Protecting Purple Martins from Owls

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t was a good season here in Port Clinton, Ohio. I have offered about 57 cavities for most of my landlord years and added an additional 16 cavities at another nearby location in 2012.

I have been a landlord for eleven years and all my young have been banded for the last nine years. The banding has been done by the Black Swamp Bird Observatory representatives, Mark Shieldcastle and Tom Kashmer from Oak Harbor, Ohio. For the past eight years we have also used numbered color bands on the opposite leg from the federal band. This is the fun and interesting part of banding, as we read the numbers of returning martins in the years that follow. While doing a nest check In May of this year, we found a dead ASY male that had been banded here in 2008. Typically between 180 – 230 young have been banded at my colony each year since 2004.

An exception came in 2009 when a nasty cold spell hit in early July and resulted in many dead young. It was too late when I realized the real problem was the temperature. I do offer supplemental feeding with crickets and scrambled eggs when I realize the need. First I was successful tossing crickets and now use a platform feeder and provide crickets and scrambled eggs.

In 2011, the Great Horned Owl problem at my site was so bad that I decided to try making owl cages for 2012. I think I had the problem for many years before I realized what was going on. Broken perch rods and broken gourd porches were the clue that finally got my attention.

The PMCA's online forum was a good place to share my ideas and ask other landlords for their input on the guard design. Some of the things I had to consider, and asked about online, included what size of fencing to use $(2 \times 4" \text{ or } 4 \times 4")$; my primary goal was protection from Great Horned Owls, but Cooper's Hawks were an issue also. I could use 2 x 4" and have the option of enlarging to $4 \times 4"$ by removing sections of wire later if needed. Did I have the fence low enough? The bottom of fence was placed 6" below the lower porches and the cage is 9-1/2' diameter. Then I had to wait until next spring to see how it worked. I was advised to cover the bottom of each cage with wire, and had a plan to close the bottom if necessary.

The cages are mounted to the poles and they remain in place when the houses or gourds are winched up and down. The two cages are put together with threaded fittings and some welding. I built and installed them in the fall, so they were tested by some good storms here on the open water's edge in Port Clinton. The pole for the three houses is 3" schedule 40 steel pipe and is very strong.

I also caged SuperGourds that are on a 2" square aluminum pole (from the PMCA). That cage is about 4.5' in diameter and 5' high (**Fig. 1**) This unit is a problem in excessive wind to the point I have to lower the rack at times. The wire cage is about 6" from the gourds. The cage top and sides stay up on the pole and do not lower (**Fig. 2**)





The bottom of the house cage lowers with the houses, which causes some problem doing nest checks—the fence bottom is somewhat in the way when opening the cavity doors (**Fig. 5**) It's a bit of a pain to reach over the fence bottom but I can work with it. I do nest checks about once weekly. The distance between the fronts of the houses and the cage wire is about 6" at the closest points. The diameter of my enclosure for the triple house system is 9.5' and about 40" high (**Fig. 6**). I live in a windy area of northern Ohio. There is 5 mile of open water to the prevailing southwest wind that we deal with but the sturdy 3" schedule 40 steel pole handles the wind well. The wind does not seem to bother the wire at all but I have it fastened pretty good to solid framework.

I mounted two motion-activated cameras to monitor the colony site for 2012. When the first owl visitor showed up, it seemed that the cage did the job. I turned the cameras on about 1/2 hour before dusk and turned them off after dawn each morning. In just one night, the two cameras took a total of 489 pictures, all motion activated (Fig. 3). My plan was to monitor every night until the martins left in August. I had been told that owls might fly up into the cage, since the bottoms were unfenced, and I wanted to watch for that. I could close off the bottoms if that happened. The martins fly through the 2" wide x 4" high fencing with no problem. About 1/3 drop down through the top, 1/3 enter through the sides and 1/3 fly in through the open bottom of the cage. The martins easily learned how to go through the 2 x 4" openings, and probably adjusted to the cages more quickly than when I switched from round to crescent, starling-resistant openings.

In the end, I decided to go ahead and protect the bottom of the triple house cage sooner rather than later. I used wire with $4 \times 8''$ openings so the martins can fly through them easily (**Fig. 4**) The martins really like to drop down and out when leaving the cage, so I did not want to close it too tightly. I thought the $4 \times 8''$ openings in the bottom of the cage would keep a big owl from entering due to its large wingspan.

Arkansas landlord Kent Justus suggested 4"x 4" fence as another good size for the bottom. It appears important that the martins have the benefit of dropping out the bottom easily. I did not close the bottom of the cage for the SuperGourds for a couple of reasons; each gourd is also protected by the prong-type owl guard, plus the diameter of the cage is much smaller than on the 3-house unit, which is about 25' away from the gourd unit. I have not had an owl problem at the gourds even with the bottom of the cage left open, as it is much smaller inside the cage and there is less room for a GHO to move. I have not had any more owl problems after enclosing the bottom of the house cage. It has been a good season here and

I am looking forward to the martins return in 2013.







