



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 Southern Lower Peninsula is considered of fair or good condition as wildlife habitat (~65%). About a quarter of pasture areas are considered degraded and in need of improved management to promote wildlife benefits.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

INSECTS

spatterdock damner (*Aeshna mutata*)
a leafhopper (*Flexamia reflexus*)
American burying beetle (*Nicrophorus americanus*)
regal fritillary (*Speyeria idalia*)
tawny crescent (*Phyciodes batesii*)

AMPHIBIANS

Fowler's toad (*Bufo fowleri*)
Blanchard's cricket frog (*Acris crepitans blanchardi*)
northern leopard frog (*Rana pipiens*)

REPTILES

Kirtland's snake (*Clonophis kirtlandii*)
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*)
copperbelly water snake (*Nerodia erythrogaster neglecta*)
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*)
Northern Bobwhite (*Colinus virginianus*)
Northern Harrier (*Circus cyaneus*)
Upland Sandpiper (*Bartramia longicauda*)
American Woodcock (*Scolopax minor*)
Barn Owl (*Tyto alba*)
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*)
Western Meadowlark (*Sturnella neglecta*)

MAMMALS

least shrew (*Cryptotis parva*)
red bat (*Lasiurus borealis*)
hoary bat (*Lasiurus cinereus*)
evening bat (*Nycticeius humeralis*)
eastern pipistrelle (*Pipistrellus subflavus*)
least weasel (*Mustela nivalis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Inappropriate grazing may aid encroachment by invasive species or degrade the health of existing plant communities. Some mowing may maintain early successional stages and control weeds but also destroy nests of ground nesting birds.

HABITAT CONVERSION

- Industrial, residential, and recreational development
- Conversion to agriculture: As fewer head of livestock are kept in the State, the amount of land used for pasture decreases. The economics of keeping livestock encourage the establishment of feed lots rather than pastures.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals: Livestock avoid invasive shrubs and thistles. Eastern red cedar (*Juniperus virginiana*) is moving into some pastures.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]

LAW & POLICY

- Work with municipalities to promote planning and zoning to protect pasture from development or to convert it to features that have greater value to wildlife. [Industrial, residential, and recreational development]

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

ECONOMIC & OTHER INCENTIVES

- Provide education to family farms on developing agricultural strategies that allow for profitable livestock farming that uses pasture rather than feed lots. [Grazing and mowing patterns; Conversion to agriculture]

Research and Survey Needs

- Determine the impacts of variations in haying, mowing, and grazing patterns on plant communities and wildlife use in pastures.
- 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 value to wildlife of these systems. Are there other variables associated with grazing and pasture management that affect their value to wildlife? 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 value to wildlife 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.
- Monitor the distribution of invasive species