Twelve Reasons Why People Lose Their Purple Martins

When a martin landlord loses an entire colony from one year to the next, they frequently suspect their ‘stock’ died in a storm during migration or was poisoned by pesticides on their Brazilian wading grounds. These scenarios are unlikely. Martins that share a colony site do not migrate or overwinter as a group. Colony members are a random aggregation of unrelated birds attracted to a common breeding site — they arrive in spring, and depart in fall, independent of each other. Therefore, it is highly improbable that any single calamity, occurring away from the colony site, would affect every one of them. Almost without exception, the reason for total colony loss is the result of something that happened (or didn’t happen) in the landlord’s back yard. Below is a list of the 12 most common reasons why landlords lose their entire colonies from one year to the next.

1. Predation. The most common reason martins abandon their colony site is because predators have raided their nests. It only takes one foray up a martin pole by a snake or raccoon, a few nightly visits by an owl, or a few daily visits by a hawk or crow to cause all the surviving birds to abandon the site, often forever. Since many martin landlords don’t have easy-to-lower housings (and therefore, don’t conduct weekly nest checks), most never realize their martins, nestlings, or eggs are disappearing prematurely. Early detection via weekly nest checks (or written records) often allows the landlord to save a colony site before it is entirely lost. All martin poles (both wooden and metal) are easily climbed by martin predators and should be equipped with predator pole-guards. In addition, landlords should check the ground under their martin housing daily for evidence of predation (i.e., owl feathers, plucked martin feathers, chewed-off martin wings, etc.). Active martin nesters, while looking for their nests, will “trespass” into the human’s territory and should be actively managed to persist. This is analogous to a gardener keeping their garden not overrun by weeds.

2. Tree encroachment. The second most common reason people lose their martins is that the trees and shrubs in their yards gradually grow taller and closer, decreasing the “openness” of the airspace immediately surrounding the martin housing — a situation called ‘tree encroachment.’ Since martins require lots of swooping space around their housing, a tree-encroached yard is undesirable to them. At colony sites where trees are gradually encroaching the housing, the original colony members will return year after year, as long as they live (due to the strength of site tenacity), but they will be increasingly unsuccessful in recruiting new colony members and fledglings to the same site. Landlords should not return to breed at their natal colony sites, once all the veteran martins have died, the site is lost because there are no younger martins to take their place. If martins return to their colony site and are gradually cut off, their number will decrease at a rate set by the site. Landlords should periodically add new housing nearby to ensure their martins have a diversity of nest-site competitors often lose their martins. The martin’s two most serious nest-site competitors, the non-native European Starling and the House Sparrow, take over martin nesting sites, they crowd out the younger, throw out or eat their eggs, and aggressively repel them. In addition, one pair of House Sparrows will clog so many compartments with their nesting material, that they essentially barads martins from access. Research has shown that landlords who allow House Sparrows and starlings to nest in their martin housing, have colony sites with significantly reduced marton occupancy and productivity. If a landlord makes the mistake of leaving their martin housing out, and open, over the winter and paper wasps, squirrels, American Kestrels, or Screech Owls take up residence before the martins return from migration, the martins will abandon the house. A landlord should never allow any other species to occupy housing intended for martins.

3. Parasite infestations. Under certain environmental conditions, blackflies, blowflies, nest mites, fleas, and mosquitoes can become so numerous in and around a martin’s nest, that they weaken and kill their hosts. Sometimes, martin houses get so overrun with nest mites that parent martins refuse to enter their compartments to feed their young. Complete reproductive failure can result, with entire colony sites being abandoned. Because many martin landlords do not have easy-to-lower martin systems (and many of those who do, don’t lower their housing for weekly nest checks), they may not realize their martins’ nests are becoming parasitized. Reynolds, one of the most experienced pest controllers, landlords can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

4. Nest-site competition. Martin landlords who allow their housing to become overrun with nest-site nesting competitors often lose their martins. The martin’s two most serious nest-site competitors, the non-native European Starling and the House Sparrow, take over martin nesting sites, they crowd out the younger, throw out or eat their eggs, and aggressively repel them. In addition, one pair of House Sparrows will clog so many compartments with their nesting material, that they essentially barads martins from access. Research has shown that landlords who allow House Sparrows and starlings to nest in their martin housing, have colony sites with significantly reduced marton occupancy and productivity. If a landlord makes the mistake of leaving their martin housing out, and open, over the winter and paper wasps, squirrels, American Kestrels, or Screech Owls take up residence before the martins return from migration, the martins will abandon the house. A landlord should never allow any other species to occupy housing intended for martins.

5. Local pesticide use. Although pesticides have rarely, if ever, been positively implicated (via autopsy & tissue analysis) as the cause of large-scale martin die-offs, the PMCA occasionally receives word of martin die-offs or disappearances that coincide with the local spraying of pesticides. Whether these incidents are caused by a lack of food or direct poisoning is unknown.

6. Neighbors ‘steal’ martins. If your martin housing is infested with nest-site competitors and/or your yard is becoming enclosed by trees, your martins may be using it just because they have nowhere else to go. Because many martin landlords do not have easy-to-lower martin systems (and many of those who do, don’t lower their housing for weekly nest checks), they may not realize their martins’ nests are becoming parasitized. Reynolds, one of the most experienced pest controllers, landlords can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

7. Not enough housing offered. Too many martin landlords offer just one 12-unit martin house. While this is enough to start a colony, it is not enough to ensure long-term colony site survival! Landlords should offer multiple houses and/or at least 24 total nesting compartments. They should strive to build their colonies to at least 12-15 breeding pairs. Because conventionally-designed martin houses rarely have active nests in more than 50 - 60% of their rooms (due to male pair dominance), this means a landlord should be offering at least 24-30 total compartments. Don’t put ‘all of your eggs in one basket.’ If you have only one house and a summer storm blows it to the ground, smashing the roosting and killing the nestlings, you could be out of the martin business. Landlords with single houses (and thus smaller colonies) run a much higher risk of losing all their birds from a weather calamity, or from one year to the next due to natural attrition — approximately half of all adult martins die each year, and about 75% of the nestlings. Give your martins a diversity of nest-choices: try adding some gourds to your housing set-up.

8. Housing not reoriented to the same compass direction after a nest check. When landlords with telerecording holes fail to is the only way to tell if the housing is incorrectly re-oriented after a nest check, they may not realize their martins’ nests have been defeated. When nesting compartments are incorrectly re-oriented, the landlord can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

9. Housing reoriented to the same compass direction after a nest check. When landlords with telerecording holes fail to is the only way to tell if the housing is correctly re-oriented after a nest check, they may not realize their martins’ nests have been defeated. When nesting compartments are incorrectly re-oriented, the landlord can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

10. Housing not reoriented to the same compass direction after a nest check. When landlords with telerecording holes fail to is the only way to tell if the housing is incorrectly re-oriented after a nest check, they may not realize their martins’ nests have been defeated. When nesting compartments are incorrectly re-oriented, the landlord can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

11. Housing reoriented to the same compass direction after a nest check. When landlords with telerecording holes fail to is the only way to tell if the housing is correctly re-oriented after a nest check, they may not realize their martins’ nests have been defeated. When nesting compartments are incorrectly re-oriented, the landlord can completely remove a martin’s nest when the young in it reach about 13 days of age (when their wing and tail feathers begin to burst their sheaths) and replace it with a 1-2” bed of thoroughly dried grass clippings or dried pine needles or wood shavings. Most of the nest parasites will be thrown out with the old material.

12. Death of the landlord. A curious thing happens when the person who manages a colony site dies — if no one else takes over the responsibility, the colony invariably goes into decline and is eventually lost. This dramatically emphasizes the fact that colony sites must be actively managed to persist. This is analogous to a gardener needing to be weeded, watered, and fertilized in order to produce a healthy and abundant crop. An unmanaged colony site is one that is at high risk of being lost from one year to the next.