



Grassland: Hayland

Description

Hayland is agricultural grassland from which the "grass" is periodically harvested. Small grain crops (e.g. wheat) were included here since they are structurally similar to hayland during the growing season. Hayland generally has fewer plant species than native prairie or old fields and is simpler structurally.

General Condition of Feature

Most of the hayland in the Western Upper Peninsula is considered to be in fair or good condition as wildlife habitat (~80%). Much of the remaining area is considered degraded.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

AMPHIBIANS

northern leopard frog (*Rana pipiens*)

REPTILES

blue racer (*Coluber constrictor foxii*)

western fox snake (*Elaphe vulpina*)

Blanding's turtle (*Emydoidea blandingii*)

BIRDS

Blue-winged Teal (*Anas discors*)

Sharp-tailed Grouse (*Tympanuchus phasianellus*)

Northern Bobwhite (*Colinus virginianus*)

Northern Harrier (*Circus cyaneus*)

Upland Sandpiper (*Bartramia longicauda*)

BIRDS cont.

American Woodcock (*Scolopax minor*)

Sedge Wren (*Cistothorus platensis*)

Vesper Sparrow (*Pooecetes gramineus*)

Savannah Sparrow (*Passerculus sandwichensis*)

Le Conte's Sparrow (*Ammodramus leconteii*)

Dickcissel (*Spiza americana*)

Bobolink (*Dolichonyx oryzivorus*)

Eastern Meadowlark (*Sturnella magna*)

Western Meadowlark (*Sturnella neglecta*)

MAMMALS

least weasel (*Mustela nivalis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Farm abandonment results in succession to forested landscape features. Timing of mowing may affect species composition and species use.
- Altered fire regime: A lack of fire leads to succession to shrub and forest types.
- Altered hydrologic regimes

HABITAT CONVERSION

- Industrial, residential and recreational development: Conversion pressure leads to residential and industrial development.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals
- Other biological interactions: There is a lack of native plant species and communities within haylands in the Western Upper Peninsula.

Conservation Actions Needed [Threats addressed]

LAND, WATER, & SPECIES MANAGEMENT

- Develop and implement plans for invasive species control and prevention. [Invasive plants and animals]
- Find and use sources of native plant species to restore degraded features and create new ones. [Other biological interactions]
- Manage to approximate natural disturbance regimes using managed fire, grazing and mowing, prescribed fire, and restoration of water flow patterns. [Grazing and mowing patterns; Altered fire regime; Altered hydrologic regimes]
- Develop mowing guidelines to minimize seasonal habitat loss for wildlife. [Grazing and mowing patterns]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for hayland or their conversion to features that have greater value to wildlife. [Industrial, residential, and recreational development]

ECONOMIC & OTHER INCENTIVES

- Encourage maintenance of hayland features through private land conservation initiatives (CRP, CREP, etc.). Provide sustainable agriculture strategy training to help keep family farms afloat. [Industrial, residential, and recreational development; Grazing and mowing patterns]

Research and Survey Needs

- An inventory needs to be conducted to determine the location, condition, and size of haylands.

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: WESTERN UPPER PENINSULA

- Study the effects of timing and intensity of haying and hayfield management on the value to wildlife of these systems. Are there other variables associated with haying and hayfield management that affect their value to wildlife? Strong regional differences have been observed in haying practices and the value of haylands to wildlife.
- Evaluate opportunities for wildlife and economic benefits from hayland management. Examine economic impacts and changes in value to wildlife resulting from changes in management.
- Compare small grain crops to hay crops in terms of value to wildlife. Are small grain crops more similar to hay crops or row crops in terms of value to wildlife? Harvest schedules for small grain crops are likely to differ from those for hay crops.
- Compare the impacts of mowing (cutting without biomass removal) with haying (cutting with biomass removal).
- Determine how wildlife use changes as a result of seasonal (height of vegetation, presence of seed, amount of stubble, etc.) or annual (crop rotation, etc.) fluctuations of cover crops.

Monitoring

- Analyze county agriculture statistics to determine trends in acreage and distribution.
- Track changes in species composition under cultivation.
- Track changes in haying, both in timing and techniques.