## Tough Times for Bluebirds in 2012 Leif Marking

or decades, members of the Brice Prairie
Conservation Association have been confident
that our inch-and-three-quarters PVC-covered
steel T posts were effective protection for our
bluebirds. We believed that ground predators were
unable to climb the posts. Yet this spring and early
summer both nestlings and eggs began disappearing
from many of my nest boxes on Marking Ridge in La
Crosse County, Wisconsin.

My bluebird box number 7, located on our farm yard, is a box designed especially to accommodate a nature camera so it is 16 inches high and provides adequate distance to focus on the entire bluebird nest. The tiny Hawkeye video camera, attached to the ceiling, is powered by electricity through the cord that leads into our house for connecting to a television for viewing or to a computer for recording. This video camera has six tiny infrared light bulbs so the subject can be viewed in darkness.

This site offers ideal bluebird habitat and bluebirds have nested here many years. On April 4 a bluebird nest was recorded in the box; the early Wisconsin spring offered early starts for birds and other wildlife. Within a week there were five blue eggs in the nest cup, and and the expecting parents spent their spare time searching for ground insects while perching on the windmill, the buildings, or the perches placed next to the box. Insects appeared early to fortify the decision for birds to start early.

The five eggs hatched on April 26, and the adults began to feed small insects. They also removed the fecal sacs to maintain sanitation in their home. The chicks grew rapidly, their feathers were developing, their eyes were open, and they were oriented to the entry where food arrived from the adults about every 10 minutes. The 12-day nestlings were healthy and content on May 10, but on the morning of May 11 I discovered that they had disappeared overnight. I searched for evidence of a predator, but there were no visible scratches or claw marks. The nest was not greatly disturbed with the remaining cup and shelf in place, although a few nest grasses were pulled out of the entry hole. That nest material was probably in the clutches of the chicks as they were pulled reluctantly from their nest.

In 2011 the nestlings in this box as well as a few others were taken by a kestrel, so sparrow hawks *Bluebird* 

were under suspicion. One upward sliver on the side of the box could have been a claw of a cat. But they usually mess up the nest and pull more nest material into the entrance. Our PVC predator guard has been effective in the past to prevent climbing ground predators. I set a baited live trap, not knowing which predator was the culprit, and caught a skunk. The La Crosse County Humane Society fortunately came and took the skunk so I didn't have to deal with it. They recommended baiting with canned cat food.

Then, the live trap was set in buildings farther from home to avoid skunks, but I caught raccoons rather than cats. Meanwhile the parent bluebirds had built a new nest in their box, and on May 18 five eggs were recorded. On May 19 the eggs were gone. I suspected a cat again. One egg was lodged between the nest and front panel and another was broken and seeped to the bottom of the box.I removed the nest material. Nestlings and eggs had also been taken from nearby boxes on this trail.

I suspected this predator was local and must be destroyed. First, the predator must be identified. My friend Dan Leubke from RECONYX in Holmen, Wisconsin (where motion cameras are built, tested, and marketed) offered to place cameras to focus on four bluebird boxes that lost eggs and nestlings.

On May 25 the adult bluebirds had completed a third nest in their box and on June 1 there were five blue eggs in the nest cup. Incubation was under way, but on June 8 those eggs were gone. The adult birds were distraught at this point, but they remained around the farmyard entering the box occasionally to make sure it was not a bad dream. They didn't realize the motion camera had recorded the theft at 11:05 the night before (see photo). They also had no clue their fourth attempt would be safe from predators. The motion camera revealed a raccoon had climbed the PVC predator guard and removed the eggs. A single exposure reveals a blue egg in the front paw of the coon. On the night of June 9 that raccoon entered a live trap baited with marshmallows, and a few days later circling turkey vultures recycled the raccoon's dead body for energy to continue their niche in our environment.

The resilient parents restructured the remaining nest material for a nest cup and shelf during the next few days, and on June 17, only nine days after losing five

10 Fall 2012

eggs in their third nesting, they had four eggs in the fourth nesting. How remarkable for the female to physiologically prepare her reproduction system to begin laying eggs five days after losing the third clutch of five. The four eggs hatched on June 30, and those nestlings fledged successfully on July 17. Those tremendous efforts demonstrate the persistence and the resilience of the parent bluebirds' producing 19 eggs that resulted in only four fledges. These amazing and persistent bluebirds overcame these devastatingly adverse conditions.

The motion camera results suggest the raccoon doesn't use claws to climb the PVC predator guard, but foot pads under pressure cling

to the pipe to facilitate the climb. New PVC pipe is slick and apparently restricts climbing for a few years, but when the plastic surface oxidizes and ages the surface loses the slippery texture. We believe the slippery surface can be restored by treating the pipe with car wax. We will be evaluating this procedure and promoting brands that are most effective. Annual or more frequent applications may be required. Not all raccoons realize that some of these pipes can be negotiated to get to the lunch box, but we now realize



Dextrous bandit caught in the act of removing a bluebird egg. Note the PVC, which this racoon climbed.

that aging PVC becomes vulnerable to raccoon predation.

The trapped raccoon was apparently the guilty party since there were no more losses of eggs or nestlings in the local vicinity, and results of motion camera monitoring did not capture any more attempts of climbing or entry. However, my records suggests 20 nestlings were lost in box numbers 6, 7, 8, 9 and 10 and 40 eggs were lost before this raccoon was destroyed. I suspect that I lost 100 or more eggs and nestlings in the 160 boxes that I monitor. In addition, many other bluebird monitors in Wisconsin are reporting similar results. This has become the year of the raccoon, and we must prevent their entry to ensure that bluebird reproduction

continues successfully in our boxes.

Leif Marking is a retired U.S. Fish & Wildlife Service employee who now devotes much of his time as the Bluebird Project Manager for the Brice Prairie Conservation Association, monitoring 195 nestboxes. As a board member of the Bluebird Restoration Assocation of Wisconsin, he serves as the Nestbox Design Chairman. He is also a member of NABS and the Minnesota Bluebird Recovery Program.

## A Must-Have Book for Bluebird Lovers

Most bird lovers are familiar with the art and prose of Julie Zickefoose. Her new book, *The Bluebird Effect*, has found an enthusiastic audience beyond the nestbox-and-binoculars crowd. Here are excerpts from some reviews:

"We've been knocked to our knees by the delightful illustrated essay collection." – Oprah.com

"The prose here is richly descriptive and eminently readable... Zickefoose can make the mundane fascinating." – *Cleveland Plain Dealer* 

"Anyone who's ever considered hanging a birdfeeder is likely to be mesmerized by the sensuous, precise prose as well as Zickefoose's vivid portraits." – *Publisher's Weekly* 

Pick up a copy from your favorite bookseller or online at www.juliezickefoose.com.

