

# **DEER POPULATION AFFECTS BIRD POPULATION**

*Kim Young Vice Chair Wilton Conservation Commission with Pat Sesto*

## **WHERE HAVE OUR GROUND-NESTING BIRDS GONE?**

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Indigo Bunting: photo Julian Hough

Summer is the time where we are outside soaking up the natural environment and bathing in the songs of the season. For the well tuned ear, some of the familiar songs, bird songs that is, are harder to come by.

The increasing populations of various deer species are edging out bird species in North America, with the white-tailed deer being the species plaguing our region. The decline in forest birds has long been blamed on factors such as disease, loss of habitat, and an increase in the number of animals that prey on bird nests. These factors continue to impact bird populations; however a recent study has focused on the effects of overabundance of deer on birds.

The numbers of deer in North America are reaching historic levels. As reported in the October 2005 issue of Biological Journal, the white-tailed deer is overabundant in 73 percent of its range in North America and other deer species are overabundant in 41 percent of their ranges. Because these animals are devouring the forests' native shrubs and saplings (called the understory), birds that use the understory for either nesting or foraging for berries, insects, and worms are also being impacted.

The Biological Journal article focused on a study conducted on the Haida Gwaii archipelago in British Columbia that examined the relationship of deer and forest birds on six islands. The study found that birds that relied on the understory of a forest for food or nesting were the most adversely affected. Islands with highest deer density had no fox sparrows, which nest in the understory and no rufus hummingbirds, which forage in the understory. These species were commonly found on the islands with no deer.

Deer over-abundance has many well recognized negative impacts such as increase in the incidence of Lyme disease, car accidents, destruction of plant species in our gardens. While it has been theorized that deer overpopulation affects bird populations, the Haida Gwaii study provides compelling evidence to support this theory. Deer abundance as a factor explaining negative population trends in forest songbirds is one more reason to reduce the number of deer in our forests.

In Connecticut forests many bird species are believed to be adversely affected by the over-abundance of deer. There are declines in the populations of many songbirds which rely on the understory for foraging or nesting including; the worm-eating warbler, black and white warbler, hooded warbler, ovenbird, ruffed grouse, eastern towhee, and brown thrasher.

Deer are also eating oak, hickory and hemlock saplings, and these trees are not able

to regenerate in our forests. Consequently, bird species that depend on these trees, such as eastern wood pewee and wood thrush are disappearing.

It was precisely this loss of understory and bird species that compelled two of Fairfield County's leading nature preservation organizations to take steps to cull the deer herds. The Nature Conservancy's Devil's Den has now completed five years of hunting and the Audubon Society's Audubon Center in Greenwich has completed three annual hunts.

Audubon Connecticut reported in its In Focus, Winter-2005, "Nowhere are these [deer foraging] impacts more evident than at our Audubon Center in Greenwich, where deer have completely destroyed the vegetation of the forest floor". And citing "...a dramatic decline in the number of ground nesting/feeding birds during the 27-year period from 1971 to 1998. Populations of mid-canopy bird species are also showing declines." Tom Baptist, Executive Director, Audubon Connecticut reports that the four most-prevalent ground-nesting species counted at the large Center in 1971 have gone missing all together.

While Mr. Baptist readily acknowledges that the trend will take some time to reverse, Steve Patton, Director of Devil's Den is seeing the first signs of progress. While no formal studies have yet been conducted to document the progress, Mr. Patton enthusiastically reported the patchy return of trillium, a forest floor wildflower and deer delicacy. He is hopeful that this is an early sign of floral recovery that will continue to expand to again support bird populations.

This article is provided as a service of the 16-town Fairfield County Deer Management Alliance, whose purpose is to foster a collaborative approach to managing the region's abundant deer population and reducing its impact on the ecological integrity, public health, and safety.