



Grassland: Idle/old field

Description

Idle/old field is a grassland community of opportunistic plants and animals that take over bare ground previously disturbed by humans—usually for agricultural purposes. These grassland communities are often a mix of opportunistic (weedy) native and invasive species. These communities are often ultimately replaced by early successional trees if left alone without disturbance (e.g., fire).

General Condition of Feature

Idle or old fields in the Northern Lower Peninsula are generally in fair to good condition (~65%). Most of the remaining areas are degraded or very degraded (~35%).

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

INSECTS

a spur-throat grasshopper (*Melanoplus eurycerus*)
blue-legged locust (*Melanoplus flavidus*)
persius duskywing (*Erynnis persius persius*)
grizzled skipper (*Pyrgus wyandot*)
ottoe skipper (*Hesperia ottoe*)
Karner blue (*Lycaeides melissa samuelis*)
frosted elfin (*Callophrys irus*)
tawny crescent (*Phyciodes batesii*)

AMPHIBIANS

eastern tiger salamander (*Ambystoma tigrinum tigrinum*)
Fowler's toad (*Bufo fowleri*)
western chorus frog (*Pseudacris triseriata triseriata*)
pickerel frog (*Rana palustris*)
northern leopard frog (*Rana pipiens*)

REPTILES

blue racer (*Coluber constrictor foxii*)
northern ringneck snake (*Diadophis punctatus edwardsii*)
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*)
wood turtle (*Glyptemys insculpta*)
eastern box turtle (*Terrapene carolina carolina*)

BIRDS

Blue-winged Teal (*Anas discors*)

BIRDS cont.

Sharp-tailed Grouse (*Tympanuchus phasianellus*)
Northern Bobwhite (*Colinus virginianus*)
Northern Harrier (*Circus cyaneus*)
Killdeer (*Charadrius vociferus*)
Upland Sandpiper (*Bartramia longicauda*)
American Woodcock (*Scolopax minor*)
Yellow-billed Cuckoo (*Coccyzus americanus*)
Short-eared Owl (*Asio flammeus*)
Red-headed Woodpecker (*Melanerpes erythrocephalus*)
Northern Flicker (*Colaptes auratus*)
Eastern Kingbird (*Tyrannus tyrannus*)
White-eyed Vireo (*Vireo griseus*)
Sedge Wren (*Cistothorus platensis*)
Brown Thrasher (*Toxostoma rufum*)
Blue-winged Warbler (*Vermivora pinus*)
Golden-winged Warbler (*Vermivora chrysoptera*)
Eastern Towhee (*Pipilo erythrophthalmus*)
Field Sparrow (*Spizella pusilla*)
Vesper Sparrow (*Poocetes gramineus*)
Grasshopper Sparrow (*Ammodramus savannarum*)
Henslow's Sparrow (*Ammodramus henslowii*)
Dickcissel (*Spiza americana*)
Bobolink (*Dolichonyx oryzivorus*)
Eastern Meadowlark (*Sturnella magna*)
Western Meadowlark (*Sturnella neglecta*)

MAMMALS

hoary bat (*Lasiurus cinereus*)
eastern pipistrelle (*Pipistrellus subflavus*)
least weasel (*Mustela nivalis*)
deer mouse (*Peromyscus maniculatus gracilis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Farm abandonment results in succession to forested landscape features. Timing of mowing may affect community composition and wildlife species use.
- Altered fire regime: A lack of fire may lead to succession to forested feature types.
- Fragmentation

HABITAT CONVERSION

- Industrial, residential and recreational development: Conversion pressure leads to residential development.
- Incompatible natural resource management: Planting of trees by private landowners within idle/old field systems may affect their value to wildlife.

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Mining practices: Oil and gas extraction facilities degrade idle/old fields in the Northern Lower Peninsula.

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

BIOLOGICAL INTERACTIONS

- Invasive plants and animals: Species like autumn olive (*Elaeagnus umbellata*) may impact idle/old field systems.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using prescribed fire. [Altered fire regime]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Work with land managers to develop priorities for prairie restoration and management. [Incompatible natural resource management]
- Provide contiguous dry and mesic grassland areas of at least 250 acres. [Habitat Conversion—multiple]
- Temporary roads or clearings for oil and gas extraction should be planned and constructed to be revegetated. [Mining practices]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for idle and old field 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]

EDUCATION & AWARENESS

- Educate local planning and zoning boards about the value of idle and old field and methods to conserve these systems. [Fragmentation; Industrial, residential and recreational development; Incompatible natural resource management]

Research and Survey Needs

- A better understanding is needed of the species associated with idle/old field communities. Are these systems sinks or are they valuable as wildlife habitat?
- A better understanding is needed of the role of idle/old field on the landscape. These systems may serve an important role as a buffer around other features.
- Study the species composition of idle/old fields. Are there native communities in old fields? Both native and non-native weeds may colonize fields after the cessation of agriculture.
- Compare the value of old field systems man-made managed grasslands in residential areas.
- An inventory needs to be conducted to determine the location and condition of idle/old fields.

Monitoring

- Track the total acreage of idle/old field in the ecoregion as well as its distribution across the landscape.