



## What are Grassland Birds?

Grassland birds breed in and depend upon large open landscapes dominated by grass and forbs. They are generally ground nesters, typically concealing their nests in clumps of grass or forbs. This group includes many songbirds, but also includes species such as the Northern Harrier (a.k.a “marsh hawk”), short-eared owl and upland sandpiper. Grassland birds are experiencing the most significant population declines of any group of birds in the United States and worldwide. Priority species in Vermont include the bobolink (pictured above), Eastern meadowlark, grasshopper sparrow, northern harrier, and upland sandpiper.



**The savannah sparrow (left) is a common grassland bird in Vermont. In the Northeast US, grassland birds are strongly tied to hayland and pasture. Large fields and agricultural landscapes, such as the Champlain Valley (below), are primary habitat for these birds in Vermont.**



## What is good grassland bird habitat?

Grassland birds evolved on the prairies in the central U.S. but in the Northeast, agricultural landscapes and other grass-dominated areas (e.g., airports or capped landfills) are the preferred habitat. Habitat suitability is related to the amount of open land in the landscape and the size of the habitat “patch” (i.e., field) the birds select for breeding. Large fields are important because these birds will regularly nest away from “edges” caused by adjacent forest land, development, roads, tall trees in hedgerows, etc. Generally, fields 20-25 acres that are square to circular in shape (not long and narrow) provide good habitat for grassland birds. Smaller fields may provide suitable habitat if they are within a landscape dominated by open agricultural land.

Grassland birds do not all have the same habitat requirements. Some, like the bobolink (top right), prefer longer grass while some species, like the Eastern meadowlark do fine with shorter grass. Hayland next to pasture land can provide a good mix of habitat. Generally, fields should be predominantly grass but with some forbs or legumes mixed in. Fields dominated by one species of grass or forb do not provide good habitat. Common hay and pasture forage mixtures in Vermont, such as timothy, orchard grass, and clover have been shown to provide good habitat for grassland birds.

## What are the challenges to grassland bird management?

In Vermont and across the Northeast U.S, grassland bird habitat was likely limited prior to European colonization. However, with land clearing for agriculture, many grassland species found suitable habitat in Vermont, reaching population highs in the late 1800's and early 1900's.

Since that time the amount of agricultural land has decreased dramatically and so has populations of grassland birds. In addition, the fragmentation of fields through development and forest succession, have contributed to the loss of suitable habitat. Trends over the last twenty years show more intensive use of remaining agricultural land, with earlier and more frequent cuts on hayfields. This makes it increasingly difficult for grassland birds to breed successfully.



## How do I manage land for grassland birds?

**The northern harrier (above) is a one of the grassland species of concern in Vermont. These bobolink nestlings (below) are from a hayfield under a Delayed 2<sup>nd</sup> Cut management scenario. The field produces bobolinks and still provides 3 cuts of hay including the protein rich first cut.**



On existing and otherwise suitable habitat (e.g., hay or pasture), disturbance, such as mowing and heavy grazing, during the nesting season is the primary habitat concern.

With a change in management, breeding success can be improved significantly. The traditional “delayed mowing” practice is the best for these birds as it postpones mowing of fields until the end of the breeding season (August 1<sup>st</sup>). Even limiting mowing until after July 4<sup>th</sup> can have a positive effect on breeding success.

There are also innovative options for fields mowed 3 or more times a season which usually result in limited breeding success for grassland birds. The key is to mow early, before the end of May, and then delay the 2<sup>nd</sup> cut for 65 days. This type of management allows bobolinks to have similar nesting success as they would in fields under traditional delayed mowing (no cutting until August 1<sup>st</sup>). There are similar options available for grazing systems that incorporate “deferring” or postponing grazing in certain paddocks.

## What can I do?

Landowners who own sizable pasture or hayland can develop a management system to provide good habitat for grassland birds. The **USDA Natural Resources Conservation Service (NRCS)** can provide the assistance of a professional resource manager as well as financial assistance for habitat improvement practices to help meet landowner goals. NRCS works in partnership with the Vermont Fish and Wildlife Department and the Vermont Department of Forests, Parks and Recreation to assist private landowners in improving habitat and forest management on their lands.

**For more information** visit the NRCS web site <http://www.vt.nrcs.usda.gov/>, or call your local USDA Service Center in the phone book under U.S. Government, Agriculture Department