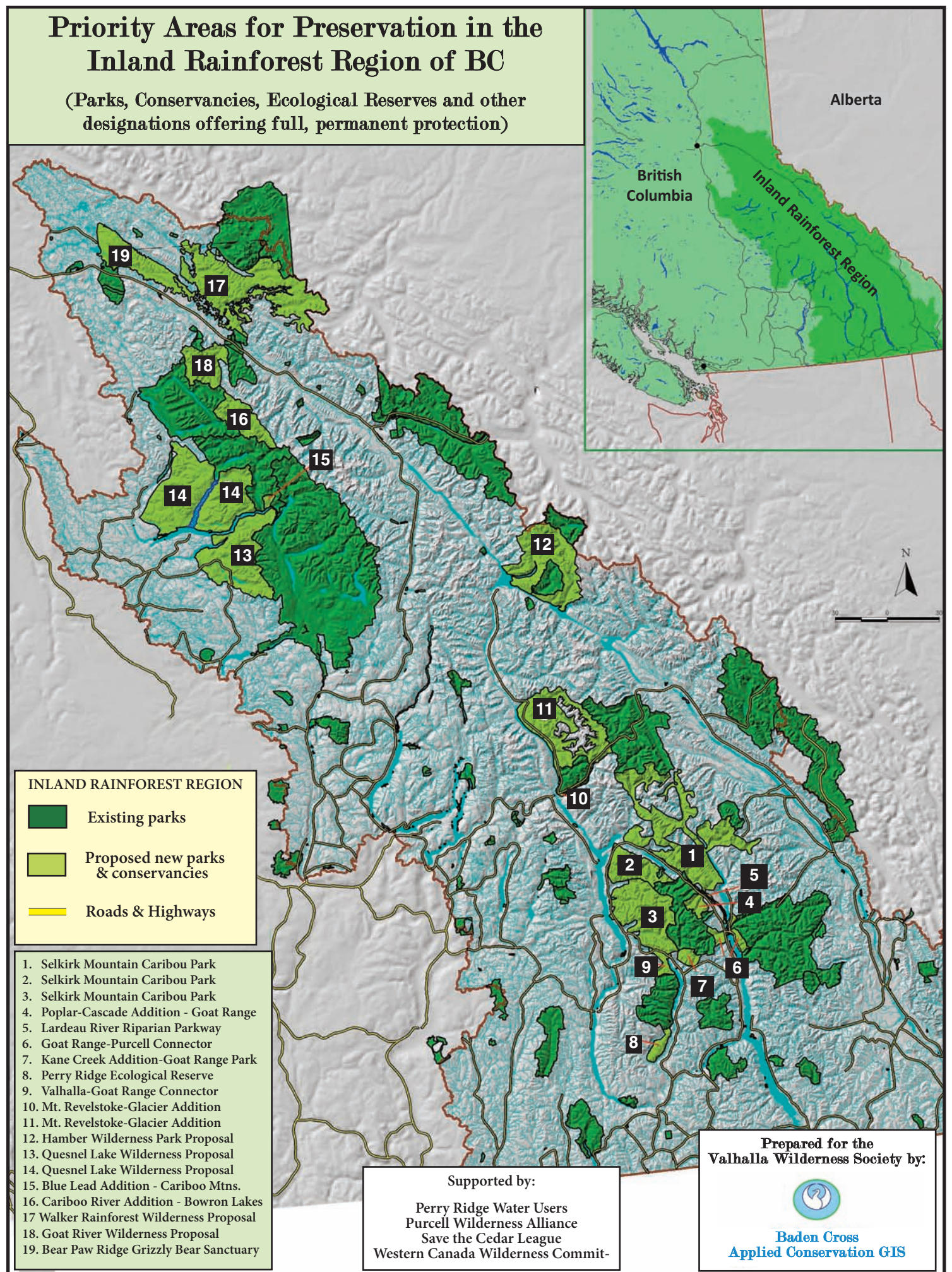
land Rainforest.

One conservation approach advocated by some is to put the focus on saving only the very wettest and very oldest rainforest. The Valhalla Wilderness Society does not take this approach because it concedes ongoing fragmentation by clearcuts and roads around these very

areas, which would make them islands of extinction. This would likely happen quickly once the logging companies finish the massive salvage logging of dry pine forests recently killed

by the mountain pine beetle. Such an approach would also sacrifice the old for the very old, the moist Cedar-Hemlock for the wet, and the wet for the very wet. Maintaining the largest possible protected ecosystems in order to stop the spread of fragmentation is one of the key values in the Valhalla Wilderness Society's maps and conservation approach. This map does not appear to do that because there are huge areas with no new proposals. But some of these areas are rock and ice in BC's rugged mountains, some are already devastated by logging and roads, and some will receive upgraded protection for mountain caribou. In addition, the Valhalla Wilderness Society may identify more key areas as our work progresses.

**Can you see the person in this photograph?** This photo demonstrates why the Valhalla Wilderness Society believes that all old-growth Interior Cedar-Hemlock forest (ICH) should be preserved. This ICH is likely classed as "moist" rather than "wet." It is in Lake Creek Valley of the Selkirk Mountain Caribou Park Proposal. The tree on the front cover of this publication is also "moist" ICH. Some scientists consider only the "wet" and "very wet" categories to be true rainforest. But the moist and even the dry ICH were once rainforest during a wetter period in the Earth's history. Five hundred year old trees were not uncommon in the moist ICH. In some cases they are well supplied with ground water that has protected them from fires for hundreds of years. They are refugia for many species. Some rainforest lichen species are found as far south as southern Idaho. The dry and moist ICH are especially endangered because of global warming. But the great value of the wet and very wet ICH is that they stand by far the better chance of surviving fires and drought caused by global warming. It is all humid, high-biomass forest radically different from the dry pine forests that surround them, and of immense value in the fight against global warming.



Courtesy of Gary Diers



# SELKIRK MOUNTAIN CARIBOU PARK PROPOSAL



Alan Watson



Gene Parker

## INCOMAPPLEUX

**The only remaining habitat of the Central Selkirk mountain caribou  
Grizzly bears fishing for Kokanee salmon  
Antique inland temperate rainforest  
Bull trout-Gerrard trout-Kokanee fisheries  
Stunningly rugged, beautiful mountains**

The ecological wealth of the Central Selkirk Mountains is seriously in danger due to logging that has decimated whole valleys of huge old-growth trees and pushed the mountain caribou to the brink of extinction. There are already large parks in the area. Unfortunately, they are predominantly rock, ice, alpine meadows and sparse subalpine forest. Only a limited amount of the lower, heavily forested slopes and valley bottoms were included within the boundaries of these parks. As a result the caribou herd is down to 90 animals because of logging, but they still have significant habitat that would be lost if logging the old-growth continues.

The Central Selkirk herd is more endangered than herds to the north, but it has more habitat left to protect than smaller herds to the south that range across the BC-US border. The BC government's Mountain Caribou Recovery Plan has recognized the importance of this herd by proposing 20,000 hectares of new forest protection within the Timber Harvesting Land Base in the Central Selkirk planning unit. The Valhalla Wilderness Society provided extensive input into the distribution of the new reserves in the hope that the areas with the highest value for caribou would be chosen. The Ministry of Environment made similar recom-

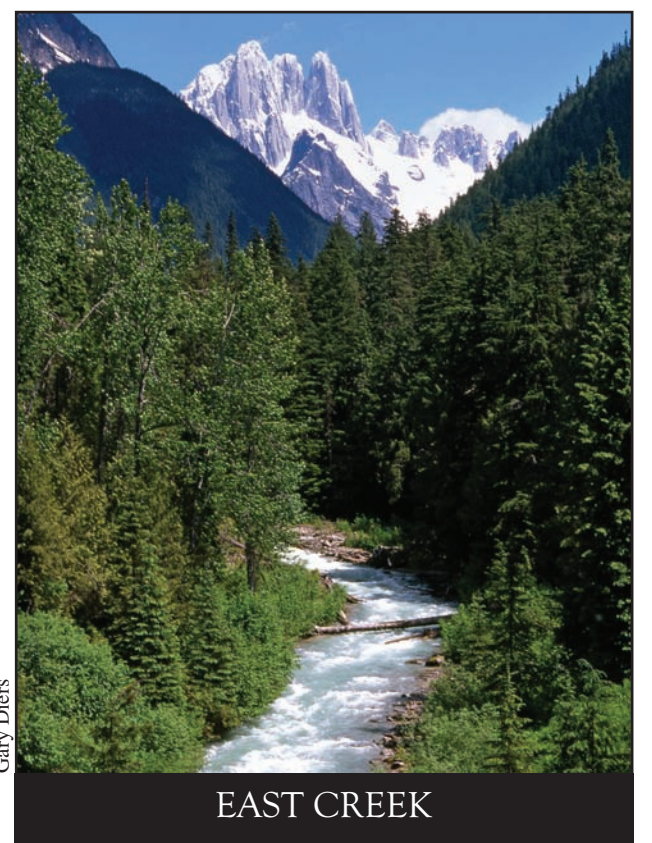
mendations; if they are followed, the future no-logging zones will protect some significant areas for caribou. However, the 20,000 hectares are not remotely enough to save this herd. Protecting that alone would sacrifice most of the herd's remaining intact, low-elevation habitat, as well as most of the big trees of the old-growth Cedar-Hemlock, including one of the most extraordinary tracts of primeval inland rainforest in the province (the Upper Incomappleux Valley.) (For more information on the status of the Mountain Caribou Recovery Plan, see page six.)

Using the forest cover maps by Applied Conservation GIS, and the Conservation Area Design by Dr. Lance Craighead, the Valhalla Wilderness Society has defined the boundaries that would give the caribou herd and a multitude of other old-growth species the best chance of survival. The result is 360,000 hectares proposed for preservation that would link the three large existing parks (Glacier National Park, Goat Range Provincial Park and Purcell Wilderness Conservancy). This would provide a protected area complex for the southern Inland Rainforest Region similar to that in the Cariboo Mountains. The proposal includes the largest remaining areas of intact old-growth forest ranging from valley-bottom cedar-hemlock to the most valuable subalpine forest. It includes the Upper Incomappleux Valley, which is the southernmost example of wet rainforest, plus many identified and potential smaller pockets of inland rainforest. It also contains all the intact low- and mid-elevation forested habitat identified in the Mountain Caribou Recovery Process.

Since 2002 the Valhalla Wilderness Society has sponsored research on inland rainforest lichens by lichenologist Toby Spribille, formerly based at the University of Göttingen, Germany. Spribille has worked closely with BC lichenologists Curtis Björk and Trevor Goward, and they have collaborated with international experts. They have found that the inland temperate rainforests contain one of the richest tree lichen floras in the world — richer than BC's coastal temperate rainforest.

Previously, inland temperate rainforests had been deemed low in biodiversity. But Spribille, Björk and Goward found more species of lichens in the Incomappleux Valley than tree, shrub, herb, grass and moss species combined. Spribille has now listed a spectacular 283 lichen species from the Incomappleux, and that's with only cursory examination. Most of them (about 74%) were found in old-growth forest. The Incomappleux species include three not previously known in BC or Canada, three not previously known in North America, and nine that were not previously known to science at all (report now in press). These discoveries have totally remade the concept of biodiversity in these inland temperate rainforests.

The temperate rainforests are poor in nitrogen. Some lichens, like the leafy Lung Lichens, are natural fertilizers, aiding the growth of trees



Gary Diers

### EAST CREEK

*East Creek and Geigrich Creek are two totally intact wilderness valleys with ancient forest in this proposal. In the background are the rugged spires of Bugaboo Provincial Park, which currently protects mostly rock and ice.*

by capturing nitrogen from the air. Lichens can provide up to half the nitrogen requirement of a forest. Many species of wildlife depend upon lichens for food and nesting materials. For example, over the winter the mountain caribou depend totally upon hair lichens. The fragmentation of these forests represents a direct and immediate threat to many species that depend on small micro-habitats, and for which a clearcut represents an immense migration barrier. Fragmentation creates canopy gaps allowing valley winds to penetrate into the heart of forest canopies that have been sheltered and humid for thousands of years, drying out the habitats of species. The biodiversity of the tropical rainforest has long been a serious world concern, but BC also has cradles of biodiversity in these old forests that need world attention to protect them.



Craig Pettitt

*Common rainforest lichen Lobaria pulmonaria*



Toby Spribille

*Electron microscope reveals the fruiting bodies of one of the crust lichens discovered by WWS research project.*



Craig Pettitt



# THE SELKIRK MOUNTAIN CARIBOU PARK PROPOSAL IS CRITICAL FOR GRIZZLY BEARS

Human contact is the largest cause of grizzly bear mortality. Historically, the disappearance of grizzly bear populations in North America started in the southern part of their range and has travelled north over a couple of centuries as human population and development spread. In the US there are only four small, isolated populations of grizzly bears left.

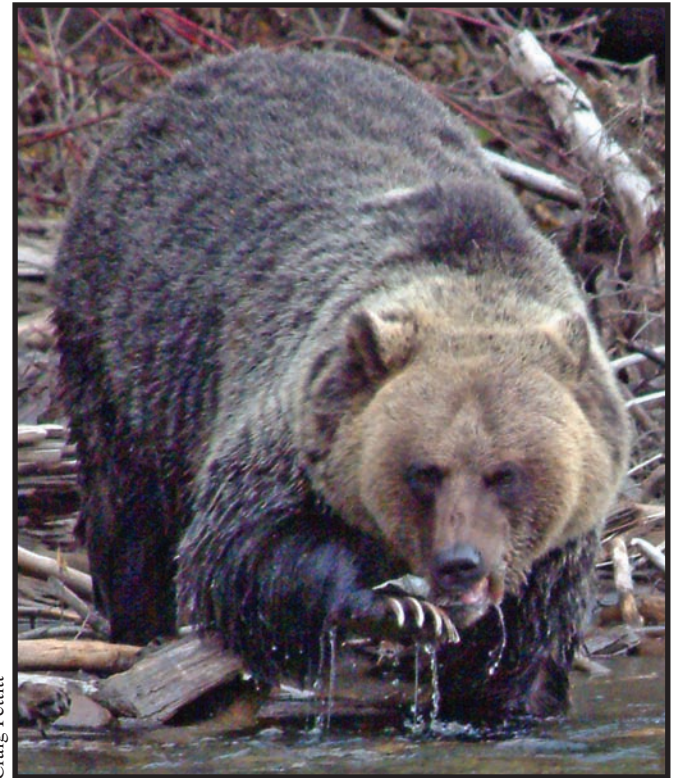
The research of Dr. Michael Proctor has documented the drain on grizzly bear populations in southern BC. There is only one isolated population of 70-100 grizzly bears in BC's South Selkirk Mountains, south of the park proposal. Proctor says that this population should be considered endangered; but with the failure of the Mountain Caribou Recovery Process to provide significant new habitat protection in the South Selkirks, these bears will not be helped. He has used scientific methods to determine how many grizzly bears the habitat will support. Grizzly bear populations in the southern part of BC's Selkirk Mountains were only 44% of what they should be; whereas they were at 96% in the northern part encompassed by the proposed Selkirk Mountain Caribou Park. In the southern Purcells they were 76% of what they should be, whereas in the northern Purcells they were at 96%.

Thus the Selkirk Mountain Caribou Park Proposal and adjacent mountains may have the most southerly, reasonably healthy populations of grizzly bears in the

province. The reason for this is the existence of the major wilderness parks, especially the Goat Range Provincial Park and the Purcell Wilderness Conservancy, as well as Glacier National Park. However, some of the bears leave these parks for the lower elevations in spring, where they are searching for new plant growth, and in autumn when they come to the rivers to fish for land-locked Kokanee salmon which provide a grizzly-bear feast every year. But there is little protected habitat for the bears along the rivers. The proposed Selkirk Mountain Caribou Park will protect critical forest patches along the Lardeau River.

Now the threats are moving in from all directions. The chief ones are logging roads, independent hydro-electric projects, swarms of off-road vehicles, including hunting in the alpine from ATVs, backcountry lodges, and mega tourism development such as the Jumbo Glacier Resort. The same old-growth forest that forms the critical habitat of the mountain caribou is also needed to provide critical seclusion areas for grizzly bears.

The Selkirk Mountain Caribou Park Proposal contains critical expanses of old-growth forest which, if they were lost, would be a great blow to prospects of grizzly bear survival, but if added to the existing wilderness parks they could provide much larger and more complete sanctuaries.



Craig Pettitt

*This grizzly bear is having a meal of land-locked Kokanee salmon outside of Goat Range Provincial Park.*



Craig Pettitt

## Very High Values for Wilderness Recreation

The Selkirk Mountain Caribou Park Proposal lies in an area of very steep, high mountains. In some areas it is penetrated by logging roads, but extensive areas too steep to log and high-elevation side valleys have no roads or trails at all. It should largely be kept this way because the purpose of the new park would be to protect animals that need insulation from human contact. However, there are innumerable opportunities for cross-country wilderness trekking and mountain climbing that are used every year by hardy backcountry travellers. There are large areas of gorgeous alpine and sub-alpine terrain that are accessible by old roads and open enough for easy hiking. The park proposal is very large because some key tracts of forest are interspersed with clearcutting over a large area, or else with extensive areas of rock and ice. This means there are opportunities to build a limited number of good hiking trails into spectacularly scenic mountains, while also leaving many areas without trails for complete wilderness protection.

## Why We Can't Afford to Log Our Old-Growth Forest

One of the world's top climate scientists, Dr. James Hansen, who is Director of the NASA Goddard Institute for Space Studies, says the planet is in a crisis due to global warming. The cause is burning fossil fuels, and the worst culprit is coal. It is absolutely urgent that countries around the world stop burning coal. There should be zero new coal-fired plants built and drastic cutbacks of existing coal emissions. Dr. Hansen supports the gas tax. It is also urgent that we figure out how to absorb and store the excess carbon already in the atmosphere. The technology to do this on a large scale is not yet available.

But what does global warming have to do with forests? On land, forests store more carbon than any other type of ecosystem. But when forests are logged, only 10-25% of that carbon remains stored in wood products. The rest goes back into the atmosphere. The US Forest Service Climate Change Resource Center says that the elimination of logging on US public lands:

“could result in an annual increase of as much

as 43 percent over current sequestration levels on public timberlands and would offset up to 1.5 percent of total U.S. greenhouse gas (GHG) emissions. In contrast, moving to a more intense harvesting policy similar to that which prevailed in the 1980s may result in annual reductions of 50 to 80 percent in anticipated carbon sequestration.”

In BC, global warming combined with poor, exploitative forestry practices, has caused outbreaks of mountain pine beetle that have killed nine million hectares of pine forest in the BC Interior. According to the Canadian Forest Service, the trees killed by mountain pine beetle in BC will pour one billion tonnes of carbon dioxide into the air as they rot or are burned. And we are also losing what the trees would have absorbed if they had remained alive. Studies show that old-growth forests in the Pacific Northwest store higher amounts of carbon per acre than any other type of vegetation anywhere in the world. BC's Inland Rainforest

carbon storage is similar. As BC suffers massive forest lost due to beetles, why are we logging the healthy forests we have left? Economic concerns? Some experts now recognize that maintaining BC forests for carbon sequestration and storage is worth over \$1,000 per hectare, making the trees now more valuable standing than cut down.

Some scientists, industry and governments have long held that old forests stop absorbing carbon and that it is best to cut them down and start all over with young trees, which supposedly would absorb carbon faster. But that has now been thoroughly refuted by newer studies:

- It may take many years before young forests start absorbing more carbon from the air than they emit. It will take hundreds of years before they store as much as old forests already contain.
- Disturbance of old-growth temperate forests may reduce carbon storage for at least 250 years and with continued harvesting, carbon storage may be reduced indefinitely.

### Green Carbon

**“The remaining intact natural forests constitute a significant standing stock of carbon that should be protected from carbon-emitting land-use activities....**

**“We can no longer afford to ignore emissions caused by deforestation and forest degradation from every biome (that is, we need to consider boreal, tropical and temperate forests) and in every nation (whether economically developing or developed)....**

**“From a climate change perspective, forest degradation needs to be defined to include the impact of all human land-use activity that reduces the current carbon stock in a natural forest compared with its natural carbon carrying capacity. The impact of commercial logging on natural forests must therefore also be considered when accounting for forest degradation. As discussed earlier, commercially logged forests have substantially lower carbon stocks and reduced biodiversity than intact natural forests, and studies have shown carbon stocks to be 40 to 60 per cent lower depending on the intensity of logging....**

**“In Brazilian Amazon, the area of natural forest that is logged commercially resulting in degraded carbon stocks is equivalent to that subject to deforestation and represents approximately 0.1 Gt of green carbon emissions to the atmosphere....”**

Professor Brendan Mackey, et al.  
*Green Carbon*, Australian National University Press, 2008.



Anne Sherrod

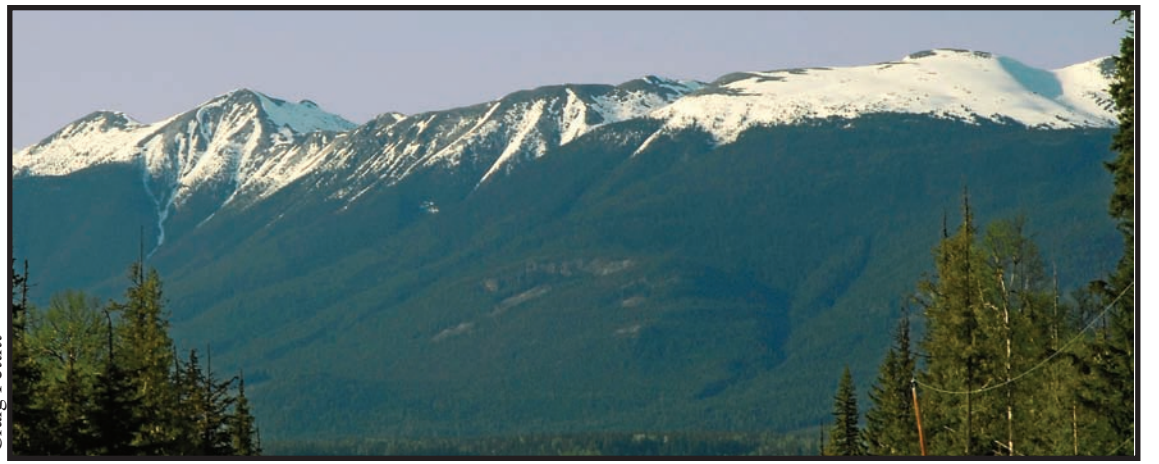
*Marked for logging: Block 486 in the Robson Valley. The trees were rescued by local residents building an old-growth interpretive trail.*



# ROBSON VALLEY: THE WALKER WILDERNESS & BEAR PAW RIDGE

**Good news in the Robson Valley:** The BC government's own Integrated Land Management Bureau has recommended that 4,770 hectares of the oldest and wettest rainforest be protected. In addition, the BC government's Forest Practices Board (FPB) has said that these very old forests can be protected under the *Forest Act* if the government recognizes that they are vulnerable and at risk. The FPB report recommended a ten-year moratorium on logging ancient rainforest to study them for protection.

**Bad news:** The BC government turned down both of these recommendations. However, it cannot make them go away and the public should continue to support them. Another very high priority is to stop the ongoing and severe fragmentation of intact ecosystems on which the area's wildlife depends. That requires full protection of the Walker Rainforest Wilderness and Bear Paw Ridge.



Craig Pettitt

The Walker Rainforest Wilderness viewed from the Robson Valley. The relatively gentle slopes and rounded ridgetops make this some of the best wildlife habitat, including mountain caribou habitat, in the Interior of BC. The mid-elevation band contains rich inland temperate rainforest.

The following is by Dr. Rick Zammuto  
Save-the-Cedar League

The Robson Valley is in the northernmost part of the Inland Rainforest Region. The valley contains the headwaters of BC's great Fraser River. It is a very long and broad valley enclosed by foothills that climb gradually to the glaciated peaks of the Rocky Mountains on the east and the Cariboo Mountains on the west. This makes it some of the best habitat for wildlife in the Interior of BC.

The internationally significant Walker Rainforest Wilderness (WRW, 2006 sq. km, 774 sq. mi) is the largest wilderness remaining anywhere in the world outside of Parks that includes ancient Inland Rainforest, mountain caribou, salmon-grizzly, and ocean going Chinook salmon. From 2003-2008 about a third of this magnificent world-class wilderness area was protected with the help of the community of Dome Creek, sci-

entists, VWS, Save-The-Cedar League, and others. However, much more work needs to be done since the area is still threatened by industry. Some 140,000 hectares of old-growth forest provide key habitat for more than 350 vertebrate species.

The WRW contains the only watershed in Canada that is home to three federally recognized sub-populations of woodland caribou which are at risk of extinction (the Southern Mountain, Northern, and Alberta Mountain ecotypes). Grizzly and black bear, mountain caribou, wolverine, lynx, wolf, moose, deer, beaver, mink, and many bird species are common. Conservation Area Design data from conservation biologists indicate that 75% of the WRW is used daily by all six of the key focal species of mammals that signify wilderness in BC (grizzly bear, mountain caribou, wolverine, lynx, cougar, and wolf). Some of the largest and darkest coloured grizzly bears ever recorded in BC are often seen.

The WRW also contains the largest waterfalls and salmon spawning raceway of the region at Morkill Falls, where grizzlies are viewed feeding on salmon in the kilometer long, boulder-strewn raceway beneath three impressive waterfall cascades. In fact, the WRW is the largest remaining undeveloped watershed-cluster in the entire Rocky Mountains where grizzly bears can still be watched fishing for wild, ocean-going salmon. The WRW contains 40 key spawning grounds for Chinook salmon, bull trout, and rainbow trout. Some 44% of the WRW watersheds support Chinook salmon that are also an important food source for grizzly bears.

More grizzly bears have been observed on Bearpaw Ridge than most places in BC. One can observe more than 25 different bears over a weekend. If Bearpaw Ridge is protected it would be one of the premiere grizzly bear sanctuaries in Canada.

## A priceless biological heritage cut down for fence posts



Anne Sherrod

Block 486: 57 hectares, proposed for protection for 34 years

The valley bottom and much of the low- and mid-elevation slopes of the Robson Valley have been massively clearcut. Nevertheless, the Robson Valley still has the most ancient inland rainforest left in the Inland Rainforest Region, including more of the rare "very wet" type. The failure of efforts to protect this rarest and wettest of all Inland Rainforest reveals the extreme reluctance of the BC government to protect the big trees that industry wants to log, most of which are exported raw to the United States.

The Prince George Timber Supply Area contains 130,000 hectares that grow this very wet, very old Inland Rainforest. However, so much of it has been logged that only about six sites of approximately 6,000 hectares of the very wet, very old, with monumental cedars, remain. In this forest district, only 360 hectares of these sites are protected in one small park. Recently the BC government's own Integrated Land Management Bureau recommended that 4,700 hectares of the oldest and wettest rainforest be protected.

It is a shocking statement on the BC government's attitude towards priceless legacies of biodiversity, that it has promised to protect only 57 hectares of ancient rainforest — the now-famous "Block 486" — and it hasn't even done that yet. Further, the protection may come in the form of a Recreation Area, which is very

weak protection. The huge cedar trees on Block 486 still bear the red flagging tape and crayon marks showing that they were about to be cut down when local residents intervened by building a trail through the area. Now called the Ancient Forest Trail, it attracts thousands of hikers from all over the world. Visitors to this trail are now bringing tourism dollars into the valley, whereas the company that was logging the ancient rainforests went bankrupt.

The Robson Valley does have the best record in the BC Interior for setting aside special management zones for mountain caribou; but most of what has been protected in these zones is sparse subalpine forest. It is the lush, mid-elevation inland temperate rainforests, and interconnected valley-bottom spruce forests that have by far the highest biodiversity. They are refugia for hundreds of species of rare and newly identified lichens, but many of these species will disappear forever from the region if the remaining ancient rainforest is logged.

The BC government has also set aside thousands of hectares of forest in Old-growth Management Areas (OGMAs) in this Forest District. However, most of these are high elevation forest. They are also *aspatial* OGMAs — areas where the logging companies must leave a certain percentage of old-growth when they log.



Anne Sherrod

Near Block 486: logged for fence posts and rails; note the waste pile

*Aspatial* OGMAs allow ongoing severe fragmentation in which logging companies can cut down the best trees. Only *spatial* OGMAs offer strong protection similar to parks. Only about 20% of OGMAs in the Robson Valley are spatial, and even then they are mostly high elevation. In 2002 the Save-the-Cedar League and other local activists persuaded the government to include some rainforest in new Old-growth Management Areas; but to date only 1,600 hectares of the very wet, very old rainforest over 250 years old have OGMA protection.

This creates the same conundrum that will be found throughout the Inland Rainforest Region. Amidst an abundance of seeming "protection," the very heart of the area's ecosystems and the wellsprings of its biodiversity — its low- and mid-elevation cedar-hemlock and spruce forests — is being consumed, creating numerous endangered species and wiping out small ones such as lichens before we know anything about them.

Many of the ancient cedar trees have hollow interiors. This is a natural state in which they can live many hundreds of years. But when logged, the cedars of the Robson Valley are only good for fence rails and posts, and garden mulch. Presently beetle-killed pine trees have priority for logging, but by law the company could log or build roads through these precious ancient forests at any time.



# Mountain Caribou Still Not Protected

It has been one year since a Recovery Plan was announced, but it has never been enacted

Letter to Honourable Pat Bell  
Minister of Agriculture and Lands  
April 30, 2008

“The controlling elements of the mountain caribou plan were negotiated between parties that had signed confidentiality agreements. The public and the broader environmental movement knew nothing about the plan until it was announced to the press. ... Scientists concur that the chief reason for the decline of the mountain caribou is clearcuts and roads in their habitat. Most logging takes place on the Timber Harvesting Land Base (THLB). Thus it is evident that this part of the forest is critical to the survival of the mountain caribou. ... Yet under the proposed plan, only 1% of the THLB may be protected. Such a plan can only be called a mountain caribou extinction plan. It is clearly apparent that this plan was designed to avoid any significant reductions in the allowable annual cut or any reduction of mill capacity — the two factors that are most destructive to the mountain caribou.”

Signed by 11 environmental groups

In October 2007 the BC government dazzled the world by announcing the protection of 2.2 million hectares of habitat for the critically endangered mountain caribou. With this huge amount of “protection,” why do many BC environmentalists oppose this plan?

Of the 2.2 million hectares promised, only 380,000 hectares would be new habitat protection. The rest had already been protected years ago. Some of it was existing parks; some was small forest patches outside of parks that had been reserved for caribou. The vast ma-



Valhalla Wilderness Society

*In early winter, the mountain caribou come down to low elevations to take shelter in old-growth forest, often Cedar-Hemlock forest. These mountain caribou are swimming in Quesnel Lake in 2002, headed for shore where there is lush inland temperate rainforest. There are only about 1,800 mountain caribou left, and they are found mostly where inland rainforest at low elevations is topped by subalpine meadows. Their yearly migration takes them from the valley bottoms to the mountain tops twice a year.*

majority of it all was at very high elevations. Lower elevation forest reserves were only partly protected, allowing them to be heavily fragmented with clearcuts and roads that are deadly to mountain caribou

Of that 380,000 hectares, only 77,000 hectares (20% of the new protection) can come from the Timber Harvesting Land Base (THLB). The THLB contains the low- and mid-elevation forest on gentle to moderate slopes that are critical for mountain caribou survival in early winter and spring. Even the protection of 77,000 ha of Timber Harvesting Land Base cannot reduce the allowable annual cut for five years.

These constraints all mean that most of the new habitat protection (like the old protection) is being concentrated at high elevations and on steep slopes — areas that are not included in the Timber Harvesting Land Base because they are too high or steep to log. Logging protection in these areas is like firemen protecting houses that aren't on fire while many that are receive little defense. This obviously facilitates the wholesale destruction of the mountain caribou's critical spring and

early winter habitat.

Government scientists have done the best they can do with this new protection allowance. The plans they have drawn up would lump 25,000 hectares of new protection in the West Cariboo Mountains, and 20,000 hectares in the Central Selkirks. These two allotments fall in areas proposed by the Valhalla Wilderness Society for new parks or conservancies. There is a concurrence of scientific opinion that these are high priority areas. VWS has scrutinized the scientists' proposals, and they would be a welcomed improvement in these two, relatively small, areas. We wish we could tell the public that this will save the mountain caribou, but it will not.

It is gravely disturbing that there are many planned cut-blocks within the areas proposed for no-logging zones that were approved before the new plan was announced. The government tight-fistedly insists upon allowing these to be logged. So even what the plan offers that is good may, in the end, be tragically fragmented by further logging.

Lastly, we come to what is perhaps the worst part of the plan. The government promised that the plan would be in place by the end of March 2008; but as this newsletter goes to press on December 1, a plan has not been approved and the 77,000 hectares has so far failed to materialize. The planning teams did their work relatively quickly, and they are not responsible for this delay. Their plans mean nothing until the government signs an Order to put them into action.



Craig Pettit

*This is 2008 logging in the Downie Creek Valley near Revelstoke. It is mountain caribou habitat that is left out of the plans for new protection. The area is being logged by the Revelstoke Community Forest.*

## Rosie's agony exposed the suffering that is befalling wolves and other wildlife in the name of mountain caribou protection

In the South Selkirk Mountains and the South Purcell Mountains, there are small remnant groups of mountain caribou that cross the BC-US border. For many years there has been a cross-boundary effort to save them. But all the while, BC has continued to allow their critical habitat to be logged, in spite of 20 years of scientific reports showing that logging was the chief cause of the decline in mountain caribou populations.

The terms of the proposed new Mountain Caribou Recovery Plan instruct government biologists to produce two-and-a-half times more mountain caribou in the South Selkirks, and seven times more in the South Purcells, within 20 years. However, the South Selkirks have been assigned only 3,803 hectares of new protection within the Timber Harvesting Land Base, and the South Purcells only 5,984 hectares. Reports by the government biologists state that these amounts are not significantly more than what these areas already have. They say their planning units do have more critical habitat to protect, but it is not covered by the small amount of new protection offered. In other words, the habitat of the caribou that are closest to dying out will continue to be logged.

In the Revelstoke Planning Unit, government biologists have admitted openly that meeting the government's goal of increasing their planning unit's caribou population to 363 animals will be largely dependent upon increased killing of predators and competitive prey species such as moose, elk and deer. They make clear that less habitat protection means more killing. The biologists have also said at various times that in order for predator control to work, it would have to be continued for 60-100 years to have any significant effect. Besides wolves and cougars, the government is also proposing increased killing of two species-at-risk — grizzly bears and wolverines — as



**MOUNTAIN CARIBOU RECOVERY PLAN FOR HERDS WITHOUT ENOUGH HABITAT PROTECTION**  
This is the “humane” leghold trap that crushed Rosie's legs

well as black bears.

While habitat protection has been delayed, predator control began over a year ago without a plan in place. In several planning units this is happening under the disguise of relaxed hunting regulations that started in 2007. The Thompson Region introduced extended hunting seasons for cougar, wolf and black bear, as well as removal of the bag limit on wolves. The Cariboo and Omineca regions both removed bag limits on wolves.

But in May 2008 the dirtiest secret of BC caribou recovery was laid bare when Rosie, the beloved dog of Steve Austin and his wife, stepped into a trap near Creston. The powerful steel jaws crushed her leg, and



Steve Austin

Courtesy of Fur-Bearer Defenders

Rosie

while she was screaming in pain, she stepped into another one, which crushed a second leg. The owner had to drive 23 kilometres to find a veterinarian, with the dog crying in agony the whole way. Rosie had to be euthanized. The traps had been authorized by the BC Ministry of Environment as part of the mountain caribou recovery program. They were set in a well-used recreation area, with no signs to warn people. The government later explained that if people know about the traps, they will spring them or remove them.

Government scientists have defended predator control in general. They say that there is not enough forest left in the most heavily clearcut planning units to save mountain caribou, even if the government were willing to protect it all. But the whole dilemma is created by single-species conservation. We should not be

Continued next page

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# QUESNEL LAKE WILDERNESS

**Joint Valhalla Wilderness Society-First Nations field trip finds abundant signs of First Nations occupancy, rare species, old-growth inland rainforest, extraordinary biodiversity**

**Fabled Penfold rainforest wilderness still largely intact**

**Government mountain caribou Habitat Team recommends 25,000-hectare no logging zone**



Courtesy Cody William

Craig Pettitt



Left: Teena Sellars of the Soda Creek Band amidst ancient legacies of nature and aboriginal culture. Above: Williams Lake Band member Cody William in a marsh where the Penfold Valley flows into Quesnel Lake.

In 1994 the Penfold Valley at the head of the North Arm of Quesnel Lake was part of the most resplendent, intact and wild tract of Inland Temperate Rainforest in existence, connected as it was to Wells Gray Provincial Park by the Niagara River; and it was lined up for inclusion within the new Cariboo Mountains Provincial Park. The betrayal of the Penfold and its sacrifice to the logging industry in the public planning process of that year was a tragic loss. But the arrival of a mountain pine beetle attack in pine forests sent the logging companies racing outside the Penfold to log the dying and dead pine forest. As a result, despite the incursion of a several logging roads and clearcuts, the head of the North Arm of Quesnel Lake and the Penfold remain one of the largest bodies of unprotected old-growth Inland Rainforest left in the province.

In October 2007, with the generous help of the Vancouver Foundation, the Valhalla Wilderness Society organized a seven-day field trip into the head of the North Arm of Quesnel Lake. Present on the trip were VWS director and forest technician Craig Pettitt, lichenologist Toby Spribille, Teena Sellars from the Xats'ull First Nation (Soda Creek Band), Cody William from the Natural Resource Team of the T'exelc First Nation (Williams Lake Band). These are two of the four bands that make up the Secwepemc Nation. Two members of the Quesnel River Watershed Alliance were also present.

The First Nations representatives found abundant signs of their cultural use and occupa-

tion. Wilderness values were very high. The travellers were thrilled to hear wolves howling at night and to find grizzly bear tracks along the lake. Local guides told of mountain caribou paths. For years there have been claims that mountain caribou do not use the low elevation cedar-hemlock forests in the West Cariboo Mountains. But historical and scientific records do not support this, as shown by the photo at top right, given to VWS by a local resident.

Lichenologist Toby Spribille has surveyed lichens in a wide range of locations throughout the Inland Rainforest Region, and he found that the forest along the lake had the greatest abundance and diversity of lichen species anywhere in the Region. Spribille believes the West Cariboo Mountains are likely the core of the Inland Temperate Rainforest and the richest hotspot for coastal lichens occurring inland. He discovered one lichen species new to science, along with numerous other rare species. There were more sites with the very rare *Nephroma occultum* (Cryptic paw lichen), which is listed as a species-of-concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), than have ever been

found anywhere else.

Members of the exploration team were surprised to discover that sockeye salmon were spawning directly in the shallow bays of the lake as well as in the river. This attracted bald eagles and grizzly bears, which were taking the remains of dead salmon into the forest to feed on them, dropping pieces along the way that fertilized the soil. They were also scattering high-nitrogen droppings throughout the forest, with the eagles leaving them in the branches of trees. Spribille believes that this contributed to the wild abundance and diversity of lichen growth. There were species present that belonged only to nitrogen-rich environments and would never have been found in the area without the salmon, eagles and grizzly bears. In addition, limestone rock formations supported lichen species associated only with limestone. All these elements combined make the head of Quesnel Lake and the Penfold Valley a very rare and unique ecosystem entwined with the history and culture of aboriginal people.

Spribille recommends that logging should be stopped in the Penfold and the head of Quesnel Lake because of numerous rare lichen species. The BC government's Mountain Caribou Habitat Team has recommended 25,000 hectares for no-logging zones. Unfortunately, the plan leaves about 12,000 hectares unprotected, and government scientists say this could have consequences to the mountain caribou herd's survival. Perhaps the greatest hope for this area lies with First Nations.



Craig Pettitt

*Nephroma occultum* - a Species of Special Concern to COSEWIC

## Rosie's Agony (continued from previous page)

trying to protect species at risk, we should be trying to protect ecosystems at risk. If that had been the case, the mountain caribou would never have lost so much habitat. Now, even though it may not help the mountain caribou, it is critical to protect *all* of the old-growth forest that is left in these tragically fragmented areas; if this is not done, many more old-growth species could be lost. Protecting all remaining old-growth forest would give the mountain caribou their best chance of survival.

Many scientists are furious about the use of predator control to artificially pump up caribou numbers. Top carnivores such as wolves and cougars are critical to the health of ecosystems. They aid the survival of many plant communities and small animal species by keeping prey species as well as mid-sized predators in check. Areas where the top predators have been slaughtered have experienced heavy overgrazing of wildlife habitat and the subsequent death by starvation of thousands of deer and elk.

In 2007 50 independent scientists signed a petition saying that predator control was being over-emphasized in the planning. The petition calls, not only for protection of adequate habitat, but also for decommissioning hundreds of kilometres of logging roads that create travel lanes for predators to access caribou.

Vancouver-based Fur-Bearer Defenders first alerted the public to the story of Rosie. They were told by the Ministry of Environment that the traps that killed Rosie are "humane" for their intended victims (wolves) since they have larger legs. But all kinds of wildlife could step into these traps, and Rosie has shown us what they endure. There is no one to take them to the veterinarian for a quick death. What's more, let a child or even an adult step into one of these traps, and we shall quickly find out how humane they are for animals with big legs. The traps were so strong that Rosie's owner could not open the jaws, and had to carry his pet to the vet with the traps still on her legs. In the wild, the animals are often left to suffer in agony for days or weeks

before they die; many gnaw their legs off to escape.

Is it right to knowingly, deliberately destroy the critical habitat of a species, even after it is known that the logging is driving the animals towards extinction, then blame predators for killing the last few members of the herd, and set off on a new kind of killing spree against the predators that damages the ecosystem even more? This leads nowhere but to a continuous downward spiral into more and more wildlife deaths, more cruelty and more ecological damage. Humankind has tried to lock itself away from feeling connections with fellow creatures to pursue its own selfish ends. But science has never been closer to showing us that the species we kill may ultimately be our own.

**WRITE: Tom Ethier, Director/Fish and Wildlife Branch/Environmental Stewardship Division/Ministry of Environment/PO Box 9391/Victoria, BC V8W 9MB.**

**VISIT: [www.BanLegholdTraps.com](http://www.BanLegholdTraps.com)**



# PLEASE JOIN THOUSANDS OF PEOPLE WHO ARE TAKING ACTION

## GRASSROOTS ENVIRONMENTAL DECLARATION for BC'S INLAND RAINFOREST REGION

The following organizations have signed an accord calling for "Full protection of all old-growth forest 140 years or over, including low- and mid-elevation Interior Cedar-Hemlock."

For full text see [www.vws.org](http://www.vws.org)

Applied Ecological Stewardship Council of BC  
BC Pathways  
Conservation Biology Center  
Friends of the Grove  
Friends of the Lardeau  
Kids for Caribou  
Granby Wilderness Society  
Koordinationszentrum Natur und Umwelt  
Perry Ridge Water Users  
Pro Terra  
Purcell Alliance for Wilderness  
Raincoast Conservation Society  
Save-The-Cedar League  
Selkirk Conservation Alliance  
Sinixt First Nation  
Valhalla Wilderness Society  
Wild Earth  
Western Canada Wilderness Committee  
World Temperate Rainforest Network



Berlin, January 31, 2008  
German environmental group Robin Wood  
delivers 4,884 letters to the Canadian Embassy

Thank you to the German people for their  
ongoing concern and generous help.

[www.robinwood.de/german/presse/080131en.htm](http://www.robinwood.de/german/presse/080131en.htm)  
[www.naturschatz.org/kanada/mountain-caribou.htm](http://www.naturschatz.org/kanada/mountain-caribou.htm)

"Honorable Mr. Premier, the Inland Rainforest and the Mountain Caribou represent a unique nature that only exists in British Columbia. It is your responsibility to maintain this heritage of humankind for the next generations on this planet."

Signed by 4,884 German citizens

\*

"The government of British Columbia bears special responsibility for the Inland Rainforests ... How long will it take before the BC government takes biodiversity seriously? In BC's inland rainforest, new species are being discovered at a faster rate than in any other North American ecosystem."

Robin Wood  
Koordinationszentrum Natur und Umwelt  
Naturschatz  
Urgewald  
Stefan Wenzel, (Chairman,  
Green Party - Lower Saxony)

\*

PETITION SIGNED BY 50  
CANADIAN AND US SCIENTISTS  
see full text at [www.vws.org](http://www.vws.org)

"Only one course of action will avert the loss of mountain caribou over most or all of their current range ... As a first priority, legislated full protection of all mountain caribou old-growth forest 140 years or older through new provincial and national parks, fully protected caribou old-growth management reserves, and wildlife sanctuaries."

See the full petition at  
[www.vws.org](http://www.vws.org)

Dear Premier Gordon Campbell,

"I am very concerned with recently announced BC government plans that are clearly inadequate to save the endangered mountain caribou. ... Please rewrite the plan to ensure that it does not allow any further ancient temperate rainforest logging or other habitat diminishment in the entire range of the mountain caribou's habitat..."

Over 1,800 letters sent through Ecological Internet  
see [www.inlandtemperaterainforest.org](http://www.inlandtemperaterainforest.org)

\*

"We are opposed to killing predators as a means of increasing the numbers of mountain caribou ... The undersigned declare a state of emergency because mountain caribou populations are declining rapidly ... We have therefore joined together to demand:

"An immediate moratorium on all logging (including that under the guise of beetle management), and on issuance of new recreation tenures within any caribou habitat until the items in this submission have been considered in open public process and recovery plans based upon habitat protection and restoration are completed and implemented."

Applied Ecological Stewardship Council of BC  
BC Pathways  
Conservation Biology Center  
Friends of the Grove  
Granby Wilderness Society  
Kids for Caribou  
Koordinationszentrum Natur und Umwelt  
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Raincoast Conservation Society  
Save-the-Cedar League  
Selkirk Conservation Alliance  
Slocan Valley Watershed Alliance  
Valhalla Wilderness Society  
Western Canada Wilderness Committee  
Wild Earth  
World Temperate Rainforest Network



Colleen McCrory with her son in Valhalla Park

### CRITICAL SITUATION

There is no inheritance more important to pass on to one's children than a healthy planet. The conditions for quality life on the planet are humanity's heirloom. The campaign to stop the logging of old-growth Inland Rainforest is critically important to the future of our children. Funding for environmental organizations is very threatened by the recent economic collapse. What ever you can give to further the cause, whether large or small, is crucially important. Small donations become big when many people pitch in; and if you can give more, please do.

THIS PUBLICATION WAS MADE POSSIBLE BY THE GENEROUS, PUBLIC-SPIRITED DONATIONS OF: GOLDMAN FOUNDATION, MCLEAN'S FOUNDATION, HARRIMAN FOUNDATION, PATAGONIA, FANWOOD AND THE WORLD WILDLIFE FUND.

### Valhalla Wilderness Society Membership and Donations

All donations are tax creditable, Charitable Tax # 119260883 RR

Please sign me up for membership (\$10.00) \_\_\_\_\_.

I would like to make a donation of \_\_\_\_\_.

I would like to become a Sustaining Donor at the rate of \_\_\_\_\_/month.

Please make an automatic withdrawal from my credit card. The withdrawal should occur on the  1st day of each month or the  15th day of each month, beginning the month of \_\_\_\_\_, 2009.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Fax: \_\_\_\_\_

VISA #: \_\_\_\_\_ MC #: \_\_\_\_\_

Exp. Date: \_\_\_\_\_

Signature: \_\_\_\_\_

### IF YOU CAN DO ONLY ONE THING FOR THE ENVIRONMENT, WRITE THE BC GOVERNMENT TODAY. SOME KEY POINTS:

- ★ No more endless talking and planning to protect some forest someday. Action is needed immediately. STOP LOGGING OLD-GROWTH FORESTS IN THESE CATEGORIES:  
Old-growth Mountain Caribou habitat  
All old-growth Cedar-Hemlock forests 140 years or older
- ★ Twenty environmental groups, 50 scientists and a number of environmental groups in Europe have called for an end to logging all old-growth 140 years or older in the Inland Rainforest Region. They have asked for a moratorium on logging until this can be decided.
- ★ The Forest Practices Board has asked for a 10-year moratorium on logging old-growth inland temperate rainforest in the Robson Valley.
- ★ A moratorium throughout the Inland Rainforest Region is needed. It would allow time to create a plan that will endanger ecosystems and many species at risk, not just one.
- ★ Placing large amounts of forest reserves at high elevation while most of the logging is occurring and low- and mid-elevations is unacceptable. The lower forests have the highest biodiversity and carbon storage.
- ★ New protection should preserve the remaining large intact areas — the Selkirk Mountain Caribou Park Proposal, the Quesnel Lake Wilderness and the Walker Rainforest Wilderness on the VWS map. The Mountain Caribou Recovery Process has recommended new forest reserves in these areas, but more and better protection is needed.

Address for letters: Premier Gordon Campbell  
Room 156  
Parliament Buildings  
Victoria, BC V8V 1X4

Printed by HORIZON PUBLICATIONS in Vancouver, British Columbia, on 100% post-consumer recycled newsprint from Snowflake Mills in Arizona.

