



Other Features: Inland rock/cliff/ledge

Description

Inland rock/cliff/ledge areas generally represent inland areas with significant rock substrate, including rock outcrops, rocky cliffs, and other areas that generally have significant rock available for wildlife use. Cliffs are geological features that form from a variety of rock types and erosion processes. Cliffs present very unique environmental conditions that allow for very specialized plant and animal associations. Rock outcrops are rocky areas that lack vegetation or differ in vegetation from the surrounding communities (these are often forest openings) due to the presence of rock on or near the land surface. Where rock isn't exposed, thin soils result in droughty conditions with sparse herbaceous communities, low shrubs, and/or stunted trees.

General Condition of Feature

Inland rock, cliff, or ledge features are rare in the Southern Lower Peninsula. What is available is mostly considered to be in fair, good, or excellent condition. The moist acid cliff natural community associated with this feature is considered to be imperiled or critically imperiled in the State.

Associated Natural Communities

Moist Acid Cliff

Associated Species of Greatest Conservation Need

SNAILS

lambda snaggletooth (*Gastrocopta holzingeri*)

INSECTS

woodland camel cricket (*Ceuthophilus silvestris*)

REPTILES

blue racer (*Coluber constrictor foxii*)

northern ringneck snake (*Diadophis punctatus edwardsii*)

black rat snake (*Elaphe obsoleta obsoleta*)

REPTILES cont.

eastern massasauga (*Sistrurus catenatus catenatus*)

BIRDS

Northern Bobwhite (*Colinus virginianus*)

Great Blue Heron (*Ardea herodias*)

Bald Eagle (*Haliaeetus leucocephalus*)

Peregrine Falcon (*Falco peregrinus*)

Barn Owl (*Tyto alba*)

Associated Threats

HABITAT CONVERSION

- Industrial, residential, and recreational development
- Incompatible natural resource management

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Mining practices: Though illegal, some excavation of rocks does occur.

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Hiking and climbing may impact these systems.

OTHER

- Historic status/current abundance: This feature is absent from most of the Southern Lower Peninsula and is known primarily from isolated areas around Lake Huron.

Conservation Actions Needed [Threats addressed]

LAND & WATER PROTECTION

- Expand conservation easement programs [variety of threats]
- Support and expand conservation purchase of high quality occurrences [variety of threats]

LAND, WATER & SPECIES MANAGEMENT

- Assess management goals to ensure that they provide for a diversity of communities across the landscape. [Incompatible natural resource management]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for high quality rock and ledge communities. [Industrial, residential, and recreational development]
- Enforce existing excavation regulations. [Mining practices]
- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation]

RECREATION

- Promote responsible recreational use. [Non-consumptive recreation]

Research and Survey Needs

- Identify and quantify recreational use and its impacts on the value to wildlife of rock, cliff, and ledge systems.

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

- Identify the characteristics of rock, cliff, and ledge systems that provide benefits to wildlife and which species may be affected by changes in these characteristics.
- Inventory rock, cliff, and ledge systems to determine location and condition.

Monitoring

- Track the use of cliff and ledge features by peregrine falcons.