



## PURPLE MARTIN Information Dick Nikolai

Attracting Purple Martins (*Progne subis subis*), with manmade housing in North America has become a popular pastime. For the eastern population it is now the only accepted cavity by purple martins. They are truly dependent upon man! Each year many people look forward to the return of the purple martin in the spring and enjoy watching & listening to them throughout the nesting season. These seemingly friendly birds are highly sought because of their insect eating ability and their melodious song. Purple martins are colonial cavity nesters using apartment style houses and hollowed out gourds set closely together.

The Purple Martin is the largest of the swallows in North America. Size of martins is roughly 7 1/2" in length with a weight of 1 1/2 to 2 1/4 ounces (42-65 grams). The adult male's (at least 2 years old) appearance is a dark purplish black over its entire body. Adult females (at least 2 years old) and yearling or sub-adult males (1 year old) are a lighter purplish black on top of the head and back with a grayer breast and forehead. Sub-adult males have a few patches of purplish black on the breast, head or near their anal opening. Sub-adult females (1 year old) are completely pale brown or gray on their back and white on their breast and underneath their tail.

Adult purple martins or "**scouts**" are the first to arrive back in the spring from their wintering grounds in South America. This migration encompasses up to 8,000 miles northward to their cavity in a colonial house or gourd selection. These birds are extremely faithful to their colony site from one year to the next and often return about the same date each year, except for newly established colonies. They move north as their source of food (flying insects) becomes available.

Scouts usually arrive in Wisconsin during the last week of March and the first two weeks of April. Males choose one or more cavities as their territory and defend them against other male martins. Female martins are courted and eventually pair up, usually with a male that is of equal age class. The female martin does most of the nest building during early to mid-May while the male goes through the motions with some select additions of leaves. She brings grass, twigs and mud into the cavity to form a shallow cup raising one brood per year. After three to four weeks (usually mid-May through mid-June), females lay 1-8 white eggs and incubates them for 14-16 days. Young martins remain in the nest for 26-35 days. Most will have fledged by early August. The young continue to be fed by the parent's several days after leaving the nest. Occasionally they return to the nest to roost. Gradually, neighborhood colonies will join up with other martins to feed and roost communally before and during their migration south to Brazil, which occurs in August to early September in Wisconsin.

### MANAGEMENT OF THE MARTIN COLONY

Martin houses and gourds should be cleaned out every fall. Readiness for occupancy is needed in the spring by early to mid-April in order to attract purple martin scouts or by mid-May for new colonies.

Many well-meaning people erect a martin house expecting it to attract scouts without any further work. **Management and monitoring are the only correct ways to even get a chance at attracting purple martins and keeping them.** House and gourd owners are generally satisfied if any bird takes up residence. What these people are actually doing is discouraging martins by allowing house sparrows and starlings to reside there.

These two non-native species are the martin's worst enemies competing aggressively for the cavity site. Both species are unprotected and maybe euthanized. **THEY SHOULD NEVER BE ALLOWED TO NEST IN A MARTIN HOUSE OR GOURD.** Repeated nest removal or trapping of house sparrows and starlings may be necessary to make the cavity or cavities available to martins.

Adult (at least 2 years old) martins are extremely faithful to their previous nest and colony site. Therefore, the sub-adult martins (1-year-old) establish new colonies. Adults will also colonize new sites if their previous house is gone, changed, competition from sparrows and starlings becomes too great for nesting and improvements to housing are existing close to their old colony site. Houses or gourds may be installed for the first time prior to the arrival of purple martins.

Generally, first time purple martin homeowners should not open up any cavities before the end of April. The trick is not to open up too many cavities at one time for the new colony or old one. A rule of thumb is to have only one third of the cavities open at first with a gradual opening of the cavities as martin numbers increase. Never open all on one side of the house or all on one floor. If you have several houses from an existing colony, consider opening only one house for the early martin arrivals. Early in the season, open some of the middle cavities for these will retain the warmth when cool and wet weather exists. Monitor the colony daily when these conditions exist so one can provide emergency care. At the most, martins can tolerate these conditions for three days before they start dying by starvation or hypothermia.

Arrival of sub-adult martins occurs around the first two weeks in May to late June in Wisconsin. New housing can be put up as late as mid-June and still attract nesting martins.

Do not be disappointed if martins fail to come to your house or gourds the first year they are placed. Continue to monitor them until late September with all the cavities open after July 1 but never allow competitors to nest. Martins of all ages may discover your house during fall migration and return there to breed the following year if their conditions for nesting are met.

Around late September lower the house, clean out the old nests and wash the compartments with soap, water and bleach (10%). Then store the house for the winter or plug the cavities to prevent house sparrows or starlings from becoming established before the next nesting season.

Martins consume large numbers of insects providing a secondary benefit of having them around. Patience is the key in attracting martins, especially if all their habitat conditions are met. "*Purple Martin Dawnsong*" has been recorded on a cassette tape or on a CD to attract yearling martins. By virtue of playing the "dawnsong" it increases your chances of acquiring a pair of martins. The only trick is playing it early in the morning before and around dawn and during the migration of the sub-adult martins. It may not guarantee your success but it won't hurt it either. Other options used by people to attract martins are placement of mud throughout each compartment to make it look used, use of a mirror on the porches of housing for martins to see a replicate moving, placement of egg shells on an elevated platform, placement of martin decoys on the house and providing adequate nesting materials.

If you have a Purple Martin colony, or are trying to attract one, you can register with the Purple Martin Conservation Association (PMCA) and receive periodic information about martins. The PMCA also sponsors the cassette tape or CD's mentioned above. In Wisconsin, we have our own society as part of the PMCA called the Wisconsin Purple Martin Association. Addresses are listed for reading and inquiry. All have annual membership fees for their quarterlies.

## **GUIDELINES FOR PROPERLY CONSTRUCTED AND INSTALLED MARTIN HOUSES:**

Martin houses are large and can be complicated to build. Many commercially built houses are available. Most of these houses incorporate the necessary features to provide martins with a safe place to raise their young. Be wary of cheap houses using plastic for components to support the house. When some plastic components break down the whole house or compartment may fall to the ground. Always have methods to monitor the house or cavity at least weekly, preferably every three days during the nesting season. This will eliminate the competition and provide you with many hours of enjoyment and not of frustration. Important features are listed below:

1. Martin's nest in open areas including backyards, meadows, fields, farmland, near ponds and lakes. Martins especially like inhabited residences. The house should be placed in the center of a large opening at least 30-40 feet or more from large trees or buildings. Existing colonies are tolerable to being enclosed. Always maintain open areas for proper flight and maneuverability of martins. In new sites of house or gourd establishment, additional space may be required. Allow for extra space if trees are taller than your house placement height!
2. Nesting compartments should be at least 6" X 6" X 6" or larger and separated by partitions. Each compartment should have a minimum of a 2" entrance hole and not more than 2 1/2" positioned 1 1/2" above the floor. Preference of cavities 6" X (8", 9" or 12") is made to ensure greater hatching and survival. On larger compartments install the entrance to one side. This aids in the prevention of owl predation. Houses with railings aid to prevent young from falling. Gourds may be used but must have at least 8" diameter at their widest point.
3. Houses should have capabilities of being ventilated and be painted a light color. White is preferred to reflect the sunrays in the summer. It is also the most often chosen color through conducted research.
4. Houses should be placed on poles 12-20 feet above the ground.
5. Houses should be easily maintained and monitored. Many commercial houses have telescoping poles, which allow them to be lowered for cleaning and monitoring. This system can be adapted for wooden housing as well (Contact PMCA or the Wisconsin Purple Martin Association for a detailed drawing).
6. It is recommended to install a predator guard below the housing to prevent climbing predators like cats, snakes and raccoons from raiding the colony. It should have a diameter of 8+ inches and be from 3-7 feet off the ground.
7. Never allow other species to occupy martin houses or gourds. This especially, includes English sparrows and European Starlings. Once present they will only cause harm or death of martins at some future date or prevent martins from establishing.
8. It is advisable to place porch dividers to separate each cavity if they are connected. This safeguards males from dominating the whole floor or side of a house. In addition, it acts as a blockage for young martins to travel to

another cavity and receive food away from a younger brood. If you are interested in purchasing commercially made martin houses contact the WPMA, PMCA or one of the organizations listed or companies listed. Their addresses are given below. For the people who can construct their own house, the PMCA or the TPMSNA have drawings for a fee that would adequately meet purple martin requirements.

### **Purple Martin Companies—Bird Houses & Supplies**

Birds Choice Coates Housing [http://www.birdschoice.com/our-products/field\\_pd\\_product\\_category/bird-houses-6](http://www.birdschoice.com/our-products/field_pd_product_category/bird-houses-6)

Heritage Farms Housing <http://www.heritagefarms.biz/pm/>

Nature House—Erva Tool & Manufacturing Co. Inc., 3100 W Grand Ave, Chicago, IL 60622-4324 1-800-342-3782.  
[www.naturehouseinc.com](http://www.naturehouseinc.com) or [http://www.naturehouseinc.com/index.php?main\\_page=index&cPath=235\\_3\\_109](http://www.naturehouseinc.com/index.php?main_page=index&cPath=235_3_109)

Purple Martin Conservation Association, Telephone: 814-833-7656. <http://shop.purplemartin.org/Houses-list.aspx>

Purple Martin Place <http://purplemartins-r-us.com/sunset-purple-martin-system-aluminum-p-148.html>

Song Bird Essentials <http://www.songbirdessentials.com/store.php?cat=1019&title=Purple%20Martin%20Products>

Troyer T-14—<http://www.purplemartins.com/troyer-purple-martin-house-catalog.html> or  
<http://www.purplemartinproducts.com/>

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### **Organizations:**

IOWA PURPLE MARTIN ORGANIZATION <http://iamartin.org/>

ONTARIO PURPLE MARTIN ASSOCIATION <http://essexpurplemartins.ca/>

PURPLE MARTIN ASSOCIATION OF THE DAKOTAS <http://www.purplemartindakotas.org/index.php>

PURPLE MARTIN CONSERVATION ASSOCIATION (PMCA), Telephone: 814-833-7656.  
E-mail [martininfo@purplemartin.org](mailto:martininfo@purplemartin.org) or the web site is [www.purplemartin.org](http://www.purplemartin.org)

WISCONSIN PURPLE MARTIN ASSOCIATION (WPMA) 920-889-0060 <http://www.wisconsinpurplemartins.org/> or on  
Facebook <https://www.facebook.com/WisconsinPurpleMartinAssociation>

### **Sources of information:**

Allen, R.W. and M.M.Nice. 1952. A study of the breeding biology of the Purple Martin (*Progne subis*). *American Midland Naturalist* 47:606-665.

Layton, R.B. 1969. *The Purple Martin*. Published by Nature Books Publishers, P.O. Box 12157, Jackson, Mississippi 39211, 192 pgs.

Stokes, Donald and Lillian and Justin L. Brown. 1997. *Purple Martin Book—The Complete Guide to Attracting and Housing Purple Martins*, Published by Little & Brown Co, 96 pgs.

Wade, J.L. 1987. *Attracting Purple Martins*. Published by The Nature Society, Purple Martin Junction, Griggsville, Illinois 62340, 225 pgs.

Westcott, Deb, Managing Editor, *Purple Martin Update*. Quarterly Journal—Purple Martin Conservation Association.

