



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 has fewer plant species than native prairie or old fields and is simpler structurally.

General Condition of Feature

Most of the hayland in the Eastern Upper Peninsula is considered to be in fair or good condition as wildlife habitat (~60%) and about 20% is considered excellent condition. The remaining areas are considered degraded or very degraded.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

AMPHIBIANS

northern leopard frog (*Rana pipiens*)

REPTILES

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*)

Yellow Rail (*Coturnicops noveboracensis*)

Upland Sandpiper (*Bartramia longicauda*)

BIRDS cont.

American Woodcock (*Scolopax minor*)

Sedge Wren (*Cistothorus platensis*)

Vesper Sparrow (*Pooecetes gramineus*)

Savannah Sparrow (*Passerculus sandwichensis*)

Grasshopper Sparrow (*Ammodramus savannarum*)

Henslow's Sparrow (*Ammodramus henslowii*)

Le Conte's Sparrow (*Ammodramus leconteii*)

Dickcissel (*Spiza americana*)

Bobolink (*Dolichonyx oryzivorus*)

Eastern Meadowlark (*Sturnella magna*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Farm abandonment results in succession to forested landscape features. Timing of haying may affect community composition and wildlife species use.
- Fragmentation: Farms are being subdivided for conversion to residential development.

HABITAT CONVERSION

- Industrial, residential and recreational development: Conversion pressure leads to residential and industrial development.
- Incompatible natural resource management: Planting of trees may alter the value of haylands for wildlife.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using mowing or haying. [Grazing and mowing patterns; Fragmentation]

LAW & POLICY

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

EDUCATION & AWARENESS

- Work with land managers to develop priorities for hayland retention and management. [Incompatible natural resource management]

ECONOMIC & OTHER INCENTIVES

- Provide guidance for developing agricultural strategies for family farms to help support them and prevent their conversion via development. [Industrial, residential and recreational development; Fragmentation]

Research and Survey Needs

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

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

- 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.