



Terrestrial characteristics: Large contiguous unfragmented landscape

Description

A large contiguous unfragmented landscape is a relatively large area of a particular landcover type, or a mosaic of landcover types, excluding industrial, residential and urban (low or high density) landcovers. Specifically, this feature refers to species-specific requirements for habitat (or a mosaic of habitats) that span a relatively large spatial extent with relatively little fragmentation. "Large" may vary by landcover type (i.e. a large forest or forested complex in Michigan will likely have a much greater spatial extent than a large grassland or grassland complex). Large contiguous unfragmented landscape is also used for species that require a fairly specific mosaic of landscape features that span a relatively large area (e.g., eastern massasauga, golden borer). The quality and spatial extent of the habitat required will be species specific and may include intensively managed landscapes; some species that require large contiguous grasslands will do well with a mixture of native and more heavily human-influenced (e.g., agricultural) landcovers, while others require contiguous native grasslands.

General Condition of Feature

The Southern Lower Peninsula is generally considered degraded or very degraded with regard to the availability of large contiguous landscapes. This reflects the high level of development and fragmentation across the region.

Associated Natural Communities

N/A – No defined natural communities

Associated Species of Greatest Conservation Need

INSECTS

- ottoo skipper (*Hesperia ottoe*)
- blazing star borer (*Papaipema beeriana*)
- golden borer (*Papaipema cerina*)

REPTILES

- blue racer (*Coluber constrictor foxii*)
- copperbelly water snake (*Nerodia erythrogaster neglecta*)
- eastern massasauga (*Sistrurus catenatus catenatus*)

BIRDS

- Bald Eagle (*Haliaeetus leucocephalus*)

BIRDS cont.

- Cooper's Hawk (*Accipiter cooperii*)
- Northern Goshawk (*Accipiter gentilis*)
- Red-shouldered Hawk (*Buteo lineatus*)
- Upland Sandpiper (*Bartramia longicauda*)
- Black Tern (*Chlidonias niger*)
- Barn Owl (*Tyto alba*)
- Short-eared Owl (*Asio flammeus*)
- Acadian Flycatcher (*Empidonax vireescens*)
- Cerulean Warbler (*Dendroica cerulea*)
- Worm-eating Warbler (*Helmitheros vermivorus*)
- Hooded Warbler (*Wilsonia citrina*)
- Western Meadowlark (*Sturnella neglecta*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered fire regime
- Fragmentation: Parcelization and splitting of property results in a profusion of small, 5 to 10 acre, lots containing differing feature types depending on landowner preferences.

HABITAT CONVERSION

- Industrial, residential, and recreational development: Residential development is common and favors parcelization.
- Incompatible natural resource management: Management which favors edge habitat will reduce the amount of large contiguous natural landscape.

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices: Timber harvest can lead to temporal fragmentation.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals

EDUCATION

- Social attitudes

OTHER

- Historic status/current abundance: Few large contiguous natural landscapes remain in the Southern Lower Peninsula. Most of the existing ones are on public land.

Conservation Actions Needed [Threats addressed]

LAND & WATER PROTECTION

- Expand conservation easement programs [variety of threats]
- Acquire, either by government agencies or private conservancies, parcels which either encompass large blocks of contiguous natural landscape or which, when managed with abutting conservation properties, constitute large blocks

of contiguous natural landscape. [Fragmentation; Industrial, residential, and recreational development; Incompatible natural resource management]

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]
- Develop and implement best management practices for timber harvests that address wildlife needs including the importance of large contiguous habitat blocks. [Forestry practices]
- Promote the closure of non-essential resource management roads and seek other road closure opportunities that do not conflict with other appropriate uses. [Fragmentation]
- Provide contiguous dry and mesic grassland areas of at least 250 acres. [Habitat Conversion—multiple]
- Support Landowner Incentive Programs to foster conservation on private land [variety of threats]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for larger parcel sizes. [Industrial, residential, and recreational development]

EDUCATION & AWARENESS

- Educate the public about the value of large contiguous landscape blocks for the management of quality wildlife habitat. Provide information about estate planning to allow landowners to maintain habitat management initiatives over longer time frames. [Fragmentation; Social attitudes]

CAPACITY BUILDING

- Develop networks of landowners to coordinate habitat management across property boundaries. [Fragmentation]

Research and Survey Needs

- Inventory existing examples of large contiguous natural landscape.
- Compare the value to wildlife of mosaics of similar features to patches of a single feature. Does a mosaic of prairie, hayland, and old field have the same value to wildlife as a similarly sized patch of just prairie?

Monitoring

- Track abundance and distribution of large contiguous natural landscape across the landscape.