

Nest ID Tips for Martin Landlords

*Casey Evans-Cable & Tara Dodge
Purple Martin Conservation Association
Edinboro University of PA
Edinboro, PA 16444*

Photo by James R. Hill III

Several species of cavity-nesting birds will nest in martin housing. Two are nonnative species—the European Starling and House Sparrow—whose nest removal has long been a recommended practice for Purple Martin landlords. But others are native secondary-cavity nesters, and although they many complete with martins, their active nests are protected by federal laws. The task of identifying a nest can be a challenging one for landlords at new or unestablished sites, especially if the “tenant” of a mystery nest is not observed coming and going from the cavity. Identifying nests becomes easier with practice. A good field guide is a wise investment for any martin landlord. This article will help you become familiar with the nests and eggs of cavity-nesting birds that may nest in martin houses.



Photo by James R. Hill III

Purple Martins

Purple Martins build their nests out of thin twigs, straw, bark, and mud (or any combination of these), and line the cup liberally with green leaves, just before laying eggs. The entire nest is usually flat—only about 1 to 3 inches high. Some -martin nests feature a mud “lip” on the front edge, which can block the bottom half of the entrance hole. Adult (ASY) birds are the most experienced nest builders; subadult (SY) martins commonly have sparser nests than their older counterparts. Eggs are pure white and measure about 24.5 x 17.5 mm.

On the left is a nest made by adult martins, with tightly packed nest material surrounded by green leaves. The nest on the right is an example of a subadult nest. The eggs may be laid directly on bare nest bowl, with few green leaves.



Photo by James R. Hill III



Tree Swallows

Tree Swallows build nests out of straw and fine grasses, lining the nest cup profusely with feathers, often so the tips curl over the eggs. The entire nest is usually only 1-3 inches high in a martin house, but can often fill up half of a gourd. Their eggs are pure white and measure about 18.7 x 13.2 mm.



Bird by James R Hill, Ill; Photo by Patrick Kramer



Photo by Tara Dodge; inset by James R. Hill III



Eastern Bluebirds

Eastern Bluebirds build their nests out of fine grasses and weed stalks. The entire nest is usually only 1-3 inches high when built in a martin house. The eggs are almost always pale blue (5% of bluebirds lay white eggs; a genetic trait) and measure 20.7 x 16.3 mm.



Bird by James R Hill, Ill; Photo by Patrick Kramer

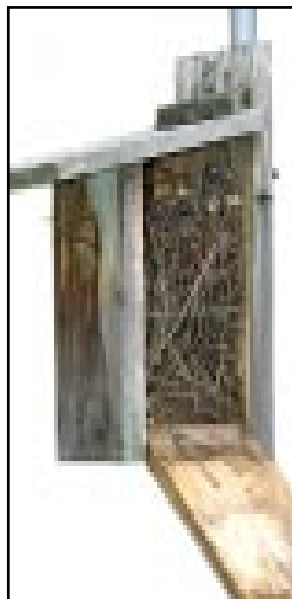


Photo by Patrick Kramer; inset by James R. Hill III



House Wrens

House Wrens build bulky nests of twigs, topped off with a cup of grasses, plant fibers, rootlets, feathers and hair. In a martin house cavity, their nests can be 2-5 inches high. Male House Wrens build several "dummy" nests entirely of twigs, and the female chooses one to complete with a cup of grasses, etc. The eggs are white, but thickly speckled with cinnamon-brown dots and measure 16.4 x 12.7mm.



Bird by James R Hill, Ill; Photo by James R Hill III



Photo by James R Hill III; inset by James R. Hill III



House Sparrows

House Sparrows build bulky nests from straw, grasses, weeds, and trash. The nest is lined with many feathers, hair, and string. House Sparrows will fill an entire compartment from floor to ceiling, leaving only a circular tunnel where they enter. The nests appear sloppy, and often spill out so that they are visible from the outside of the compartment. Eggs are white or greenish-white, dotted with grays or browns, and 22.8 x 15.4mm.



Bird by James R Hill, III; Photo by Patrick Kramer

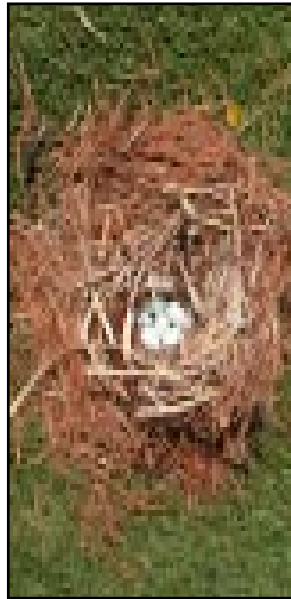


Photo by Louise Chambers, inset by Patrick Kramer



European Starlings

European Starlings, like House Sparrows, build bulky, slovenly nests of coarse grasses, weed stems, coarse straw, twigs, cornhusks, dried leaves, cloth, and feathers. Their nests are 3-7 inches high in a martin house. Eggs are similar in color to robin's eggs, but larger; pale-bluish, or greenish-white, unmarked, and about 29.2 x 21.2 mm.



Bird by James R Hill, III; Photo by James R Hill III



Photo by James R Hill III, inset by James R Hill III



Barn Swallows

While Barn Swallows are not cavity nesters, they are often confused with Purple Martins. Barn Swallows nest in barns and outbuildings, under bridges and docks, and even on people's porches—anywhere that they can attach their mud nest under shelter. Nests are built out of mud and lined with feathers and grass. Eggs are white, with brownish speckles and measure 18.8mm x 13.5mm.



Bird by James R Hill, III; Photo by Tara Dodge

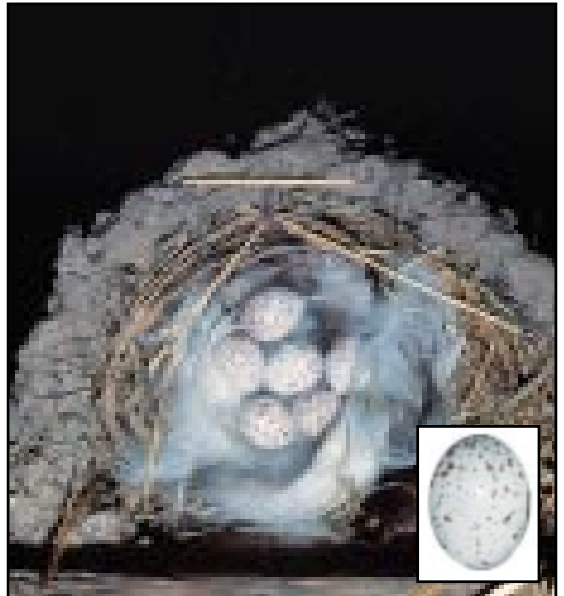


Photo by James R Hill III, inset by James R Hill III



House Finches

House Finches, though not commonly cavity nesters, may occasionally nest in martin houses. They build nests out of fine weeds and grass stems, thin twigs and rootlets, and string, wool, and feathers. Similar but finer material is used to line the nest cup. Eggs are pale blue, with fine black or purple speckles, usually confined to the larger end. Eggs measure 18.8 x 13.8 mm.



Great Crested Flycatchers

Great Crested Flycatchers construct their nests from twigs, leaves, hair, feathers, bark fibers, rope and other trash. They almost always include a shed snakeskin or piece of cellophane. In a martin house compartment, the nests are about 2-5 inches high. The eggs are yellowish, or pinkish-white, and scratched, lined, streaked, or blotched with dark brown or purple. Eggs measure 22.6 x 17.2mm.



Black-Capped Chickadees

Chickadees will sometimes use martin housing located near forests or forest edges, their preferred habitat. They often lay a moss foundation, and line the nest cup with hair, rabbit fur, wool, cottony fibers, and feathers. Eggs are white, speckled with reddish-brown, 15.2 x 12.2 mm.



Eastern Screech Owls

Screech Owls are secondary cavity nesters, nesting in abandoned woodpecker cavities, as well as birdhouses. They do not bring in any nesting material; they use only what material was left behind. Eggs are white, measuring 30.0mm x 35.5mm.

All photos by James R Hill III
Photo by Tara Dodge
Owl by Pam Winegar

Table 1: How to House Native-Cavity Nesters

Native Cavity Nesters	Location, Location, Location	Provide Alternate Housing
Eastern Bluebird	Both species prefer similar habitat to Purple Martins—open land, with few or no trees. They are not colonial, so single-unit housing can be offered, placed about 30' from martin housing. Because these two species arrive before the martins, keep your martin housing closed up until the bluebirds or Tree Swallows have claimed the cavities	Bluebirds and Tree Swallows will nest in a single-unit gourd or nestbox. The diameter of the entrance should be 1-1/2" and the housing should be placed so the entrance is about 5' above ground; pole equipped with a predator guard
Tree Swallow		
House Wren	Brushy edges, away from the open habitat a martin prefers	Wrens will use boxes, with an entrance between 1 to 1-1/4"
Great Crested Flycatcher	Woodlots and forest edges	Single-unit nestbox or gourd with an entrance between 1-3/4 to 2"
House Finch	Settled areas with open habitat	Single-unit nest box, with an entrance 1-1/2 to 2"
Black-Capped Chickadee	Open woods, brushy edges and suburban areas	Nestbox similar to House Wrens, with an entrance diameter of 1-1/8 to 1-1/4"
Eastern Screech Owl	The Eastern Screech Owl usually nests at the edges of hardwood forests	Nestbox about 10' off the ground with a 3" entrance
Barn Swallow	Beams & rafters in barns, and under the eaves of porches or decks	Provide a shelf-like surface (sheltered by roof or eave) to support nest

Table 2: Dealing with Non-native Cavity Nesters

Non-native Cavity Nesters	Preventative Action
House Sparrow	If the martins have not yet arrived in your area, be sure to block the entrances of your martin housing so House Sparrows and starlings cannot enter. Once the martins arrive, the most effective way of ridding your colony of these non-native pests is by means of trapping and/or shooting along with nest removal. A great way to prevent starlings from nesting is to use a starling-resistant entrance hole (SREH) such as the crescent or Excluder entrance.
European Starling	

Management of competing cavity-nesting species is a critical element in establishing a martin colony, and ensuring its continued well-being. Cavity-nesting competition, whether it is from non-native or native bird species, is best avoided by taking preventative action. By positively identifying the birds that take interest in martin housing, you can determine which course of action to follow.

With non-native birds, quick identification and eviction can prevent needless damage to your martin colony. In the case of native competition, providing alternative housing early on can help facilitate a quick and easy shift of interest (from martin housing to another location), allowing you to enjoy the presence of several cavity-nesting birds in your yard.

