Birds are culturally and economically important to us all.

They contribute to our economy through bird watching and hunting. They help keep our forests and farms healthy by eating pests.

Healthy water, air, and land for birds benefits us by:
- reducing flooding and erosion
- filtering our groundwater
- increasing our property values
- providing homes for wildlife
- providing us with the space to enjoy nature

Birds are an integral part of our lives and a voice for nature. We cannot let their voices be silenced.

Conservation works when it is integrated with our economy, policies, and daily lives.

What is good for birds is good for us. We need to keep our water, air, and land clean by finding innovative alternatives to pesticide use and single-use plastics.

Birds need space to live. We need to protect critical lands and waters in Canada and beyond, and reduce the threats to birds from human activities globally by using beneficial practices in forestry, agriculture, fisheries, oil and gas production, urban and coastal development, and other activities.

Future generations of Canadians need nature. We must demand action from politicians, policy makers, and industries to address the causes and effects of climate change, and support organizations that help conserve birds and their habitats.
Rapidly declining
Urgent conservation action is needed
Canada has lost 40-60% of shorebird, grassland bird, and aerial insectivore populations. In the last decade, 80% of bird species newly assessed as threatened or endangered in Canada have been aerial insectivores or grassland birds. Another 10 shorebird species are priority candidates for assessment. Coastal land conservation, sustainable agricultural practices, and effective climate action in Canada and abroad can bring these birds back from the brink.

Little to moderate change
These lines show little to moderate change, but they are complex and are composed of both increasing and decreasing species.

Recovering
Ongoing, informed conservation is working
In the last century, many species of waterfowl and birds of prey were on the brink of extinction. The causes were identified and addressed by banning the pesticide DDT, actively managing hunting, and protecting and restoring important habitat.

Average status of Canadian bird populations

- **Waterfowl**: 150% increase since 1970
- **Birds of Prey**: 110% increase since 1970
- **Wetland Birds**: 30% increase since 1970
- **Canadian Nesting Seabirds**: 15% increase since 1970
- **Forest Birds**: 7% increase since 1970
- **All Other Birds**: -3% decrease since 1970
- **Shorebirds**: -40% decrease since 1970
- **Grassland Birds**: -57% decrease since 1970
- **Aerial Insectivores**: -59% decrease since 1970

For more details on the methods, visit [www.stateofcanadasbirds.org](http://www.stateofcanadasbirds.org).

Photo credits (from left to right): Peregrine Falcon, Upland Sandpiper, Bobolink, Bank and Tree Swallows, and Snow Geese by Jacques Bouvier.

Millions of hectares of wetlands and surrounding lands have been saved, allowing waterfowl populations to rebound.
Most geese have taken advantage of increasing waste grain in agricultural areas. Some species of Arctic geese are now so abundant that there is concern over their potential impacts on other species.

360% Goose Species

150% All Waterfowl Species

69% Duck Species

30% Wetland Birds

GEESE HAVE INCREASED BY 360%

These dips represent drought cycles in the prairies.

Average % change since 1970


−50% −33% 0% 50% 100% 200% 400%

Many ducks and wetland birds are increasing

32 species increasing

15 species stable

9 species decreasing

29 species unknown

Ducks and wetland birds have benefited from ongoing investment in conservation and cooperative stewardship of wetlands and surrounding lands, including over 80,000 km² in Canada under the North American Waterfowl Management Plan.

MANY DUCKS AND WETLAND BIRDS ARE INCREASING

Investment pays

Hunters and other conservationists who purchase the Canadian Wildlife Habitat Conservation Stamps have raised over $50 million and funded over 1,500 wetland conservation projects.

Conservation Actions

Increase efforts to conserve, enhance, and restore wetlands to offset loss of land from intensive agriculture and urban development.

Demand action to address the causes of climate change and its effects on wetland birds, such as increasing risk of drought, rising sea levels, and ocean warming.

Prevent loss of coastal areas from industrial and urban development.

Clean our waterways by reducing runoff from agricultural and industrial activities, and improving wastewater management.

Threats

Many wetland birds and sea ducks are elusive or breed in remote areas. They are difficult to monitor, so their trends are unknown.

Photo credits (from left to right): Snow Goose by Jacques Bouvier, Surf Scoter by the Macaulay Library at the Cornell Lab of Ornithology, Bufflehead by Ducks Unlimited Canada, Pied-billed Grebe by Jacques Bouvier, and Black Terns by Katelyn Luff.
GRASSLAND BIRDS ARE RUNNING OUT OF TIME

**Conservation Actions**

- **Protect the few remaining grasslands**, including grazed public lands, from crop agriculture and restore native grasslands to provide habitat and increase carbon storage.

- **Support sustainable range-fed beef**, which includes beneficial hay and pasture management.

- **Protect the water and land** by seeking innovative alternatives to broad-scale pesticide use.

- **Demand action to address the causes of climate change** and its effects on grasslands, such as increasing erosion, frequency and severity of drought and flooding, and risk of wildfire.

**Threats**

![Average % change since 1970](chart.png)

- **-87% Species dependent on native grasslands**
- **-57% All grassland species**
- **-39% Species tolerant of agriculture**

**Birds that depend exclusively on native grasslands for breeding and wintering have declined dramatically by 87%, and even the other species that can tolerate agricultural landscapes have declined by 39%**.

- **4 species increasing**
- **4 species stable**
- **17 species decreasing**
- **8 species unknown**

**Number of species in**

- **Breeding**
- **Wintering**

**Grey lines, provided for scale, represent the state of other bird groups in Canada.**

**Our grasslands have lost 300 million birds since 1970, or 2 out of every 3 birds.**

**Darker colour = more species**


**Photo credits (from left to right):** Snow Goose by Jacques Bouvier, Surf Scoter by the Macaulay Library, Swainson’s Hawk by the Macaulay Library at the Cornell Lab of Ornithology.

**Photo credit:** Swainson's Hawk by the Macaulay Library at the Cornell Lab of Ornithology.

Each year, **Swainson’s Hawks** like this one breed in Alberta’s Prairies and then fly south, often passing through key grassland wintering regions in Mexico, such as the Chihuahuan grasslands, and eventually to Argentina’s Pampas grasslands.

**International partnerships are key** to protecting these three areas from being converted to irrigated crops, as they are critically important to grassland birds that depend on intact native grasslands.

**Beneficial grazing** on public and private lands is critical for the creation and maintenance of grassland bird habitat.
SHOREBIRDS ARE LOSING GROUND

Shorebirds depend on coastal areas and inland wetlands for breeding, migration, and wintering. Many vital areas are being lost to coastal development and human disturbance.

- **Shorebirds have declined by 40%**
- **-23% Short-distance migrant shorebirds**
- **-40% All shorebird species**
- **-52% Long-distance migrant shorebirds**

**Long-distance migrant shorebirds** have declined more steeply than other shorebird species.

**Threats**
- Protect and restore migration stopover and wintering sites for shorebirds, such as Important Bird and Biodiversity Areas and Western Hemisphere Shorebird Reserve Network sites.
- Demand action to address the causes of climate change and its effects on shorebirds, such as rising sea levels and shrinking tundra breeding habitat.
- Clean our beaches, shorelines, and oceans by banning single-use plastics and preventing oil spills.
- Address unsustainable shorebird harvest along migratory routes and at wintering sites through international and domestic partnerships.

**Conservation Actions**

- **International partnerships are critical for shorebird conservation**
- This **Red Knot** undertakes an epic 30,000-km long migration every year.
- **Let shorebirds rest and refuel during their long migration** by keeping dogs on leashes, and minimizing other types of disturbance.

**Grey lines, provided for scale, represent the state of other bird groups in Canada.**

**Ruddy Turnstones** like this one hatch in the Arctic and fly to Colombia’s coast for the winter when they are only 8-12 weeks old. Adults return to the Arctic to breed every year.

**Movement data courtesy of Ronald Porter.**
95% OF CANADIAN SEABIRDS ARE IN TROUBLE WORLDWIDE

Canadian seabirds include species that nest in Canada, and species that nest elsewhere but rely on our waters to feed. A global assessment¹ shows that 55 of the 58 seabird species that use Canadian waters are of conservation concern.

20 species are at risk of extinction
35 species are of conservation concern
3 species are of low concern

MANY OF OUR SEABIRDS HAVE UNKNOWN POPULATION TRENDS

Of the seabirds that we can monitor in Canada, some populations have increased while others have decreased. However, 62% of Canadian seabirds have unknown trends, as they nest outside Canada or in remote areas of the Arctic. This is why it is important to also consider the global assessment in the state of Canada’s seabirds.

20 species are at risk of extinction
35 species are of conservation concern
3 species are of low concern
36 species unknown

This Short-tailed Albatross hatched in Japan and wintered off Canada’s west coast.

Threats

Clean our oceans by banning single-use plastics and preventing oil spills.

Demand action to address the causes of climate change. Breeding colonies are being destroyed by more frequent storms and rising sea levels, and changing ocean conditions are causing seabird food supplies to decline.

Work domestically and cooperate internationally to promote sustainable fishing and reduce the risk of birds being caught in fishing gear.

Protect breeding colonies by eradicating invasive species like rats that prey on seabirds.

Conservation Actions

This Sooty Shearwater bred in the Falkland Islands, and wintered off Canada’s east coast.

Over 80% of Arctic-nesting Northern Fulmars have plastic in their stomachs.

FOREST BIRDS
CONSERVATION WITHOUT BORDERS

Threats

- Reverse forest loss in South America, and other wintering areas, by promoting beneficial management, such as forest certifications and bird-friendly coffee programs, and engaging international partners to retain and restore these critical lands.

- Conserve the health, diversity, and economic sustainability of Canadian forests for future generations by retaining older trees and forests, reducing the use of pesticides, creating a network of protected areas, and not planting monocultures.

- Prevent the death of tens of millions of forest birds every year by making windows visible to birds, strategically managing light pollution during migration, and keeping cats from roaming at large.

- Demand action to address the causes of climate change and its effects on forest birds, such as increasing insect epidemics and forest fires.

Conservation Actions

- Forest birds that breed in Canada and fly thousands of kilometres to winter in South America face threats at home, during migration, and on their wintering grounds, where they are rapidly losing habitat. Species wintering in Canada face fewer threats and are faring better overall, except for species that depend on tree seeds and fruit.

- Every winter, forest crop specialists like this Evening Grosbeak cover large distances in search of food like seeds and fruit. Their populations fluctuate naturally but are declining. This group’s decline has not yet been well studied, but may indicate changes in the health of Canada’s forests, since these birds rely on mature, healthy trees for food.

- 80% of Canada’s forest birds winter outside the country. This Canada Warbler is one of many migrant songbirds that winters in this part of South America, where much of the native forest has been cleared.

1 IN 3 CANADIAN BIRDS DEPENDS ON FORESTS

- 49 species increasing
- 31 species stable
- 43 species decreasing
- 14 species unknown

Number of species
Darker colour = more species

Grey lines, provided for scale, represent the state of other bird groups in Canada.
Birds of prey such as Bald Eagle, Peregrine Falcon, and Osprey have recovered since the indiscriminate use of DDT was banned in Canada and the United States in the 1970s, and in Mexico in the late 1990s.

Aerial insectivores are mirroring the declines that birds of prey showed in the 1950s. Losses may be due to agricultural intensification, declining insect populations, and a changing climate, both at home and abroad.

Aerial insectivores have declined steeply since the 1980s but have recently levelled off.

Our success with birds of prey shows us that when we understand the problem and take action together, conservation works.

**Threats**

- Protect the food web, water, and land by reducing the use of pesticides and seeking innovative alternatives.
- Demand action to address the causes of climate change and its effects on aerial insectivores, such as increases in severe weather, which limit insect availability and put the birds in jeopardy.
- Protect pastures, forests, and wetlands, which are important roosting sites and feeding grounds, from development, pollution, and crop agriculture.

**Conservation Actions**

- Protect the food web, water, and land by reducing the use of pesticides and seeking innovative alternatives.
- Demand action to address the causes of climate change and its effects on aerial insectivores, such as increases in severe weather, which limit insect availability and put the birds in jeopardy.
- Protect pastures, forests, and wetlands, which are important roosting sites and feeding grounds, from development, pollution, and crop agriculture.

Our world is losing its insects. International cooperation is vital to reverse the loss of insects that birds and humans rely on.
Our economy and well-being depend on the health of our environment. Conservation works when it is integrated into our economy, policies, and daily lives. Through forward-thinking policies, industrial practices, and individual actions, we can work together to conserve birds.

**What's Good for Birds Is Good for Us**

**Birds are under pressure, but here's what we can do to help**

<table>
<thead>
<tr>
<th>WHAT'S GOOD FOR BIRDS</th>
<th>IS GOOD FOR US</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VOTE WITH YOUR FORK AND WASTE LESS</strong></td>
<td>By reducing food waste, buying from local, sustainably-run farms, and choosing products like bird-friendly coffee, range-fed beef, and certified, sustainable seafood, we can make the world better for birds and for us.</td>
</tr>
<tr>
<td><strong>REDUCE CARBON EMISSIONS</strong></td>
<td>Canada’s climate is warming at more than twice the global rate. By demanding action on the causes of climate change, and making transformative changes to our industrial practices and daily lives, we can help prevent the catastrophic effects of climate change, such as rising sea levels, ocean acidification, thawing permafrost, droughts, floods, and wildfires, all of which threaten both nature and our economy.</td>
</tr>
<tr>
<td><strong>PROTECT AND IMPROVE BIRD HABITAT</strong></td>
<td>Birds are losing ground. By protecting and restoring critical lands and waters, and managing our working landscapes more sustainably, we can have a major positive impact on bird populations.</td>
</tr>
<tr>
<td><strong>MAKE WINDOWS SAFE FOR BIRDS</strong></td>
<td>By making the windows on our homes, skyscrapers, and businesses more visible to birds, we can save the lives of millions of birds each year.</td>
</tr>
<tr>
<td><strong>KEEP CATS FROM ROAMING AT LARGE</strong></td>
<td>By keeping cats and wildlife apart, we can save the lives of tens of millions of birds each year.</td>
</tr>
<tr>
<td><strong>REMOVE PLASTICS AND CONTAMINANTS FROM NATURE</strong></td>
<td>Birds are showing us that our environment is polluted. By seeking innovative alternatives to pesticide use, and banning single-use plastics, we can protect the quality of our water, air, and land for birds and people.</td>
</tr>
<tr>
<td><strong>ELIMINATE INVASIVE SPECIES</strong></td>
<td>By removing invasive species, like rats on islands that prey on seabirds and other ground-nesting birds, we can save entire breeding colonies.</td>
</tr>
</tbody>
</table>
Birds are excellent indicators of the health of our water, air, and land, and we have been monitoring most bird species since the 1970s.

**Volunteers are critical to monitoring the state of Canada's birds.** 66% of the species trends in this report came from programs that rely on skilled volunteer citizen scientists. These programs, and the dedicated people who contribute to them, are the backbones of bird conservation. You can be a volunteer too – see our website for more information.

**Professional biologists coordinate large-scale volunteer programs, and analyze the data.** They also monitor challenging species. These partnership-based monitoring programs include waterfowl, Arctic-breeding shorebird, and seabird surveys.

Using the monitoring data, we calculate each species’ population trajectory over time. Then we re-scale each species’ trajectory to represent the % change since 1970. We use the average of all the species’ lines to create our indicators. For example, the grassland bird indicator is composed of all bird species that are typically found in grasslands.

Increases and decreases are scaled equally. We scaled the vertical axis this way so that positive and negative changes are equal on the appropriate scale (logarithmic). For example, it takes a 100% increase to recover from a 50% decline, so those two points are equal distance from 0.

24% of Canada's bird species are not yet well monitored. We have limited information for many Arctic-nesting birds, pelagic seabirds, sea ducks, nocturnal owls, and cryptic or very rare birds. Investments in new programs and new technologies will help us track birds better.

See the online report at [www.stateofcanadasbirds.org](http://www.stateofcanadasbirds.org) for more information.
Acknowledgements

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This report would not have been possible without the dedication and skill of the thousands of volunteer observers who are the backbone of many monitoring programs, such as the North American Breeding Bird Survey, shorebird migration surveys, and the Christmas Bird Count. Similarly indispensable were the many professional biologists and technicians from across Canada and internationally who designed and helped to conduct and report on all the programs monitoring Canada’s birds. We are also particularly grateful to all of the photographers and organizations who generously donated their images for use in this report.

Photo credit: Solitary Sandpiper by Glenn Springer.