

PREDATOR & Prey



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As I was assembling my four gourd racks this week during the Christmas vacation, and watching the wildlife around me going through their daily routines, it made me start to wonder about the fascinating hobby I have endeavored upon now in my upcoming 20th year of hosting Purple Martins in my back yard, starting in 1999. It has been the most rewarding hobby, and, the most challenging endeavor I have ever been involved in. The main problem I encounter every year is the aerial attacks by both Cooper's Hawks, and Red-shouldered Hawks, and the ground predation from the very common Orange Rat Snake.

One of the first things I have realized over the years is that being predator or prey depends on your size. Generally, larger things eat smaller things. Lizards in my yard feast on most small insects including, but not limited to, small moths, flies, any type of crawling bug, but they seem to leave the ants alone. The birds, like Mockingbirds and Cattle Egrets, Great Egrets, Snowy Egrets, even Great Blue

Hérons, feast on the lizards, egrets and herons of course, eat fish too. From there, the larger birds of prey like Red-shouldered Hawks, Cooper's Hawks, and Eastern Screech Owls, all feed on birds, among other things like mole crickets, lizards, frogs, small rodents, etc. I have even seen an adult Red-shouldered Hawk come out of the woods, fly in front of me and my vehicle holding in the talons a bloodied, full sized Grey Squirrel.

This brings me to the Purple Martins. I have had snake predation off and on for as long as I have had martins except for the first year. My colony did not attract too much attention that first year as I had only four nesting pairs and of the 14 out of 17 eggs that hatched, all fledged. I have always had some type of predator guard in place on every housing assembly. I have seen several Purple Martin houses in my area here in Melbourne, FL, the vast majority never had predator guards of any kind, and all those colonies, with time, went away, or had very poor nesting success. I have had conversations with people

who said they wouldn't have snake problems since they have dogs on the property. All well and good, but dogs sleep too. I also have talked to people who say they don't have any snakes on their property since they have never seen one.

As I was erecting my four gourd racks of 12 gourds each, besides the usual large SuperGourds, with porches and entrance tunnels to give extra depth, I also had to be concerned about the climbing predators along with the flying predators. I have a 4' diameter wooden disc on each pole. The discs are mounted on top of a 6" diameter PVC pipe that goes to about 2-3 inches above the ground, but not touching the ground. The PVC pipe is about 40" tall, with the wooden disc mounted and secured with deck screws on top of the PVC pipe. (The topside of the PVC pipe has a 6" PVC cap glued to the pipe itself). The topside of the wooden disc is secured with four thin, steel cables that are connected to the edges of the wood in four places and secured with a clamp that is on the martin pole about 2 feet above the

PVC pipe and cap installed on the pole. The guard hangs on the pole, just off the ground, secured under the cap with two small angle brackets secured with a screw-type hose clamp.



The 4'diameter wooden disc attached to the top of the PVC cap with screws, and four support cables attached to the wood and a plastic ring secured to the pole. Cables are tightened with a clamp under the plastic ring. This makes it secure even when the wind picks up.



The hawk/owl fence guard stays on top of the rack when the SuperGourds are lowered for easy nest checks.



disc. The thin cable is 90# fishing leader line, crimped with skinny sleeves from any bait and tackle shop. If something pushes against the base of the PVC, it will move. A floating guard will make the pole hard to climb if a snake or raccoon attempts to breach the first line of ground defense. If the predator can scale the PVC then it will run into the wooden flat disc that is mounted on top of the PVC. This is the first season I will try these two guards at the same time. As the season progresses, I will find out via nest checks as to how my devices will work.

At the top of the gourd rack, surrounding the gourds is a wire fence with openings of 2" wide and 4" high. The martins can easily get through these openings to enter and exit the gourds. The reason for the wire cage/guard is to keep the hawks and large owls away from the gourds. It works. I had a Great Horned Owl making nightly visits to my gourd racks in 2013 and lost at least six ASY martins before I stopped the predation overnight by installing the wire fence around all of the gourd racks. I only used three racks that season; I have since added another because of overcrowding. I know it was six ASY martins as I picked up six sets of adult bird feathers, six mornings in a row. I put the wire cage up after the 6th day, and the aerial predation stopped. Before I made the modification, I would watch the owl sitting on one of my Wood Duck nest boxes. He would sit there all night like a statue. At the time, I didn't realize he was so successful at raiding the housing each night.

My friend, Mike Schmitt, also of Melbourne, built the steel support that I wanted. The top eyebolt is threaded right into a welded nut on the support and the bolt threads right through a

The horizontal welded supports have a notch cut at each end to hold the fence guard in place. The fence is secured with plastic wire ties, which last through the season and are replaced with new ties at the beginning of each season.



hole that was drilled at the top of the pole and stops when it goes all the way through to the other side of the pipe. It is very secure. The perches on top are wooden dowel rods. They are primed and painted and they are attached with plastic coated wire. There are no holes in the dowel rods so they will last longer out in the weather. At the end of the season, I take everything down and it all goes in the garage so it is not constantly in the weather. Of course, it keeps other birds away from my site too, since there is nothing there to attract them. During the off season I repaint whatever is necessary.

At the top and end of each steel support for the wire cage, a little notch has been cut in the steel and the wire cage fence rests in those notches, secure with plastic tie wraps. The cage only weighs seven pounds and since it is all open, there is very little wind resistance, and the gourds go up and down through the cage very easily. One last item, the cage being open at the bottom does allow a hawk to fly up under and land on the gourd rack. I have seen that happen, and I have seen a hawk take a young bird from the rack. I can close the bottom of the cage as the martins like to drop down from the inside of the rack and fly off, but if I close the bottom of the cage, I will have to figure a way to open the bottom, a hinge sort of thing so I can lower the gourds. At this point, I do not think it is necessary. There is no way to stop all predation, it is part of nature. In 2014, there was no snake predation;

the same is true for 2015. The hanging/ floating PVC guards really worked for me. One last thing to consider, if I didn't do weekly nest checks (twice a week during egg laying season), and once a week thereafter, my colony could have been wiped out years ago. Many landlords have lost their entire colony over the years and sometimes they don't know why. When there is snake predation, they usually don't leave any clues.

One last item to note, my gourd rack poles are of the two-piece, round, variety. This allows me to completely assemble and disassemble the entire system without the need for climbing on a ladder; I can do everything from ground level. Also, the plastic ring that the steel cable is connected with, is simply a thick piece of plastic drilled with a hole saw to make it round, then the center drilled so it just fits over the steel pole. From there Mike S. drilled four small diameter holes in the plastic to thread the plastic coated steel wire cable through and crimped with linesmen pliers to secure it. On the underside of the wooden disc, I have a construction nail looped with the steel cable and the nail is secured in place with some adhesive caulk so it cannot slide out from the cable loop. Mike Schmitt's abilities and his machine shop were a great help to me with this project.

The reason for all this work, of course is for the health, safety, and well-being of my beloved Purple Martins. After all, if they come to

your back yard, it is no accident. You have to build it, and if the conditions, amenities, and other things pleasing to the martins are apparent, they will come. They make a long journey to your backyard, the least we all can do for them is to protect them in the dead of night when we are sleeping, but the predators are always on the prowl looking for a meal. If it is not a Great Horned Owl from above, it will be an Orange Rat Snake or raccoon from below. The Purple Martin is a beautiful song bird, the largest North American swallow, native to North America and the majority of the population has no idea what a Purple Martin is, or what they look or sound like. There is work and effort to successfully host them and for this landlord it is worth the work required to not only attract them, but to do all I can to keep them safe while they perform their parental duties of raising a family so the life cycle of the Purple Martin can continue. ➡

For more information, questions, or comments, contact Mike Dingman at mdingman@cfl.rr.com.

Biologist's note: The PMCA strongly recommends the installation of pole-mounted predator guards. They are an inexpensive addition to your colony that many don't realize is needed until it is too late. Not handy like the author, Mike? Find the guard that's right for your pole at shop.purplemartin.org.