

Plum: A Safe Passage for Migratory Birds by Sadie Odell, USFWS

Millions of birds migrate through the Great Lakes every year using more than 32,000 islands as stopover sites. The Lake Michigan shoreline serves as an important migration corridor for large concentrations of migrant landbirds and islands may be the center of activity for migratory birds.

In a 1996 study, scientist W.C. Scharf suggested three possible reasons why Great Lakes islands are attractive to Nearctic-Neotropical birds as well as short distance migrants including:

- 1) Nocturnal migrants that find themselves over open water at dawn seek the nearest land.
- 2) Islands often represent northward extensions of the mainland and are included in the flightpath north by internal orientation mechanisms of birds and stochastic events of weather patterns.
- 3) Islands are the intended destination of migratory species that regularly nest on the islands.

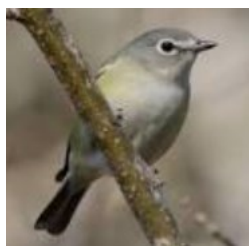
Baseline biological inventories were completed on Plum Island in 2004-2006 to document biotic resources including documentation of migratory and breeding bird use. Migrant and breeding bird surveys followed an area search method in which the island was divided into 3-hectare blocks. (Hectare is a metric unit, often used in the measurement of land. It is equivalent to ~2.5 acres.) During a survey, staff spent 20 minutes within each block mapping the location of all individual birds detected by sight or sound. All surveys took place in the morning hours.

Spring migrants on Plum Island often arrive before the leaves on trees have fully emerged, taking advantage of the swarms of emerging aquatic insects that are concentrated along the beaches. Forested habitat in close proximity to the shoreline provide excellent foraging for migratory birds feeding on these insects. Mixed flocks of passerine species were encountered passing through the canopy or understory of the island. (Passerine denotes birds with feet adapted for perching.) Species of these flocks included white-crowned and white-throated sparrows, blue-headed and red-eyed vireos, and many warblers



White-crowned sparrow

including golden-winged, Nashville, Tennessee, magnolia, palm, yellow-rumped, black-throated green, northern parula, and American redstart. The largest of these flocks consisted of perhaps a hundred or more individuals, while smaller flocks



Blue-headed vireo

often numbered 20 to 30 individuals. Thrush species (Swainson's, hermit, veerys) were more often encountered as single individuals gleaning from the forest floor. Given the consistency



Veery thrush

at which flocks were encountered throughout the island, it is probable that thousands of individual birds may pass through the forest on the island during the migration period.



Hermit thrush

The entire island was mapped three times during the height of the breeding season (early-, mid-, and late-June). Close to 100 species were documented on the island during the breeding season! The ubiquitous American



Ovenbird

redstart was observed more often than the next most common species; in order: house wren, indigo bunting, red-eyed vireo, American robin, red-winged blackbird, ovenbird, and eastern wood-pewee. White-



Eastern wood-pewee

throated and chipping sparrows were the most abundant sparrows. Other notable species recorded included yellow-billed cuckoo, black-billed cuckoo, and scarlet tanager.



Yellow-billed cuckoo



Scarlet tanager



Chipping sparrow

The diversity and abundance of birds document the important role that Plum Island plays in providing critical stopover and breeding habitat for birds. Check out ebird <https://ebird.org> and explore what FOPPI volunteers and visitors to Green Bay National Wildlife Refuge are observing on their recent visits to Plum Island.

- Photos courtesy of ebird