## Eastern Bluebird Program At Shaw Nature Reserve



The Eastern Bluebird (*Sialia sialis*) has long been a favorite bird for many Americans. It is considered a symbol of happiness, and was made Missouri's state bird on March 30, 1927. The male Eastern Bluebirds are a brilliant royal blue on the back and head, and rusty red on the breast. The females are similar but with duller grayish colors. The juveniles are grayish with camouflage speckled upper parts and breasts.

For their habitat, the Eastern Bluebirds like open land with scattered trees. The open land provides for foraging, and the trees serve as perching and possible nesting sites. They will nest in trees and posts as well as in boxes. They begin breeding in late March and April and will normally lay four to six eggs which are usually pale blue but might occasionally be white. Bluebirds can breed up to three times during the breeding season. The female does the incubating, with the male bringing her food. The eggs hatch in 12 to 14 days, but the female will continue to incubate until the nestlings develop feathers. Then both the male and female bring food to the nest. The nestlings fledge in 18 to 21 days. After that, both parents stay with the fledglings for a while as they learn necessary life skills. Occasionally, the first-brood siblings will stick around and help with the feeding of the second-brood nestlings. Bluebirds are primarily insectivorous with two-thirds or more of their diet consisting of a wide variety of insects.

There was a major decline in the bluebird population between 1920 and 1970 due to several factors. One of the factors was the changing land use destroying its habitat, thus reducing the number of



nesting sites. As the open savannahs that were common in Missouri were converted for other uses, the bluebirds lost their habitat. Another factor was the introduction of invasive species, such as the House Sparrow and the European Starling. These species competed aggressively for the bluebird nesting sites. Another factor was the increased use of pesticides such as DDT which reduced the bluebirds' food supply.

By the late 1960's the bluebird population was at its lowest point and concerned people began placing nesting boxes to encourage their return. This, along with the banning of DDT in 1972, helped to bring the bluebirds back.

Shaw Nature Reserve has had bluebird boxes for many years. Initially, various researchers put up boxes for their own projects. Then, around 1997, these scattered boxes were pulled together and organized into a bluebird trail. This trail consisted of over 80 boxes which SNR volunteers cleaned and maintained. The volunteers kept breeding statistics which were reported to the Cornell Nest Watch program.

There are now 85 nest boxes throughout SNR, and these boxes have helped researchers acquire various data for use in their projects. SNR has also trained others who were interested in starting their own bluebird trails. The SNR bluebird boxes usually fledge between 300 and 350 bluebirds each year. Other birds, such as Tree Swallows, House Wrens, and Carolina Chickadees, also use these boxes and fledge quite a few birds yearly.

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