



## 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 Northern Lower Peninsula is considered to be in fair or good condition as wildlife habitat (~95%).

### 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*)

eastern fox snake (*Elaphe gloydi*)

black rat snake (*Elaphe obsoleta obsoleta*)

eastern massasauga (*Sistrurus catenatus catenatus*)

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*)

#### BIRDS cont.

Upland Sandpiper (*Bartramia longicauda*)

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*)

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.
- Fragmentation

#### HABITAT CONVERSION

- Industrial, residential and recreational development: Conversion pressure leads to residential and recreational development.
- Wetland modifications
- Conversion to agriculture

#### BIOLOGICAL INTERACTIONS

- Invasive plants and animals

### Conservation Actions Needed [Threats addressed]

#### LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using controlled grazing and mowing. [Grazing and mowing patterns; Fragmentation]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]

#### LAW & POLICY

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

### 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 wildlife value of these systems. Are there other variables associated with haying and hayfield management that affect their wildlife value? 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: NORTHERN LOWER PENINSULA**

- Compare small grain crops to hay crops in terms of wildlife value. Are small grain crops more similar to hay crops or row crops in terms of wildlife value? 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.