

Purple Martins—A Welcome Neighbor at Mannington Mills

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Partnerships develop in unusual and exciting ways. One doesn't necessarily associate industry and the environment as having a common agenda. However, corporate environmentalism is alive and well at Mannington Mills, Inc., where producing America's flooring also benefits the environment.

Mannington Mills has been in the business of producing high quality flooring products for over 90 years. Led by their corporate office in Salem, New Jersey, they also have plant locations in Alabama, Georgia, and North Carolina. The southern NJ office is surrounded by one of the region's largest and most significant tidal wetlands, and part of the Delaware Estuary. Where there are wetlands, there are insects. Some of those insects are attracted to some of the product components and are easily trapped in the sticky gels, resulting in product defects. When screened double-door air locks and overhead door air curtains to keep insects out didn't totally work, pesticides became necessary. A few associates took charge and instituted a more

natural answer by providing housing for Purple Martins. A martin colony was established in the late 1980s; however, the success of the colony was limited due to lack of proper management and various other factors.

In October of 1999, Allen Jackson, a PMCA member and martin mentor, became involved when Dave Kitts, VP Environment at Mannington Mills, contacted him for technical assistance to improve the martin colony. An after-the-season site investigation was conducted. The seven Trio Castles were

located in an expansive mowed grassland between the plant buildings and a wetland area. The precursory review suggested approximately 40 active martin nests were present, along with evidence of ground predators, aerial predators, and nest-site competitors. Literature on the PMCA's best management practices was provided and it was recommended that nest checks begin the following year to collect base-line data on the colony. Dave canvassed the plant's employees for volunteers to help monitor the colony, and a number of interested employees quickly responded.

As the monitoring process began in 2000, information obtained suggested that improvements to the colony site were necessary. Each year changes were made to correct any prob-

lems that surfaced. Many of the Trio Castles were in disrepair. Under the supervision of Marvin Morris, significant time was spent by Mannington's maintenance staff (specifically, John Finlaw, and Wallace Wright) to repair and modify the Castles.



Dave Kitts, Mannington Mills VP-Environment, has supported a multi-year martin management program that helps Purple Martins while also helping Mannington Mills deal with insects. Photo by Bruny Cardoso.

Mannington Mills Colony Site Data						
Year	2001	2002	2003	2004	2005	2006
# of available nest cavities	168	84	84	96	96	96
% nests used	25	57	51	64	69	71
# of nests	42	48	43	62	67	69
# of eggs	132	158	87	162	198	223
# of young	103	129	59	130	159	192

Modifications included doubling the size of the nesting units and adding light globes as pole guards. Wire mesh (2" x 4") predator guards were added around each house for protection from aerial predators, and SREH doors replaced round-holed doors for protection from starlings.

Over all, good steps were being taken, however, the martin colony was not sufficiently responding to the improvements. Controllable and uncontrollable events affected the colony each year. 1) A wet spring and prolonged rainy spell at the end of May 2003 had a major impact on martins in New Jersey and throughout the northeast. Thousands of martins starved to death during that bad weather.

The martins that survived, along with late-arriving SY birds, had reduced nesting success that year. 2) While the wire mesh predator guards provided protection from aerial predators, the light globes offered little protection from ground predators. Rat snakes were documented raiding the houses in 2004 and 2005. Snakes were probable predators prior to 2004. 3) House Sparrows, starlings, and Tree Swallows were continuous problems. Little time was available to control sparrows and starlings or to encourage Tree Swallows to nest in bluebird boxes rather than the martin houses. 4) More

recently, it is speculated that many of New Jersey's 2005 ASY martins were lost to the effects of Hurricane Katrina as their southward migration likely put them in the hurricane's path. Most New Jersey colonies, excluding Mannington Mills, showed population reductions in 2006. A shortage of ASY

females was especially noticeable. Many of the 2006 breeding martins were SY birds, reducing productivity because of inexperienced parents. Additionally, competition among unmated SY males led to increased evidence of infanticide, further limiting successful production.

Because the Trio castles required frequent repairs and had nest-site competitor and ground predator problems, a gradual switch to gourd racks equipped with SuperGourds began in 2003. By the 2006 breeding season, eight gourd racks were in place, equipped with owl and pole guards; all the SuperGourds had crescent-shaped SREH with inside and outside porches; three perching trees and two eggshell feeders were installed; and, four bluebird houses for Eastern Bluebirds and Tree Swallows were added. While production was good, growth of the colony has been less than anticipated. The data in the table on page 3 identifies the results of nest checks and production the past six years. The number of nests do not mean that each nest was productive. For instance, the number of productive nests for 2005 and 2006 was actually 52 and 50 rather than the 67 and 69 active nests listed in the table. Unproductive nests could be attributed to impacts from competitors

or predators, or represent unmated males that built nests but never paired with females.

Mannington Mills plans to maintain the colony at the present eight racks of SuperGourds. With the help of the martins and the continuing use of screens and bug-proof en-



Above: Banding day, July 2004. Jen Kyle holds a young martin for Allen Jackson to band while Debbie Tomlinson, Marianne Weatherbee, Kim Mooney, and Nancy Koenig look on.

Below: Volunteers Marianne Weatherbee, Debbie Tomlinson, Cil Kidd and John Baese conducting a nest check in 2004. Involvement with the Mannington Mills' colony has inspired some of the volunteers and employees to establish colony sites of their own at home. Photos by Bruny Cardoso.

tries, their insect problem, though not completely eradicated, is more manageable. According to Mannington Mills, this is a sound environmental—as well as good business—policy.

Many people were involved with the success of this program. Besides making many of the necessary modifications, Marvin Morris' maintenance staff has spent countless hours each year preparing the houses/gourds for the spring arrival of the martins and winterizing the setup each fall after the martins leave. They provide great support for the program each and every year.

Non-employee volunteers Allen Jackson, Ken Glaspey and Ed Sheppard have provided assistance organizing the gourd setup, modifying the SuperGourds, controlling House Sparrows and starlings early in the nesting season, adding bluebird houses and eggshell feeders, and banding the martins each summer.

Dave Kitts and his avid group of volunteers (Bruny Cardoso, Kim Mooney, Rich Baese, Jen Kyle, Marianne Weatherbee, John Baese, Debbie Tomlinson, Marvin Morris, Nancy Koenig, Forest Bobbitt, Michelle Patterson, Jon Dunn, Dawn Fredo, Keith Bodendorf, Jeff Kaighn, Mary Katherine Dyczko, Susan Villanova, Heidi Ambrosius, Kathy Dickson, and Jeff Hamilton) spent significant time monitoring the colony from April thru July each year. Conducting nest checks is done during the heat of the day when temperatures and humidity can get extremely uncomfortable. Dave is also the prominent player responsible for providing funds for the setup. Considerable money was required to fund the establishment of the colony and subsequent recommended improvements. Thanks to Dave's efforts, Mannington Mills has been a strong supporter of the program.

The Trio castles that were replaced have been repaired and

used to start or improve other martin colonies in southern New Jersey. Preference was given to volunteers and Mannington Mill employees. Of seven castles that have been placed at other locations, one has started a new colony and five have improved existing colonies.



Above: 2006 and the transformation is complete with eight racks equipped with SuperGourds, for a total of 96 nesting units with SREHs, pole and owl guards, plus three perching trees, two eggshell feeders, and four bluebird houses.

Below: The old setup before improvements. The old housing has been repaired and put to use by volunteers and employees who want to start or increase their own colonies. Photos by Allen Jackson.

Management efforts are expected to show bigger increases for years 2007 and 2008. Every volunteer has helped partner in the success of the martin colony. The 96 SuperGourd units will make Mannington Mills one of the largest martin colonies in New Jersey. While progress has been slower than desired, the project is considered extremely success-

ful. Our goal is to double the size of the colony, increasing production to over 400 young each year. Few, if any, corporations have gone to the extent that Mannington Mills has. Mannington's environmental position is clear and straightforward: "Actions Speak". This position is reflective in Mannington's plans to erect two SuperGourd racks at their plant in Calhoun, Georgia for the 2007 season. We wish more corporations would make proactive decisions like Mannington Mills.

Allen Jackson is an active member and mentor in the PMCA. He was selected as the PMCA's 2002 Landlord of the Year for his efforts to help martin landlords and ultimately Purple Martins. He bands martins at over 60 colonies in southern New Jersey.

David Kitts, VP Environment, has worked at Mannington Mills since 1989 and has long been the environmental advocate for the company. He has initiated many projects insuring Mannington's position as a champion of the environment. For more information on Mannington's environmental initiatives, see <<http://www.mannington.com/global/products/environment/home.asp>>