

Natural Heritage Resources Factsheet

Migratory Songbird Habitat in Virginia's Coastal Plain



Migration

Neotropical migratory songbirds are species which breed in North America during the spring and summer months and travel hundreds or thousands of miles south to spend the winter in the tropical and subtropical Americas. There are 150-200 species which are known to breed in North America and make the twice yearly journey back and forth from breeding sites to winter foraging sites. This means that 65-80% of all individual birds in the eastern U.

S. are neotropical migrants. In their southern wintering grounds of Mexico, Cuba, Jamaica and Hispaniola, these birds account for half of the bird population.

Common migrants through Virginia include Wood Thrush, Red-eyed Vireo, American Redstart, Black-throated Green Warbler, Ovenbird, and Scarlet Tanager. Less common migrants are Yellow-bellied Flycatcher, Gray-cheeked Thrush, Yellow-throated Vireo, Prothonotary Warbler, Rose-breasted Grosbeak, and Orchard Oriole.



Migration is an extremely hazardous venture. One half of the birds that leave their northern range in the autumn will not make it back in the spring. One reason for this is the high amount of energy required to make the journey of several hundred to several thousand miles. Many migrants are unable to find the food they need to maintain their energy reserves. Another reason for such high mortality rates is predation. Long flights across open areas make migrants vulnerable to predators.

Most migrating songbirds on their way south follow a route called a flyway. In eastern North America, many migrants fly south along the coast, called the Atlantic flyway. Migrants often fly these routes at night, all night long, and land to rest early in the morning. Before dawn they seek out suitable habitat in which to feed and avoid predators. Such a site is called a stopover. Large natural barriers--mountains, deserts, or large bodies of water--create especially crowded stopovers. These stopovers are very important since flight over the barrier will mean a long stretch without any opportunity to stop for food, rest or cover. Along the Atlantic flyway, two major barriers are the Delaware and Chesapeake Bays. Birds traveling down the peninsulas of Cape May and the Eastern Shore become bottle-necked as they approach the tips. The reasons for which these sites are so popular to birdwatchers also make them especially important for conservation of migratory songbirds. It is here that migrants seek out habitat that will allow them to rest and feed before resuming their perilous journey.

Habitat

At the peak of migration, millions of birds will pack into the relatively small area of the the Eastern Shore, but the migrants do not distribute themselves evenly throughout the landscape. A study conducted on the Eastern Shore found that migrating birds are more abundant along the coastlines, with bay coastlines having the higher densities of migrants than Atlantic coastal or inland areas. In a related study, researchers found that while migratory songbirds of different species seek out their own specialized stopover habitat, what all these habitats had in common was a forest with dense undergrowth. Forests consisting of several layers of vegetation provide more feeding and resting niches for migratory songbirds and the dense undergrowth and closed canopy provide cover from predators.

Values

Concern for migratory songbirds goes beyond the aesthetic pleasures of birdwatching or the enjoyment of a spontaneous song arising from one of these little pilgrims. Their ecological functions add further incentive to protect them and their habitat. It is estimated that a single pair of warblers will clear one million leaves of caterpillars to feed themselves and their young during nesting season, reducing the caterpillar population by as much as one-half. Swallows and purple martins feast on mosquitoes. Orioles and Tennessee Warblers are important plant pollinators in their southern wintering habitat. Other species of songbirds disperse seeds of various plants.

Conservation

While migratory songbirds themselves are protected by legislation, their habitat continues to decline. While much media attention has focused on the loss of tropical forests, the fact is that in the recent past habitat fragmentation and loss in this country has far exceeded that of our southern neighbors. Fragmentation results in loss of food sources so critical during migration. Also, forced to fly in the open from patch to patch in search of food, small birds are more susceptible to predation. Smaller forest patches also offer less protection from nest parasites and predators. For instance, in the breeding ranges of migratory songbirds creation of open areas and forest edges attracts the Brown-headed Cowbird, a bird-nesting parasite. Therefore, loss of food sources as well as increased vulnerability to predation and nest-parasitism are indirect, yet very significant, pressures brought upon migratory songbirds as a result of declining habitat.

Foremost in the conservation of migratory songbirds is the protection of large tracts of forest and shrubland habitats in their summer and winter ranges as well as critical stopover sites such as Virginia's Eastern Shore. It is also desirable to minimize the removal of trees and shrubs where development occurs. Individual landowners can initiate their own backyard habitat conservation program. The Alliance for the Chesapeake Bay's Bayscapes program can provide interested landowners with information to make environmentally sound landscaping decisions.

Recently, more and more localities are learning how conservation of biodiversity can lead to economic benefits. In Northampton County, local citizens encourage tourism focused

specifically on the area's ecological resources. The Eastern Shore of Virginia National Wildlife Refuge and Kiptopeke State Park conserve biodiversity and attract tourists. The Eastern Shore Birding Festival, held in Northhampton County every year during the second weekend in October, draws nature enthusiasts from around the state and around the country to birdwatch and experience fall migration. Such events have been shown to be a significant boon for area businesses and provide examples of how conservation enhances rather than diminishes economic opportunity. For more information regarding the Eastern Shore Birding Festival or other activities supporting conservation of migratory songbirds, contact the Virginia Department of Conservation and Recreation, or the Center for Conservation Biology at the College of William and Mary in Williamsburg.