

PURPLE MARTIN Information

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Attracting Purple Martins (<u>Progne subis subis</u>), 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 (coverts).

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 when successfully fledging their young. Often, they return about the same date each year, except for newly established colonies. Northward timing is based on light and insect phenology to arrive when their source of food (flying insects) becomes available.

Scouts usually arrive in Wisconsin during the last week of March and throughout April. Males choose one or more cavities as their choice sites of territory while defending them against other males. Female martins are courted and eventually pair up, usually with a male that is of equal age class. Female martins construct nests during early to mid-May near the timing of when sub-adults start arriving. Females bring grass, twigs, local materials and mud into the cavity to form a shallow cup raising one brood per year. Male's contributions are small but do include placement of selected green tree leaves just before or after eggs are laid. Females lay 1-8 white eggs, incubating them for 14-16 days starting mid to late May through early July. 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. Gradually, neighborhood colonies will join up with other martins to feed and roost communally. Fat reserves are built up gradually before their migration south to Brazil which occurs from August to early September in Wisconsin.

MANAGEMENT OF THE MARTIN COLONY

Martin houses and gourds should be cleaned out each fall after September 15 or by April 1. Readiness of established colonies for occupancy by early to mid-April includes placement of nesting materials for those purple martin scouts or by mid-May for new colony establishment. Many well-meaning people erect a martin house expecting it to attract scouts or sub-adults without any further work. **Management and monitoring are the only correct ways to allow a chance at attracting Purple Martins and keeping them**. Some house and gourd owners are generally satisfied if any bird takes up residence. This displacement discourages

martins by other cavity dwelling species, especially house sparrows and European starlings. These two non-native species are the martin's worst competitors even if martins do tolerate their presence. Eventually losses will occur from egg breakage, along with young and adults being pecked to death to cause a loss of colony site. Both species are unprotected and maybe euthanized without a permit. THEY SHOULD NEVER BE ALLOWED TO NEST IN A MARTIN HOUSE OR GOURD. Repeated nest removal, trapping or euthanizing house sparrows and starlings are 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 or are attracted to existing 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 <u>improvements</u> 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, <u>first time</u> purple martin homeowners should not open up any cavities before the end of April. The trick is to open up as few 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 on the south or west side 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 few years 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 to clean out old nests, remove wasp nests and wash the compartments with soap, water and bleach (10%) to ensure mites, fleas or other invertebrates are reduced. 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. Advice is to use a recorded "Purple Martin Dawnsong" on a cassette tape or on a CD or on what they call a "bird magnet" to attract yearling martins. By virtue of playing the "dawnsong" it increases your chances of acquiring a pair of martins. It is best to play it early in the morning about a half hour before, during and after dawn during the migration of the sub-adult martins. It may not guarantee your success but it won't hurt it either.

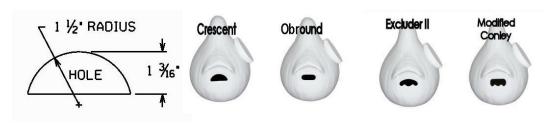
Other options used by people to attract martins are placement of mud throughout each compartment to make it look used, including the cavity hole. Mirrors placed on the porches or sides of housing create movement or action for martins visiting. Placement of egg shells on an elevated platform for calcium intake assist in their gizzard's breakdown of insects. Provide use of martin decoys whether plastic or carved wood on the housing moving them daily if possible. Finally provide adequate nesting materials within cavities of at least an inch or two deep to resemble past occupancy.

GUIDELINES FOR PROPERLY CONSTRUCTED AND INSTALLED MARTIN HOUSES:

Purple Martin houses are generally large structures that can be complicated to build. Modern commercially built houses are available from several sources. Most incorporate the necessary features to provide purple martins with a safe place to raise their young including being lowered vertically. Be wary of cheap housing in general. Some housing using plastic components break down or cause failure for operation of opening cavities or keeping the house together. 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 human inhabited residences nearby not to exceed 120 feet. 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 under 40 feet by the elements but may lose interest if better housing is located nearby. Always maintain open areas for proper flight and maneuverability for the martins. Larger areas of openings are always best, especially when 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. 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. Each compartment should have a minimum of a 2" entrance hole not exceeding 2 1/2" positioned 1 1/2" above the floor. Starling Resistant Entrance Holes (SREH) are utilized to prevent starlings from entering cavities shaped liked crescents, slots and bird shapes (see picture below). Note that "resistant," means some starlings may be able to enter. Exact size or shaped dimensions need to be implemented if hand made. Houses with railings assist to prevent young from falling. Gourds utilized must have at least 8" diameter at their widest point.
- 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 being able to withstand winds up to 90+ mph.
- 5. Houses should be easily lowered vertically for cleaning and monitoring with access openings for each cavity.
- 6. A predator guard is recommended 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 future harm or death of martins 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. Additionally, this acts as a blockage for older young martins to travel to other cavities for food.



Purple Martin Companies—Bird Houses & Supplies

Birds Choice Coates Housing http://www.birdschoice.com/our-products/field_pd_product_category/bird-houses-6

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

Mast, Ora—Purple Martin houses, W5637 State Road 44, Dalton, WI 53926

Nature House—Erva Tool & Manufacturing Co. Inc., 3100 W Grand Ave, Chicago, IL 60622-4324 1-800-342-3782. www.naturehouseinc.com or 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

Shimek, Robert—Purple Martin houses, Telephone: 920-973-4577. Farmboy54228@yahoo.com

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

Troyer T-14—<u>https://www.purplemartinproducts.com/Troyers-Birds-Paradise_bymfg_1-0-1.html</u> or http://www.purplemartinproducts.com/

Organizations:

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

NEW YORK STATE PURPLE MARTIN PROJECT https://finwr.org/nyspmp/

NORTH CAROLINA PURPLE MARTIN SOCIETY https://www.ncpurplemartin.org/

ONTARIO PURPLE MARTIN ASSOCIATION http://essex.purplemartins.ca/

PURPLE MARTIN ASSOCIATION OF THE DAKOTAS, Telephone: 701-732-0246 http://www.purplemartindakotas.org/

PURPLE MARTIN CONSERVATION ASSOCIATION (PMCA), Telephone: 814-833-7656.

E-mail martininfo@purplemartin.org or the web site is www.purplemartin.org

PURPLE MARTIN LANDLORDS OF NORTH TEXAS http://www.purplemartinlandlordsofnorthtexas.com/

THE COASTAL CAROLINA PURPLE MARTIN SOCIETY https://www.purplemartinroost.com/

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

Dellinger, Ree, 2009. *My Best Nest: A Purple Martin Story*. Published by The P3 Press, 16200 North Dallas Parkway, Suite 170, Dallas, Texas 75248. (Children's book) www.thep3press.com

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.

Wolinski, Richard, 1996, Enjoying Purple Martins More, Bird Watcher's Digest

REPORT BIRD BANDS: https://www.usgs.gov/labs/bird-banding-laboratory

