

WINTER 2017-18

# NH Audubon **Afield**

*Notes from the Field Edition*





*Willard Pond. Photo by Phil Brown.*

## From the Director of Land Management

Our wildlife sanctuaries embody all of NH Audubon's major focus areas: conservation research, education, environmental policy, and of course, land stewardship. In this way, they truly represent NH Audubon's mission: to protect New Hampshire's natural environment for wildlife and for people.

Our lands, some well-known and others well-hidden, provide *sanctuary*—a safe place for wildlife. These locations are permanently protected and undeveloped places that harbor a wide diversity of plants, animals and natural environments. Our state's wildlife and human populations are stronger and more resilient because of them, and their significance in the landscape relates to how they connect people to the natural world.

Sanctuary stewardship, or care of these valuable landscapes, is critical to protecting their significance. Along with a strong team of Sanctuary Stewards, numerous volunteer groups contribute hundreds of hours annually to help us provide responsible, low-impact recreation opportunities and access to some 70 miles of trails. Through well-developed partnerships and collaborations, our stewardship of these lands for wildlife habitat is performed with a high level of competency.

The following stories are just a handful of the many examples of how maintaining a vibrant land

stewardship program plays an important role in protecting the state's natural environment. I'm pleased to report on the 2017 season at NH Audubon's wildlife sanctuaries.

*Phil Brown*  
*Director of Land Management*



*Harvest tours were conducted at the Deering Sanctuary in February of 2017 (pictured) and at the Kensan-Devan Sanctuary in July. Between the two tours, about 30 neighbors, friends, and interested members of the public had the opportunity to learn about the management first-hand from foresters, wildlife biologists, and land managers. Photo by Phil Brown.*

## Kensan-Devan Forest Management for the Birds

by Chad Witko and Phil Brown

The Land Management Department carefully assesses forest management opportunities on its 7,500 acres of land across the state. Forestry projects on these lands are quite limited: only 5.5% of total acreage has been managed through tree cutting over the past 20 years. These locations are determined through analysis involving location, impact, goals and potential outcomes.

Over the winter of 2016-17, with the help of consulting foresters from Meadowsend Timberlands, NH Audubon implemented forest management on its Kensan-Devan Wildlife Sanctuary in Marlborough. The goals included wildlife habitat, forest health improvement and a sustainable source of revenue from the organization's fourth largest property. The timber harvest focused on strategies developed by the Foresters for the Birds initiative, originated by VT Audubon, to increase habitat quality for a particular suite of bird species of conservation concern including the Black-throated Blue Warbler, Canada Warbler, Scarlet Tanager and Eastern Wood-Pewee. Among other management strategies, the harvest included single-tree and group selections to create small and larger clearings, and targeted an increase in hard and soft mast species like Red Oak and Black Cherry through the creation of a larger shelterwood cut.

In the summer of 2016, in order to establish baseline data for breeding bird populations, NH Audubon partnered with Chad Witko, an Antioch University New England graduate student, to complete a pre-harvest breeding bird survey on the sanctuary. Chad's work assessed not only the diversity and number of bird species, but also the species' associations with different habitat types. In the summer of 2017, Chad completed a second, post-harvest, breeding bird survey of the sanctuary's 600 acres.

Chad surveyed 45 points laid out in a grid across the sanctuary during June and July. He identified 49 species in 2017, 41 of which were also observed in 2016. There was an 18.6% decline in the total number of bird detections from 998 in 2016 to 812 in 2017. This is to be expected in the year following forest management, where a considerable amount of vegetation is removed. Although some of the more common woodland songbirds such as Red-eyed Vireo, Ovenbird and Hermit Thrush saw initial drops in detection, other species such as Canada Warbler and Scarlet Tanager saw marginal increases.

These numbers may be linked to forest management at the sanctuary. For example, Ovenbirds are expected to decline after harvest simply because the habitat has been cut away. However, Chad cautions against drawing conclusions without deeper statistical analyses. His thesis will examine the bird community's initial response to the harvest in the first year. In the years following the initial harvest, such as the fourth or fifth year, the understory and mid-story become



*Scarlet Tanager by Shannon Lewis (top); Chad Witko conducting a bird survey on the Kensan-Devan Wildlife Sanctuary, by Lauryn Witko (bottom).*

prevalent enough that target songbirds respond accordingly. NH Audubon hopes to replicate breeding bird surveys on the sanctuary in future years to better understand how forest management impacts these populations.