



3 BILLION BIRDS GONE

A comprehensive report in the journal *Science* revealed that bird populations in the continental United States and Canada have declined by nearly 1/3 since 1970, a staggering 3 billion breeding birds, signaling a widespread ecological crisis. Using data from multiple sources, as well as continental radar (NEXRAD) measuring nocturnal migrations, the *Science* report identified bird losses across every biome.

- ♦ Much of the loss is among common species.
- ♦ Over 90% of the loss belongs to 12 bird families often seen in our backyards.
- ♦ More than half of grassland birds have disappeared.
- ♦ Forests have lost more than one billion birds.



Why Are Birds Disappearing?

Widespread declines in bird populations across regions and bird families suggest multiple threats, among them the following:

- ♦ Loss of habitat due to development, pollution and spread of invasive plants.
- ♦ Use of toxic pesticides that harm insects, an essential food source for birds.
- ♦ Climate change affecting weather patterns and altering plant communities that birds need.
- ♦ Predation of birds by free-roaming cats.
- ♦ Bird strikes of windows and buildings.

Why Should We Care?

If birds are in trouble, we're in trouble. Birds are acutely sensitive barometers of environmental health. Their cumulative mass decline signals that the natural systems we depend on are at risk. The water we drink, the food we eat, and the beauty of our landscapes require a healthy planet. Birds also provide benefits like seed dispersal and pest control.

What Can Be Done?

Bird populations *can* rebound. Declines *can* be reversed as evidenced by recovery of the Bald Eagle, once decimated by DDT. Restoration of wetlands has enabled waterfowl populations to come back. Policy decisions matter too, such as strengthening the Migratory Bird Treaty Act, protecting wildlife habitats, addressing harmful pesticide use, and responding to the growing challenge of climate change.

You can make a difference too, in your own backyard.

Birds in Crisis: What Can I Do?

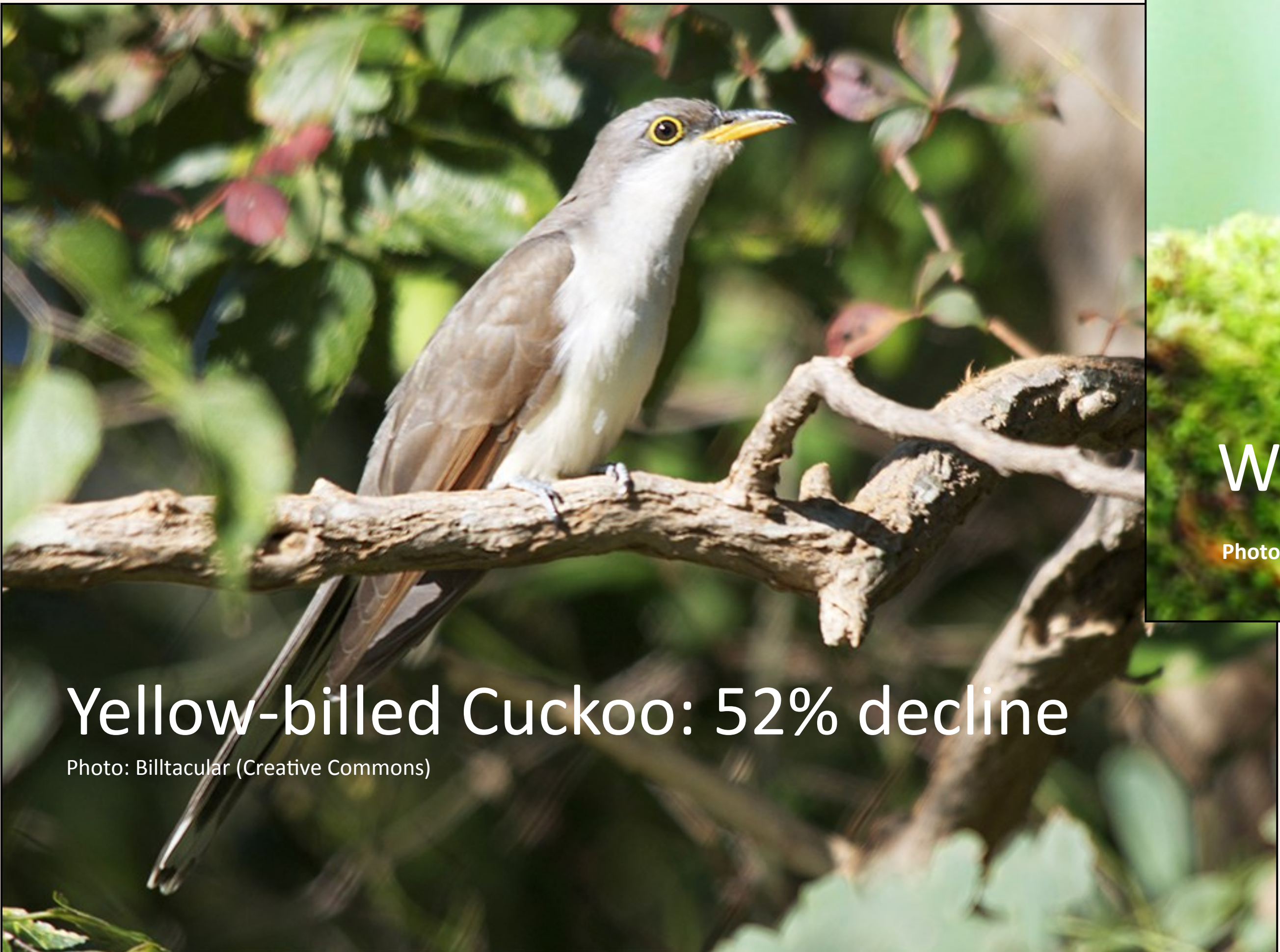
That is the theme of this exhibit.



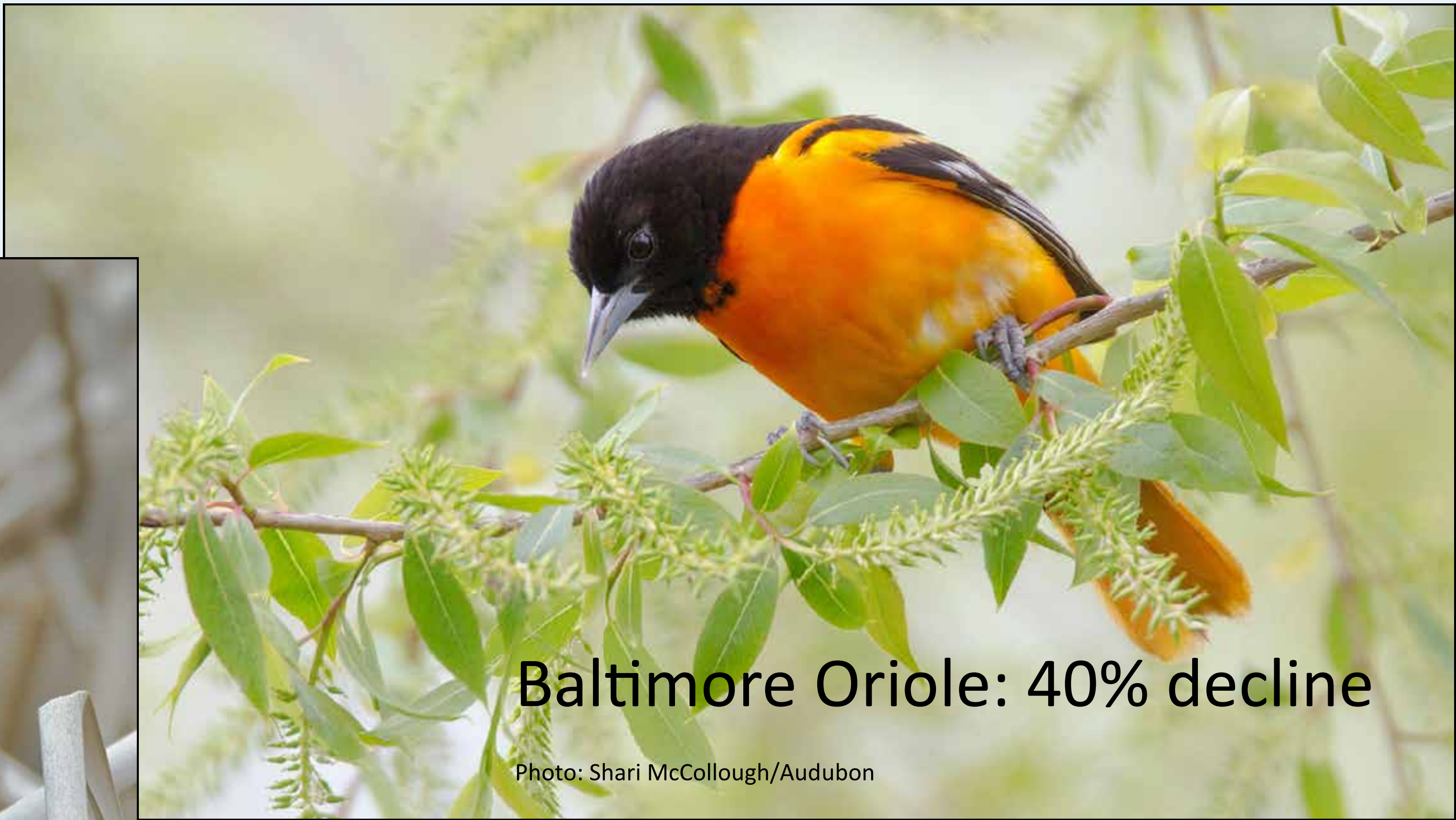
This exhibit is funded by the Salisbury Association Land Trust
and brought to you in partnership with Sharon Audubon and HVA/Greenprint.

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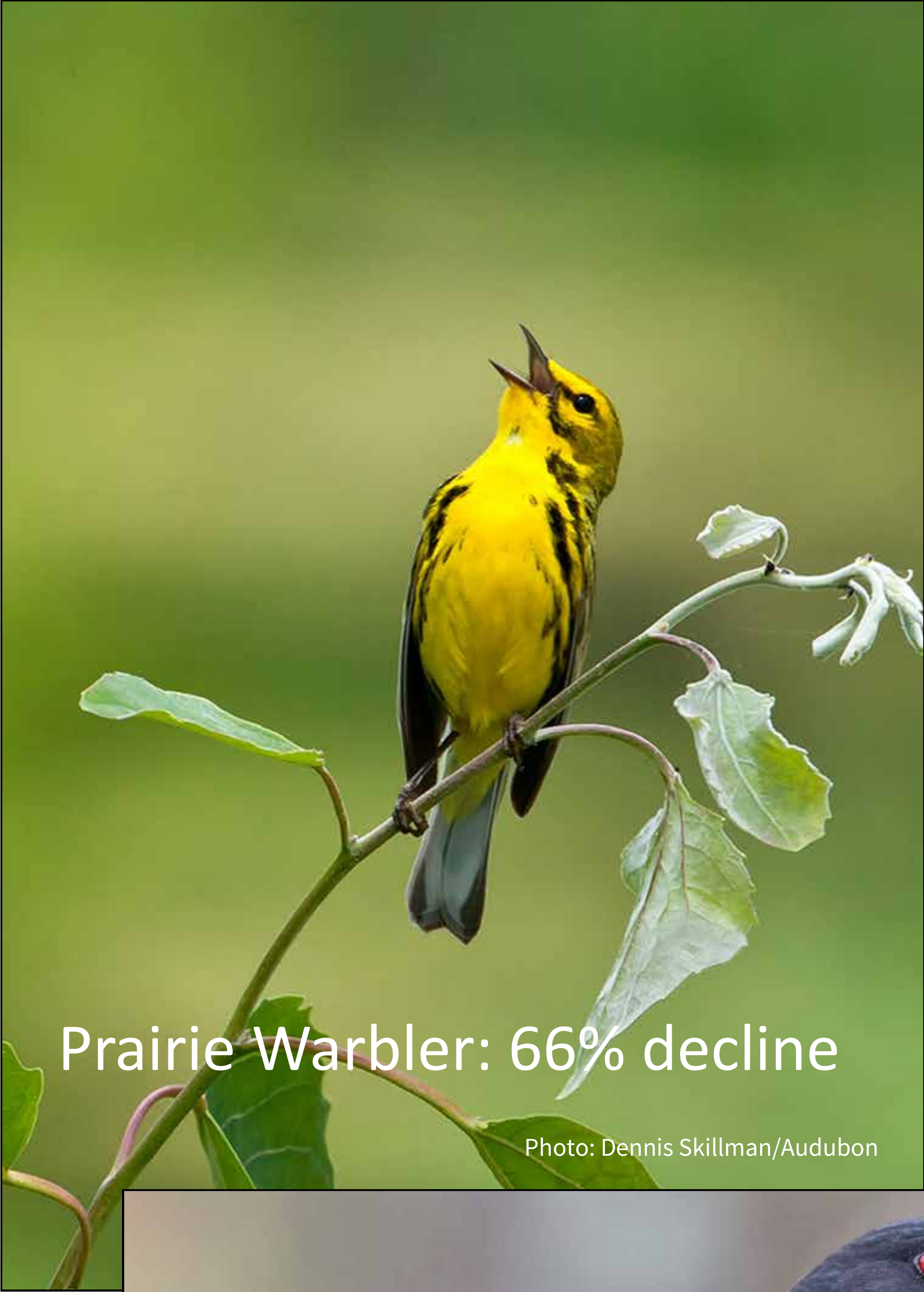
DECLINES IN EASTERN FOREST BIRD POPULATIONS SINCE 1970



DECLINES IN BACKYARD BIRD POPULATIONS SINCE 1970



*DECLINES IN EASTERN SHRUBLAND &
GRASSLAND BIRD POPULATIONS SINCE 1970*



Prairie Warbler: 66% decline

Photo: Dennis Skillman/Audubon



Eastern Meadowlark: 59% decline

Photo: Brian Sullivan



Bobolink: 53% decline

Photo: Douglas Gimler



Eastern Towhee: 40% decline

Photo::Tim Sackton



American Woodcock: 30% decline

Photo: Robert Hamilton/Almay



Reduce Lawn, Add More Native Plants

As noted in National Audubon's 2019 climate report:

"America's largest irrigated crop isn't corn or soy—it's grass. Lawns cover more area than Georgia, and their upkeep deepens the climate crisis."



Do You Really Need All Of Your Lawn?

Lawns are attractive and useful for some activities, but they have significant drawbacks in the environment. Lawns are high maintenance, water-guzzling and expensive. Keeping a lawn neat, weed-free and green often requires treatment with insecticides and synthetic fertilizers and herbicides, many of which can be harmful to people and wildlife.

Go Native!

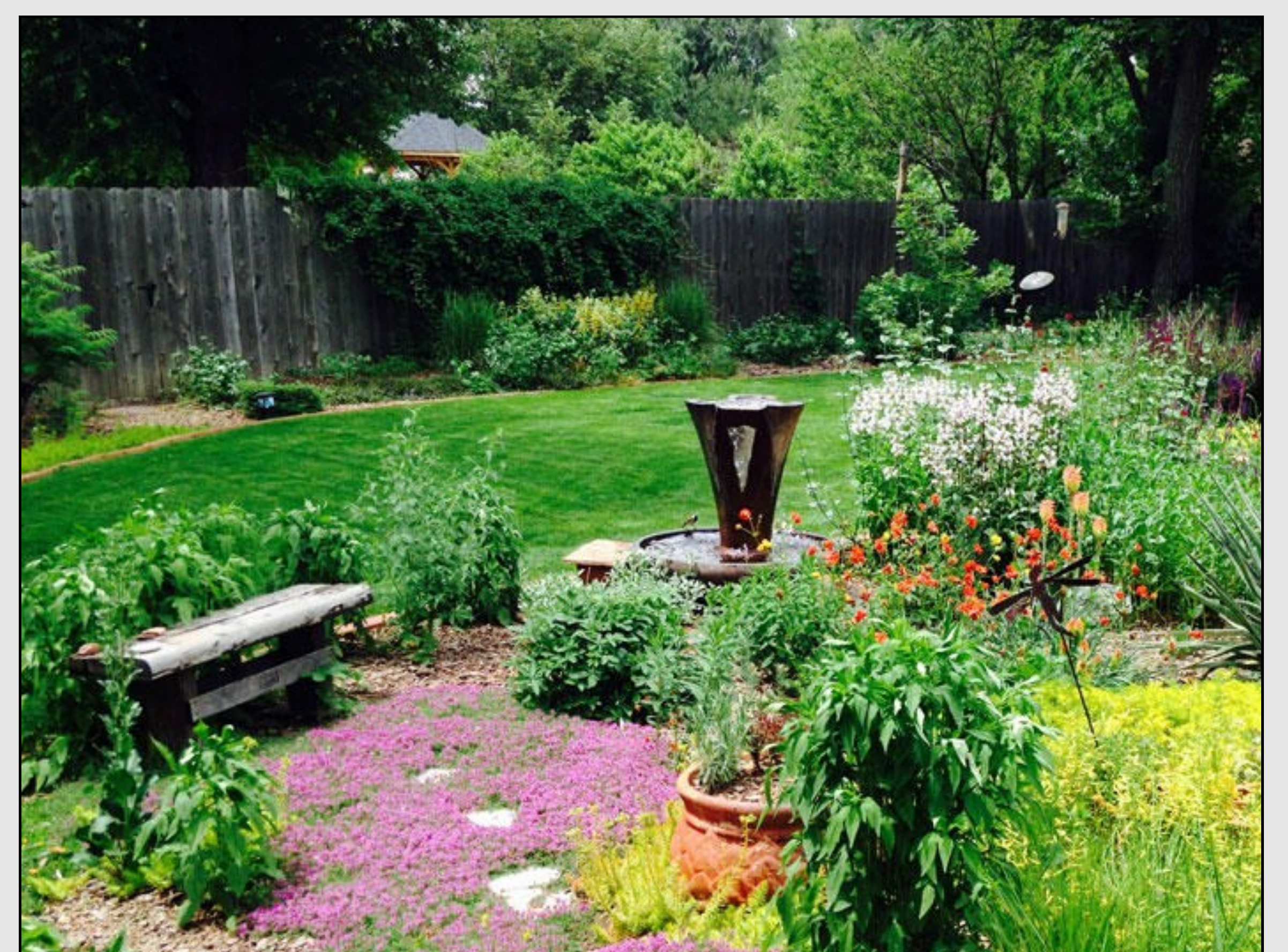
A landscape of native grasses and shrubs provides ecological benefits with very little maintenance. After the plants are established, watering is usually unnecessary, and mowing is reduced to once per year, typically late fall.

Native vegetation offers cover for nesting song birds and game birds. With native flowers, your backyard can be a sanctuary for goldfinches and other species (*right*).



Photo: David Shipper/Audubon

Hummingbirds play an important role in pollination, serving as a link between plant populations by visiting flowers and moving pollen over great distances. Specializing in nectar feeding, these migratory birds depend on native flowering plants for food. Ruby-throated Hummingbird and honeysuckle (*above*).



Audubon.org

Here's another idea for a backyard with reduced lawn, replaced with a garden of native plants and flowers. It's a natural attraction for birds, as well as for people.



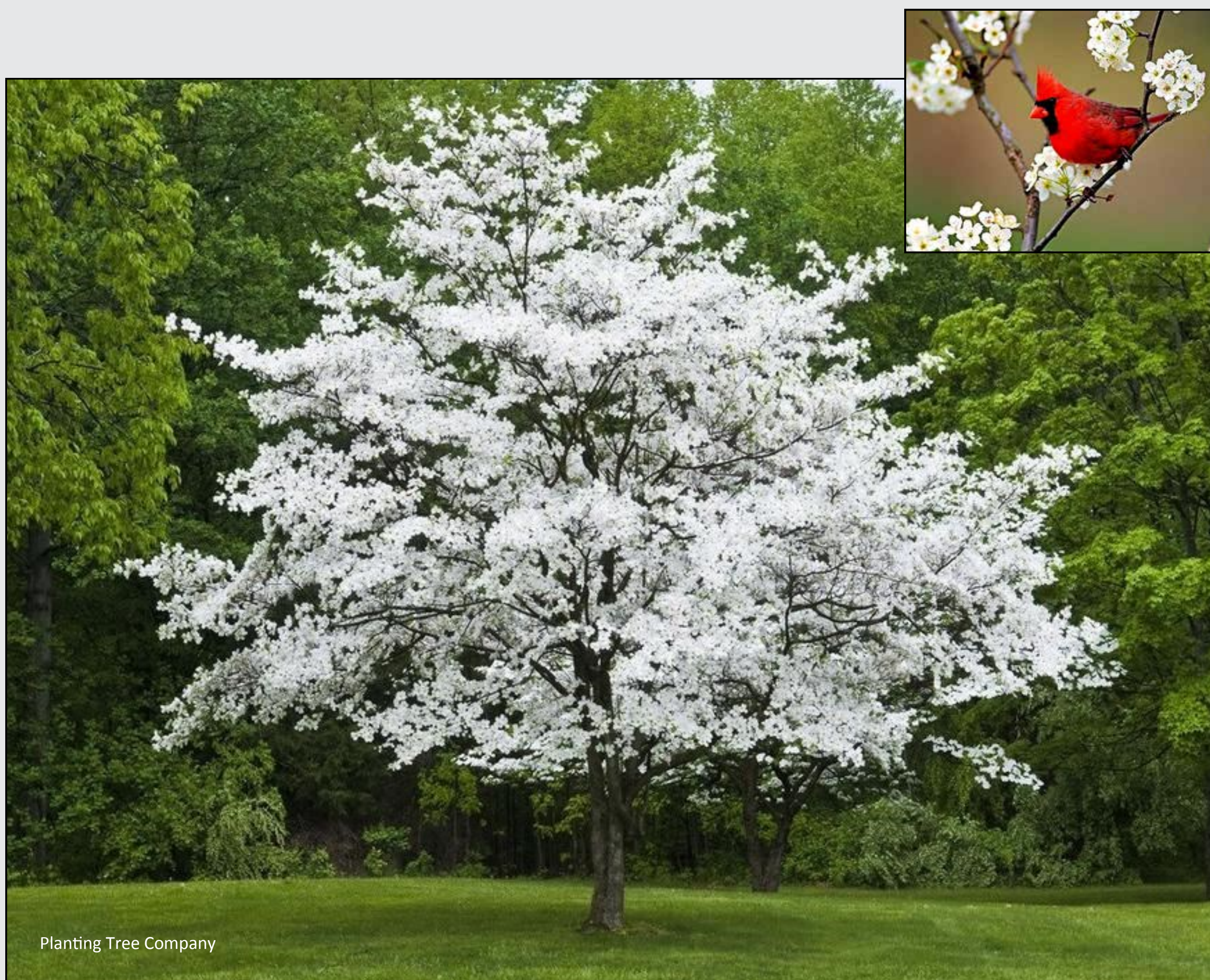
Choose Native Plants for Birds

Native plants are the foundation of a region's biodiversity. The native trees and shrubs that evolved with birds and other wildlife in the same ecosystem provide more food for wildlife than do non-native plants.

For example, native oak trees alone support more than 550 different species of butterflies and moths, an important food for birds. Entomologist Doug Tallamy has shown that a nest of chickadees consumes as many as 9,000 caterpillars between hatching and fledging. Non-native plants are not nearly as productive of essential insects. Even a small addition of native plants in your landscape can bring big rewards for birds.

Which plants are native to your area? What bird families do they attract?

To find out, go to [audubon.org/native plants](https://audubon.org/native-plants).



Native flowering dogwoods support many more species of moths and butterflies than do non-native plants. The insects they attract are an important protein for birds.



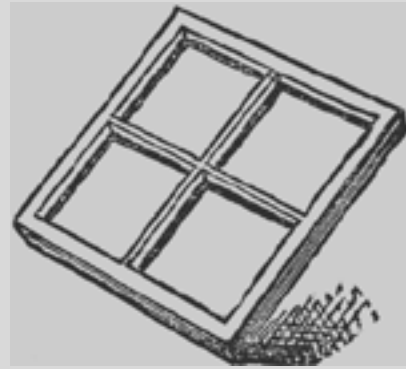
A chickadee forages for sumac berries, a winter "emergency" food (*above*). The berries are also part of the winter diet of Ruffed Grouse, wild turkey, and Ring-necked Pheasant. About 300 species of songbirds include sumac fruit in their diet.



Fruit-eating birds, like these Cedar Waxwings, on Winterberry Holly. The shrub's bright-red berries are a favorite food when the ground freezes and worms and insects are less available.



Native milkweed is the host plant for Monarch Butterfly caterpillars. After emerging, the caterpillars depend on the milkweed plant as their sole source of food. The caterpillars, in turn, are a major food for birds, especially the young.



Make Windows Safer for Birds

Birds Are Injured By Windows

Chances are that birds have hit the windows on your house without you being aware of it. Birds injured by window strikes may fly away only to die elsewhere. Window strikes often take place during spring and fall migrations. The Cornell Lab of Ornithology estimates that up to one billion birds in the United States and Canada may die each year from collisions with windows and buildings.



Deborah Allen



Photo by Susan Spear/Cornell Lab.

Why Do Birds Strike Windows?

In daytime, birds see the reflections of trees and shrubs in the window glass and fly toward them. They see the reflections as habitat they can fly into. Instead, they crash into the glass.

At night, migratory birds are drawn to structures by bright lights, particularly in cities, and are at risk of flying into them. Reducing light pollution, especially during migrations, could help. Some cities are now mandating “bird-friendly” glass made from materials that birds can see.

How You Can Help

The American Bird Conservancy (abcbirds.org) describes a variety of visual deterrents that homeowners can use to help break up reflections and reduce window strikes by birds.

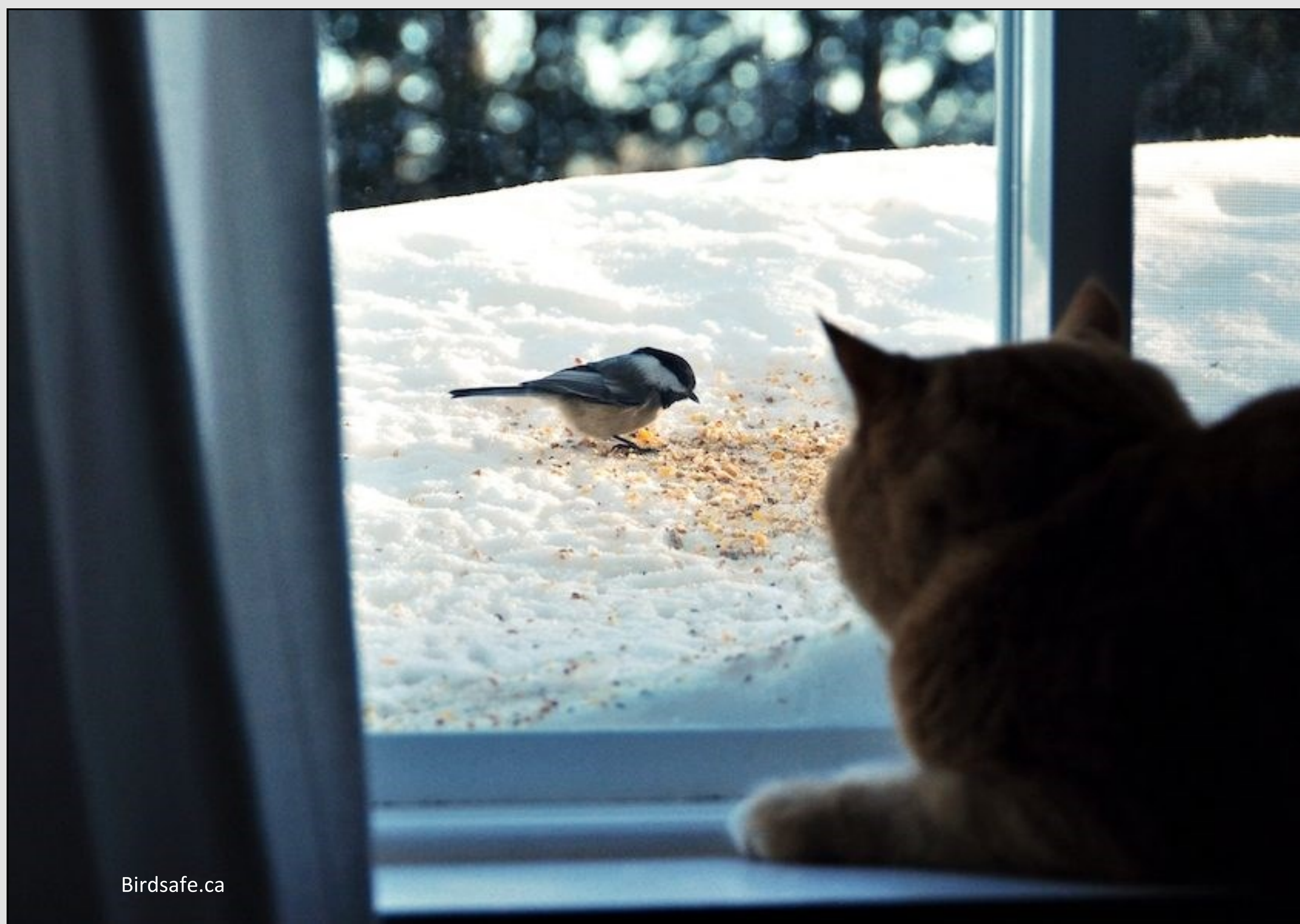
Included in these options are the use of screens on the outside of windows, film or paint to break up reflections, bird tape, and string devices hung on windows (*right*). These and other suggestions may provide a solution that works for homeowners as well as for birds.



Acopian Bird Savers



CATS KILL MILLIONS OF BIRDS WHAT CAN BE DONE?



Birdsafe.ca

Cats make great pets, but they take a severe toll on birds. Cat predation is the #1 human-caused reason for bird loss in the continental United States and Canada, aside from habitat loss. Cats, a nonnative predator, instinctively hunt birds and other small wildlife, even when well fed. Free-roaming cats kill many millions of birds each year. What can a pet owner do to help?

Keep Pet Cats Indoors

The best way to keep pet cats safe and also protect wild birds is to keep cats indoors. As pet owners know, cats need stimulating activities that engage their senses and provide exercise. The American Bird Conservancy (abcbirds.org) suggests activities for the home targeted to this need, including the following.

Get a Cat Exercise Wheel. The popular wheel used for exercising hamsters is now available in a cat-friendly size.

Provide enrichment activities. By nature, cats are hunters and respond to toys that mimic prey activity. Common household objects like boxes, socks, crumpled paper and balls of string can serve as play objects for cats to manipulate.

Indoor cats gravitate to window ledges from which they can watch what's going on outside.



Bedford Highway Veterinary Hospital



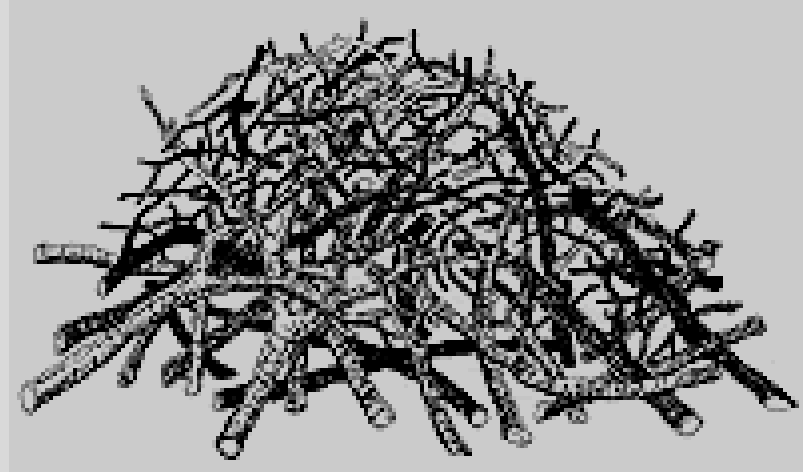
Catio Spaces

Contain Cats

There are ways that cat owners can safely enjoy the outdoors with their pet. The American Bird Conservancy and other websites offer ideas such as the following.

Install a safe outdoor enclosure for your cat. A “catio” (*left*) comes in various sizes, depending on the preference of the homeowner. The catio can be linked with the home, allowing a pet to easily access inside and outside locations.

Another way to safely explore outdoors with your cat is to use a comfortable restraint such as a cat harness or a backpack in which your pet can safely accompany you.



Other Ways to Help Birds



Dark-eyed Junco. Photo: Christine Haines/Great Backyard Bird Count

Make a Brush Pile

Here's a simple backyard project to provide cover and shelter for birds year-round and during severe weather. Begin by collecting fallen branches. Lay the largest logs horizontally to form a foundation. Pile the bigger branches loosely on top of this layer. Don't pack the brush too tightly. Continue to build up your brush pile in successive layers, leaving open pockets between the layers for birds to access.

Leave Dead-Standing Trees and Leaf Litter

Dead-standing trees serve as nesting sites for cavity-nesting birds and as a food source for birds. Woodpeckers rely on insects, a good source of protein, that they find in these trees.

Allowing some fallen leaves to remain on the ground enriches the soil for plants from which birds forage.



Photo: Tom Murray; Flickr CC



Drink Shade-Grown Coffee

As reported by the Cornell Lab of Ornithology, three-quarters of the world's coffee farms destroy forest habitat to grow coffee in the sun. North American migratory birds that winter in Latin America and the Caribbean depend on these forests as critical refuge for food and shelter.

Some coffee farms produce shade-grown coffee that preserves the forest canopy. This helps migratory birds as well as local birds that winter in coffee plantations.

The coffee you drink can make a real difference and help to ensure that the birds we love return in spring.



Reduce Pesticides

More than a billion pounds of pesticides are used in the U.S. each year. Pesticides are widely used in agriculture and in some products around the home. Toxic pesticides are lethal to birds through direct contact, or if birds feed on contaminated seeds or insects.

Pesticides also reduce the number and diversity of insects, an important food for many birds. When possible, avoid pesticides in and around your home.

For a healthier choice, choose organic foods when possible.





Be a Citizen Scientist

Bird watchers, from beginners to experts, are observing and counting birds and sharing their observations with organizations like the National Audubon Society and Cornell Lab of Ornithology. The result is a database that provides researchers as well as amateur naturalists with real-time information on bird distribution and abundance—a window into how birds are faring. The participation of thousands of birders in data collection is an important contribution to conservation.



Photo: Sharon Audubon, Christmas Bird Count

Christmas Bird Count

The Christmas Bird Count (CBC), a project of the National Audubon Society, takes place annually from December 14 to January 5. CBC is one of the longest-running wildlife censuses in the world. You don't need to be an expert to join with other birders in contributing to each year's count. To learn more, go to audubon.org/christmas-bird-count.

Great Backyard Bird Count

The Great Backyard Bird Count (GBBC) asks participants to count birds for as little as 15 minutes on one or more days of the four-day event and report sightings to birdcount.org. The Sharon Audubon Center helps visitors identify common feeder species to submit for the count. In 2019 more than 160,000 GBBC participants submitted bird observations online, creating the largest instantaneous snapshot of global bird populations ever recorded.



Wingspan Optics

eBird

Count birds anywhere, anytime, with eBird. Explore bird hotspots near you and wherever you go, based on the latest sightings from around the world.

Birders are asked to fill out and submit a checklist of the birds they have seen on an outing. In this way, you help scientists gather information on a geographic scale that would be impossible without your help. To get started go to eBird.org.



Photo: Art Pelham, release of Great Horned Owl

The Sharon Audubon Wildlife Rehabilitation Center treats injured and orphaned birds. When possible, it releases healthy, viable individuals back into the wild. Animals that cannot survive independently in the wild become “ambassadors” for public education.



Audubon Sharon’s diverse habitats—fields, wetlands, ponds and forests— provide many opportunities to observe birds and other wildlife.



Skilled staff and trained volunteers are dedicated to the care and rehabilitation of injured or sick wildlife brought to the Center.



Sharon Audubon’s “ambassador” birds are on display in aviaries (*left*). In addition, Audubon’s rehab center includes emergency care facilities, plus two aviaries for recovering songbirds, one for medium-sized raptors, and a 60-foot flight cage for large raptors to practice flying before release.



Salisbury Association
Land Trust
Conserving Our Land.

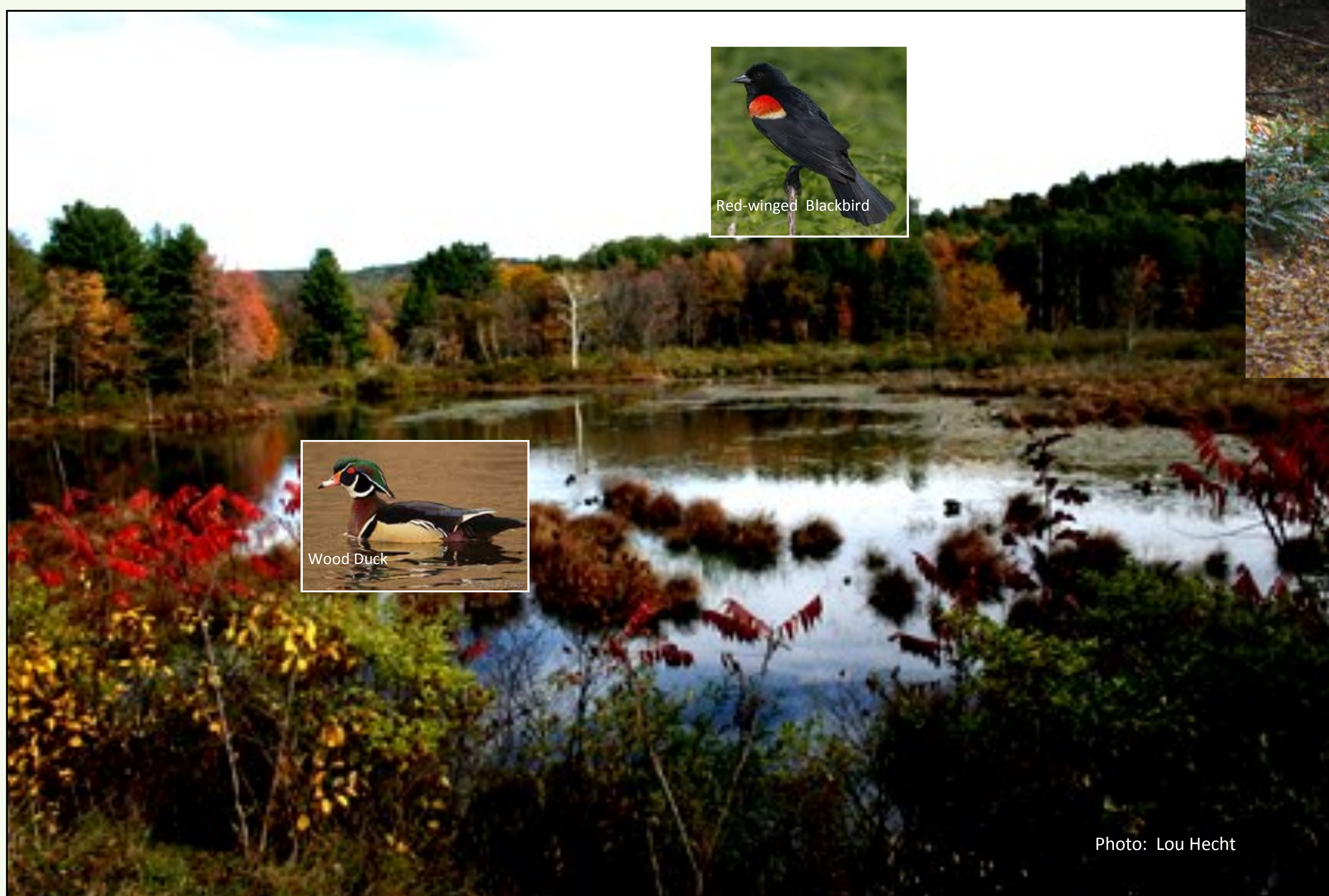
Birding and Bird Conservation

The Salisbury Association Land Trust conserves a variety of wildlife habitats including forested hills, calcareous wetlands, early successional habitat and grasslands that birds need for food, shelter and nesting. Support land conservation!



Schlesinger Bird Preserve

The Schlesinger Bird Preserve on Scoville Ore Mine Road at Undermountain Road is a 19-acre mosaic of old field, shrubland, thick ground cover, and young woodland. It is managed by the Land Trust as an important bird habitat. In spring the public is invited to participate in a guided bird walk. The preserve is the place to be to see colorful shrub nesters like the Prairie Warbler and the Indigo Bunting.



Dark Hollow

Dark Hollow, owned and managed by the Salisbury Land Trust, is a 125-acre forested preserve with hiking trails. Located on Dark Hollow Road between Salmon Kill and Farnum Roads, the preserve is a preferred habitat for birds specializing in interior forest nesting, such as the Wood Thrush and the Black and White Warbler.

The Pond at Railroad Ramble

Located along the Railroad Ramble (Bike Path) that runs between Salisbury and Lakeville, the pond is a good place to see year-round bird residents and waterfowl.