

Thank you again for participating in our study! This form contains the information we will be asking about in the follow-up survey, which will be sent at the end of the season. **Please keep this form in a safe place** and use it to keep track of your observations of non-native species usurping native nests over the course of this season. For those who participate in NestWatch, note that these observations are collected in addition to your normal NestWatch data, so **please submit data to NestWatch as you normally would in addition to using this form**. The data will be stored and analyzed separately, so your responses will not appear in your NestWatch data overview.

WHAT ARE NON-NATIVE (I.E. INVASIVE) SPECIES?

Non-native invasive species are those introduced species which benefit from their new environment such that they increase their population range significantly over time. Globally, invasive species are currently recognized as one of the main threats to biodiversity. House Sparrows and European Starlings were both introduced to North America in the 19th century. They are now permanent residents found across the U. S. and Canada, almost always near areas of human habitation and disturbance (e.g., cities and suburbs) or areas with a reliable food source, such as barns or granaries. Both species nest in structures ranging from gutters and downspouts to thick shrubs and bushes, but readily use nest boxes when available. They may outcompete native cavity-nesting birds, and are known to kill eggs, nestlings, and even adults while taking over an occupied nest site.

INVASIVE



EUROPEAN STARLING

Starlings are chunky black birds (showing iridescence in summer) with short tails and pointed bills. They compete for nest boxes and natural cavities of medium-sized and larger birds, such as Purple Martins, woodpeckers, Wood Ducks, and American Kestrels. Because of their larger size, it is often possible to exclude them from nest boxes intended for smaller birds (e.g., bluebirds). European Starlings are found throughout the United States and Canada year-round. Starlings make a bulky nest with a depression near the back of the cavity; fresh green vegetation and feathers are often incorporated into the nest. Eggs are typically pale blue and about the same size as a robin's egg.



HOUSE SPARROW

House Sparrows are small, brown cavity-nesting birds that compete for nest sites with native birds. They have been documented to kill or evict eggs, nestlings, and adults of native species in order to take over a nest box; broken eggs and evidence of head trauma on chicks and adults are signs of House Sparrow attacks. House Sparrow nests usually completely fill the nest box (or nearly so) and contain dried grasses, bits of paper or plastic, feathers, and sometimes green vegetation. Eggs are typically cream or beige (sometimes bluish) with reddish-brown speckling all over.

NATIVE



HOUSE WREN

Unlike the invasives listed above, House Wrens are native and protected by the Migratory Bird Treaty Act. ***You may not legally remove nesting material, eggs, nestlings, or adult House Wrens from a nest box.*** House Wrens sometimes compete for nest boxes and may pierce eggs or remove them from nest boxes which are already occupied. House Wren nests resemble a pile of twigs, with a small feather-lined cup in the back of the cavity. House Wren eggs are white or pinkish white and extensively spotted with reddish brown, rufous, or lavender markings. They are slightly smaller than House Sparrow eggs. The best way to tell their nests from House Sparrow nests is by nest material and structure.

Egg illustrations by Virginia Greene

INSTRUCTIONS - *Please keep this sheet in a safe place!*

Please place a tally or a number in Column 1 below indicating how many nests you monitored of each species. Then, make a tally in the boxes under Column 2 to the right indicating how many of those nests were taken over by a House Sparrow, European Starling, or other bird, such as a House Wren. Please indicate the species (sp.) if possible. If you are unsure, write "unknown." After the season is over, please save this form for entering the data in the second survey.

	Column 1	Column 2			
Native Bird on Nest	How many of these nests did you monitor?	Of those nests, how many were taken over by each species below?			
		House Sparrow	European Starling	Other	If other, which species?
Bluebird species					
Tree Swallow					
Purple Martin					
American Kestrel					
House Wren					
Northern Flicker					
Chickadee species					
Titmouse species					
Ducks					
Owls					
Bewick's or Carolina Wren					
Other sp:					
Other sp:					
Other sp:					