

Florida's Introduced Birds: An Overview¹

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Many non-native birds have been introduced in Florida—perhaps as many as 200 species! These include a wide variety of species, such as flamingos, hawks, ducks, doves, hornbills, toucans and parrots—a lot of parrots! Of these 200 introduced species of birds, at least 14 species are considered established, according to various authorities. The Florida Fish and Wildlife Conservation Commission (FWC) considers an introduced bird species to be established when it has been present and breeding in Florida for at least 10 years in a row. The introduced bird species that have become established in Florida are listed in Table 1 below.

The number of non-native species of birds in Florida changes constantly, as new species are introduced. The birds' geographic ranges are also dynamic, and change as established species expand their ranges. On a regular basis, new species or populations of already established species are discovered by wildlife biologists studying this problem. This document is the first of a series of documents about Florida's non-native birds and their impacts on our state's native ecosystems and human residents. For more information on a specific established species, see the other fact sheets in this

series,
[http://edis.ifas.ufl.edu/
 topic_series_floridas_introduced_birds](http://edis.ifas.ufl.edu/topic_series_floridas_introduced_birds).

How Did These Birds Get Here?

Florida's non-native birds found their way to the hospitable climate of the Sunshine State via two main *invasion pathways*—direct introduction via the exotic pet trade, and indirect introduction as birds expanded their ranges after being introduced in other states. The vast majority of these introductions were unintentional, when birds destined for the pet trade escaped from cargo shipments or birds escaped from homes or pet stores and were able to survive in Florida's subtropical climate. Other species were intentionally released by pet dealers or pet owners who weren't aware of the potential consequences of their illegal actions. Many of these species have yet to spread beyond their immediate area of introduction, whereas other species have spread rapidly. As a population of introduced birds grows, individuals begin to disperse and colonize new areas, resulting in additional introductions. For example, the European Starling was intentionally introduced in New York City's Central Park in 1890, and within 30 years had expanded its range into Florida.

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When Is an Introduced Species Considered Invasive?

The United States government defines an *invasive species* as a species that is not native to an ecosystem, whose introduction causes or is likely to cause economic or environmental harm or harm to human health and well-being. In 1999, President Clinton signed an executive order establishing the National Invasive Species Council, which was tasked with providing national leadership on invasive species and developing a management plan. Obviously, invasive species are a significant problem! A study published by scientists at Cornell University estimated that invasive species cost the U.S. around \$120 billion each year and impact nearly half of our threatened and endangered species. Remember, invasive species can be vertebrates like birds, but can also be invertebrates like the zebra mussel, or microbes that cause disease—like citrus canker.

How Are Invasive Birds Impacting Us?

Invasive birds have the potential to impact Florida's economy, natural ecology, and the quality of life of Floridians. However, for the majority of the bird species that have been introduced in Florida, we simply don't know enough about the impacts they may be having, and don't know enough about their ecology to predict possible impacts. The impacts of the vast majority of the introduced bird species are unknown and may be of little consequence. Others, however, are considered to be invasive species and pose significant threats.

Economic Impacts

Some invasive birds have significant economic impacts that negatively affect taxpayers and private businesses. For example, the invasive Monk Parakeet uses sticks to build huge, communal nests on high-voltage power distribution structures (Fig. 1). When wet, these nests can cause short-circuit and disrupt power, so they must be prevented or removed, which is not only dangerous, but also costly for Florida's utility companies. Other introduced birds, such as the Eurasian Collared-dove, Rock Dove, and

European Starling, nest and roost on ledges and overhangs of buildings. Removal of their unsightly feces (Fig. 2) can be a dangerous, difficult, and expensive undertaking.



Figure 1. Monk Parakeets build huge, communal nests on power distribution stations. When wet, these nests can disrupt power, and they are costly (and dangerous) to remove. Credits: Steve A. Johnson



Figure 2. European Starlings, Eurasian Collared-doves, Rock Doves, and other introduced birds nest and roost on buildings. They produce large amounts of feces that can corrode or stain walls and is difficult to remove. Credits: Steve A. Johnson

Ecological Impacts

Introduced birds also have the potential to negatively affect our natural ecology. Some species, such as the House Finch, are known to compete with native birds for nest cavities—a critical resource that has already been severely reduced by loss of natural habitats to urbanization. House Finches and Common Mynas also compete for nest boxes, installed to benefit native birds. Invasive birds compete with native birds for forage, and may further affect the natural ecology by spreading the seeds of invasive plants. Many introduced species, including finches, ducks, and doves, may also spread disease to native birds. Introduced birds are known to carry and spread a multitude of diseases, including duck plague, conjunctivitis, fowl cholera, paratyphoid, avian tuberculosis, chlamydiosis, and psittacosis. Some introduced ducks are also known to interbreed with native ducks, diluting the gene pool and reducing their ability to adapt, resist disease, and survive. Introduced Mallard Ducks have become established, year-round residents in Florida, are interbreeding with Florida Mottled Ducks, and may eventually cause the extinction of this native species.

Human Health and Quality of Life

Introduced birds can negatively impact our health and quality of life, and that of our pets. Introduced House Sparrows can become a considerable nuisance when they nest in tight spaces under the eaves of homes and businesses (Fig. 3).

Introduced European Starlings, Eurasian Collared-doves, Rock Doves, and Muscovy Ducks are common in urban and suburban parks and can also become a nuisance, particularly when they are fed. These birds produce copious amounts of feces that is not only unsightly (and inconvenient when it happens to be on park benches) and costly to remove, but can also spread disease. Birds can carry a wide variety of *zoonoses*, or diseases which can be spread to humans, such as avian influenza ("bird flu"). When introduced birds are allowed to proliferate in urbanized areas, the risk of transmission of such diseases increases greatly. Additionally, larger birds such as Muscovy Ducks can become aggressive, and



Figure 3. Introduced birds can become a significant nuisance. House Sparrows build messy, unsightly nests in tight spaces, especially under the eaves of homes and businesses, as shown here. Credits: Steve A. Johnson

have been known to attack small children and chase pets.

What Can You Do?

You can help to alleviate the growing numbers of non-native bird species in Florida by being a responsible and educated pet owner. Before you purchase a bird as a pet, be sure you are committed to caring for that animal for its entire life. Many pet birds can live for twenty years or more, and some parrots may live more than sixty years! You should also be sure to research the species you are considering, so that you will know if it will be suitable for you as a pet. Many species can be difficult to care for, and may develop behavioral problems (e.g., extremely loud squawking, biting). If you tire of your pet you should never release it outdoors. Many people mistakenly believe that releasing a pet is the humane thing to do, but unfortunately, released pets usually die. In the unlikely event that your pet survives in the wild, you will have contributed to the growing problem of introduced species in our state.

Florida laws strictly prohibit the release of non-native species (68A-4.005, Florida Administrative Code), and there are other, better options available. If you or someone you know have a pet that you are no longer able to care for, the Florida Fish and Wildlife Conservation Commission hosts an annual "Exotic Pet Amnesty Day," where exotic pets can be surrendered for adoption (<http://myfwc.com/nonnatives/amnestyDay.html>).

You could also contact your local animal shelter or humane society, as they may be able to refer you to an exotic animal rescue group.

(<http://www.aspca.org/>)

You can also help by learning more about Florida's natural ecology and the harmful effects of invasive plants and animals. Practicing "Florida-Friendly" landscaping can also help by enhancing habitat for our many native animals and plants. More information on this topic can be found on the Florida Yards and Neighborhoods Web page (<http://hort.ufl.edu/fyn/>). In addition, the Florida Master Naturalist Program (<http://www.masternaturalist.ifas.ufl.edu/>) offers a variety of courses that combine classroom training and "hands on" learning, and will help you to learn more about Florida's native flora and fauna. By educating ourselves and others, we can work together to protect and conserve Florida's natural resources for future generations to enjoy.

Additional Resources

We recommend several different online guides, books and other publications that provide additional information on Florida's native and non-native birds.

Books and Scientific Publications

Alsop, Fred J., *Smithsonian Handbooks: Birds of North America – Eastern Region*. (New York: DK Publishing, Inc., 2001).

Bull, J., and J. Farrand, Jr., *The Audubon Society Field Guide to North American Birds*. (New York: Alfred A. Knopf, 1977).

Kale, H. W. II, and D. S. Maehr, *Florida's Birds*. (Sarasota: Pineapple Press, Inc., 1990).

Peterson, R. T., *Peterson Field Guides, Eastern Birds*. (Boston: Houghton Mifflin Co., 1980).

Pranty, B., *A Birder's Guide to Florida*. (Colorado Springs: American Birding Association, 1996).

Robbins, C. S., B. Bruun, H. S. Zim, and A. Singer, *A Golden Guide to Field Identification: Birds of North America*. (New York: Golden Press, 1983).

Sibley, D. A., *The Sibley Field Guide to Birds of Eastern North America*. (New York: Knopf, 2003).

Woolfenden, G. E., W. B. Robertson, Jr., and J. A. Cox, *The Breeding Birds of Florida*. (Florida Ornithological Society Special Publication 7, 2006)

Online

USDA National Invasive Species Information Center (NISIC)

<http://www.invasivespeciesinfo.gov/index.shtml>

Florida Fish and Wildlife Conservation Commission
Non-Native Wildlife

<http://myfwc.com/nonnatives/index.htm> — click on "Birds"

Florida Fish and Wildlife Conservation Commission
Breeding Bird Atlas

<http://myfwc.com/bba/default.htm>

World Conservation Union, Species Survival Group,
Invasive Species Specialist Group

<http://www.issg.org>—click on "Global Invasive Species Database," search for species

Cornell Lab of Ornithology "All About Birds"

<http://www.birds.cornell.edu/AllAboutBirds>—click on "Bird Guide," search for species

United States Geological Survey, Patuxent Wildlife
Research Center, Bird Identification

<http://www.mbr-pwrc.usgs.gov> —click on "Bird Identification InfoCenter"

Table 1. Introduced bird species that have become established in Florida. (*Mallard Ducks naturally overwinter in Florida, but do not naturally breed here—invasive breeding populations are the result of escapes from parks, farms, or zoos). Sources: Florida Fish and Wildlife Conservation Commission , Florida Ornithological Society.

Common Name	Scientific Name
Black-hooded Parakeet or Nanday Conure	<i>Nandayus nenday</i>
Budgerigar or "Budgie"	<i>Melopsittacus undulatus</i>
Common Myna	<i>Acridotheres tristis</i>
Eurasian Collared-dove	<i>Streptopelia decaocto</i>
European Starling	<i>Sturnus vulgaris</i>
House Finch	<i>Carpodacus mexicanus</i>
House Sparrow	<i>Passer domesticus</i>
Mallard Duck*	<i>Anas platyrhynchos</i>
Monk Parakeet	<i>Myiopsitta monachus</i>
Muscovy Duck	<i>Cairina moschata</i>
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>
Rock Dove	<i>Columba livia</i>
Spot-breasted Oriole	<i>Icterus pectoralis</i>
White-winged Dove	<i>Zenaida asiatica</i>
White-winged Parakeet	<i>Brotogeris versicolorus</i>