

## Habitat Restoration & Management for Grassland Birds

The fastest vanishing landscapes in New Jersey are our agricultural ones. Disappearing hand-in-hand with them are a group of birds that depend on large, interconnected grasslands. These birds include the vesper sparrow, northern bobwhite quail, eastern meadowlark, American kestrel, bobolink, upland sandpiper, and several others, some of whose numbers in New Jersey have been cut in half in just the last few decades.

In response, there is now a huge state-wide emphasis on protecting, creating, and managing areas of grassland for New Jersey's native birds and other wildlife. Our state's list of Threatened and Endangered birds is speckled with the names of those that live, feed, and nest in grassland habitats, and their future here - and elsewhere - depends on our ability to preserve and properly manage large areas of open land.



Most grassland birds nest on the ground, so their nests, eggs, and young are easily destroyed by mowing during the breeding season. The simplest way to benefit these birds is to avoid mowing fields from April to late July – the peak breeding period.

Going a step further, crop land and conventional grass fields can be converted to a more wildlife friendly, native cover: warm-season grasses like big bluestem, little bluestem, Indian grass, and switchgrass. These grasses grow in “bunches,” providing birds with excellent nesting cover within the tufts of grass and with open foraging space between them. And because they are adapted to our region's soils and weather, these grasses don't need to be fertilized, limed, irrigated, or re-seeded.

“Warm-season” grasses are so named because they mature during the hot summer months, when other “cool-season” grasses like orchard grass and timothy are going dormant. This makes warm-season grasses perfect for summer grazing and later cutting. They are also highly digestible to livestock and have good protein content (varies by species and harvest time). Other uses for warm-season grasses include mulch, bedding, biofuel, eco-tourism, and game bird habitat.

By the way...Grasslands aren't just for the birds! Native pollinators like butterflies and bees - so important to our environment and food supply - are drawn to the wildflowers. Reptiles like the eastern box turtle bask in sunny fields and may use them for nesting. Mice, snakes, turkeys, insects, bats, and raptors are just a handful of animals that benefit from balanced grassland habitats.



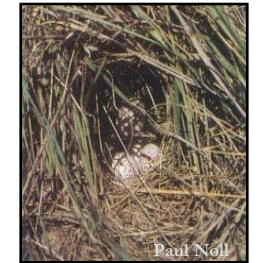
## Meet New Jersey's Grassland Birds...



### **Eastern Meadowlark** (*Sturnella magna*)

NJ Status: special concern

The eastern meadowlark requires a minimum 15 to 20 acres of grass for nesting and foraging. Meadowlarks are easily recognized by their bright yellow undersides and the black "V" on their chest. During the breeding season, males sit atop fence posts or shrubs to sing and display for mates. Females lay 2-6 white, speckled eggs in well-camouflaged ground nests made of grass.



### **Vesper Sparrow** (*Pooecetes gramineus*)

NJ Status: endangered (breeding population)

This grayish-brown sparrow has a streaked chest & back, a white ring around the eye, and white outer tail feathers. Vesper sparrows require grasslands of at least 30 acres and prefer sparse, short grass with scattered shrubs for perching. They forage for seeds and insects by scratching at the ground. Their shallow cup-nests contain 3-5 whitish eggs with purple markings.



### **Bobolink** (*Dolichonyx oryzivorus*)

NJ Status: threatened (breeding population)

The bobolink prefers fields or wet meadows of mixed grasses and wildflowers. The bobolink's bubbly song (like R2-D2 from *Star Wars*) is a giveaway, as is the male's striking black-and-white plumage and yellow-capped head. Females and nonbreeding males are yellowish with striped heads. Bobolinks make a 12,500-mile round-trip migration to winter in south America each year.



### **American Kestrel** (*Falco sparverius*)

NJ Status: special concern

Sometimes known as the "sparrow hawk," the American kestrel is actually a small falcon found across most of the U.S. Males are brightly colored, females less so. Good for pest control, they feed mostly on insects, mice, and small birds and are commonly seen hunting from telephone wires or hovering in still-flight over grass fields. Unlike other grassland birds, kestrels nest in tree cavities. They will also use man-made nest boxes where natural cavities are not available.



## More of New Jersey's Grassland Birds...



### **Upland Sandpiper** (*Bartramia longicauda*)

NJ Status: endangered

The upland sandpiper looks similar to its coastal cousins but lives inland, in grasslands with short vegetation and some shrubs or posts to sing from. These birds require over 100 acres of grass to nest. They practically disappeared from NJ by the early 1900s because of hunting and habitat loss both in NJ and in their South America wintering grounds, where they spend 8 months of the year.



### **Northern Harrier** (*Circus cyaneus*)

NJ Status: endangered (breeding population)

Also called “marsh hawks,” the northern harrier is a unique raptor. Its sexes appear different – females are a rich brown color while males are grey (notice the white rump on both). Harriers also have owl-like facial disks that help them locate prey by sound. Males may have 5 mates in a season; he provides food for all of them and their young.



### **Horned Lark** (*Eremophila alpestris*)

NJ Status: special concern (breeding population)

The horned lark is small, with a 6-8” body and 12” wingspan. Defining markers are the black upper chest & face patches and yellow throat (more vivid on males) and a pair of “horns” on top of the head. Horned larks prefer barren ground with short, sparse cover. They build nests of fine plant material in depressions in the ground and lay 2-5 pale grey, brown-speckled eggs.



### **Short-Eared Owl** (*Asio flammeus*)

NJ Status: endangered (breeding population)

This owl of open marshes and grasslands is medium-sized, with white under-wings and dark wing tips visible in flight. They have yellow eyes, facial disks outlined by tiny white feathers, and short “ear” tufts on top of their heads. Short-eared owls once nested along the NJ coasts but now infrequently breed here. They do still winter in NJ (and across most of the US) and can be seen flying low over open ground in search of the small mammals they eat.

