



# CANADA'S THREATENED *bird nursery*



## *the Boreal Forest*

### *New Protected Areas Needed Now*

The boreal forest, a region that makes up over half of Canada, is the home of many symbols of our national identity. Natural splendour abounds in this area, home to spruce trees, beavers and a sky full of songbirds. The boreal forest has sustained First Nations' cultures for generations. The boreal's rivers were Canada's first transportation network, and the landscapes of this area have inspired generations of Canadian artists, writers and musicians.

We carry symbols of the boreal forest in our pockets everyday: caribou on our quarters, and the common loon on our loonies. Unfortunately logging, oil and gas exploration, and other industrial activities threaten this forest, which stretches from the

Yukon and British Columbia to Newfoundland and Labrador.

Scientists studying the boreal forest have discovered a canary in the coal mine: they've found that the numbers of many bird species that breed in Canada's boreal forest are declining at a rapid rate. Populations of species such as Rusty Blackbirds, Canada Warblers and Evening Grosbeaks have

A recent study found that services like tourism, water filtration and the natural carbon storing function of Canada's boreal forest are worth 13.8 times more than the combined value of all resource extraction<sup>4</sup>. Only 6% of Canada's boreal forest is permanently protected. In comparison, about a third of the Amazon is in protected areas.<sup>5,6</sup>

have signed petitions asking the Canadian government to protect 50% of the boreal forest.<sup>2</sup>

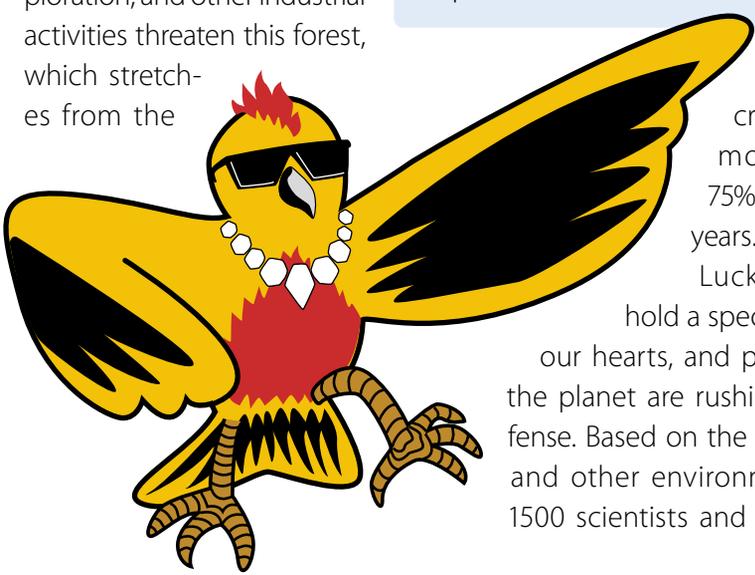
Bird watching is one of Canada's most popular recreational activities. In 2009, tens of thousands of North Americans participated in the Great Backyard Bird Count, recording over 11 million birds of 619 species in just 3 days. This interest in protecting birds and their habitat could also be a crucial factor in combating the global climate crisis; boreal forests contain more carbon than the Amazon rainforest, and in eastern Saskatchewan and western Manitoba the boreal forest is being logged at a rate faster than the Amazon.<sup>3</sup>

...continues on page 4

## THE AMAZON OF THE NORTH

Scientists have been working for decades to understand the reasons for the decline in boreal bird populations. In the process they stumbled upon one of the most important scientific discoveries of modern times: the boreal forest has a central role in regulating the earth's climate. The world's boreal forests are the largest terrestrial storehouses of potentially climate altering carbon on the planet.<sup>7</sup>

If left intact, the boreal forest would continue to absorb carbon from the atmosphere. However, when the boreal forest is destroyed or damaged, carbon is released into the atmosphere. The carbon stored in our boreal region is equivalent to more than 900 years of Canada's total greenhouse gas emissions.<sup>8</sup> Protecting our boreal forest is essential to confront the climate crisis.



crashed by more than 75% in recent years.<sup>1</sup>

Luckily, birds hold a special place in our hearts, and people around the planet are rushing to their defense. Based on the decline in birds and other environmental factors, 1500 scientists and 60,000 citizens



Top: Clearwater wilderness adjacent to Alberta Tar Sands (© Garth Lenz). Bottom: Pine Grosbeak (wiznoth), Northern Oriole (jessi.bryan). Used under creative commons licenses.

# Clock ticking for 3 billion birds



Bird Nursery Conservation Area – The Wilderness Committee is calling for 50% of this area to be protected because of high biological values, and the greatest diversity and abundance of nesting birds.

**Boreal Forest Sub-Types**  
1,500 scientists say that 50% of the Boreal forest region needs protection.

- Boreal Forest – Core (larger conifers and some deciduous trees)
- Boreal Northern Transitional Forest – Taiga (transition to mostly treeless Arctic Tundra – well spaced stunted trees & wetlands)
- Boreal Southwestern Transitional Forest – Aspen & Oak Parkland (transition to Prairie Grassland)
- Boreal Southeastern Transitional Forest – Great Lakes-St.Lawrence (transition to Deciduous Forest)

**CANADA** is world famous for the great diversity and abundance of its wild birds, from brightly coloured songbirds to abundant shorebirds and waterfowl. International scientific attention is now focused on birds that nest in boreal forests because some of their populations are crashing at an alarming rate. All of the birds pictured above are decreasing in numbers and some have decreased by over 75% since 1966, when accurate record keeping began.

The collapse of boreal bird populations is a matter of international significance. Most birds that breed in our boreal forests migrate to warmer climates for the winter.<sup>9</sup> Some travel as far south as Argentina.

Nearly half of the birds in Canada and the US rely on Canada's boreal forest

for their survival.<sup>10</sup> Each year during spring and fall migration about 3 billion birds cross the Canada/US border. However, radar data shows that the massive "clouds" of birds are shrinking fast; some have diminished by as much as 50%.<sup>11</sup>

Scientists say that a full 50% of each forest ecosystem within the boreal forest needs immediate protection. Although birds are a focal point of the call for boreal forest protection, these forests are important to many other species too.

The boreal forest also plays a crucial role in regulating the earth's climate. Boreal forests are the single largest land-based deposit of carbon on the planet. However, when

the forests are logged, a considerable portion of carbon is released into the atmosphere. **The climate changing impacts of the release of boreal forest carbon would be catastrophic.**

Boreal forest protection should begin in the Bird Nursery Conservation Area (see map), which includes the most threatened habitats, largest trees, and greatest diversity and abundance of nesting birds. This area is based on protected area representation, degree of threat, and importance to certain key birds, in particular those that need specific habitats such

as larger trees, and rich wetlands. Unfortunately, these areas are also of great interest for logging, mining, oil and gas, and tar sands developments.

So far, most parks in the boreal forest are located in the Taiga, where the tiny trees are not threatened by logging. **Now the battle is to convince federal, provincial and territorial governments to designate a network of protected areas encompassing at least 50% of the Bird Nursery Conservation Area.**

Reference list of birds (photos used under creative commons licenses, see [creativecommons.org](https://creativecommons.org/))  
 1 Bufflehead Duck (Dave and Rose), 2 Scarlet Tanager (Iveronesi), 3 Least Flycatcher (Seabamirum), 4 American Redstart (Adrián Afonso), 5 Hooded Merganser (Rick Leche), 6 Boreal Chickadee (Pbonenfant), 7 Blackburnian Warbler (Petroglyph), 8 Ruby-crowned Kinglet (ornitholoco), 9 Rose-breasted Grosbeak (Gavatron), 10 Rusty Blackbird (leppyone), 11 Palm Warbler (Seabamirum), 12 Magnolia Warbler (Gavatron), 13 Purple Finch (almiyi), 14 Bay-breasted Warbler (prairiedog), 15 Mourning Warbler (Scott A. Young), 16 Golden-crowned Kinglet (Efraser), 17 Northern Parula (stevehdc), 18 Black-throated Green Warbler (Gavatron), 19 Canada Warbler (M. Cormier), 20 Northern Flicker (Lucina M)

Boreal Songbird Initiative; Boreal Songbird Network; Save Our Boreal Birds; Boreal Information Centre; BirdLife International; Nature Canada; American Bird Conservancy; Ducks Unlimited; National Wildlife Federation; Audubon; Defenders of Wildlife; Environment for the America's; Canadian Boreal Initiative; Greenpeace; ForestEthics; NRDC; Pembina Institute; CPAWS; Sierra Club of Canada; Sierra Club USA; Ontario Nature; Nature Quebec; BC Nature; Federation of Alberta Naturalists; Natural History Society of Newfoundland and Labrador; Manitoba Naturalists Society; Nature Saskatchewan; Guyra Paraguay; Aves and Conservation; SAVE Brasil; Falklands Conservation; Aves Uruguay; Aves Argentinas



**Synchrude mine in the Tar Sands** (Chris Evans; The Pembina Institute), **Smokestacks spew emissions from Tar Sands processing** (S. Jocz), **Logging of Dancing Point in Manitoba** (Eric Reder).

identified a 1.5 million km<sup>2</sup> Bird Nursery Conservation Area in the part of the boreal forest most threatened by industry and critical to nesting birds.<sup>16</sup> At least half of each forest ecosystem in this area should be permanently protected, including the larger trees that many birds depend on. Governments should also focus on better land use planning throughout Canada's boreal forest, and get consent from First Nations communities before permitting new industrial development in their territories.

threat to the boreal forest. If the tar sands are fully exploited, 149,000 km<sup>2</sup> of Alberta and Saskatchewan boreal forest could be transformed into an industrial landscape.<sup>14</sup> Although only a small percentage of the potential area has been developed, the scars on the Earth are already visible from space.

To turn the disturbing trend of declining bird populations around, at least 50% of Canada's core boreal forest must be protected. Manitoba has taken the step of ending logging in most of its parks, but, like Saskatchewan and Alberta, it has not committed to protecting the areas needed for the survival of boreal songbirds.

Ontario and Quebec took a big step in 2008 by agreeing to protect hundreds of thousands of square kilometers of forest.<sup>15</sup> Unfortunately, most of this future parkland has not been determined, and many fear that the new parks will be in the Taiga zone i.e.

the northern fringe of the boreal with tiny stunted trees, permafrost and peat wetlands. The Taiga is less threatened by industry and is less critical to the survival of birds than the core area of the boreal forest.

The Wilderness Committee has

Scientists have confirmed that 40 boreal bird species are in decline, but most birds have not been studied thoroughly enough to confirm if their populations are dropping or not.<sup>12</sup> Scientists fear that as they learn more they will discover even more bird species in decline in the boreal forest. Meanwhile, boreal birds will continue to decline unless their habitat is protected so time is of the essence.

Some obvious culprits in falling bird populations are logging, oil and gas

The Wilderness Committee has worked on boreal forest research and protection for decades. In 1992 we opened the Boreal Research Station in northern Alberta, a unique partnership with the University of Alberta to study wildlife populations in older forests. The research led to the creation of Alberta's largest provincial park, the Caribou Mountains Wildland Park. In 2009, the Wilderness Committee completed a survey of birds in Saskatchewan, Manitoba and Ontario.

exploration, tar sands extraction, and mining. About half of Canada's wood harvest comes from the boreal forest, and most of the trees are turned into toilet paper, newsprint, and junkmail catalogues.<sup>13</sup>

Tar sands extraction is also a major

# Take Action to Save Canada's Bird Nursery

Write or call your elected officials today, and tell them how you feel about protecting a representative 50% of the boreal Bird Nursery Conservation Area now.

## Prime Minister Stephen Harper

80 Wellington Street  
Ottawa, ON, K1A 0A2  
Fax: 613-941-6900  
E-mail: pm@pm.gc.ca

Most importantly, **write to your Premier.**

Visit **writewild.net** for your provincial government's contact information and letter writing tips.

[info@wildernesscommittee.org](mailto:info@wildernesscommittee.org) • 1-800-661-WILD (9453) • [wildernesscommittee.org](http://wildernesscommittee.org)

# Yes!

## I want to protect Canada's Bird Nursery



Enclosed is:  \$25  \$50  \$100  Other \$ \_\_\_\_\_  
Fed. reg. charity #11929-3009-RR0001

I want to become a member! Enclosed is my annual fee for a:

\$35 Individual Membership  \$52 Family Membership

NAME \_\_\_\_\_ PHONE \_\_\_\_\_

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PROV \_\_\_\_\_ POSTAL CODE \_\_\_\_\_ EMAIL \_\_\_\_\_

The Wilderness Committee is Canada's largest membership-based wilderness preservation organization.



And return to the:  
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## Citations

- <sup>1</sup>Boreal Songbird Initiative (2009) *Boreal Bird Declines and Human Disturbances*. [www.borealbirds.org/SOBB-Materials/BirdDeclinesFactSheet-BSI.pdf](http://www.borealbirds.org/SOBB-Materials/BirdDeclinesFactSheet-BSI.pdf)
- <sup>2</sup>CBC (May 12, 2009) *Songbird decline shows need to protect boreal forest, environmentalists say*. [www.cbc.ca/technology/story/2009/05/12/songbirds-boreal-forest-protect-ontario.html](http://www.cbc.ca/technology/story/2009/05/12/songbirds-boreal-forest-protect-ontario.html)
- <sup>3</sup>Hobson, Keith, A. (December 2002) "Large-Scale Conversion of Forest to Agriculture in the Boreal Plains of Saskatchewan." *Conservation Biology*; Canada's Boreal Forest: A vision for and commitment to world-leading conservation by Ducks Unlimited Canada (no date)
- <sup>4</sup>Mark Anielski & Sara Wilson (2009) *Counting Canada's Natural Capital: Assessing the real value of Canada's boreal ecosystems*. [www.borealcanada.ca/documents/BorealBook\\_CCNC\\_09\\_enFINAL.pdf](http://www.borealcanada.ca/documents/BorealBook_CCNC_09_enFINAL.pdf)
- <sup>5</sup>Canadian Boreal Initiative (no date) *About Canada's Boreal* [www.borealcanada.ca/boreal-did-you-know-e.php](http://www.borealcanada.ca/boreal-did-you-know-e.php)
- <sup>6</sup>Yale School of Forestry (2006) *Model Shows Amazon Conservation Strategies Inadequate* <http://environment.yale.edu/topics/985>
- <sup>7</sup>See citation 5
- <sup>8</sup>Canadian Boreal Initiative (no date) *About Canada's Boreal* [www.borealcanada.ca/boreal-did-you-know-e.php](http://www.borealcanada.ca/boreal-did-you-know-e.php)
- <sup>9</sup><http://www.birdday.org/resources/factsheets/overview.pdf>
- <sup>10</sup>Boreal Songbird Initiative (no date) *The Boreal Forest: Bird Nursery of the North* [www.birdday.org/resources/factsheets/overview.pdf](http://www.birdday.org/resources/factsheets/overview.pdf)
- <sup>11</sup>David S. Wilcove (2007) *No way home: the decline of the world's greatest animal migrations*. p 22.
- <sup>12</sup>See citation 10
- <sup>13</sup>*Canada's boreal forest: A Sierra Club of Canada Fact Sheet* (no date) [www.sierraclub.ca/img\\_upload/a38c14d2c65b43c7910bb4fb3317aa7/boreal\\_fact\\_sheet.pdf](http://www.sierraclub.ca/img_upload/a38c14d2c65b43c7910bb4fb3317aa7/boreal_fact_sheet.pdf)
- <sup>14</sup>Pembina Institute (2006) *Oil Sands Fever* [http://pubs.pembina.org/reports/OSF\\_Fact72.pdf](http://pubs.pembina.org/reports/OSF_Fact72.pdf)
- <sup>15</sup>Montreal Gazette (July 14, 2008) *Ontario moves to protect boreal forest*
- <sup>16</sup>For examples of boreal bird breeding ranges see Boreal Songbird Initiative (2009) *Boreal Bird Declines and Human Disturbances*. [www.borealbirds.org/SOBB-Materials/BirdDeclinesFactSheet-BSI.pdf](http://www.borealbirds.org/SOBB-Materials/BirdDeclinesFactSheet-BSI.pdf)

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