

The Purple Martin

by Karen Rowe



The purple martin (*Progne subis*) is North America's largest member of the swallow family and a common migrant and summer resident in Arkansas.

Description

Adult male purple martins are colored blue-black, much more striking than the dull steel-blue female. Females also sport a grayish throat, breast and dusky undertail feathers. Martins don't attain adult plumage until their third year, and sub-adult martins look similar to adult females.

Purple martins have a distinctive gurgling song ending in a succession of low, rich guttural notes.

Habitat

Purple martins live most of their lives in the air, where they fly in circles, alternating between quick wing beats and glides, spreading their tail when flying. These aerial acrobats require open areas of unobstructed air space to forage on flying insects. Martins normally establish colonies in meadows, fields and towns near bodies of water where flying insects and open spaces are plentiful.

Years ago, purple martins nested in natural cavities in trees and cliffs. Today, martins nest almost exclusively in man-made martin houses or hanging hollow gourds erected for their use.

Habits

There are several myths about the habits of purple martins. Contrary to popular belief, they don't have a voracious appetite for mosquitoes. In fact, studies show mosquitoes comprise no more than 3 percent of a martin's diet. Ironically, martins eat vast numbers of dragonflies and damselflies. The nymphal stages of these insects are major aquatic predators of

mosquitoes.

Martin-house landlords anxiously await the arrival of purple martin "scouts." However, these scouts don't return north, first, to start new martin colonies. The scouts are just the older breeding male birds, returning early to maximize chances of claiming the best nest compartment at spots where they have previously bred.

Once they arrive at the nest site, the so-called scouts don't return south to escort the rest of the flock north. Instead, they stay to defend nest site claims against later arrivals.

In Arkansas, older male birds usually arrive in late February and are followed several days later by the first females. Later, more females and inexperienced first-year birds arrive, usually in groups, with the majority of first-year birds arriving in Arkansas four to eight weeks after older birds.

Because of a great fidelity to return to established breeding sites, older male martins aren't typically lured to new housing. Newly placed martin houses usually attract only later arriving first-year birds.

Martins are colony nesters, but a "colony" isn't a group of martins that migrates and nests together. It's just a random assembly of birds, arriving and departing independently, attracted to a favorable breeding site.

Reproduction

Upon return from South American wintering grounds, male martins choose and defend a nest site. Females choose a nest site/mate combination, and paired birds construct a nest from grasses, small twigs, feathers, mud, string and other soft fibrous materials. Females lay four to five pure white eggs that hatch after about 15 days of incubation.

Young martins are ready to fledge (leave the nest) after approximately 28 days. However, both parents continue feeding

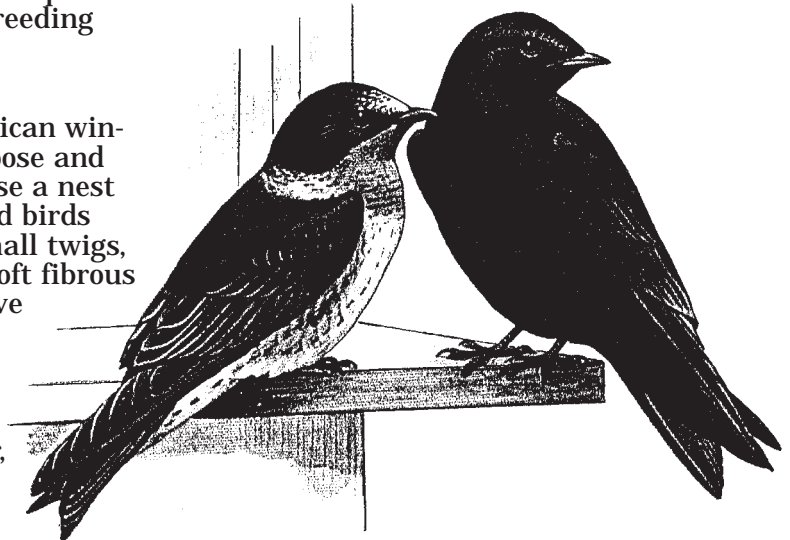
their young for up to two more weeks. During this time, males may abandon their feeding duties and begin migration, leaving females to finish caring for the young.

Purple martins abandon nest sites when the young leave, but they usually remain in the immediate area for four to eight weeks more, assembling for migration. They are joined or replaced by passing martin migrants. During this time, they congregate in roosts containing hundreds, even thousands, of martins. In Arkansas, martins often leave nesting areas in July yet are regularly seen migrating through the state through early September, as they return to South American wintering grounds.

More than 75 percent of juvenile martins die during their first year. Most survivors go elsewhere to breed when mature, with less than 5 percent returning to breed where they were hatched.

Management

Prior to European colonization, Indians hung hollow gourds to attract nesting purple martins, and this popular method of providing martins housing continues today. Martin houses are available commercially, but many people prefer building their own, usually with several tiers containing six to



eight compartments each. Nest compartments should be a minimum of 8 x 8 inches, with an entrance hole 2 inches in diameter and 1-1/2 inches above the floor. Houses should be adequately ventilated.

Only properly located houses and gourds attract martins. Place nest boxes 12 to 20 feet above the ground at the center of the largest opening in the yard. Ideally, trees or buildings should be at least 40 feet from the martin pole in any direction. A cone-shaped predator guard extending 1 to 2 feet from the pole helps protect martins from climbing predators.

Never allow house sparrows and starlings to nest in martin houses. Inspect houses and gourds during martin nesting season, and clean out sparrow and starling nests in mid-afternoon when most martins are out foraging for insects.

Clean nest houses with a mild

solution of water and household bleach after purple martins migrate south. Martin houses left up all winter should have the entrance holes plugged, because unmanaged houses quickly become breeding slums for house sparrows and starlings, preventing martins from nesting the following year.

Importance

Purple martins have little value in controlling mosquitoes, but their graceful flight, rich song and sociable habits enrich the lives of many people. Because they prefer man-made nest houses and need assistance in combating house sparrows and starlings, purple martins in Arkansas depend on conservation efforts of purple martin landlords like yourself.



Arkansas Game & Fish Commission

2 Natural Resources Drive
Little Rock, Arkansas 72205

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