Acreage Requirement for Some Species of Grassland Birds

Species	Minimum Grassland Size (Acres)
Bobolink	5-10
Savannah Sparrow	20-40
Eastern Meadowlark	15-20
Grasshopper Sparrow	30
Vesper Sparrow	30
Upland Sandpiper	150

Internet Resources for more Grassland Management Information:

Audubon NY: http://ny.audubon.org/managing-habitat-grassland-birds
NYS Department of Environmental Conservation: http://www.dec.ny.gov/pubs/32891.html
Ohio Division of Wildlife: http://www.dnr.state.oh.us/portals/9/pdf/pub390.pdf
Massachusetts Butterfly Club (look under mowing guidelines): http://www.naba.org/chapters/nabambc/butterfly-conservation.asp
Cornell Cooperative Extension: http://www.rauscherfarm.org/Fields_Grassland_Birds.pdf

Facts about New York State's Grasslands:

- As of 2011, approximately 18% of the 48 contiguous states are comprised of native grassland or pasture/hayfields.
- As of 2010, almost 25% of New York is grassland/pasture or hayfields.
- Over 90% of grasslands found in New York State are in private ownership.
- As of 2010, grasslands comprise roughly 16% of the land area in the Finger Lakes Region (defined in this case as being the area between Canandaigua Lake and Otisco Lake, including Montezuma NWR, and not including the southern part of the region in the Susquehanna watershed).
- Since 1966, the amount of grasslands in New York has declined by 33%.
- Between 1966 and 2006 grasshopper sparrow populations have declined by 66%, eastern meadowlarks by 53%, and bobolinks by 37%.

Adapted from: www.dec.ny.gov and www.epa.gov.

Afoot in the Field:
A Resource for Conservation Landowners in the Finger Lakes Region

Summer 2012 Vol. 3 Issue 2

At the end of June, the Finger Lakes Land Trust welcomed our newest staff member, Jason Gorman, who will serve as Land Steward and assist with a wide variety of nature preserve and conservation easement stewardship functions. With 31 nature preserves totaling approximately 4,000 acres and 101 conservation easements and deed restrictions totaling approximately 7,900 acres, this addition to our team is much-needed and will enable us to continue undertaking a variety of land management activities and meeting our important conservation agreement responsibilities.


Betsy Darlington
Jason at the Sweedler Preserve at Lick Brook

It just so happens that Jason has a background in ornithology, and more specifically, grassland birds. His knowledge and joy of observing (and hearing) birds comes from work with the Audubon Society NY, Cornell Lab of Ornithology, and Braddock Bay Raptor Research. It is only fitting that we invite Jason to share with us some of his knowledge of grassland birds and how to manage for them. The meadows and pastures that provide grassland bird habitat also benefit butterflies and other animals, and of course they contribute significantly to the landscape diversity and beautiful scenery of our region!

Chris Olney, Director of Stewardship


Jim Kersting
Kersting Conservation Easement Property

Grassland Ecology and Management in New York State

by

Jason Gorman, FLLT Land Steward

When I worked as a seasonal grassland bird technician for Audubon New York a couple years ago, I was given the task of collecting breeding-bird data for a tax abatement program sponsored by the United States Department of Agriculture (USDA) and New York State Department of Environmental Conservation (NYSDEC). Although not the most glamorous position at times (due to swarms of unrelenting mosquitoes, searing heat and humidity, and predawn awakenings), I was able to trek through pastures and grasslands from the Niagara Frontier, through the Mohawk Valley, and north into the St. Lawrence Seaway. I was afforded panoramic views of our great state, and serenaded by bobolinks and eastern meadowlarks on a daily basis. My native New Yorker heart swelled with pride as I waded through those green waves of grass. I also had the rare treat of spotting a short-eared owl patrolling a field for a quick meal of vole or meadow jumping mouse.

Bobolink
allaboutbirds.com

Eastern meadowlark
allaboutbirds.com

Grasslands are becoming less numerous throughout New York State. During pre-colonial times most of New York was covered by mature forest. Grasslands were uncommon, but could be found in wetlands, flood plains, and areas disturbed by fires caused by lightning or clearing by Native Americans. When European settlers arrived, they cleared land extensively for pasture and hay. By the 1800's, grasslands could be found throughout the state. During the 20th century, grasslands were continually lost to development and changes in agriculture. Two-thirds of New York's farmland has been lost in the past century! Much of that former farmland has transitioned to shrubs and young forests, benefitting some species, but causing a decline in many grassland birds and butterflies. As a result, grassland birds, such as bobolink and upland sandpiper, have been given a high conservation priority, and there are programs and a lot of

Upland Sandpiper
allaboutbirds.com

Restoration may be necessary to help return shrub-dominated areas into viable grasslands. A few methods for restoration include:

Removal of woody vegetation:

- Achieved mechanically, chemically, and/or by burning.
- Most grassland birds need large open areas without shrubs and trees.
- Hedgerows benefit some wildlife, but they tend to impede grassland bird habitation because they provide perches and nest sites for predators as well as create barriers between adjacentfields.

Replanting of native WSG

- WSG are generally adapted to sandy, infertile soil; are hardy; are nutritious for grazing livestock; and usually provide better habitat for breeding grassland birds.
- WSG, however, can be much harder to maintain without use of prescribed burns than CSG, and therefore prone to invasion by non-native plants over time.

Protect from overgrazing

- Can cause excessive bare ground and contributes to erosion.
- Also reduces plant and invertebrate diversity, and leads to trampling of bird nests.

Grasslands and pastures dot the landscape surrounding the Finger Lakes, and are vital to preserving the scenic and rural character that our area region is famous for, and providing habitat for birds and invertebrates such as butterflies. The Finger Lakes Land Trust actively manages portions of the Roy H. Park and Lindsay-Parsons Biodiversity Preserves as grasslands, as well as smaller meadow areas at the Plymouth Woods and Wesley Hill Preserves. At these sites, we partner with local preserve stewards and the US Fish and Wildlife Service to regularly mow meadow areas. Volunteers using mechanical control methods, and occasionally contractors applying limited use of herbicides, have also been employed to remove woody vegetation that encroaches onto grassland areas. It is the hope of FLLT that these actions will preserve the biodiversity and aesthetic values that grassland areas provide to our region.

Note To Conservation Easement Landowners:

While most or all conservation easements allow for continued mowing and maintenance of existing meadows, there may be restrictions or limitations on tree cutting. Please do not convert forested areas to meadow or remove hedgerows without first consulting the Land Trust about the specific terms and conditions of your conservation easement.

Conservation Landowner Profile: Jim and Sara Kersting

Jim and Sara co-owned a 102-acre property with Mark and Kathy Malmendier, and they jointly donated a conservation easement on the whole property in 1998. The property was later divided approximately in half between the couples, in accordance with the terms of the easement. The land is in the hills above Canadice Lake, in the western Finger Lakes.

You both have a long and interesting history of commitment as volunteer leaders of the Finger Lakes Land Trust. Please tell us about the ways in which you have served and assisted the Land Trust over the years.

Sara started first, in the mid 1990s, recruited by Meg Ewing and Steve Lewandowski, working as a coordinator with Meg in the Talks & Treks program, at that time a very extensive series of hikes and lectures that started early May and continued throughout the fall. Being a volunteer in those early days also meant meeting with landowners, discussing easements, giving presentations on land conservation to local groups, etc. Jim got involved in these activities, and progressed to serving on the Board, which he continued for about 12 years, serving as Board President his last term.

You've been in a unique position to witness and participate in the Land Trust's growth and evolution from a small, volunteer-run organization doing the majority if its projects in Tompkins County, to a staffed organization working effectively throughout the 12-county Finger Lakes region. How important do you think it is for the Land Trust to have the mission and the capacity to protect land across such a big area?

The region is defined by its unique topography more than county or municipal boundaries so it follows that efforts to protect the region are needed and warranted. To us, it seems critical for the Land Trust to maintain a regional emphasis vs a single county one. There is no other local land conservation organization that has taken on this mission or focused its efforts in this way, and we are happy to continue to support and contribute.

Its now been nearly 14 years since you donated a conservation easement on your land in the Town of Canadice. Have you ever regretted your decision to encumber your land? Have you ever felt that complying with the restrictions in your easement was difficult?

Never regretted it, never found it dif cult.

A significant area of your property is actively maintained as open meadow. How many acres of meadow do you maintain; how do you maintain it; and why do you choose to expend time and resources to maintain it?

Our 50-acre parcel has approximately 15 acres of open fields. Our meadow, however, borders our neighbor's acres of open meadow, which are also protected by conservation easement with the Land Trust, so the cumulative area that is mowed and maintained by both of us is appreciable.

Originally we would mow half annually, alternating them, but the woody plants are so well established in the soil that the grasses were becoming increasingly threatened by them. So we now mow 100% of the open fields annually in the fall after all of the grassland birds have left. This annual mowing has increased the domination of the grasses and the birds that depend on them.

Please tell us about the wildlife that use or inhabit your grasslands.

We have a sizeable population of bobolinks who return every year to nest in the fields, and watching them is one of the great benefits of keeping the grasslands open. We also see tree swallows, field sparrows, red-winged blackbirds, a variety of hawks, and bluebirds near the edges.

Deer, fox, and rabbits are always in residence.

What is your most memorable wildlife sighting or other experience on your property?

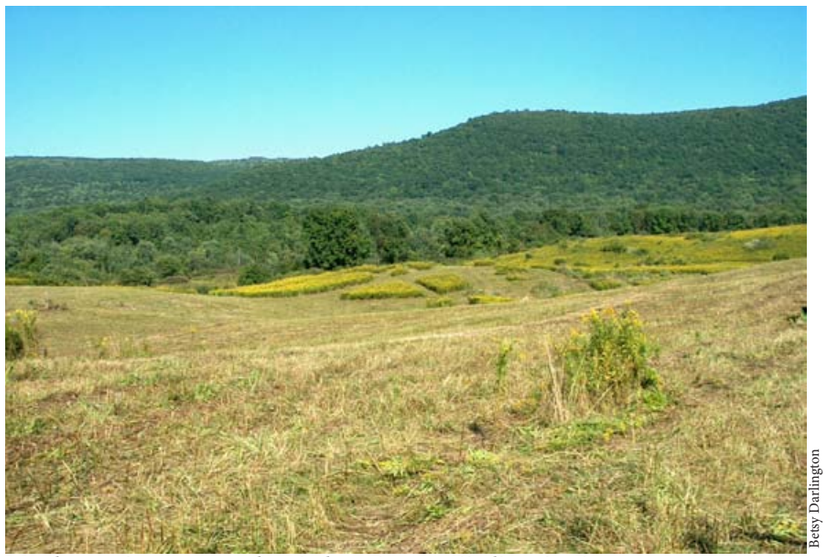
The firefly displays this summer were spectacular, the fields full of strobe lights as far as you could see. Waiting for and then seeing the bobolinks return every spring is another joy. As are bluebird sightings anytime of the year.

Some tools used to manage and maintain grasslands include:

Mowing:
- Should be done every 1-3 years to prevent growth of woody vegetation.
- Best avoided before August in areas where ground-nesting birds are present.
- Mowing in late fall benefits most species of butterflies. Mowing in summer may help prevent goldenrod dominance, but can also impede nectar plants beneficial to butterflies such as Queen Anne's lace and milkweed.
- Leaving one-half or one-third of a meadow un-mowed in a given year provides refuge for wildlife. Butterfly larvae tend to over-winter near the ground.
- Often the most practical and economical!

Grazing:
- Beneficial because it creates a mosaic of grass heights and structure.
- Some grassland birds respond favorably to limited grazing

Burning:
- Helps prevent spread of woody vegetation, and rejuvenates plant growth.
- Reduces buildup of thatch, and returns nutrients to the soil.
- Least practical and economical in our area.



Betsy Darlington

Meadow maintenance at the Lindsay-Parsons Biodiversity Preserve

Orchardgrass, hcs.osu.edu

Big bluestem: www.ag.ndsu.edu

Timothy grass, timothygrass.com

Indiangrass, www.kaupag.com

information available to landowners interested in restoring or managing their grasslands.

The basic definition of a grassland is: "land on which grasses and/or legumes are the dominant vegetation," (OH Div. of Wildlife) and are typified by either cool- or warm-season grasses. Cool-season grasses (CSG) are predominantly non-native and include common species such as timothy and orchardgrass. They are ideal for haying because they begin their growth cycle in the cool, wet early spring and mature by early summer.

Warm-season grasses (WSG) are mostly species that are native to the US. Most of their growth occurs in the summer when CSG are less viable. They are drought resistant and winter hardy, as well as more nutritious as feed for livestock. WSG also tend to grow in clumps (as opposed to sod-forming), and provide better nesting areas for ground-nesting birds than CSG. They are also a reliable food source for butterflies such as the wood nymph and wood satyr. Some typical WSGs are: big bluestem, indiangrass, and switchgrass.

Grasslands require a disturbance to remain open. Active management is necessary in most cases, because if left to succession, open meadows will be invaded by woody plants and mature into forest.

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