



Grassland: Pasture

Description

Pastures are agricultural grasslands used for grazing livestock. They are simpler structurally (shorter grass) and have fewer plant species than prairie or idle/old fields. Exotic plant species that are more resistant to impacts from heavy grazing generally have displaced the native plants, except on some dry sites where native species may hold on due to the higher moisture demand of most exotics.

General Condition of Feature

Much of the pasture in the Northern Lower Peninsula is considered of fair or good condition as wildlife habitat (~65%). Most of the remaining areas are degraded or very degraded.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

INSECTS

spatterdock damer (*Aeshna mutata*)
tawny crescent (*Phyciodes batesii*)

AMPHIBIANS

Fowler's toad (*Bufo fowleri*)
northern leopard frog (*Rana pipiens*)

REPTILES

blue racer (*Coluber constrictor foxii*)
eastern fox snake (*Elaphe gloydi*)
black rat snake (*Elaphe obsoleta obsoleta*)
eastern hognose snake (*Heterodon platirhinos*)
smooth green snake (*Liochlorophis vernalis*)
eastern massasauga (*Sistrurus catenatus catenatus*)
spotted turtle (*Clemmys guttata*)
Blanding's turtle (*Emydoidea blandingii*)
eastern box turtle (*Terrapene carolina carolina*)

BIRDS

Blue-winged Teal (*Anas discors*)
Sharp-tailed Grouse (*Tympanuchus phasianellus*)
Northern Bobwhite (*Colinus virginianus*)

BIRDS cont.

Northern Harrier (*Circus cyaneus*)
Upland Sandpiper (*Bartramia longicauda*)
American Woodcock (*Scolopax minor*)
Short-eared Owl (*Asio flammeus*)
Northern Flicker (*Colaptes auratus*)
Eastern Kingbird (*Tyrannus tyrannus*)
Migrant Loggerhead Shrike (*Lanius ludovicianus migrans*)
Sedge Wren (*Cistothorus platensis*)
Northern Mockingbird (*Mimus polyglottos*)
Vesper Sparrow (*Pooecetes gramineus*)
Savannah Sparrow (*Passerculus sandwichensis*)
Henslow's Sparrow (*Ammodramus henslowii*)
Bobolink (*Dolichonyx oryzivorus*)
Eastern Meadowlark (*Sturnella magna*)
Western Meadowlark (*Sturnella neglecta*)

MAMMALS

red bat (*Lasiurus borealis*)
hoary bat (*Lasiurus cinereus*)
least weasel (*Mustela nivalis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Heavy grazing may contribute to erosion.
- Altered fire regime: Fire suppression contributes to succession to forested feature types.
- Fragmentation

HABITAT CONVERSION

- Industrial, residential and recreational development: Rising land prices drive conversion to residential development.
- Wetland modifications
- Conversion to agriculture: Increased commercial farming results in pasture becoming row crop.
- Incompatible natural resource management: Planting of trees by private landowners within pastures may affect their value to wildlife.

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Mining practices: Oil and gas extraction facilities degrade pasture in the Northern Lower Peninsula.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals

EDUCATION

- Social attitudes: There is a cultural shift away from farming and a subsequent loss of family farms.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using prescribed fire, grazing, and mowing. [Grazing and mowing patterns; Altered fire regime]

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: NORTHERN LOWER PENINSULA

- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Work with land managers to develop priorities for pasture management. [Incompatible natural resource management]
- Provide training on developing agricultural strategies to support retention of family farms. [Fragmentation; Industrial, residential, and recreational development; Conversion to agriculture; Social attitudes]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for pasture systems or their conversion to features that have greater wildlife value. [Fragmentation; Industrial, residential, and recreational development]
- Develop new and enforce existing regulations for mitigation of oil and gas extraction facilities. [Mining practices]

Research and Survey Needs

- Assess the impact of soil compaction on vegetative and wildlife diversity.
- Study the effects of timing and intensity of grazing and pasture management on the wildlife value of these systems. Are there other variables associated with grazing and pasture management that affect their wildlife value? Economically realistic alternatives to high impact grazing practices are needed.
- Determine the impacts of invasive plant and animal species.
- Evaluate the relationship between the species of livestock being pastured to the wildlife value of the land in use.

Monitoring

- Track species composition changes in pastures.
- Analyze county agriculture statistics to determine changes in the types of livestock being pastured and livestock densities.