

Western CanadaWilderness Committee





OUR GREAT BOREAL FOREST

THE SECRET OF THE "PRAIRIE" PROVINCES

North will kill, if left unchecked, everything else."

Margaret Atwood



THE UNKNOWN BOREAL FOREST

By Dr. Jim Butler Professor of Parks, Wildlife and Conservation Biology, University of Alberta, Edmonton

There is a mystique about the boreal forest. It is the most extensive forest type in Canada and one of the least understood. To a society of North Americans who seek to balance the technology and stress of their urban lifestyles, it is the last great roadless and wild area.

The great boreal forest is one of Canada's best kept secrets - it is under-rated and under-marketed, a potential giant for our tourism industry.

Wood warblers' are among the most sought-after birds by those informed about wildlife. Their bright coloration makes them the champagne of the bird world, and they are the most common bird in the boreal forest. Twenty species of warblers occur in Alberta's boreal forest. The magnificent Blackburnian warblers live in the highest tips of the spruce trees. Their orange-yellow faces shine like flames when touched by sunlight. Cape May warblers have an orange tinge to their faces and a distinctive yellow collar. In the mid-levels of these spruce forests nest the rose-colored, bay-breasted warblers, which have a black mask like the lone ranger. All three of these warblers are at risk in Alberta. Many warblers are threatened by habitat destruction in their wintering grounds, as far away as South America and the Caribbean. And because they require old growth conifer for nesting, logging threatens them in their Canadian breeding grounds.

More than 200 other species of birds are found in the western Canadian boreal, including 6 of the 10 'most wanted' birds listed by the American Birding Association. These are the boreal owl, gyrfalcon, great gray owl (at risk in Alberta), Connecticut warbler, northern hawk owl, and the yellow rail. Boreal birds are also well represented in the 'most favorite' category listed by the ABA. Our pileated woodpecker is the fifth most favorite bird in North America!

Birdwatching is the second fastest rising recreational activity in North America. Birdwatchers spent more than 40 billion dollars in North America in 1993. Every May the small town of Leamington, Ontario, near the bird-watching destination of Point Pelee National Park gets an economic infusion in excess of \$4 million from birders.



Porcupine

Jim Butler

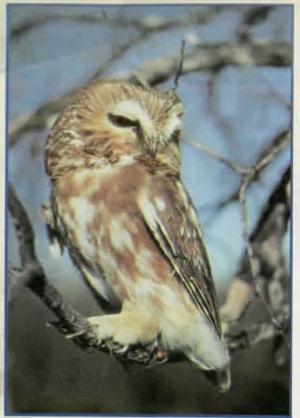
Perhaps the four most charismatic mammal species of the boreal forest are the wolf, lynx, river otter, and woodland caribou. Extremely high satisfaction is also derived from sightings of moose, porcupine and beaver. diversification for northern communities and take some pressure off the mountain parks. One can only hope that Alberta's traditional favoritism toward resource industries like forestry and oil and gas will not destroy the northern wilderness that is our heritage and our future.

The distinctive "who cooks for you who cooks for you" call of the barred owl across northern lakes is a charismatic wildlife encounter, perhaps only third in importance behind the howl of a wolf and the wail of a northern loon.

The Magic of the Boreal

I recall one hectic Friday in June when I had driven up from Edmonton to a campground in the Lakeland area of Alberta's boreal forest. I arrived at dusk, still dictating office correspondence. Within ten minutes of my arrival, I launched my canoe. The lake was a still as I've ever seen it. With each paddle stroke I left behind not only the shoreline, but also my obligations at work.

Swainson's thrush songs mingled with those of hermit thrushes, along with the occasional song of the Lincoln's sparrow. Four silver-haired bats flapped slowly and lazily in their traditional fashion across the water's surface, once even at eye level between myself and the bow of the canoe. Cupping my hands to my ears I could hear the repetitious notes of the saw-whet owl. Then a lone barred owl boomed its eight distinctive notes and did so again three or four more times. A single hoary bat, a classic boreal forest species, joined in with the foraging silver hairs, like an F-16 jet passing through a group of crop dusting biplanes. I called to the barred owl who had been silent for a while, and he answered me. As I returned to the shore, fireflies twinkled like fairies and from the darkness a white-throated sparrow sang "Oh dear, sweet Canada, Canada, Canada." The boreal forest - a secret worth telling, a landscape worth preserving.



Saw-Whet Owl: Edgar T. Jones

DOLLARS & SENSE:

THE TRUE COSTS OF ALBERTA'S OIL SANDS

by Chris Genovali

Director, Canadian Forest Protection Project, Pacific Environment and Resources Center

The biggest oil development scheme in the history of North America is about to commence. Oil company consortiums and corporate investors plan to invest more than \$25 billion over the next twenty years into mining the northern Alberta oil sands.

The oil sands occupy an area the size of New Brunswick in Alberta's boreal forest. They contain an estimated 300 billion barrels of oil, approximately one third of the world's oil resources. Industry predicts that by the year 2020 they will be producing up to 1.2 million barrels a day.

Not surprisingly, additional pipeline capacity to the USA is in the works. The planned route for

BEAUTY AND

tons apiece, to extractors where the material is heated until the sand separates from the oil. It takes two tons of sand to produce one barrel of oil.

Since 1978 Syncrude has excavated 1.5 billion tons of 'over-burden', the 20 meter thick layer of muskeg, gravel and shale that sits atop the oil sands.

The deeper oil sands reserves are recovered by drilling horizontal wells and injecting massive amounts of steam into the ground. This method requires nine barrels of water to produce one barrel of oil. A Shell Canada oil sands plant has already dried up one lake and lowered the level of another so that it froze solid, killing all the fish. Shell is currently taking enormous amounts of water from the Peace River for its oil sands production.

There is serious concern about the long term effect of the steam injection process on boreal hydrology. Drying from oil sands developments combined with global warming and increased fire patterns could transform the boreal into a huge carbon bomb.



Clearcut, Dore/Smoothstone

Bruce Slusar

Oil sands development produces four times more upstream greenhouse gas emissions than conventional oil reserves. The oil sands are already Alberta's biggest single emitter of sulfur dioxide. Alberta emits 500,000 tons of sulfur dioxide anOIL SANDS DEVELOPMENT

PROPOSED DORE/
SMOOTHESTONE PROTECTED
AREA



OUT OF SIGHT,

The secret of the 'prairie' provinces is that they are far more than wheat fields, endless sky and cattle. Well over fifty per

cent of their land mass is blanketed with boreal forest. Until the last decade these huge northern forests remained as vital carbon-sinks and intact wildernesses webbed together by water. Then the technology evolved for manufacturing pulp from hardwoods, and the great boreal

In most cases raw petroleum and ore end countries - exporting or jobs with th

rush was on. Piggybacking on the billions of dollars worth of pulp mill expansions are coal, nickel and uranium mines, and explosive oil and gas developments.

Perhaps the most frightening specter is the astronomical \$25 billion expansion of the oil sands in Alberta. The amount of water required by this Goliath will dry up forest ecosystems, and produce massive greenhouse gas emissions, escalating global warming.



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For thre to h pais est Not surprisingly, additional pipeline capacity to the CDS is in the works. The planned route for this "express pipeline" is through threatened native prairie grasslands which support more than 100 endangered species.

Alberta environmentalists are calling upon the federal government to include oil and gas export projects in the Canadian Environmental Assessment Act. Between 1984 and 1993 almost 600,000 kilometers of seismic line was shot in Alberta. In total over 225,000 wells have been drilled; 1.5 million kilometers of seismic road access have been cut; 750,000 kilometers of all weather road access built; and 500,000 kilometers of pipeline right-of way cut, all without federal or provincial Environmental Impact Assessments. Meeting the projected export demand to the year 2000 will require thousands more wells.

More soil has been excavated by Syncrude than from the construction of the Great Pyramid of Cheops, the Great Wall of China, the Suez Canal, and the 10 biggest dams in the world combined.

Oil sands reserves at or near the surface are strip mined. Huge mounds of oil sand are excavated and moved by 3 story high trucks weighing 240 berta's biggest single emitter of sulfur dioxide. Alberta emits 500,000 tons of sulfur dioxide annually. Petroleum operations in Alberta and nearby parts of BC are the second largest source of sulfur emissions in North America, next to the industrial regions of eastern Canada and the USA.

While forestry and oil and gas activity skyrocket, Alberta's Ministry of Environmental Protection is being slashed. Over the next three years the department will lose 500 jobs and \$164 million. In addition the province's new 'Regulatory Reform' initiative means that the oil industry will essentially be handed the responsibility for monitoring its own water and air emissions.

The new oil sands developments overlap much of the 10,000 square kilometer unceded traditional territory of the Lubicon Cree. The Lubicon are already struggling to preserve their boreal homeland from forestry and conventional oil and gas. With the huge additional profits to be made from oil sands developments the future of the Lubicon looks bleaker still.

The oil sands developers are promised major tax breaks, and they will pay a minuscule one percent royalty on oil sands production. Alberta's government continues to subsidize a destructive, polluting industry at the expense of energy efficiency and alternatives to fossil fuels. The oil sands may provide a short term boom, but at what cost?







LOGGING ESCALATES

By Joys Dancer: Saskatchewan Forest Conservation Network & Barb Handbridge: Dore/Smoothstone Lakes Wilderness Protection Association, Saskatoon.

Saskatchewan's Mixedwood boreal features the greatest diversity of breeding birds of any forest type in North America. Rare species in Saskatchewan's forests include 88 plants, 8 birds, and unknown numbers of insects, fungi and microorganisms. But industry is converting the forest into even aged

blocks with a maximum age of about 60 years. This will eliminate numerous species which rely on the complex structures provided by old growth.

The three forestry companies which hold FMLA tenure for most of the "commercial forest zone" in Saskatchewan's boreal are all planning expansions when the prices of lumber, pulp and OSB recover. In the west, Mistik Management plans a sawmill expansion. (Mistik also supplies a CTMP pulp mill near Meadow Lake.) In centre of the province Weyerhaeuser plans to increase the capacity of its kraft pulp mill, paper mill, and sawmill. To the east, Saskfor-

The Dore/Smoo

Wilderness Protect

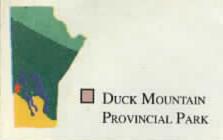
working to protect of

areas of relatively

forest in Sas

Great Blue Heron

THE BEAST



OUT OF MIND

Unique wilderness areas like Dore/Smoothstone in Saskatchewan and historically significant provincial parks like Mani-

w pulp, logs, end up in foreign gour value added them. toba's Duck Mountain, are being clear cut as you read this. Duck Mountain Provincial Park is famous for its lakes, loons, and the ghost of Louis Riel.

WCWC's Boreal Forest Campaign is working with local people to stop

ogging in provincial parks and significant wildlands, and to reate new protected areas. We are about to present plans for two new parks in Alberta's boreal forest.

for many Canadians, both the wonder of the boreal and the hreats it faces are out of sight, so out of mind. We urge you to help spread the word, and support our boreal forest campaign. • Gray Jones, Executive Director WCWC Boreal Forest Campaign.



DUCK MOUNTAIN PARK:

by Lindy Clubb: Western Canada Wilderness Committee, Manitoba

Duck Mountain Provincial Park is Manitoba's wilderness at its finest. Part of the Manitoba escarpment, it rises like a green island from the surrounding farmlands. Its 1,250 square kilometers are crossed by only two roads. The park is traversed and drained by rivers, creeks and valleys in a mixed wood setting. Last week I watched a great blue heron lift off from the spring run-off in the Favel River; a spectacular contrast to the raptors floating overhead. A profusion of colorful undergrowth supplied food and shelter for animals in a landscape textured with granite, grasses and hillsides.

Unfortunately, while I played in the woods, I couldn't forget that 80% of this magnificent park is slated for logging. The scale of logging will triple now that Louisiana Pacific is buying hardwoods for its oriented strand board plant in nearby Minitonis. Softwoods go to the Repap pulp mill north of the park, and to ten small sawmills in Swan River.

Local people have fought for ten years to protect sensitive areas like mineral licks, calving grounds for moose and elk, and several of the more spectacular valleys and ridges. All they have won are a few small back country additions to the park, which the province's new Parks System Plan spares from logging. Not surprisingly, the terrain in these areas is too steep for logging equipment.

The rest is well worth saving. To the south the park begins with the highest elevation in Manitoba, the 500 meter Baldy Mountain. In these cool, moist heights, trees give dense canopy cover to violets, bunchberry, snowberry, sarsaparilla, win-



Three Toed Woodpecker

Edgar T. Jones

Manitoba's public remains, for the most part, blissfully unaware of the policy of cutting in natural parks.

populations. The park is also home to black bears, cougars, lynx, deer, moose, elk, beaver, foxes and wolves, to name a few.

Logging is taking place all around the park's borders. Within Louisiana Pacific's huge allocation in the surrounding Duck and Porcupine Forests, only .2% of the wildlife habitat is protected. Unregulated logging on private lands is also seriously impacting habitat, just as it is in Alberta.

A land use study and presentation to students in Swan River revealed that almost everyone had used the park and wanted it protected, but didn't realize it is being logged.

Canadian Wildlife Service researcher Keith Hobson has given the provincial and federal En-



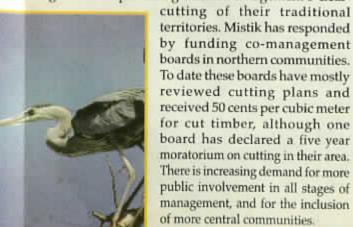
S IN SASKATCHEWAN

MacMillan, a 50/50 partnership of a Saskatchewan crown corporation and MacMillan Bloedel, plans to assume management of the area currently supplying a plywood plant, stud mill, and an existing and proposed OSB plant.

noothstone Lakes ection Association is t one of the few large ly untouched boreal askatchewan.

An unbiased federal review of the new Saskfor-Macmillan OSB plant is essential considering its cumulative impacts with existing facilities in Saskatchewan, and Louisiana Pacific's recently constructed OSB plant across the border in Swan River, Manitoba.

In 1992-93 The Protectors of Mother Earth held a year and a half long blockade protesting Mistik Management's clear-



To date these boards have mostly reviewed cutting plans and received 50 cents per cubic meter for cut timber, although one board has declared a five year moratorium on cutting in their area. There is increasing demand for more public involvement in all stages of management, and for the inclusion

Continued on page 4.

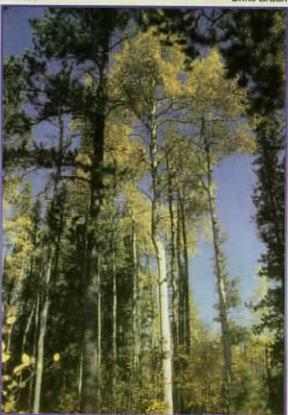
tergreen, hazel, roses, mosses and lichens.

Duck Mountain's forests host the largest neotropical bird population in North America, including vireos, warblers, siskins, and fly catchers, as well as a great variety of wetland bird communities. Habitat loss is reducing both of these



Delimber

Chris Bruun



Alberta Mixedwood Borea

Albert Karvonen

vironment departments eloquent evidence of the need for old growth and snags for migrant birds and cavity nesters. Dan Soprovich, a wildlife biologist and local resident, states that plenty of wood exists outside of the park, and it is only greed and prior allocations which drive the logging within Duck Mountain Park boundaries.

Duck Mountain Provincial Park is crucial for the survival of numerous species of birds, animals and plants. The park provides an important source of income for local guides and outfitters, and subsistence food for nearby native communities. Duck Mountain Park is still a valuable example of what existed before Manitoba's government sold off our communal resources behind closed doors, at bargain basement prices. But if it continues to be a park in name only, all these values will disappear. We want Duck Mountain Provincial Park preserved. After all, we are only borrowing it from our children.



Black-throated green warbler



Beaver

Chris Bruun

LOGGING ESCALATES IN SASKATCHEWAN (cont.)

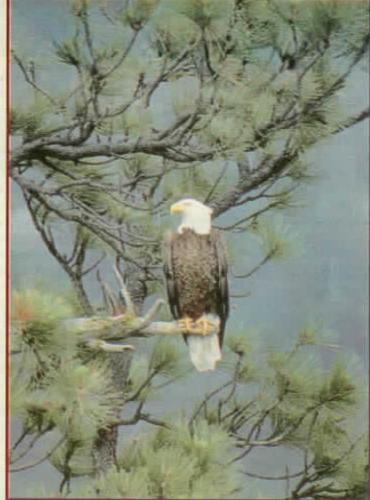
The Dore/Smoothstone Lakes Wilderness Protection Association is working to protect one of the few large areas of relatively untouched boreal forest in Saskatchewan. This 550,000 ha. region north of Big River includes Dore, Smoothstone, Sled, Emmeline, and Beaupre Lakes, and Lac la Plonge. The trees here are typically 80 years or older. The diverse growth patterns and combinations of hundreds of plants growing under the mixed tree canopy are one of the wonders of this ecosystem.

The soils in the Dore/Smoothstone area are very fragile - in places only a one to three inch layer of organic material covers glacial till as fine as baby powder. If the organic layer is stripped during clear cutting, forests can all too easily be changed to desert.

In addition to an incredible variety of bird species, this forest is home to moose, woodland caribou, white-tailed deer, elk, bear, wolverine, beaver, mink, muskrat and many other small mammals. The diversity of fish species is also high, including most of the species found in Saskatchewan.

In response to public concern, in early 1995 approval of logging and road building in a portion of the Dore/Smoothstone area was delayed. Nonetheless logging activity continued in the area. Since early winter, 1996, Weyerhaeuser has been 'salvage logging' areas burned last summer. Although only fire-killed trees are supposed to be cut, live trees have also been harvested. Cuts extend right to the edge of Dore Lake, in contravention of normal buffer requirements.

The Dore/Smoothstone Lakes Wilderness Protection Association calls for the designation of the Dore/ Smoothstone Wilderness as a protected area. Traditional land uses like trapping, commercial fishing, ecotourism and individual tree selection logging would be acceptable, but clear cut logging and other large scale industrial activities must be halted. Dore/Smoothstone is the finest, and last sizable piece of boreal mixedwood forest left in Saskatchewan. Some parts of the proposed protected area have already been destroyed; let's save the rest before its too late.



Bald Eagle Edgar T. Jones





WCWC BOREAL INFORMATION PACKAGE

Inform yourself, your children and your community about the great boreal forest and global warming education is the first step toward preservation!

Package includes:

- · Great Northern Forest Albert Karvonen's 48 minute video (spectacular wildlife, scenery& ecological info.)
- . The Carbon Bomb: Climate Change and the Fate of the Northern Boreal Forests - 33 page booklet by Greenpeace International
- · Fire and Ice Climate Change and the Northern Forest pamphlet, back issues of WCWC's boreal information reports, and Global Warming and the Taiga (unpublished report by Dr. W.O. Pruitt)



All for \$35, including postage! (To order, please fill out form to the right)

Credits & Thanks

Editing: Karen Baltgailis • Photos: Edgar T. Jones, Jim Butler, Chris Bruun, Bruce Slusar, Shawn Baker, Jerry Markewich · Writing: Jim Butler, Chris Genovali, Lyndy Clubb, Joys Dancer, Barb Handbridge, Gray Jones · Design & Layout: Lorraine Swift • Thanks also to: Angus Ouchterlony, W.O. Pruitt, Albert Karvonen, Greenpeace Canada.

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YES!! I WANT TO HELP WCWC SAVE OUR BOREAL FOREST!

- Make me an individual member of the Western Canada Wilderness Committee for \$30 a year.
- Make us family members for \$52 a year that's only a dollar a week for wilderness preservation!
- I'd like to give you a tax deductable donation of: \$30 \$50 \$100 \$200 \$500 other
- Yes! I'd like to order WCWC's Boreal Information Package. I've enclosed \$35.

City / Town: Postal Code:

Name: _ Address:

Make cheques, VISA or Mastercard (include expiry date) payable to WCWC and send them to:

Western Canada Wilderness Committee

#4 - 10121 Whyte Avenue Edmonton, AB, T6E 1Z5

Phone: (403) 433-5323 • Fax:(403)433-5327

email: wewcab@web.apc.org * home page: http//www.ccinet.ab.ca/wewc