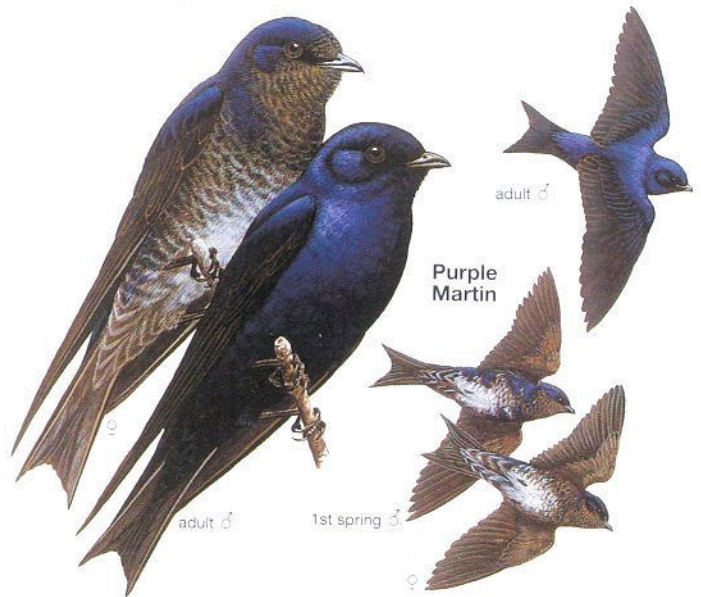


PURPLE MARTIN (PROGNE SUBIS) FACT SHEET

PHYSICAL DESCRIPTION:

The Purple Martin is the largest of the North American swallows at 7½ inches long. It takes two years for both males and females to attain their adult plumage, but they can and do breed as one year olds. Adult males that are two years old and older have glossy, purple-black plumage. Adult females are less colorful, with gray necks, foreheads, and under parts, but they can be nearly as purple on their backs as adult males.

Yearling males resemble adult females but can be distinguished by a few distinct purple feathers on the chin, throat, breast, and flanks. Yearling females are less colorful than yearling males and are white underneath. Juveniles are gray brown with grayish white under parts.



DISTRIBUTION AND BREEDING HABITAT:

Purple Martins are a migratory species that breeds along the West Coast and in the eastern and central portions of the United States, and in parts of Canada and Mexico. While martin populations have grown in the East, their numbers have declined in the middle of the United States. This species nests in open and semi open areas, including savannas, cultivated lands, fields, parks, pastures, near lakes and marshes and in towns and suburbs. Purple Martins can reach fairly high densities when nest boxes are present; however, in other areas, they can be completely absent. In the West, martins are less likely to inhabit nest boxes, relying more heavily on natural cavities, but they will nest in gourds and supplied single-unit houses on the West Coast.

DIET:

Purple Martins are obligate, aerial insectivores; they feed in flight upon flying insects such as wasps, moths, flies, grasshoppers, bees, and ballooning spiders. They also feed on midges, dragonflies, damselflies, cicadas, stinkbugs, beetles, and butterflies. They are not the mosquito specialists that martin-house manufacturers would have us believe. They forage high above the ground and over water, in loose aggregations. Since martins feed solely on flying insects, they are extremely vulnerable to weather conditions that affect insect availability. Prolonged bad weather, such as rain, cool temperatures, and/or heavy winds, all reduces or eliminates insect flight. If bad weather persists for 2 or 3 days, martins begin to die of starvation.

Pair Formation and Territoriality: Usually the first to return to the breeding site, male martins immediately choose and defend a nest site. Females select their mates based upon the nest site and upon the male himself. Purple Martins are monogamous, but both sexes are highly promiscuous. Once a pair bond is formed, both sexes defend the nest site intensely. Purple Martins nest in colonies, but members of the breeding colony are not related.

NESTING BEHAVIOR:

Nest Building: The breeding season begins in late March in the southern part of the range, but not until late May or early June in the northern parts. (In Florida, however, nest building can begin as early as February.) As with many native cavity-nesting species, Purple Martins compete with House Sparrows and European Starlings for nest sites. In many regions, such as the eastern United States, martins are extremely dependent on human-provided nest boxes. The tradition of people providing Purple Martins with nest boxes and gourds dates back to Native American culture. In the West, however, Purple Martins nest more frequently in natural sites, such as abandoned woodpecker holes, cliff crevices, and in the cavities of oak, sycamore, ponderosa pine, and spruce trees.

Nest building starts about a month before the first egg is laid. Initially, pairs may begin to build in more than one cavity. But eventually one cavity is chosen, and the male and female build a nest made of grass, stems, twigs, straw, bark, leaves, and mud. The nest cup is lined with fine grasses and green leaves. Fresh green leaves are brought regularly until the eggs hatch. The nest also has a mud or dirt rim that may prevent the eggs from rolling out. This rim also helps keep the weather out, and it may restrict the reach of Great Horned Owls.

Egg Laying: Females start laying eggs as early as April in southern regions (in Florida, in early to mid-March), but they start later in northern regions. The average clutch has four to six white, unmarked eggs. The age of the female influences the clutch size; yearling females lay about one less egg per clutch than older females.

Incubation: Females incubate their eggs for 15 to 16 days. When females are absent from the nest, males may sit on the eggs or sit at the nest entrance to guard it. Males may also stand over the eggs to prevent cooling.

Nestling Care: Hatching is asynchronous; that is, all of the eggs don't hatch at once. Hatching may occur over two to three calendar days. Both adults feed and care for the nestlings. The young fledge after 26 to 32 days; sometimes they stay in the nest longer. As the young leave the nest, the parents try to keep their brood together, but family mixing within the breeding colony often occurs. Sometimes members of the colony mob the fledglings. The reason for this is uncertain. Some researchers believe this prevents the fledglings from imprinting on the colony site. Others believe it is to keep them from coming back to steal incoming food from younger colony mates in neighboring compartments. The fledglings remain dependent upon their parents for up to two weeks after leaving the nest.

Purple Martins have one brood per season. Two broods during one breeding season are considered rare. They will re-nest if nest failure occurs early in the nesting cycle. Purple Martins are highly likely to return to successful breeding locations.

Winter Movement and Dispersal: After the breeding season, Purple Martins assemble into large flocks. Eventually these flocks migrate to parts of South America, including Brazil, the Amazon basin, Bolivia, and Paraguay.

The Purple Martin Conservation Association reports that approximately 10% of juvenile birds returns to their natal colony. Another 30% returns to the general vicinity of their natal colony.

Purple Martin Housing: Purple Martins exhibit a very high level of site fidelity. Once they have bred successfully at a specific location, the same individuals return year after year. As a purple Martin landlord you can take either a passive or active approach to managing your colony. Those assuming a more active role will usually have a more successful colony. At a minimum, when first establishing your colony, plan on spending some time protecting the nesting area from House Sparrows and starlings until the colony becomes established. Those who attempt to attract Purple Martins should make sure to select a wide-open space, like waterfront access, with few or no trees.



Housing should be painted white with trim of any color, be designed to raise and lower vertically, to check on martin nestlings and clean out at the season's end. The houses should be durable and easy to clean, well ventilated with good rain protection and drainage. Purple Martins are very sensitive to the location of their house. Be sure to raise the house to the exact same height and with the exact same orientation each time you perform a nest check. Lowering and raising the housing to do a nest check does not bother the martins. Do not perform nest checks in high winds or in mist or rain. The exposure may be harmful to young birds. The Purple Martin Conservation Association recommends opening your housing up around the dates the adult martins are first scheduled to begin arrive in your area (for Florida, this is January 15th each year).

End of Season Clean Up: Clean houses at the end of the nesting season with 10% bleach and water solution. Dry completely. Either store the house or close the nesting holes to prevent unwanted visitors until January 15th each year.

Control of House Sparrows and Starlings: Controlling House Sparrows and starlings can be one of the more difficult jobs in establishing a Purple Martin colony. Remove nesting materials from these species as soon as it is placed on the martin house. Purple Martins nests are flat, usually with some mud and sometimes green leaves. Starlings and House Sparrow nests are a thick collection of straw, grass and trash that will usually fill up the nesting cavity. Landlords can supply nesting materials. Dried pine needles, clean dry twigs, or straw can be scattered in an open area and may be picked up by the martins. Keep a small, non-gassy area soaked with water to provide a good source of mud.



Predators: Small animals such as raccoons, squirrels, possums and snakes can raid martin nests. A good precaution is to place a baffle on the pole that prevents snakes and small mammals from crawling up the pole to the bird house. Several commercial baffles are available and homemade baffles are easy to produce and can be just as effective. To discourage predators, keep the base of the pole clean and free of scrubs, vines and tall grass/ In some areas, owls can be a problem. Owl guards can be homemade screen or commercially available product.

The Shadow Wood Community Association, Inc. (SWCA) maintains four Purple Martin houses. Two are located on Lake 88; one is west of the nature preserve boardwalk on the cart path across from the 7th hole of the North Course and the other is northwest near Banyan Cove on the cart path that runs parallel to Knollview Blvd. The third house is just west of Magnolia Bend boardwalk on Lake 47; the fourth house is west of the Shadow Wood Country Club Golf Course Maintenance building on Oakwilde Boulevard. If you are a Birder and would like to donate time to SWCA bird related projects, please call us at 239-948-3576.

Information provided by: The Birdhouse Network: Cornell Lab of Ornithology, Bird Bios. Wildlife Habitat Council, Nest Monitoring

For more information visit these sites:

The Purple Martin Conservation Association - <http://www.purplemartin.org/index.html>

Maryland Cooperative Extension, University of Maryland College Park -

<http://www.agnr.umd.edu/MCE/Publications/PDFs/FS792.pdf>

Wildlife Habitat Council, Nest Monitoring -

<http://www.wildlifehc.org/nestmonitoring/index.cfm>

A Bird's Home - <http://www.abirdshome.com/pm/ovintro.htm>

My Favorite Martin by John McKenzie for Linger Longer Magazine

Purple Martin Care

The Purple Martin Association

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