

# A Nest Check Guide

Louise Chambers  
Purple Martin Conservation Association

*Why should you do nest checks? To list just a few reasons: To know what's going on at your colony site. To detect and correct any problems that develop in a timely manner. From year to year, a record of goings-on at your colony site will provide you with a useful history of your site. To increase your knowledge and enjoyment of your martins.*

*Nest checks will not cause the martins to abandon their nesting efforts. The birds will become used to the routine and perch nearby until you are finished. The bottom line is, doing regular nest checks will help you manage your site better. Since you will be able to resolve problems more quickly, your site will be more successful and fledge more young. Watching the nestlings as they grow to fledge age is one of the best rewards of being a landlord.*

*Before you begin: Number all compartments and gourds. Put alignment marks on telescoping poles to ensure you orient the house correctly, facing the same direction, after each nest check. Be prepared to deal with various situations such as finding a snake in a compartment, or wasps. Don't blindly stick your hand into a nest without knowing what's in it first. Record data on a MartinWatch form and follow the detailed instructions at <<http://www.purplemartin.org/pmw/>> or on pgs. 19-21 of the Martin Market Place.*



James R. Hill, III



James R. Hill, III



Louise Chambers

**When:** When martins are nest building, after they start taking **green leaves** into the nest, egg laying will soon follow. Start checks within a week of seeing green leaves going into nests.

**Midday** is generally a good time, as are afternoons. Try to avoid early morning and evening, bad weather or stressful times for adult birds. Try to schedule checks to **avoid hottest or coolest times of day**, when eggs need incubating or nestlings might require brooding. Give adults a chance to leave the nests before you begin lowering the system – **talk, whistle, or tap on the pole** so they know you are there. While it's okay to pick a nestling up to age it using the PMCA's **Prognosticator** + Laminated Baby Photos (Prog+LBP, a calculator wheel that will tell you projected hatch and fledge dates, and **life-size photos of nestlings**), and very helpful to know nestling ages, **small nestlings are fragile** and the oil on our skin is not good for eggs or feathers. So don't be afraid to handle them if needed but **avoid handling eggs or nestlings excessively**.

**How:** Lower housing and check each compartment or gourd. **Record** stage of nest building, number of eggs and/or hatched young. **Age nestlings** using the Prog + LBP—this is an especially important step if you don't know the date the first egg was laid. Probe beneath top surface of nest gently with your fingertips so you don't miss buried eggs. Counting eggs or heads should not take more than a **minute per nest**. Aim to have each system down for **no longer than 15-20 minutes**. With larger houses or gourd racks, you might have to spread a check out over AM and PM, or over two days.



Louise Chambers

**How often:** Checking nests every **4 or 5 days** during egg laying will help you accurately record first egg dates and calculate projected hatching and fledging dates. Once egg laying is completed, checking nests every **5-7 days** will be sufficient. Avoid long

gaps of 10-14 days between checks, especially early and late in the nesting period. You won't know egg laying dates, hatch dates, and won't know if young fledged or failed (died and were removed by their parents, or were lost to predation).

**Continue nest checks** until all young have fledged. TIP: To **avoid premature fledging** of older nestlings (22 days or older) keep checks on these nests very brief. Just look inside to confirm that nestlings are present. Use plug & string method to keep them safely inside throughout the system check. To do this, check records before you begin the check. Prepare a **plug and string** that reaches to the ground, with the system in the raised position, for each cavity with nestlings 22 days or older. They cannot fly at this age but could jump out and glide to the ground. Lower the system very quietly and plug each cavity with older nestlings as soon as it can be reached. It's a good idea to have a helper plug entrances while you lower the system.

Once your nest check is completed and the system is raised, **wait 5-10 minutes** before removing the plugs by tugging gently on the strings. Don't jam the plugs in so far you can't tug them loose, and don't have them too loose; they could fall out while you are raising the system.

**Last step**, but a very important one: Once housing is up, walk all around your housing. Make sure all gourd caps have been replaced, that doors to compartments are securely latched, and that you did not leave a cavity with older nestlings plugged. Make sure the predator guard is in place and use a safety bolt on poles too.



## When to check and when NOT to check

Do an extra check when:

A nestling is on the ground. Return it to correct nest or place with similar size young, if not sure what nest it is from.

Bad weather has ended. Check for wet nests, dead birds.

You see signs of predation or other problems below housing, such as martin feathers, owl feathers.

You notice a change in the martins' behavior—they seem agitated, won't land or enter cavities, etc.

Avoid checking:

When the birds are weather-stressed UNLESS you notice a problem, such as a dead bird blocking an entrance.

In the evening or after dark—if there is a problem with the cable or pole, there won't be time to fix it.

When weather is bad & parents are busy feeding nestlings

## Problem Solving



Capped Egg



Parasites



Raccoon

Half of a hatched eggshell is stuck onto an unhatched egg. The nestling in the capped egg will die if it cannot break through the extra shell. The cap can be carefully removed and the egg may still hatch if discovered soon enough.

Nest mites are most common. Northern landlords may also find blowfly larvae. Do not spray housing with insecticide or cleaning products. Place nestlings in bucket and cover it, remove nest material, wipe inside and outside of compartment with damp paper towel. Add new nest material and replace nestlings.

Finding severed martin wings on the ground is a sign of raccoon predation. Make sure your pole guard is mounted at least 4 ft. above ground level.



Unhatched Egg



Non-native Nest



Snake

if eggs are more than a week past hatch date, and remaining eggs have hatched, they can be removed. If new eggs are added to a clutch of unhatched eggs, wait until hatching is complete, remove unhatched eggs when young are a week old.

Remove nest, place trap in compartment if possible, such as Universal Sparrow Trap, Spare-O-door trap, etc. If you have a lot of problems with starlings, consider converting to starling-resistant entrances.

Remove from house and release a few miles away. Add pole guards if you didn't have them installed to begin with, or add net snake trap above guard if snake bypassed guard.



Dead Adult/Nestling



Native Nest



Owl/Hawk

Remove, check for signs of pecking by House Sparrows or starlings. Replace nest material if it is wet or full of maggots.

Leave in place if it contains eggs or nestlings. Place alternate housing nearby for them to use for next brood. Remove incomplete nests and place in alternate housing.

Finding owl feathers below housing or piles of plucked martin feathers in your yard is a sign of avian predation. Add external cage guards.

## Nest Check Kit

Notebook & pencil, clipboard, or voice activated recorder OR a helper who will record data for you • Prognosticator+LBP for aging nestlings • ASY & SY martin ID photos • Project MartinWatch data form • Automotive mirror on extendable handle, great for checking higher compartments & dark cavities • A small flashlight—very helpful for nest checks on sunny days • Plugs and strings for checks on older nestlings (20 days old or more) • Wet wipes and/or antibacterial hand cleaner • Extra nest material • An extra gourd cap or two • Latex gloves • Dust mask for windy days or when adding or replacing nest material • Unscented bar soap or Vaseline to rub on compartment ceilings to deter wasp nests • Camera • Binoculars • Tanglefoot, Vaseline or Teflon tape, to stop ants, especially fire ants, from climbing pole. Place generous amount up under the pole guard, so birds cannot get it on their feathers. Reapply as necessary.