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MORRISTOWN NHP • ROOSEVELT-VANDERBILT NHS • SAINT-GAUDENS NHS • SAUGUS IRON WORKS NHS • SARATOGA NHP • WEIR FARM NHS

Surveying is for the Birds

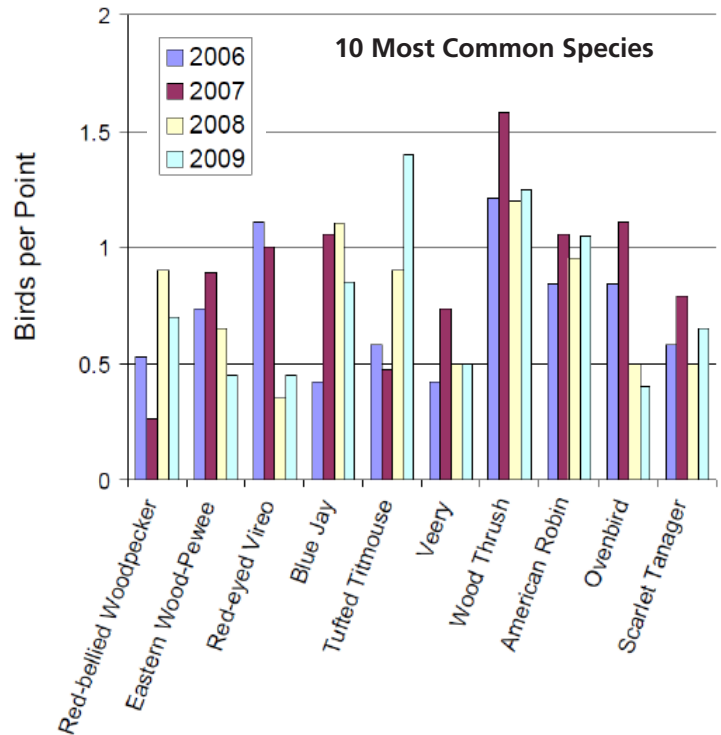
Results of Annual Breeding Landbird Survey

Background

Using volunteer birders, the Northeast Temperate Network (NETN) and the Vermont Center for Ecostudies (VCE) has been monitoring breeding landbirds in most network parks since 2006. On a broad scale, all 11 network parks are located within the temperate deciduous forest biome. At a finer scale, the parks range across four Bird Conservation Regions (Morristown lies in the Appalachian Mountains BCR). Bird Conservation Regions, developed by the North American Bird Conservation Initiative, are ecologically defined units that provide a consistent spatial framework for bird conservation across North American landscapes. By employing broad scale units that are ecologically meaningful to bird populations, conservation efforts can be tailored to support groups of species throughout the heart of their ranges. Bird Conservation Regions are being used to help assign “conservation priority” scores for bird species. Each BCR has its own unique list of “priority” species ranked by conservation importance according to a standardized set of criteria.

Purpose and Scope

The recently released report summarizes data collected from 2006 through 2009. As with any long-term study, as more years of data accumulate, interpreting study results becomes more relevant and meaningful. Therefore, it is important to not read too much into the results of only a few years of data collection. NETN and VCE are currently working to improve quality control procedures



for this project, including a thorough review of existing data. The results presented here may change slightly in future reports if data errors are detected and subsequently corrected.

Results and Findings

Three study sites were established in the park, two of which (Primrose Brook and Soldier's Huts) were surveyed in 2006 and 2007, and two (Primrose Brook and Mt. Kemble) were surveyed in 2008 and 2009. Including repeat visits, a total of 414 individual birds were detected in 2009, compared to 442 in 2008, 261 in 2007, and 199 in 2006. A total of 49 species were recorded during the four survey years with an average abundance of 11.73 birds per point. A total of nine species of regional conservation concern were detected during the four survey years, including three species (Eastern Wood-Pewee, Wood Thrush, and Eastern Towhee) that were detected in all four years. In addition, Eastern Wood-Pewee and Wood Thrush were among the ten most abundant species detected.



Red-bellied Woodpecker
Ken Thomas

48 species detected in the park.

American Crow
American Redstart
American Robin
Baltimore Oriole
Black-and-white Warbler
Black-capped Chickadee
Blackpoll Warbler
Blue Jay
Blue-gray Gnatcatcher
Brown-headed Cowbird
Canada Warbler
Carolina Wren
Cedar Waxwing
Chipping Sparrow
Downy Woodpecker
Eastern Bluebird
Eastern Phoebe
Eastern Towhee
Eastern Wood-Pewee
Gray Catbird
Great Crested Flycatcher
Great Horned Owl
Hairy Woodpecker
Hooded Warbler
House Wren
Indigo Bunting
Kentucky Warbler
Louisiana Waterthrush
Mourning Dove
Northern Cardinal
Northern Flicker (Yellow-shafted Flicker)
Ovenbird
Pileated Woodpecker
Red-bellied Woodpecker
Red-eyed Vireo
Red-tailed Hawk
Rose-breasted Grosbeak
Scarlet Tanager
Swainson's Thrush
Tufted Titmouse
Turkey Vulture
Veery
White-breasted Nuthatch
Wild Turkey
Wood Thrush
Worm-eating Warbler
Yellow-billed Cuckoo
Yellow-throated Vireo



Species Spotlight: Brown-headed Cowbird

The Brown-headed Cowbird is a native, stocky blackbird known as a “brood parasite”. Females forgo building nests and instead put all their energy into producing eggs, sometimes more than three dozen a summer. Their strategy is to find nests of other birds by watching quietly for signs of nest building, or fluttering through vegetation trying to flush birds from their

nests. They then lay their eggs in the nests of the other birds and let them raise their young. This most often comes at the expense of at least some of the host’s own chicks as Cowbird eggs hatch faster than theirs giving cowbird nestlings a head start in getting food from the parents. Young cowbirds also develop at a faster pace than their nest mates, and they sometimes roll out eggs and young nestlings or smother them in the bottom of the nest.

One theory as to why cowbirds developed this parasitic behavior is that before European migrants cleared most of the forests of the Northeast cowbirds were a bison-following bird of the Great Plains. The large grazing animals would flush up insects for the birds to eat, but could also travel hundreds of miles across the plains in search of fresh forage. This allowed cowbirds little time to mate, build nests, lay eggs, and raise young. The solution was to lay their eggs in other birds’ nests and continue following the bison across the plains.

Cowbirds lay eggs in the nests of more than 220 ‘host’ species of birds. Host parents sometimes recognize the cowbird egg, to which they react in different ways. Blue-gray Gnatcatchers may desert their nests all together and start again. Yellow Warblers bury the egg under nest material, and Brown Thrashers physically eject the egg from the nest. Doing so comes at a risk however as Cowbirds periodically check on their eggs and young after they have deposited them. Removal of the parasitic egg may trigger a retaliatory reaction termed “mafia behavior”. According to a one study, the cowbird returned to ransack the nests of a range of host species 56% of the time when their egg was removed. In addition, the cowbird destroyed nests in a type of “farming behavior” to force the hosts to build new ones. The cowbirds then laid their eggs in the new nests 85% of the time.



Magnus Manske photo

More Information

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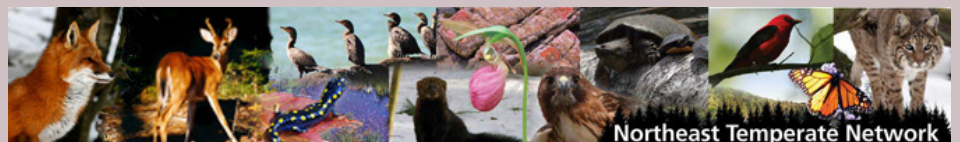
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Full Report online at:
<http://science.nature.nps.gov/im/units/NETN/monitor/monitor.cfm>



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