Meadows

Meadows include most areas dominated by herbaceous vegetation, including dry **upland meadows** and **wet meadows** that have standing water or saturated soils for part of the year. While there can be significant habitat value in small wet meadows and patches of upland meadow (for invertebrates and small mammals, for example), **large open areas** are especially important for grassland-breeding birds.

Upland meadow

Calcareous wet meadow with blue vervain

Typical plants

- Grasses, sedges, goldenrods, asters
- Reed canary-grass, purple loosestrife, sensitive fern, blue flag in wet meadows
- Rough-leaf goldenrod, blue vervain, sweetflag in calcareous wet meadows

Species of conservation concern

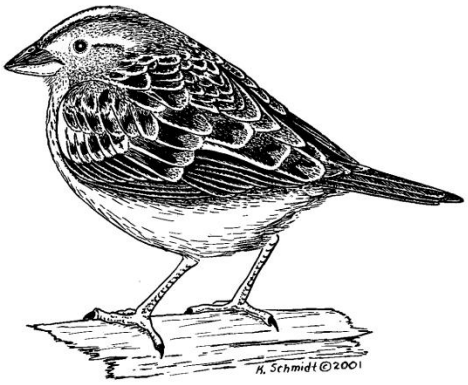
- Rare butterflies such as Aphrodite fritillary, dusted skipper, Leonard's skipper
- Nesting wood, spotted, and box turtles
- Foraging ribbon snake, spotted turtle, and bog turtle
- Birds that depend on grasslands, such as northern harrier, upland sandpiper, grasshopper sparrow, savannah sparrow, bobolink, sedge wren

These are just a few of the species of regional or statewide conservation concern that are known to occur in meadows. See Kiviat & Stevens (2001) for a more extensive list.

Blue flag

Threats to Meadows

Large and contiguous patches of meadow, particularly pasture, hayfields, and oldfields, can be valuable habitats for rare and uncommon grassland-breeding birds and other organisms. Meadows are among the habitats most vulnerable to future **residential development**. Even when development does not destroy the entire meadow habitat, the remaining fragments are usually small and have much lower biodiversity value. Development around meadows can promote **increased predation** on grassland-breeding bird nests by human-subsidized predators such as raccoons and domestic cats. Grasslands and the rare species they support are also highly susceptible to other human disturbances such as **mowing, conversion to row crops, application of pesticides, and ATV traffic.**



Grasshopper sparrow

Conservation Recommendations

- In general, hayfields, pastures, and perennial crops (such as orchards) are better for soil and water conservation and provide more wildlife habitat than annual row crops.
- Avoid overgrazing pastures.
- For meadows not in active agricultural production: delay mowing until after August, or mow only every 2-3 years, or practice rotational mowing so that each part of a field is mowed once every 2-3 years.
- For meadows in hay production: if possible, delay hay-cutting in some hayfields until after grassland birds have nested (late June-mid-July). If mowing must occur earlier, leave some unmowed strips or patches if possible. Hayfields mowed early in the season can be rotated annually with those that are mowed late in the season.
- On an active farm, if possible leave some fields out of production each year to provide wildlife habitat.
- Avoid cutting hay or mowing on wet soils.
- Remove fences or hedgerows between smaller fields to enlarge the habitat area for breeding birds.
- Raise mower blades six inches or more, use flushing bars, and avoid night mowing when birds are roosting to help reduce bird mortality.

References

Kiviat, E. and G. Stevens. 2001. Biodiversity assessment manual for the Hudson River estuary corridor. New York State Department of Environmental Conservation, Albany. 508 p.

Ochterski, J. 2006. Hayfield management and grassland bird conservation. Cornell Cooperative Extension of Shuyler County, NY. 8 p.