

The **State** of **Canada's** **Birds**



2019

nabci
CANADA



BIRDS TELL US ABOUT THE HEALTH OF OUR WATER, AIR, AND LAND

WE NEED TO LISTEN AND ACT



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.

This report was published by Environment and Climate Change Canada on behalf of NABCI Canada. Suggested citation: North American Bird Conservation Initiative Canada. 2019. The State of Canada's Birds, 2019. Environment and Climate Change Canada, Ottawa, Canada. 12 pages. www.stateofcanadasbirds.org

Cat. No.: CW66-312/2019E-PDF

ISBN: 978-0-660-30229-4

Photos: © Environment and Climate Change Canada. © Her Majesty the Queen in Right of Canada, represented by the Minister of Environment and Climate Change, 2019.

Photo credit on cover page: Canada Jay by Nick Saunders. Photo credit on this page: Yellow Warbler by Jacques Bouvier.

Aussi disponible en français.

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada
Public Inquiries Centre, 12th Floor, Fontaine Building
200 Sacré-Coeur Boulevard, Gatineau QC K1A 0H3
Tel: 819-938-3860, Toll Free: 1-800-668-6767 (in Canada only), Email: ec.enviroinfo.ec@canada.ca

The State of Canada's Birds



Waterfowl and birds of prey are recovering thanks to successful investments in conservation.



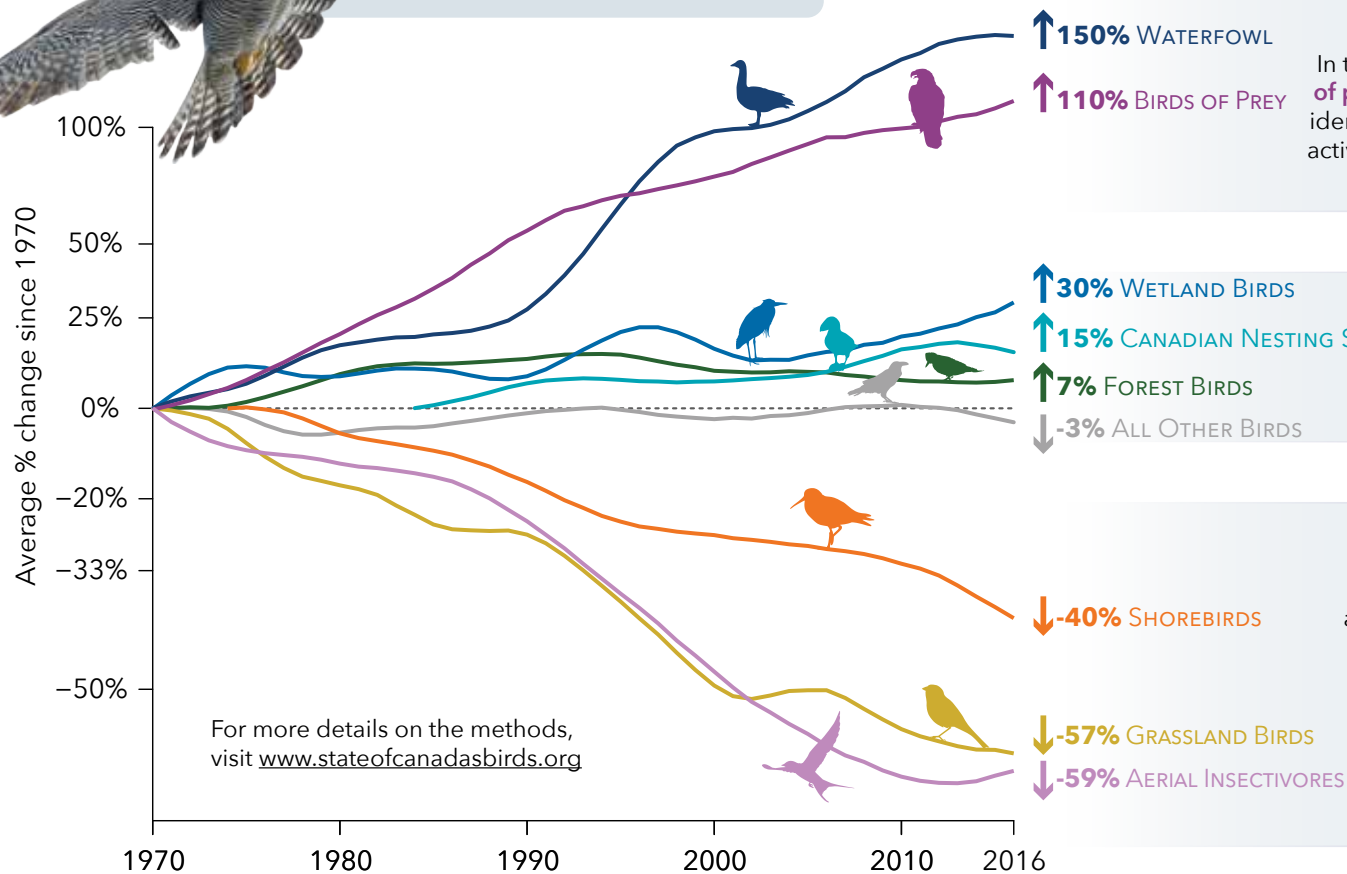
Aerial insectivores, grassland birds, and shorebirds are in trouble and need our help.

This report highlights the key actions we can take to help restore Canada's bird populations.



THE STATE OF CANADA'S BIRDS

Average status of Canadian bird populations



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.

LITTLE TO MODERATE CHANGE

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

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.



Ducks Unlimited Canada

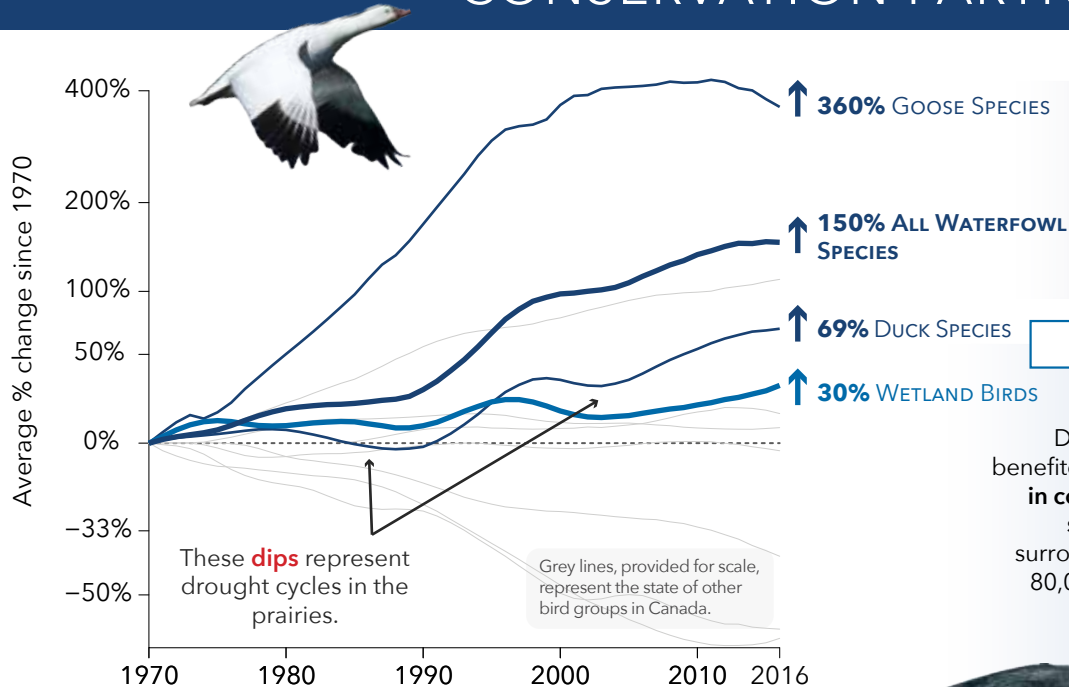
Millions of hectares of wetlands and surrounding lands have been saved, allowing waterfowl populations to rebound.

Shorebirds, grassland birds, and aerial insectivores are in steep decline.



WATERFOWL AND WETLAND BIRDS

CONSERVATION PARTNERSHIPS WORK



GEESE HAVE INCREASED BY 360%

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.

5 species increasing
0 species stable
1 species decreasing
0 species unknown

MANY DUCKS AND WETLAND BIRDS ARE INCREASING

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.

32 species increasing

15 species stable

9 species decreasing

29 species unknown

Threats



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.

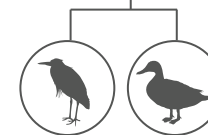


Prevent loss of coastal areas from industrial and urban development.



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

Conservation Actions



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

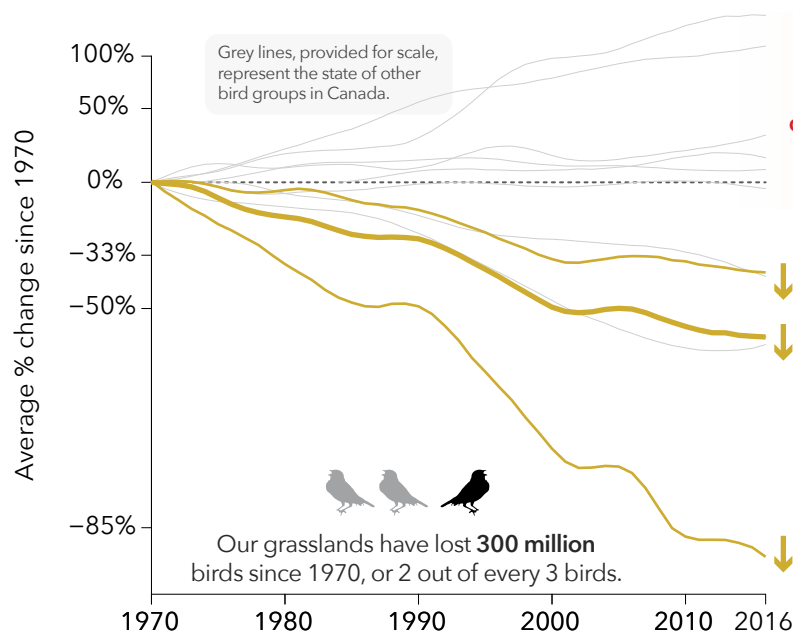


Investment pays

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.

GRASSLAND BIRDS

ARE RUNNING OUT OF TIME



GRASSLAND BIRDS HAVE DECLINED BY 57%

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



↓ **-39% SPECIES TOLERANT OF AGRICULTURE**

↓ **-57% ALL GRASSLAND SPECIES**

↓ **-87% SPECIES DEPENDENT ON NATIVE GRASSLANDS**



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.

Threats



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.

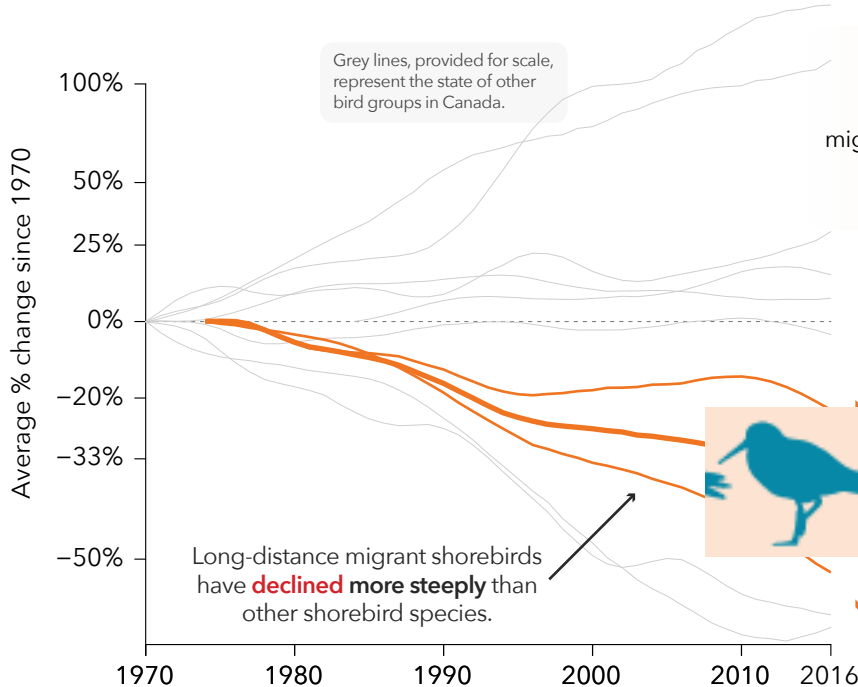


Protect the water and land by seeking innovative alternatives to broad-scale pesticide use.



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.

SHOREBIRDS ARE LOSING GROUND



SHOREBIRDS HAVE DECLINED BY 40%

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.

7 species increasing
6 species stable
25 species decreasing
11 species unknown

↓ -23% SHORT-DISTANCE MIGRANT SHOREBIRDS
↓ -10% ALL SHOREBIRD SPECIES
↓ -52% LONG-DISTANCE MIGRANT SHOREBIRDS

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.

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.



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

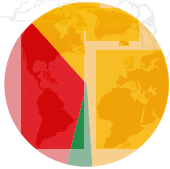


SEABIRDS

A GLOBAL CONSERVATION CRISIS

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.

7 species increasing 
10 species stable 
5 species decreasing 
36 species unknown 



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



This **Sooty Shearwater** bred in the Falkland Islands, and wintered off Canada's east 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

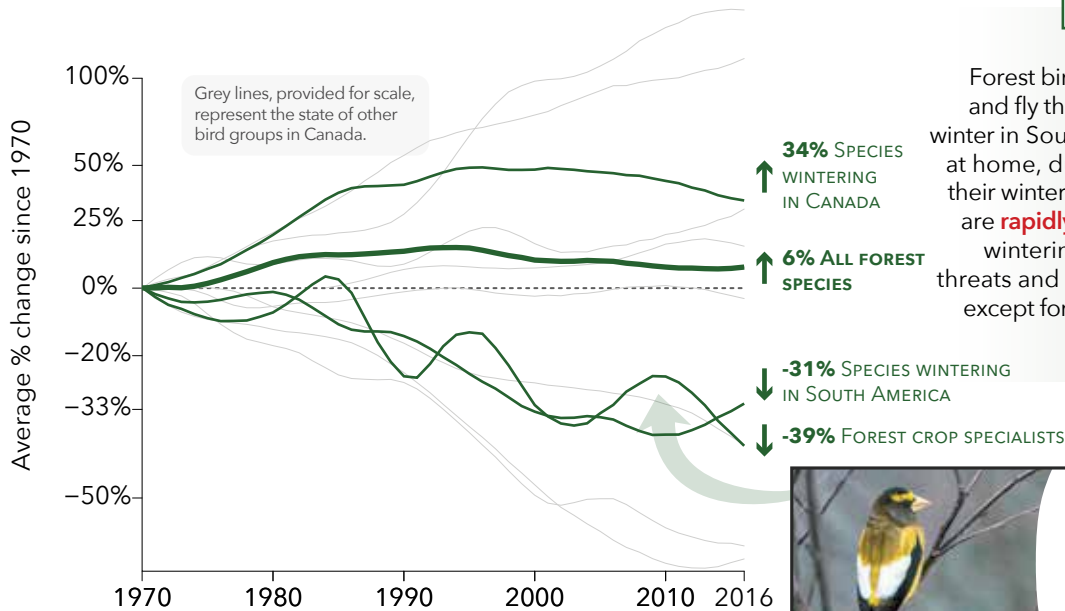


Over **80%** of Arctic-nesting Northern Fulmars have plastic in their stomachs.

FOREST BIRDS

CONSERVATION WITHOUT BORDERS

1 IN 3 CANADIAN BIRDS DEPENDS ON FORESTS



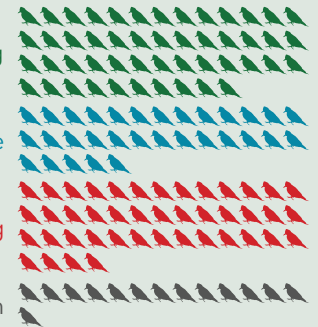
Forest birds that breed in Canada and fly thousands of kilometres to winter in South America **face threats** at home, during migration, and on their wintering grounds, where they are **rapidly losing habitat**. Species wintering in Canada face fewer threats and are faring better overall, except for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

49 species increasing

31 species stable

43 species decreasing

14 species unknown



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.

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.



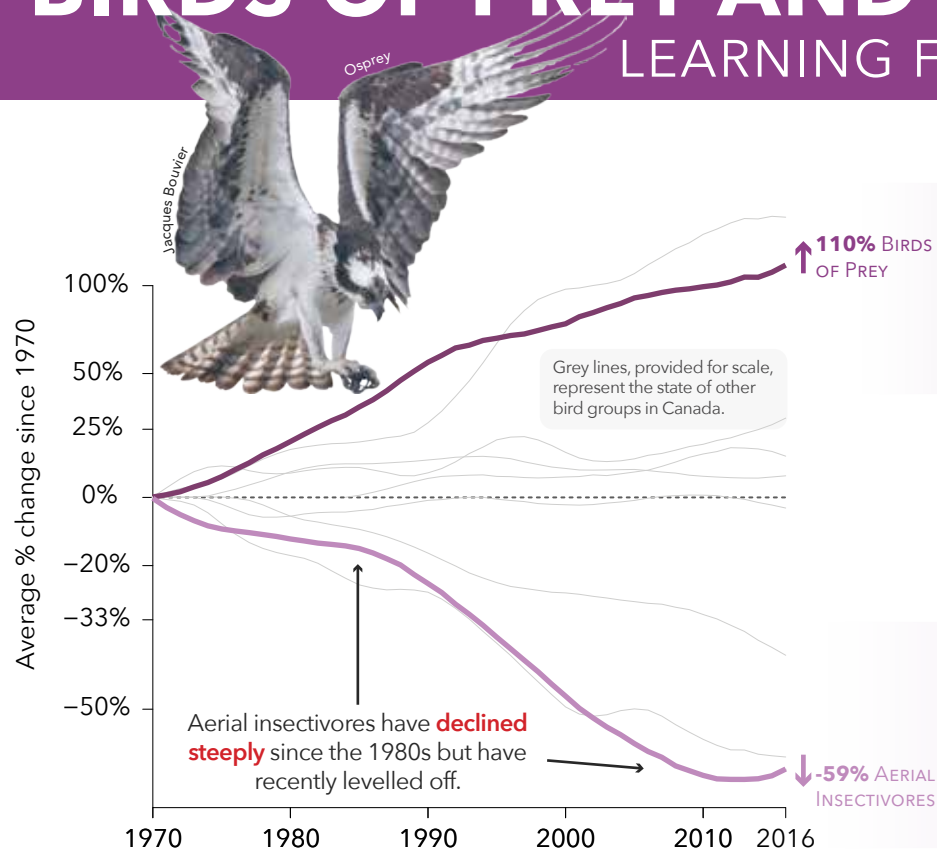
Demand action to address the causes of climate change and its effects on forest birds, such as increasing insect epidemics and forest fires.

Conservation Actions



BIRDS OF PREY AND AERIAL INSECTIVORES

LEARNING FROM THE PAST



BIRDS OF PREY ARE RECOVERING

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.

12 species increasing
3 species stable
2 species decreasing
3 species unknown



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

AERIAL INSECTIVORES HAVE DECLINED MORE THAN ANY OTHER BIRD GROUP

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.

0 species increasing
3 species stable
13 species decreasing
2 species unknown



Threats



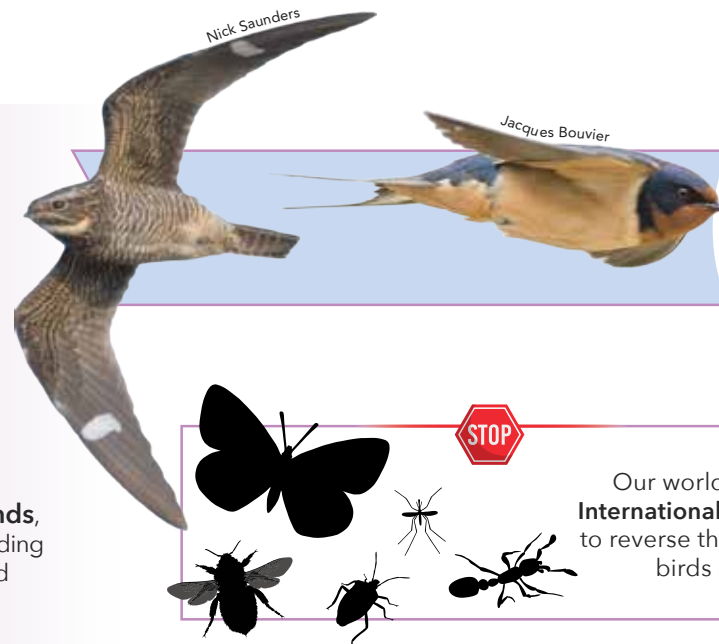
Protect the food web, water, and land by reducing the use of pesticides and seeking innovative alternatives.



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.



Aerial insectivores, like this Common Nighthawk and Barn Swallow, feed by catching insects in flight.



Our world is losing its insects. **International cooperation is vital** to reverse the loss of insects that birds and humans rely on.

WHAT'S GOOD FOR BIRDS

IS GOOD FOR US

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.

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

VOTE WITH YOUR FORK AND WASTE LESS

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.



REDUCE CARBON EMISSIONS

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.



PROTECT AND IMPROVE BIRD HABITAT

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.



MAKE WINDOWS SAFE FOR BIRDS

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.



KEEP CATS FROM ROAMING AT LARGE

By keeping cats and wildlife apart, we can save the lives of tens of millions of birds each year.



REMOVE PLASTICS AND CONTAMINANTS FROM NATURE

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.



ELIMINATE INVASIVE SPECIES

By removing invasive species, like rats on islands that prey on seabirds and other ground-nesting birds, we can save entire breeding colonies.




CANADIANS ARE MONITORING

THE STATE OF CANADA'S BIRDS

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.


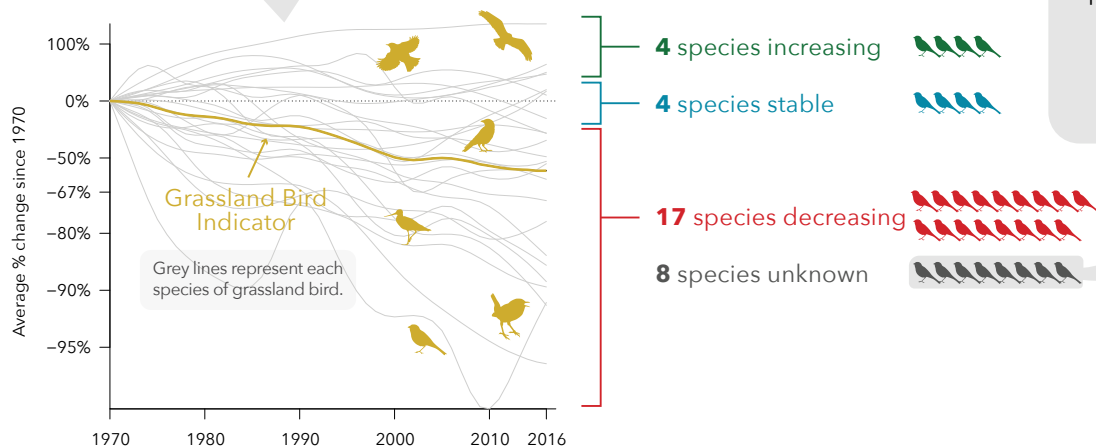


Professional biologists coordinate large-scale volunteer programs, and analyze the data. They also monitor challenging species. These partnership-based monitoring programs include waterfowl, Arctic-breeding shorebird, and seabird surveys.



- 1 Using the monitoring data, we calculate each species' population trajectory over time.
- 2 Then we re-scale each species' trajectory to represent the % change since 1970.
- 3 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.



Acknowledgements

This report was prepared on behalf of the North American Bird Conservation Initiative Canada (NABCI Canada) by a steering committee that included members from Environment and Climate Change Canada (ECCC), Bird Studies Canada (BSC), Nature Canada (NC), and Ducks Unlimited Canada (DUC)

Steering committee: Charles M. Francis (ECCC, Chair), Ted Cheskey (NC), Andrew R. Couturier (BSC), Jim Devries (DUC), Katherine Conkin (SK ENV), Adam C. Smith (ECCC), Veronica I. Aponte (ECCC), Elaine Camfield (ECCC), Wendy Easton (ECCC), Marcel Gahbauer (ECCC), Carina Gjerdrum (ECCC), Marie-Anne R. Hudson (ECCC), Christine Lepage (ECCC), Ann McKellar (ECCC), and Julie Paquet (ECCC)

Communications: Josianne Vignola and Anie Cyr (ECCC), Ruth Friendship-Keller and Andrew R. Couturier (BSC), Jodi Joy and Ted Cheskey (NC), Nigel Simms and Ashley Lewis (DUC)

Statistical analysis: Adam C. Smith

Maps: Andrew R. Couturier and Marie-Anne R. Hudson

Editors: Marie-Anne R. Hudson, Veronica I. Aponte, and Adam C. Smith


Layout and design: d2k

Website: www.stateofcanadasbirds.org

We thank the numerous individuals within all of the NABCI Canada partner organizations who contributed text or reviewed various drafts of the report.

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.



The North American Bird Conservation Initiative (NABCI) in Canada is a coalition of federal, territorial and provincial governments, non-government and industry organizations, working in partnership with the United States and Mexico to protect, restore, and enhance North American bird species and their habitats. NABCI-Canada's goal is to deliver the full spectrum of bird conservation in Canada, through regionally-based, biologically-driven, landscape-oriented partnerships.

nabci
CANADA

