



# Boreal Forests: for the birds

## A wellspring of life

Springtime in Canada's boreal forest is witness to one of the most remarkable wilderness transformations in nature — birds arrive by the billions to change the snow-muffled silence of the boreal winter into an animated feast of colour and song.

From as far away as South and Central America, billions of birds – from warblers and thrushes to ducks and shorebirds – come north to the boreal forest each spring to court and breed and raise their young. About 90 percent of birds that nest in the region leave it in the autumn. From September to April, they become familiar residents in southern Canada, the United States and other countries. But they return to the boreal forest again when winter has left and summertime once again promises an abundance of insects and other food.

According to population estimates, more than 100 million each of dark-eyed juncos, yellow-rumped warblers, Tennessee warblers, Swainson's thrushes, and white-throated sparrows return from the south every year to fill the vast boreal wilderness they left behind in the fall. They are accompanied by millions of others from almost 240

boreal-breeding species.

Canada's boreal forest – a continuous band of remote woodlands and wetlands stretching across the

middle of Canada and covering more than 400,000,000 hectares (an area larger than the 10 provinces combined) – is an essential wellspring of the continent's bird life. A third of all North American land-living birds are born here. Many of their parents return to the boreal forest each year to take advantage of the summer caterpillar bloom in the area's vast forest canopy or to glean grubs and other insects from tree bark or foliage. As well, more than 40 percent of North America's breeding waterfowl nest in the boreal region thanks to its thousands of lakes and wetlands.

Few people recognize that so much of our bird life depends on the future of Canada's great northern forest. Fewer still realize that the future of this great wilderness is uncertain, with increasing pressure from

logging, oil and gas development, mining exploration, hydroelectricity projects and other industrial encroachment. The boreal forest management choices we make today could affect North American bird life for all time. ✱



*The yellow warbler (top) and the bittern (bottom) can be found in the northern boreal forest.*

FOREST: GREGOR BECK; MARSH AND NEST: BRUCE PETERSEN; WARBLER: JOHN KORMENDY; BITTERN: LARY FRAZER

# Boreal bird species numbers decline

Populations of 40 species of boreal-nesting land birds have suffered in recent years, according to a recent report by Bird Studies Canada. Connecticut warblers, boreal chickadees and even the seemingly ubiquitous white-throated Sparrows have all shown significant declines. The report also suggests populations have dropped for several other boreal-dependent species as well as for many birds that nest both in the boreal region and elsewhere.

Rusty blackbirds are the most affected. Seventy percent of all rusty blackbirds nest in Canada's boreal forest. Their population, meanwhile, has seen an annual drop of more than 10 percent in recent years.

The reasons for these declines are unclear. Boreal birds with faltering populations represent species with different habits and habitats, from omnivorous residents to insectivorous neotropical migrants. Root causes of the problem, therefore, are likely to be numerous and varied. Nevertheless, as industrial development continues to affect the boreal forest, these falling numbers should give us pause. \*



Some bird species nesting in the boreal forest are in decline, in part due to industrial development that have decimated their natural habitat.

## Quick facts about birds in the boreal



Yellow-rumped warbler

Two out of every three Canadian warblers, thrushes, sparrows, flycatchers, woodpeckers, hawks and other land-living birds nest in the boreal forest region. For 40 boreal species, the region is the summer home to more than half of their global populations.

Most boreal birds are migratory. While many chickadees, finches, jays, woodpeckers and owls stay behind, about five billion other land birds and millions of waterbirds leave the boreal forest every autumn. About three billion land birds – after winter mortality – return again in the spring. Short-distance migrants settle for slightly more hospitable winters, mainly in the United States. The many Neotropical migrants, meanwhile, seek a balmier alternative in South or Central America.

Bird life in the boreal forest is unusually diverse. With almost 200 species from 35 bird families of land birds alone, species richness in this



Loon

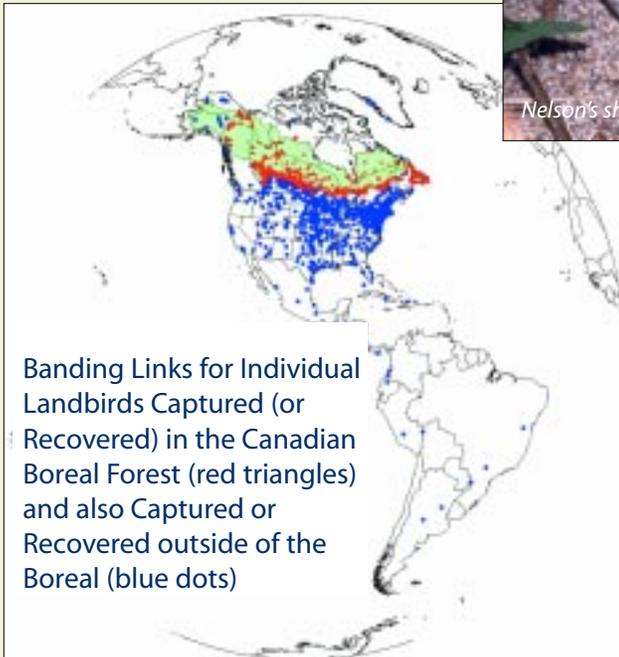
## Boreal birds are long-distance travellers



*Nelson's sharp-tailed sparrow*



*Black-and-white warbler*



Banding Links for Individual Landbirds Captured (or Recovered) in the Canadian Boreal Forest (red triangles) and also Captured or Recovered outside of the Boreal (blue dots)

Source: *The Importance of Canada's Boreal Forest to Landbirds*, Peter Blancher, Bird Studies Canada, published by Canadian Boreal Initiative and Boreal Songbird Initiative, 2003.

As many as five billion land-living birds migrate from the boreal forest each autumn. About one billion of these birds winter in the United States, including many boreal sparrows. Mexico, Colombia and Brazil, meanwhile, each host more than 100 million boreal migrants through the non-breeding season. These and other Central and South American countries are the preferred winter homes for many boreal-nesting warblers and flycatchers. More than 1,400 leg-band recoveries link the boreal forest homes of individual banded birds with the places they have been found in the south. While some birds banded in Canada's boreal forest have turned up as far south as Argentina (mainly hawks and falcons), the bands of most boreal birds are recovered in southern Canada and central and eastern United States.

group is often higher in the boreal forest than in adjacent landscapes to the south.

As many as 107 species of ducks, grebes, geese, shorebirds and other waterbirds can be found living in, or stopping by, the boreal region's numerous clear lakes and wetlands. About 40 percent of all the continent's breeding waterfowl nest in the western boreal forest alone.



Palm warblers, Tennessee warblers, black-backed woodpeckers, Connecticut warblers, and northern shrikes are all essentially dependent on the boreal forest to breed. Between 90 and 98 percent of the world populations of these species nest in the region.



*The great gray owl is one of the many birds that enjoy the warm months in the boreal.*

Wood warblers, sparrows and thrushes arrive in the boreal forest by the millions to take advantage of the plentiful summertime food. Birds that live in – and rely on – the forest account for almost 50 percent of all boreal bird species. Warblers, thrushes and sparrows make up 22 of the 25 most common boreal land birds.

Three-quarters of all Canadian warblers – as many as one billion birds – make their summer home in the boreal forest. Yellow-rumped warblers, Tennessee warblers, magnolia warblers, blackpoll warblers, yellow warblers, chestnut-sided warblers and bay-breasted warblers are a few of the

most common of the 27 warbler species that nest in the boreal wilderness.



## The future is uncertain

Canada's boreal wilderness is among the world's last great unspoiled forests – 50 percent larger than the remaining intact Amazon rain forest. The boreal forest is a global ecological treasure and home to many natural wonders, including a large supply of the world's fresh water and among the largest populations of wolves and woodland caribou.

It is also, unfortunately, a place with an uncertain future. Industry, always looking for new resource opportunities, has set its sights northward. Logging, oil and gas, mining exploration, hydroelectric power and even farming see their future in the rugged woods of boreal Canada. Many of these players are already at work there, and our boreal birds are suffering. A recent report to the North American Free Trade Agreement Commission for Environmental Cooperation

suggests that as many as 85,000 migratory bird nests were destroyed in 2001 by logging in Ontario alone.

For the sake of bird life across North America, we need to recognize the importance of boreal Canada as a continental nesting ground. As governments and industry draw up plans for further development in this region, we need to ensure large areas are protected and that sustainable resource development practices are in place. \*



## What can you do?

➤ We need to influence land-use planning decisions that will determine the future of Canada's boreal forest. Almost every province and territory will make management choices over the next five-to-seven years that could forever alter this great northern landscape and jeopardize the bird populations that rely on it.

➤ Your government leaders need to know how vital this landscape is to North American bird life. Write to your political leaders and decision makers now. We need to

protect large areas of boreal forest and to put in place sustainable development practices that will help preserve the integrity of the remaining boreal habitat for our birds.

➤ Help convince governments and industry to curb development practices that threaten breeding birds and their young during the nesting season.

➤ Visit our web site at [www.cpaws.org/boreal](http://www.cpaws.org/boreal) or call 1-800-333-WILD for more information about how you can become involved.

CANADA'S BOREAL FOREST



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Written by Peter Christie

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**CPAWS National Office**  
1 (800) 333-WILD / [www.cpaws.org](http://www.cpaws.org) / [info@cpaws.org](mailto:info@cpaws.org)