

Pole Guards: Insurance for Purple Martins

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Pole-mounted predator guards are an important part of being a conscientious and successful martin landlord. Yet many landlords don't use them, and not all manufacturers of martin housing offer them. The *PMCA* publishes reports of snake and raccoon predation each year, but often, landlords either assume their yards are predator free, or just haven't gotten around to adding pole guards. In response to an informal survey run on the *PMCA's* internet Forum, the majority of the landlords who replied said they used stovepipe guards, (perhaps because these are available commercially), followed by PVC pipe guards, often augmented by net guards, followed by inverted bucket guards, disk guards, and electric fence chargers, all of which are homemade systems. Other systems that work in areas with large snakes are hardware cloth squares 4 ft. in diameter and plastic skirts. Another informal survey landlords can conduct themselves is to note how many of the martin systems in their area have pole guards; most don't, if what the *PMCA* has observed in its travels holds true elsewhere.

The majority of the reports we receive about climbing predators involve snakes that have climbed metal poles, consuming eggs, young, and adult martins. Rat, Corn and Fox Snakes are all excellent climbers and can easily climb wood or metal poles; height won't present an obstacle, or make your martins safe from these predators. While the majority of snake reports come from the southern U.S., snake predation occurs in northern states and Canada, too. There are very few areas in North America where landlords don't have to consider snakes as a potential predator. Rat snakes, *Elaphe obsoleta*, are absent from the Dakotas, Minnesota (though Fox Snakes occur there and in Iowa), most of Wisconsin, Nebraska and Michigan, and portions of Iowa and Illinois. Once a snake has digested its meal and left, there are no signs that a predator has visited a site, other than missing eggs and birds.

Next on the list of climbing predators are raccoons. Raccoons are agile climbers, handling both wood and metal poles easily. Signs of a raccoon attack are finding severed martin wings on the ground, blood, fur and feathers on the martin



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Rat snakes, raccoons and squirrels occur almost everywhere within the breeding range of the Purple Martin. All three not only climb trees, they will climb metal poles, no matter the height, to raid nests. Adult birds, nestlings and eggs are all at risk from climbing predators.

housing and ground, and claw marks on wood poles. Nesting material may be hanging from entrance holes and doors may be pulled off. After raccoon and snake attacks, the list of potential predators includes squirrels, opossum, and bobcats. Besides climbing wood and metal poles, squirrels may access martin housing via nearby power lines or tree branches. They will eat eggs and nestlings, and may use wooden houses for nesting.

Failure to install a pole guard offers martins zero protection from snakes and raccoons. While no guard can be guaranteed to be 100% effective against all climbing predators, the designs reviewed in this article are the most effective in use today. For areas where larger snakes are the norm, use a backup system by installing a net guard above a PVC pipe, cone, or stovepipe guard. Don't rely on grease, metal poles, cayenne pepper, mothballs, or "snake repellent" products to protect your martins. Add a pole guard. You can make your own inexpensively, or look for guards at bird stores and online. Commercial systems that have

manufactured guards available include: Coates, Heritage Farms, Lonestar, *PMCA* Gourd Racks, and Troyer/Birds' Paradise. The *PMCA* has adjustable guards that will fit round poles of varying sizes, as well as a guard for square poles.

Correct installation is critical; a guard that is too low, or that leaves gaps around the pole, will result in failures. Both snakes and raccoons have climbed stovepipe guards mounted below four feet, and a few landlords have even reported that snakes managed to get past their electric or net guards. If your housing raises and lowers with a winch or lanyard system, you will likely need to run the rope or cable through a hole drilled in the top of the guard; if cable or rope is left outside the guard, snakes can use it to bypass the guard. You may need to lower the lanyard mount, or move the winch just above the ground, to place the guard high enough to be effective. Unfortunately, many landlords will find that with a guard at the recommended height, they will need a ladder for nest checks, especially with taller house designs and multi-tiered gourd racks. But don't let that be an excuse for skipping pole guards. Here are several easy ideas to use.



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A commercial stovepipe guard made by Lonestar; fits a 2" square pole. This guard removes easily for nest checks.

Stovepipe Guard: Stovepipe guards originated with bluebirders and work well against raccoons and snakes when mounted correctly. However, as evident in the photo at right, when mounted below the suggested height of four feet above the ground, they will not stop predators. In areas where larger snakes are common, a backup guard of net or plastic mesh is a good idea. Basically, stovepipe guards are a 2-foot section of 7-inch diameter pipe, designed to wobble, rather than to remain rigid, when a predator tries to climb it. Some plans now call for 8-inch pipe 24 to 36 inches long. The top of the guard can be 1/4-inch hardware cloth, a metal collar, or a pipe cap. The guard hangs from the collar, which is supported from below by hanger iron or plumber's strap. Available commercially but also easy to make at home; plans are included in *The Stokes Purple Martin Book*, *Enjoying Purple Martins More*, and other publications. A plus is that martin housing does not have to be removed to attach the stovepipe guard to the pole, if cleated stovepipe is used. Not all stovepipe guards can be removed for nest checks, so depending on which design landlords buy or build, a stepladder may be needed for nest checks.



Thayne Mueller



Sandy Bunn

A homemade PVC guard that allows base of housing to lower to 4-1/2 feet above ground for nest checks.

PVC Pipe Guard: Many landlords report good success with PVC pipe, especially against large snakes. NC landlord Sandy Bunn (see photo above) uses 6-inch PVC sections 4-1/2 feet tall. The hinged section at the top gives him access to the rope cleat. Two methods can be used. 1) Using 4" or 6" diameter PVC pipe, whichever is easier to obtain, slide a 4' or 5' long section of pipe over the pole. Housing must be removed to install PVC guard. Tamp bottom end of PVC into ground to depth of 2" or so. Cover the open top of the PVC with a pipe cap to prevent birds from getting trapped inside the pipe. Or, 2) use a 2-foot length of PVC and mount it at least 4 feet above the ground. A pipe cap, with hole sized 1/8 inch larger than pole, is anchored to the pole at desired height and the 2-foot piece of PVC is fastened to the cap with one or two screws. A coat of carnauba wax can be applied periodically, to keep the surface slick. Nest checks may require use of a step ladder, unless you are tall enough to inspect all compartments of the lowered house or rack without one. PVC guards are not available commercially, and are most easily installed when the housing is first set up. Exposure to sun and weather may cause PVC to deteriorate over time.



Kent Justus

A homemade combination guard consisting of a metal cone guard with a net trap mounted below it.

Cone Guard: Often used on Wood Duck boxes, cone guards are available commercially and can be homemade using sheet metal and tin snips. Minimum suggested size is 30 inches in diameter. Snakes sometimes bypass cones this size or even larger. Photo shows Arkansas landlord Kent Justus' site, with backup net guard installed below winch. The winch cable is threaded through a hole in the sheet metal.

Net Trap: Net traps are very effective against snakes but will not stop raccoons, so use in combination with a second guard. Constructed from plastic netting (sold for protecting fruit from birds) and mounted to the pole with pliable wire. Directions for making net traps are in *Update* 12(4) pgs. 2-3. Note: Landlords must be prepared to remove live snakes from net trap, and there's a chance birds could get caught, so this trap is not for everyone, and requires monitoring.



Steve Kroenke



Barry Picard

Barry Picard's homemade inverted bucket guard mounts at eye level and lowers down to the ground for nest checks.

Telescoping Inverted Bucket Guard: Plastic bucket guards can be made at home fairly easily. There are two main types: rigid (not shown) and telescoping, as shown above. Plans for the telescoping guard design were published in *Update* 10(4) pgs. 8-10. Barry Picard's design calls for a 32-gallon bucket with the rim cut off. Other plans for bucket guards consist of a 15 gallon (empty) plastic container. Any 15 gallon smooth plastic bucket would also work, as long as any rim or lip is cut off, so there is no easily gripped surface for raccoons or snakes to grab onto. House must be removed from pole to attach guard. When the house is lowered for nest checks, the rigid guard prevents the house from being lowered to ground level; for some landlords, this means a ladder will be required for nest checks.

In summary, avoid pole guard failures by paying attention to installation recommendations and mounting guards at the suggested height or higher. Be sure to inspect guards after installation to make sure there are no gaps that might allow a small snake to squeeze past the guard; any gaps 1/4-inch or larger should be sealed with caulk or steel wool. Paper wasps may try to attach a nest inside cone, stovepipe, bucket and PVC guards; spray the underside or interior with cooking spray periodically to avoid an unpleasant surprise! Don't let the fact that guards can make management more difficult discourage you from installing them. There's nothing sadder than looking into a nestbox and seeing scales instead of feathers, because most such episodes can be prevented. Having had the experience myself, I'd like to help others avoid it. Readers who would like copies of plans for pole guards in this article may request them from the *PMCA*.

