

## Florida's Introduced Birds: Eurasian Collared-Dove (*Streptopelia decaocto*)<sup>1</sup>

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Many non-native birds have been introduced in Florida—perhaps as many as 200 species! Of these, at least 14 introduced species are considered established, according to various authorities, and some are now considered invasive and could have serious impacts in Florida. This fact sheet introduces the Eurasian Collared-Dove, and is one of a series of fact sheets about Florida's established non-native birds and their impacts on our native ecosystems, economy, and the quality of life of Floridians. For more information on Florida's introduced birds, how they got here, and the problems they cause, read "Florida's Introduced Birds: An Overview," <http://edis.ifas.ufl.edu/UW297>, and 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).

### Species Description

The Eurasian Collared-Dove (*Streptopelia decaocto*) is a member of the dove and pigeon family (Columbidae), all of which are small to medium-sized birds with short legs and necks and small heads. With the exception of the Rock Dove (or

Pigeon), most species in this family show little variation in color. The Eurasian Collared-Dove (Fig. 1) is a medium to large-sized, stocky dove, approximately 12–13 inches long (30–33 cm) with a wingspan of 18–22 inches (45–55 cm) and weighing around 7 oz. (200 g). These large doves are a pale, sandy gray, with a slight pinkish tinge to the head and breast. Their bills are black, the irises of their eyes are red, and their legs and feet are mauve. Their tails are white when viewed from the underside, and the ends of their tails are squared off (rather than pointed). The Eurasian Collared-Dove gets its name from the black partial collar on the nape (back) of the neck, which is outlined in white. The plumage of the Eurasian Collared-Dove is similar in both sexes and changes very little throughout the year. Juveniles generally resemble adults but their breast, wing, and back feathers have pale reddish margins, the irises of their eyes are brown, and their legs are brownish-red. Juveniles younger than three months also lack a well-defined collar. The call of the Eurasian Collared-Dove is a rhythmic coo slightly lower in pitch than that of the more common Mourning Dove, or a harsh nasal "krreew" given during display flights.

1. This document is WEC256, of the Department of Wildlife Ecology and Conservation, University of Florida/IFAS. This document is one of several documents in the series entitled "Florida's Introduced Birds," published by Dr. Steve A. Johnson. Visit the University of Florida's EDIS website at <http://edis.ifas.ufl.edu>. First published April 2009.

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**Figure 1.** The Eurasian Collared-Dove (*Streptopelia decaocto*) can be easily identified by its namesake black collar. Credits: Valentin Muller, Wikimedia Project, 2006

### Similar Species

The Eurasian Collared-Dove and the Ringed Turtle-Dove (*Streptopelia risoria*, also non-native) are nearly identical in appearance and may easily be confused. However, the Eurasian Collared-Dove is much more common and widespread—the Ringed Turtle-Dove is largely limited to a few locations in Pinellas, Orange, and Miami-Dade Counties. The Ringed Turtle-Dove is slightly smaller than the Eurasian Collared-Dove. It can be identified by its call, which has been described as a rolling "kooeek-KRRROOO-aw," whereas the Eurasian Collared-Dove's call is a simpler "kuk-KOOOOO-kook." Ringed Turtle-Doves also have a laugh-like "heh-heh-heh" call when excited.

The White-winged Dove (*Zenaida asiatica*, also non-native) and the Mourning Dove (*Zenaida macroura*, a Florida native) are also very similar in size and appearance to the Eurasian Collared-Dove, but neither species has a black collar. The White-winged Dove (Fig. 2) has pale, brownish-gray plumage and a shorter, more rounded tail, and the leading edge of the wing shows a distinctive white patch in flight. The Mourning Dove (Fig. 3) is common throughout Florida, and is more slender than similarly sized non-native doves, with a smaller head, a long pointed tail, and narrow wings with black spots on their upper surfaces.



**Figure 2.** The White-winged Dove (*Zenaida asiatica*) is similar in appearance to the Eurasian Collared-dove but lacks the dark collar. Credits: Jerry Friedman, Wikimedia Project, 2006



**Figure 3.** The native Mourning Dove (*Zenaida macroura*) is similar in appearance to the Eurasian Collared-dove but is smaller and lacks the dark collar. Credits: Ken Thomas, Wikimedia Project, 2008

### Native Range and Habitats

The Eurasian Collared-Dove was originally native to the Bay of Bengal region (India, Sri Lanka, Myanmar), but historical records suggest that it expanded its range in the 1600s (by introductions

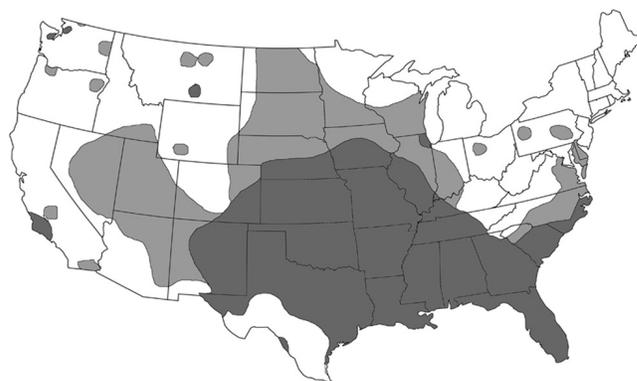
and/or by natural means) to include Turkey and the Balkan region of southeastern Europe. By the end of the 1900s, the Eurasian Collared-Dove could be found throughout Europe. In its native range, the Eurasian Collared-Dove is most commonly found in open agricultural, suburban, or coastal areas, but avoids heavily forested habitats or highly urbanized cities.

### Mode of Introduction

The Eurasian Collared-Dove was introduced in the Bahamas and the Lesser Antilles when a few pet birds inadvertently escaped or were released. By the 1980s these large doves had dispersed from the Caribbean and colonized southern Florida. Since then they have continued to expand their range explosively in the U.S. By the end of the 1990s, Eurasian Collared-Doves had been sighted as far west as Oregon. The dispersal method that has facilitated the spread of the Eurasian Collared-Dove has been described as "leapfrog" or "jump and backfill"—small, new populations spring up hundreds of miles from the known range and over time colonize the areas in between. Intentional introductions (e.g. for hunting purposes) and accidental introductions of as many as 300 birds at a time have also contributed to this method of dispersal of Eurasian Collared-Doves in the U.S.

### Introduced Range and Habitats

The Eurasian Collared-Dove is now found throughout the southeastern United States, particularly along the Gulf and Atlantic coasts, and is also well-established in the south-central regions of the U.S. (Fig. 4). Isolated populations are scattered across the western and northeastern (but not extreme northeastern) states (Fig. 4), and may serve as founder populations that will eventually help to colonize the intervening areas. The habitats used by introduced Eurasian Collared-Doves in the U.S. (and in other areas where they have been introduced) are similar to the birds' native habitats. Eurasian Collared-Doves are most common in coastal, suburban, and agricultural areas where food, roosts, and nesting sites are abundant. They avoid heavily forested areas and those under intense agriculture.



**Figure 4.** Approximate United States range of the Eurasian Collared-Dove (*Streptopelia decaocto*). Year-round range shown in dark gray, seasonal range shown in light gray. The Eurasian Collared-Dove has also been sighted in many other locations but may not yet be fully established. Credits: Monica E. McGarrity, 2008 (Data sources: Cornell Lab of Ornithology Birds of North America online, Avian Knowledge Network, Great Backyard Bird Count; National Audubon Society Christmas Bird Counts; Whatbird.com)

### Ecology

During the non-breeding season, Eurasian Collared-Doves roost communally, often by the hundreds, in barns or in trees in city parks. Eurasian Collared-Doves forage in open habitats for grains, seeds and fruit, or eat from bird feeders. By storing large amounts of food in its crop (a crop is a storage pouch of the digestive tract) and using a special siphoning technique to drink large volumes of water, the dove is able to roost for long periods between feedings, shortening the amount of time it must spend in dangerous, open areas. Eurasian Collared-Doves are highly territorial, watching for intruders from high vantage points such as utility poles or trees. Adults are most aggressive when nesting, flying at an intruder or nest predator (such as a crow) and delivering blows with their wings. Eurasian Collared-Doves are monogamous, and each pair may raise three or more broods (of two eggs each) per year in Florida, nesting in all but the coldest months. They are considered sly and aggressive competitors, engaging in fierce fights with rivals, striking with beak and wings, pulling feathers, and even jumping on a rival's back. Predators of Eurasian Collared-Doves include Cooper's Hawks, Short-Tailed Hawks, and feral cats.

## Ecological Impacts

Eurasian Collared-Doves are extremely successful colonizers and breeders, and some scientists believe that they may be competing with native North American doves, although negative effects have yet to be explicitly demonstrated. In California, Eurasian Collared-Doves may be competitively displacing another non-native dove, the Spotted Dove (*Streptopelia chinensis*). When present in large numbers, they can discourage other species from using bird feeders, and may even aggressively defend these food sources, chasing other birds away. Eurasian Collared-Doves can also carry the disease-causing parasite *Trichomonas gallinae*, which they may spread to native doves at feeders or birdbaths, or to the native hawks that feed on them.

## Impacts on People and Pets

When present and roosting in large numbers, Eurasian Collared-Doves can become a significant noise nuisance, and they also produce large amounts of unsightly feces, which could spread disease to humans or pets. It has been suggested that large flocks of doves could damage agricultural crops, although significant impacts have not yet been reported and research is needed to evaluate these potential effects.

## Solutions

Eurasian Collared-Doves have spread prolifically in Florida and the U.S., and are now extremely common in many areas; therefore, eradication would be impossible. Since non-native species are not protected, it may be possible to manage their numbers in some areas by hunting. However, before using any projectile weapon, including pellet guns or slingshots, you should check with local law enforcement—the use of projectile weapons is usually prohibited within city limits and may be otherwise regulated.

## How You Can Help

You can help to alleviate the growing numbers of non-native bird species in Florida by being a responsible and educated pet owner. Never set any pet free outside! You can also help by learning more

about invasive plants and animals and their impacts on Florida's natural environment, and by educating others. For more information on Florida's introduced birds and how you can help, read "Florida's Introduced Birds: An Overview" (<http://edis.ifas.ufl.edu/uw297>), and check out the Additional Resources listed below.

## 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

Avery, M. L., and M. P. Moulton, "Florida's non-native avifauna," *Managing Vertebrate Invasive Species: Proceedings of an International Symposium* (G. W. Witmer, W. C. Pitt, K. A. Fagerstone, Eds.). (Fort Collins, CO: USDA/APHIS/WS, National Wildlife Research Center, 2007).

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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"