



Great Lakes/Coastal: Alvar/rock

Description

Alvar/rock Great Lakes features represent the various rocky shoreline areas along the Great Lakes. Alvar/rock includes a wide variety of distinct bedrock types including limestone, sandstone, basalt, volcanic conglomerate, and other igneous and metamorphic bedrock types. While all of the shoreline bedrock communities are considered rare in Michigan, alvar or limestone pavement lakeshores is an ecologically significant natural community that is considered globally rare. Alvar communities generally have a distinctive vegetative zonation from the non-vegetated wave-swept shoreline to the more densely vegetated herbaceous or shrubby areas inland that grade into the upland forest. Because of their stability and diversity of habitats, alvars generally possess very diverse plant communities.

General Condition of Feature

Alvar is not present in the Southern Lower Peninsula and other coastal rock features are an extremely rare component of the regional landscape.

Associated Natural Communities

Sandstone Lakeshore Cliff

Associated Species of Greatest Conservation Need

In the literature examined for species habitat information alvar/rock was not mentioned.

Associated Threats

OTHER

- Historic status/current abundance: Coastal alvar is likely not present and coastal rock features, in general, are rare within this ecoregion.

EDUCATION

- Lack of scientific knowledge

Conservation Actions Needed [Threats addressed]

- No data available

Research and Survey Needs

- Inventory coastal rock features and determine their importance to SGCN
- Determine indicator species of quality coastal rock features
- Identify and quantify sources of disturbance. How does recreational use impact alvar and coastal rock communities? What are the natural disturbance factors and what is their periodicity?
- Identify the characteristics of alvar systems that provide benefits to wildlife and which species may be affected by changes in these characteristics.
- Inventory Great Lakes coastal systems to determine whether any alvar is present in the Southern Lower Peninsula.

Monitoring

- Track status of coastal rock shoreline features across the landscape.
- Track damage and disturbance intensity.
- Track indicator species abundance and distribution. Associated plant species may provide the best indicators.