## Bluebird resurgence a success story By Bruce Buckle

If you enjoy the outdoors, you've most likely walked the trails at Rider Park in Lycoming County.

If gardening is one of your hobbies, you've probably spent some time wandering around the Sensory Garden at the County Farm in Montoursville, and perhaps walked the Conservation Trail.

Outdoor enthusiasts can also experience nature at the eastern end of Lycoming County at the Muncy Heritage Park and Lime Bluff Recreation Area. All of these special places are also wonderful spots to see and hear a nice variety of birds. At each of these locations, Lycoming Audubon has placed and maintains nest boxes for eastern bluebirds.

Longtime Audubon member and volunteer Fred Stiner has spearheaded Audubon's Bluebird Nest Box Project for decades, and dutifully reports the results of Audubon's Nest Project to the PA Bluebird Society each year. Each week this spring and summer, Fred and I traipsed across the fields at Rider Park and walked the Conservation Trail, checking the nest boxes for activity while keeping our eyes and ears attuned to the sights and sounds of the many birds that frequent these places.

Gary Metzger did the same at Lime Bluff and at Muncy Heritage Park. For enjoyment, there are few better ways to begin a summer day than with an earlymorning walk, listening for the sound of a scarlet tanager, or to the song of an indigo bunting, or spotting a phoebe wag its tail, or catching sight of an elusive warbler.

Bluebirds are one of the most beautiful and recognizable of the 138 bird species that are identified by The PA Society of Ornithology as breeding in Lycoming County. They are cavity nesters, building tightly woven grass nests, unadorned with feathers or sticks or bits of plastic that can be found in the nests of tree swallows, house wrens, and house sparrows. These birds compete with bluebirds for nesting sites, so typically bluebird boxes are sited in pairs. If a competitor species occupies one box, the other box might still be home to a family of bluebirds.

Nest building begins in April, and by the first week of May egg laying is underway. Typically a bluebird lays five beautiful, pale blue eggs, and sometimes produces two broods during the breeding season. Tree swallows, who happily coexist with bluebirds, typically lay six, pure white eggs in their easily identifiable, feather decorated grass nests. Once hatched, bluebirds spend 14 days in the nest before striking out on their own; that is, if spring temperatures don't turn unseasonably cold, and if predators like snakes, raccoons and bears leave them alone.

This year at the County Farm, two of the eight boxes fledged a total of seven bluebirds. At Rider Park, seven of the 26 boxes fledged 39 bluebirds. These numbers approximate what the nest boxes have produced each year for the past few years. Interestingly, however, only nine tree swallows fledged this year at both locations, which is substantially fewer than the 30 or so that fledge in a typical year.

In the alarming context of North America's declining bird population — more than a quarter of the total bird population, three billion birds, have been lost during the past

50 years according to a 2019 study published in Science magazine — bluebirds are a success story.

During the mid-20th century bluebird populations were in steep decline. In his 1977 article for National Geographic, "Song of Hope for the Bluebird," Dr. Lawrence Zeleny wrote that "extinction remains a real possibility," and that "during the past 40 years, the population of the eastern bluebird may have plummeted by as much as 90%."

The culprits — loss of nest sites resulting from land development that cleared old trees and removed wooden fence posts, and invasive bird species like the house sparrow that are very aggressive and will chase away or even kill bluebirds.

In response, conservationists and bluebird enthusiasts launched a continent-wide effort to create bluebird trails, and today one can only speculate how many hundreds of thousands of nest boxes — if not more — dot our fields across the country. Today, the North American Breeding Bird Survey, initiated in 1966 by the US. Fish and Wildlife Service, estimates that the North American population of 22 million bluebirds is increasing. That's good news.

Yet challenges remain. In its study of the effects of climate on bird populations, "Survival by Degrees," the National Audubon Society predicts that half of the birds that breed in Lycoming County are highly or moderately vulnerable to climate change.

Fortunately, the bluebird population is not among these birds. In fact climate changes may expand the bluebird's range and population. But much is uncertain, so Audubon has launched a community science project, named Climate Watch, to monitor 12 target species, including the eastern bluebird, and test the predictions in its report. Through participation in the Christmas Bird Count, the PA Migration Count, and eBird, Lycoming Audubon members and friends are contributing significantly to the collection of data that helps scientists understand the conservation challenges confronting our avian friends.

If you would like to be part of Lycoming Audubon's conservation efforts, or simply learn more about birds, please reach out to us by visiting our website at <u>lycomingaudubon.org</u> or finding us on Facebook. In the meantime, take the time to enjoy the sights and sounds of birds in your neighborhood, or venture out with a friend to your favorite outdoor spot in Lycoming County, and look for a bluebird, though by now many of them have headed farther south for the winter.