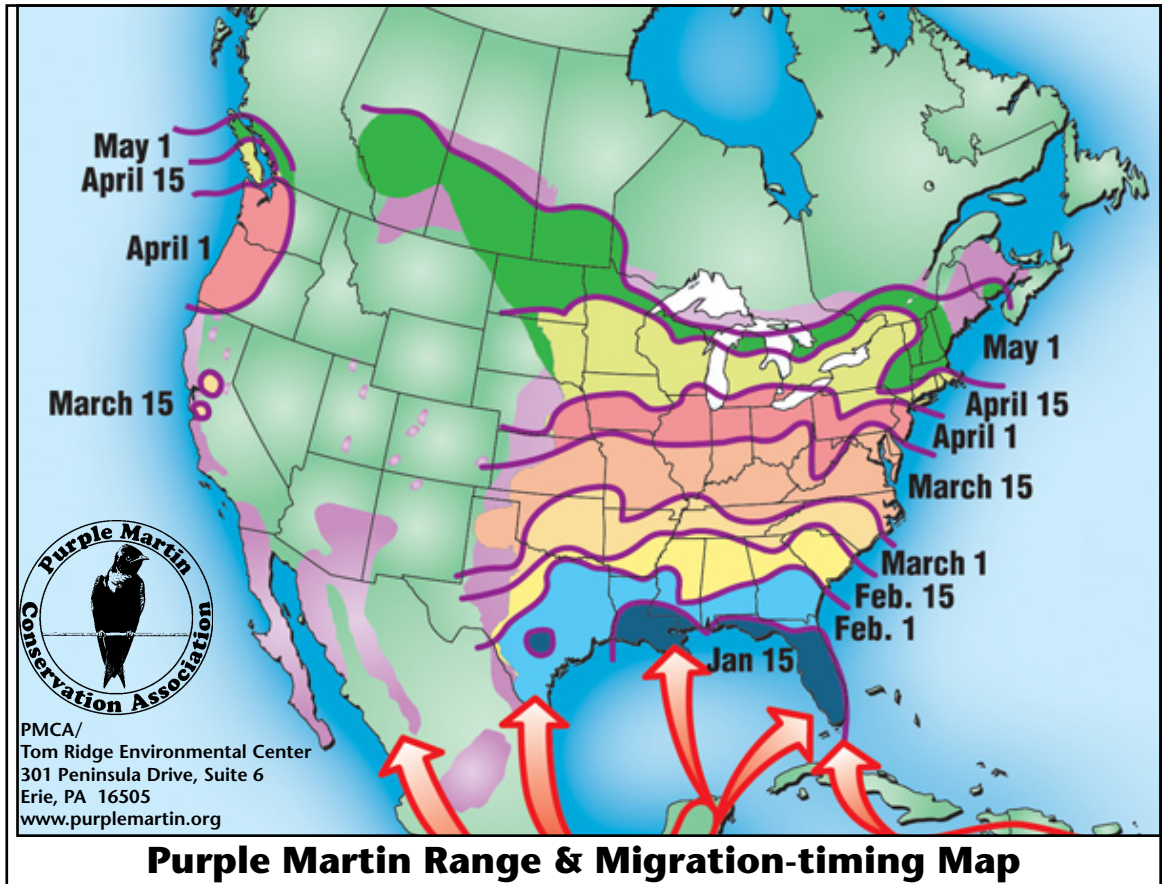


Helpful Hints for Martin Landlords from the PMCA

Range & Migration

Map: The breeding range of the Purple Martin is shown in gray. Horizontal lines mark average arrival dates of older martins at established colony sites. Yearling martins, the age-group that typically colonize new breeding sites, don't begin arriving until 4-6 weeks after these dates, and continue arriving for an additional 4-6 weeks in the north, 10-12 weeks in the south. This means martins can be attracted to new housing through mid-May in the south, mid-June in the north. New hobbyists should not open housing until 4-6 weeks after the dates shown here. Opening earlier at new sites will result in the attraction of non-native, nest-site competitors (House Sparrows and European Starlings), instead of martins. West



of the Rocky Mountains, Purple Martins have different nesting habits. In the southwest martins nest only in old woodpecker cavities. In the Pacific Northwest, martins use gourds and single boxes, but not multiple-room houses.

Join the Purple Martin Conservation Association: The information you'll receive in the *Purple Martin Update*, the PMCA's quarterly membership magazine, will greatly increase your knowledge and enjoyment of Purple Martins. Membership is \$20.00 (senior) and \$25.00 (basic). Your tax deductible donations support the PMCA's research, conservation, and education programs.

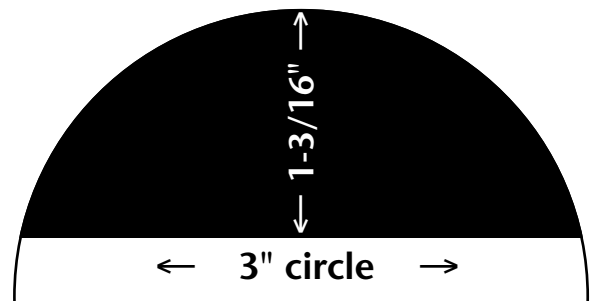
Participate in PMCA Research Programs: The PMCA needs your help in collecting information on martin arrival dates and breeding success. Colony Registration forms and Project Martinwatch forms are available on request. First Arrival ("scout") dates can be noted on a postcard and mailed to the PMCA. We appreciate your help!

Learn, Attract, Build: *Enjoying Purple Martins More* is an outstanding 36-page color booklet, filled with the practical information you need to succeed. No landlord should be without it. Available from the PMCA.

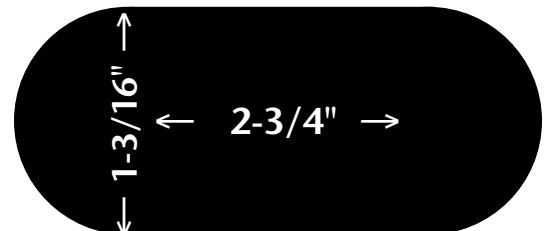
Purple Martin Dawnsong Tape and CD: The PMCA's dawnsong tape/CD have helped thousands of folks become martin landlords. To attract martins to unoccupied sites, play this 60-minute tape (or 74-minute CD) in the early morning when subadult martins are arriving in your area. Complete instructions for use and martin-attraction information included.

T-14 Martin House Plans: These plans will help you build the very best design developed for martins. The T-14 features 14 extra-large compartments and has access doors and slide-out nest trays. The house winches up and down for easy management. The plan booklet is 44 pages, and includes tips for successful martin attraction.

A Starling-proof Martin House



This diagram shows how to cut a starling-proof entrance hole for your martin housing. The height dimension is extremely critical. If made a hair too big, starlings will get in; if made a hair too small, martins won't be able to. Cut the hole with a jigsaw. Cut it slightly small, then file or sand it to proper height. If cutting the crescent-shaped entrance hole seems too difficult, try the oval slot shown below, which was cut with a 1&3/16" forstner bit. It has also been successful at excluding starlings, while still permitting Purple Martins to enter. Also, placement is important. The bottom of the entrance hole may be placed flush with the porch floor, or 1/4" to 1/2" above the porch. It should not be any higher. If you have ever had starling problems, give it a try.



Attracting & Managing Purple Martins

Over one million North Americans put up housing for Purple Martins. Unfortunately, many of these folks are unable to attract breeding martins. The advice given here will increase your chances of attracting martins. Once martins nest at your location, they will come back every year, if you manage the site properly.

Landlords who lose their entire colony from one year to the next often suspect their 'flock' died in a storm during migration or was poisoned by pesticides on their wintering grounds. These scenarios are unlikely; the martins that share a breeding site do not migrate or overwinter as a colony. The reason for total colony loss is most often the result of something that happened in the landlord's own back yard, during the nesting season. Good management practices can prevent or minimize most of these problems.

Location — The major reason people fail to attract martins is that martin housing is not placed correctly, or their site is inappropriate martin habitat to begin with. Martins have very specific aerial space requirements. Housing should be placed in the center of the most open spot available, about 30-120 feet from human housing. There should be no trees taller than the martin housing within 40 feet, preferably 60 feet. In the southern half of their breeding range, martins are less particular about house placement. Southern landlords can sometimes place housing within 15-20 feet of trees, and still attract martins. Generally, the farther housing is placed from trees, the better. Height of the housing can be anywhere from 10-20 feet. Keep tall bushes, shrubs, and vines away from the pole. Do not attach wires to a martin house, especially if they lead to trees, buildings, or to the ground. If your yard has too many trees near the martin housing, relocate the housing to a more open area, mount the housing higher, or prune (or remove) trees to create a more open site.

Timing — Most 'would-be' martin landlords rush to get their martin housing opened up for the arrival of martin "scouts" in their particular area. This is 4-5 weeks too early for new sites, and decreases chances for success. Contrary to popular folklore, "scouts" are not looking for new breeding sites for their flocks. "Scouts" are simply the first martins to arrive in, or pass through, an area on their way back to their previous year's nesting sites. These martins aren't likely to switch to new housing. Prospective landlords should not open their housing until about four weeks after the first martins are scheduled to return to their area (see map). No matter where you live, keep your housing open through June. Martins may arrive and begin nesting as late as the end of June, anywhere in North America. Landlords of active sites can leave their housing completely closed up until the martins return and land on the housing. Purple Martins exhibit a very high level of site fidelity — once they have bred successfully at a specific location, the same individuals return to breed there year after year.

Competition — If any other species is allowed to claim unoccupied martin housing, martins are not likely to stay. All birds set up territories around their nest sites and defend them against other birds. When House Sparrows or European Starlings lay first claim to martin housing, they fill the compartments with their nests, chase off investigating martins, fight with nesting martins, kill nestlings, and break eggs. Allowing House Sparrows and starlings to nest in martin housing will significantly reduce martin occupancy and productivity. Controlling nest-site competitors may require repeated lowerings of the house for nest tear-outs, and in the case of the nonnative House Sparrow and European Starling, trapping and/or shooting. The starling-proof entrance hole (see diagram on reverse of this page) can be used to keep starlings from claiming martin housing. Should native bird species (e.g., Tree Swallow, Eastern Bluebird, Great Crested Flycatcher, etc.) try to take over your empty martin housing, temporarily plug all the entrance holes with door stops or paper cups, then put up appropriate, single-unit housing elsewhere on your property. Once they have accepted the new housing, reopen the martin housing. Housing should be stored inside for the winter, or closed up, to keep paper wasps, squirrels, and other birds from claiming the house before the martins return.

Housing — Houses and gourds should be painted white, or a light pastel color; trim can be any color. White housing seems to attract martins best. White housing reflects the heat of the sun, keeping nestlings cooler.

Compartment floor dimensions should measure at least 6" x 6," but 7" x 12" offers better protection against predators and weather, if starlings are controlled. Compartment height can be from 4&1/2" to 6" or 7." Place entrance holes about 1" above the floor. Hole size can range from 1&3/4" up to 2&1/4." Many published plans for martin housing, and some manufactured houses, are made to improper dimensions, so if your housing is unsuccessful, check the dimensions, and modify where needed.

Look for housing designed to raise and lower vertically, and with easy access to compartments. Landlords may need to lower housing daily to evict nest-site competitors, or to check on martin nestlings. Systems that telescope up and down, or raise and lower with a pulley and winch, are the most practical. Nest checks will not cause martins to abandon their nests or their colony site; number the compartments and keep written records.

Replacing Active Housing — The same martins return each year, and may abandon the site if the housing they are used to is gone, or drastically altered. To safely replace a single active house, place the new housing near the housing you plan to remove, and give the martins an entire season to get used to it. Do not remove the active housing until some of the martins have accepted and bred in the new housing for at least one season. Once martins have nested in the new housing, you can remove the old house, or put an additional new house in its place. Landlords with several active houses can replace a house between seasons without risk of colony loss.

Predation — The most common reason martins abandon their colony site is because predators have raided their nests. It only takes one foray up a martin pole by a snake, raccoon, or squirrel, or a few visits by an owl, hawk or crow, to cause all the surviving birds to abandon the site. Landlords who don't conduct weekly nest checks may never know their martins, nestlings, or eggs are disappearing. All martin poles (wooden or metal) can easily be climbed by predators and should be equipped with pole-guards. Martin houses that have become regular targets for hawks, owls, or crows should be equipped with external cage-type guards. Landlords should be alert for evidence of predation (e.g., dropped owl feathers, plucked martin feathers, chewed-off martin wings, etc.) under martin housing.

Weather extremes — Since martins feed solely on flying insects, they are extremely vulnerable to weather conditions that affect insect availability. Prolonged bad weather, such as rain, snow, cool temperatures, and/or heavy winds, all reduce or eliminate insect flight. If poor weather persists for more than 4 or 5 days, martins begin to die of starvation. Heat waves and droughts can also be a problem. When air temperatures go above 100° F. for many days, nestlings can perish from overheating. Prolonged drought can also adversely affect insect numbers. Some weather conditions may contribute to a population explosion of some external parasites normally found in martin nests, including fleas, nest mites, and blowfly larvae. Never use pesticides in bird nests or boxes. The safe way to reduce numbers of nest parasites is to remove nest material (and nestlings), sprinkle 1 or 2 two teaspoons of freshwater diatomaceous earth over the floor, then replace the old nest material with clean, dry wood shavings, pine straw (dried pine needles), or dry straw. Shape a shallow bowl in the material, and place the nestlings back in the nest.