

The Western Landlord

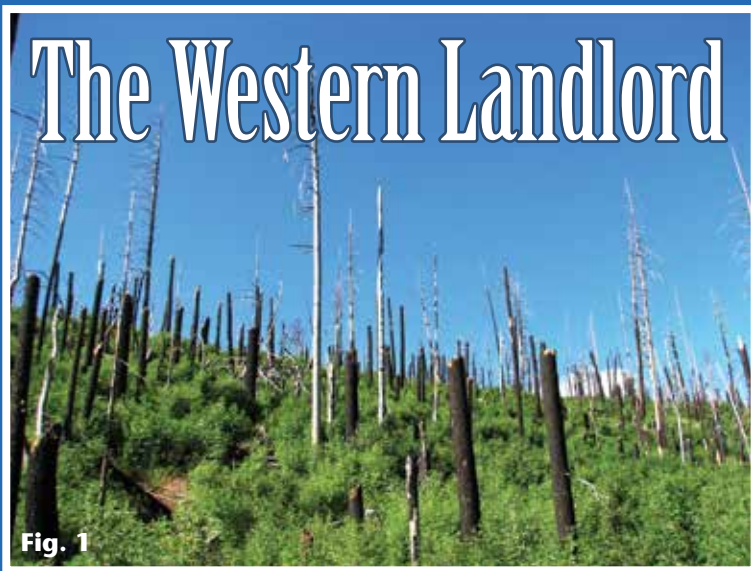
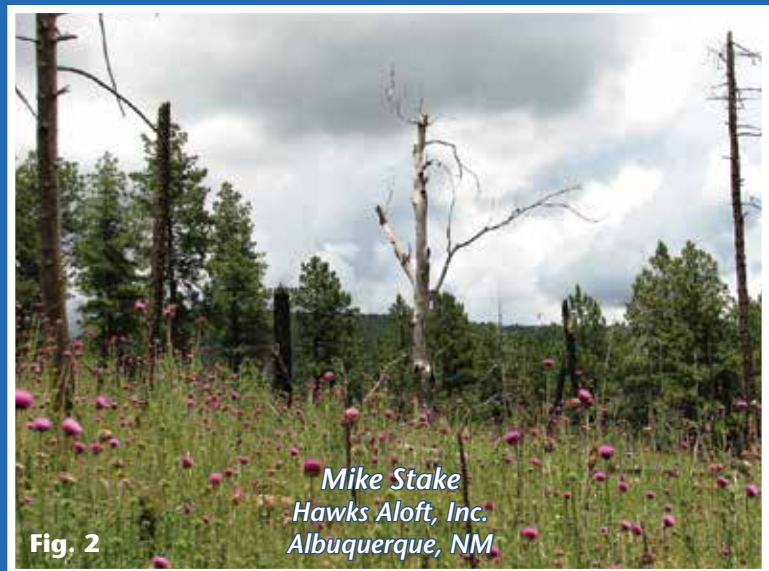


Fig. 1



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Fig. 2

Purple Martin landlords work hard to attract and maintain colonies every spring. Aside from offering free rent, landlords who provide martin houses in their backyards worry about the size of the compartments and entrance holes, excluding undesirable tenants, protecting against predators, and devising pole systems that enable periodic maintenance and monitoring. A good landlord is mindful of such things.

In the western states, though, the Purple Martin landlords are different. They are not bad landlords, like my landlord in college who wouldn't return my security deposit. They are not uninformed or behind the times, like Mr. Furley, the bumbling leisure-suit lord of the Three's Company manor. Most landowners in the west who manage Purple Martin colonies did not actively seek them. They are unintentional hosts.

For reasons not entirely clear, Purple Martins in the west eschew manufactured martin houses, like those that have been erected in urban and rural landscapes of eastern North America. They nest almost exclusively in natural or excavated cavities, which can be scarce in some environments. As a result, the Purple Martin range map includes a large block covering nearly all of the eastern states, yet much smaller patches indicating more local and less common occurrence in the west. Clearly,

becoming a Purple Martin landlord in the west requires less initial effort and more luck.

Such was the case in the Lincoln National Forest in south-central New Mexico, where a major wildfire burned 16,000 acres of coniferous forest in 2000. The fire left a seemingly barren graveyard of charred snags. Rather than clear all of those snags, the U.S. Forest Service contracted Hawks Aloft to conduct point count surveys documenting avian response to the fire. A surprising number of Three-toed Woodpeckers showed up, south of their usual range. Resident Hairy, Downy, and Acorn Woodpeckers, Northern Flickers, and Williamson's Sapsuckers joined them in the burned area, perhaps benefiting from an insect outbreak typically associated with such fires. Western Bluebirds and Violet-green Swallows descended by the hundreds, benefiting from an abundance of perching snags and nesting cavities. Elderberry and New Mexico locust carpeted the understorey in green. Pink thistles dotted the slopes. By the end of our study, the burned area was teeming with color and life, including a few Purple Martins.

I wanted to return to the forest to find and monitor Purple Martin colonies, but it was the Purple Martin Conservation Association grant program that encouraged us to start a monitoring

Fig. 1. Nesting tree at colony site #1 **Fig. 2.** The Purple Martin's favorite perch tree at colony site #7. **Fig. 3.** Female at colony site #2. **Fig. 4.** Male and female feeding their young. **Fig. 5.** Male at colony site #1. **Fig. 6.** Male at colony site #2. **Fig. 7.** Nesting tree at colony site #6. **Fig. 8.** Nesting tree at colony site #2.



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

project. We received a small grant from the association, and the U.S. Forest Service added another generous grant. Our study, consisting of an annual one-week visit to the Lincoln National Forest in early July, was intended to identify colonies and current occupied snags, determine a profile of habitat/snag use by Purple Martins, and document population changes with time. These objectives, we envisioned, could help the landlord (in this case, the forest service) protect occupied snags and develop post-fire management guidelines compatible with Purple Martin conservation.

In 2006, we got started, finding four Purple Martin colonies and counting 34 individuals. My favorite part was watching the colonies. I would take a seat and enjoy seeing the graceful martins circle overhead and parachute to a nest tree. Some perched near the top of nearby snags, while others clung to the outside of a cavity to feed their young. Occasionally, there was trouble. One squirrel drew the ire of a colony and was chased up a steep slope from treetop to treetop. An American Kestrel was mobbed on another occasion. I spent at least an hour watching each colony, counting the number of adults present, identifying nest trees and cavities, and scribbling notes on the habitat. After the observation was up, I measured the width of nesting and perching trees with metal calipers and estimated the height of cavities.

With only four colonies, the lessons were modest that first year. Perhaps my biggest lesson was the daily lightning storm. At 9,000 feet or more in elevation (these breeding colonies are among the highest known for Purple Martin), the monsoon season storms always seemed to sneak up on me over the ridge. Too far from the truck one afternoon, I cowered under a small pine and spent an hour pelted by hail and tormented by streaks of booming light. A ruffled little House Wren sat motionless beside me, strangely comforting. Yet, when I started to shiver, my fear of hypothermia exceeded my fear of lightning. I gathered up the calipers, which I imagined as a lightning rod, and scampered up the hill in a terrifying 15-minute trek back to the truck. After that day, I learned to knock off a little earlier and wait out the storms over enchiladas at the Western Bar in Cloudcroft.

I searched the same general portion of the burned area with another biologist the next year, in 2007, and we found eight colonies and counted 57 Purple Martins. Because we monitored colonies on slightly different dates and used a

second observer, we could not be absolutely certain that an actual population increase occurred between years. However, the discovery of several new colonies in areas considered vacant in 2006 indicates that Purple Martin colonization was still occurring seven years after the fire.

Purple Martin nesting and perching snags were large, relative to other cavity nesters. In some colonies, martins selected the largest available trees for nesting. Average diameter at breast height for 26 nest trees in both years was about 40 cm, and average estimated height for 34 nest cavities was about 10 feet above the ground. Martins usually perched near nest trees. We concluded that preserving clusters of large snags after a major wildfire would benefit Purple Martins.

The merits of post-fire salvage logging have been widely debated. A view that prevailed throughout much of the 20th century was that snags were a wasted resource that should be quickly salvaged to extract any remaining economic value. Others have considered that unsalvaged snags and woody debris present a greater risk for future fires. I found the public safety reason for post-fire salvage most compelling, especially during one frightening windstorm when a massive snag toppled down in front of me.

In recent decades, positive effects of snags on wildlife, forest soils, and vegetation have demonstrated the redeeming benefits of wildfire. The diverse avian assemblage following the Lincoln Forest fire is a good example. The Purple Martin colonies might eventually disappear or relocate, especially as snags fall. But, we can enjoy them while they are here and protect them. The key for enjoying and protecting Purple Martins, and many other birds, in western forests after a fire might just be a landlord that chooses to simply let nature take its course.

