

# Ten Reasons Why Caribbean Birds Matter

*The Benefits of Birds to Humans and Nature*



There's no question that birds have a special place in the hearts of Caribbean people. The intimate cultural connection between people and birds is reflected in the local names for birds that vary from island to island. They are celebrated in art and literature from the region as well, receiving praise from Bob Marley for “singin’ sweet songs,” and representing the Caribbean spirit in the poems of Derek Walcott. The true importance of Caribbean birds, however, goes far beyond their beauty and power to inspire.

Although often unknown or unnoticed, birds play many critical roles that enrich the ecosystems and economies of the Caribbean. They act as garbage men, gardeners, fish-finders and tourist attractions. The Caribbean as we know it couldn't exist without them. Best of all, they do all this work for free!



*Birds eat pests. A single Barn Swallow can eat 60 insects in an hour, up to 850 per day! Ron LeValley*

## 1. Birds eat pests.

The early bird catches the worm, and many Caribbean birds eat insects of all kinds, like mosquitoes, cockroaches, flies and beetles. In the wild, insect-eating birds help ensure the proper balance between plants, insects and other animals. On farms, and in even in backyard gardens, they do much the same, controlling the population of pest insects for free, and reducing the need to use potentially harmful pesticides.

The coffee berry borer beetle, the world's most serious coffee pest, is an excellent example of this. Research on Jamaican coffee farms has shown that migratory song birds, such as the American Redstart and Black-throated Blue Warbler, and resident birds, such as the Bananaquit and Jamaica Tody, feast on the berry borers during the critical period when the beetles are attempting to invade the maturing coffee berries. This research demonstrated that wild birds in the Caribbean increased the profits of coffee farmers by about 12 percent.

Birds also help control invasive species that are harmful to human health and ecosystems. Birds of prey such as the Red-tailed Hawk, Peregrine Falcon, and owls eat rats and mice in addition to smaller birds, mammals, insects and reptiles. In St. Martin, the American Kestrel hunts immature green iguanas, which are an invasive species.



*Endemic birds like the Jamaican Tody bring tourists. Birding brings in \$32 billion in the U.S. alone—it creates jobs and brings in revenue for many kinds of businesses. Ricardo Miller*

## 2. Birds bring birdwatchers.

Birdwatchers love birds. They are visiting the Caribbean to see our rare and beautiful endemic birds and unique habitats. The United States Fish & Wildlife Service has calculated that birding and other wildlife watching is worth \$32 billion per year (U.S. dollars) in the United States alone. Birding tourism, a growing segment of the international tourism market, now makes the Caribbean an important area for sun, sand, sea – and bird-watching! Birding trails and hotspots are established on most Caribbean islands, attracting both casual cruise ship visitors and the more dedicated stop-over birders in significant numbers. Birding tourism generates jobs and revenues for national parks and preserves, and hotels, restaurants and other small businesses. Promoting birding tourism during the peak migratory periods in the fall and spring may even help boost tourism during months that are traditionally considered the low season for tourism.

### 3. Birds clean up.

One man's trash can be a bird's treasure. From carcasses to breadcrumbs, birds are the champions of removing dead animal and other organic remains. Vultures, egrets, herons, crows and several other species remove road-kill, farming and domestic refuse. This helps keep islands beautiful and also benefits public health by disposing of items that could cause pollution or even spread disease.

### 4. Birds spread seeds.

None of our tropical hardwood forests would exist in their current state without wild birds. This is because for many tropical forest shrubs and trees, birds are the most important seed dispersers. The Caribbean is rich with seed-swallowing and fruit-pulp feeding birds, such as pigeons, doves, parrots, warblers and grassquits that spread forest seeds. By doing so, they protect valuable watersheds; produce vital water catchments; support important hardwood timber industries; help control floods; and buffer the effects of global climate change. Dominica's large parrots, with their powerful thick beaks and feet, enhance seed dispersal by opening large hard fruits, making their seeds more available to smaller seed-dispersing songbirds.

### 5. Birds pollinate flowers.

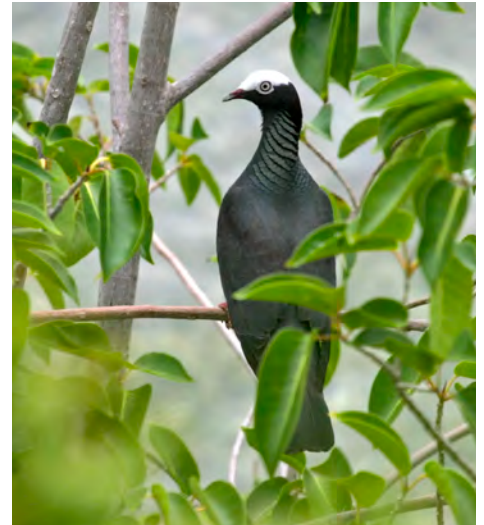
Without birds, the region would lose some of its most beautiful treasures. In the Caribbean, bats, insects and birds, including hummingbirds, Bananaquits and many warblers overwhelmingly dominate pollination. A collection of studies has documented that the shape, nectar characteristics, and colors of several Caribbean flowers have evolved in response to hummingbird pollination. Thus plant diversity can be limited by a lack of hummingbird pollinators on some islands. Pollination is a key environmental service provided by birds—without birds, numerous plants could not produce seeds and fruits.

### 6. Birds enrich soils.

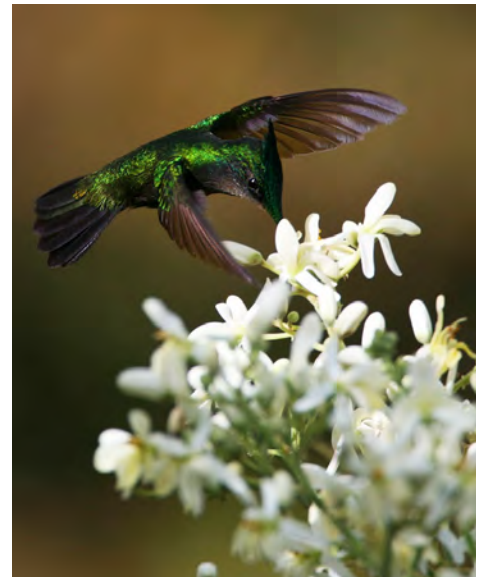
Guano, or seabird poop, contains concentrated sources of nitrogen and phosphates and is a valuable source of fertilizer. Although manure from commercially-produced chickens is now prevalent, seabird guano once formed the basis of entire industries. In the 1900s, before inorganic fertilizers became common, extensive guano deposits on Caribbean islands were harvested as guano prices skyrocketed in the Europe and in North America. Today, birds continue to provide this service in many habitats by enriching forest soils and recycling important nutrients for plant growth.

### 7. Birds are experts at finding fish.

Birds have been helping fishermen find fish since long before the invention of sonar and electronic fish finders. Seabirds like the Magnificent Frigatebird, Wilson's Storm Petrel, Sooty Tern and Brown Noddy have millions of years of experience spotting fish as they fly high above the sea. They are quick to the scene when schools of small fish are forced to the surface by larger, more desirable species. In the Caribbean, savvy fishermen have been using seabirds to help spot fish for generations, and refer to them as "fish finders." They even know what type of fish they are likely to find in a given area based on the birds that are present!



*Birds spread seeds. Many birds like the White-crowned Pigeon, Scaly-naped pigeon, grassquits, parrots, bullfinches, and mockingbirds spread seeds by eating and digesting. Lisa Sorenson*



*Birds like this Antillean Crested Hummingbird are important pollinators of many flowering plants, shrubs and trees. Sean Modi*



*Seabirds are expert fish finders; Brown Noddies nest on offshore islands and cays but feed in flocks out at sea.*

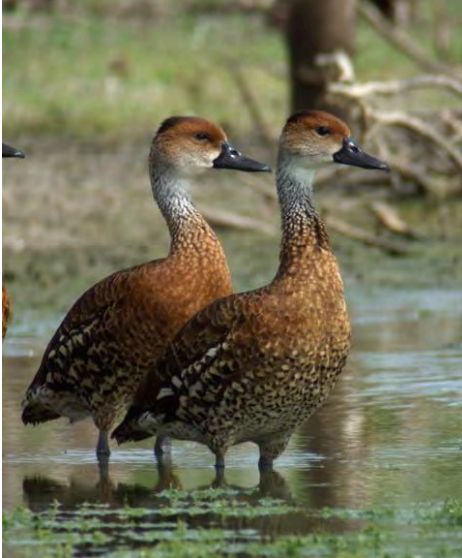


A pair of binoculars and field guide is all you need to get started on a rewarding life long hobby. Lisa Sorenson

## 8. Birds connect us to nature.

Birds are everywhere and are easy and fun to observe. In the Caribbean, where there are few native mammals, birds are often the most charismatic and familiar animals, making them the perfect ambassadors for appreciation of nature. A pair of binoculars and a field guide is enough to get anyone started on a rewarding lifelong hobby. A field trip to see birds can bring biology to life and inspire students to be our future scientists and conservationists.

Birds also have much to tell us about the world we live in. Our understanding of the natural world was and still is enriched through research on birds by numerous scientists. Charles Darwin, the famous naturalist and geologist who developed the theory of evolution by natural selection described in his book “The Origin of Species,” how his study of mockingbirds and finches in the Galapagos Islands contributed to his theory. In the Caribbean, bird research may bring new discoveries that help us better understand both the region and the world. Each island is, after all, a laboratory of sorts, running its own experiments in ecology and evolution.



The threatened West Indian Whistling-duck is found only in the islands of the Caribbean. Anthony Levesque

## 9. Birds are our “canary in the coal mine.”

In the past, coal miners brought canaries and other small animals with them into mines because they would die when exposed to dangerous levels of carbon monoxide, giving the miners a chance to escape. Even today, birds often signal when there are dangerous threats to the environment and people.

In the mid-20th Century, populations of birds of prey such as the Peregrine Falcon, Osprey and Bald Eagle declined. Scientists found that accumulations of the pesticide DDT made them produce thin, brittle eggshells that broke easily. This discovery warned of the dangers of DDT to the health of wildlife and humans. More recently, mercury has been found in the blood of forest birds such as Bicknell’s Thrush, even though the birds are living far from power plants, showing the far-reaching effects of human pollution.

Just the presence or absence of birds can tell us a lot. In some parts of the Caribbean, the Magnificent Frigatebird was known as the Hurricane Bird. Their arrival from far at sea was a sign of a coming storm. When there are fewer birds, due to human disturbance such as forest clearing it can mean a loss in biodiversity. This makes habitats less resilient to change and more prone to invasion of harmful species and agricultural pests.

This article was written by Leo Douglas, Mark Yokoyama, and Lisa Sorenson for CEBF 2014.  
Inspired by the Audubon magazine’s articles “Ten Reasons to be Thankful for Birds” and “Birds Matter Because They Do.”

## 10. Caribbean birds are UNIQUELY ours!

The Caribbean cannot claim many goods, products and services as unique to the Caribbean. Many things that we now celebrate have their roots in other cultures and are derived from influences outside the region. Caribbean birds are, however, a notable exception! Ranked among the top five areas of the planet to possess a unique (and threatened) bird community, the Caribbean boasts a diverse collection of bird species that have lived here for millions of year and are not found anywhere else! According to global experts, an astonishing 72% of the approximately 208 resident island bird species found on Caribbean islands are endemic—that is, found nowhere else on the planet. Sadly, threats and rates of extinction have been increasing, meriting international focus on the preservation of this unique natural heritage.



BirdsCaribbean is a vibrant international network of members and partners committed to conserving Caribbean birds and their habitats. We raise awareness, promote sound science, and empower local partners to build a region where people appreciate, conserve and benefit from thriving bird populations and ecosystems. To learn more, visit: [www.birdscaribbean.org](http://www.birdscaribbean.org) or <https://www.facebook.com/CaribbeanBirds>.