



Terrestrial characteristics: Snag/cavity

Description

A snag/cavity is a standing dead tree or other structurally similar cavity that is available to wildlife (e.g., under live shag-bark hickory bark). Snags are an important structural component to many wildlife species. Snags also provide important food sources for many insect species and the species that subsequently prey upon them.

General Condition of Feature

The status of snag or cavities as a landscape feature characteristic in the Southern Lower Peninsula is considered to be in fair or good condition over most of the region (~75%). About 20% of the potential area in the region with potential for snag habitat is considered to be degraded due to a lack of mature woodlands and snag removal.

Associated Natural Communities

N/A – No defined natural communities

Associated Species of Greatest Conservation Need

INSECTS

- zigzag darner (*Aeshna sitchensis*)
- six-banded longhorn beetle (*Dryobius sexnotatus*)

BIRDS

- Great Blue Heron (*Ardea herodias*)
- Black-crowned Night-heron (*Nycticorax nycticorax*)
- Osprey (*Pandion haliaetus*)
- Northern Harrier (*Circus cyaneus*)
- Red-shouldered Hawk (*Buteo lineatus*)
- Barn Owl (*Tyto alba*)
- Red-headed Woodpecker (*Melanerpes erythrocephalus*)
- Northern Flicker (*Colaptes auratus*)

BIRDS cont.

- Olive-sided Flycatcher (*Contopus cooperi*)
- Eastern Kingbird (*Tyrannus tyrannus*)
- Northern Shrike (*Lanius excubitor*)
- Prothonotary Warbler (*Protonotaria citrea*)

MAMMALS

- silver-haired bat (*Lasionycteris noctivagans*)
- northern bat or northern myotis (*Myotis septentrionalis*)
- Indiana bat or Indiana myotis (*Myotis sodalis*)
- evening bat (*Nycticeius humeralis*)
- eastern pipistrelle (*Pipistrellus subflavus*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered fire regime

HABITAT CONVERSION

- Incompatible natural resource management

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices: Removal of trees at a young age prevents them from becoming snags or developing cavities. Leaving isolated snags after clear-cut increases their vulnerability to blowdown. Clear-cuts which remove all trees eliminate snags.
- Removal of non-timber flora: Firewood collection reduces the amount of standing dead wood which may provide either snags or cavities.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals

EDUCATION

- Social attitudes: There is a lack of understanding by the public of the value of snags and cavities to wildlife.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using prescribed fire. [Altered fire regime]
- Assess management goals to ensure that they provide for a diversity of communities across the landscape. [Forestry practices]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Develop and implement timber harvest best management practices that address the value of snags and cavities to wildlife. [Forestry practices]
- Develop and implement best management practices to guide issuance of firewood permits which incorporate the value of snags and cavities to wildlife. [Forestry practices, Removal of non-timber flora]

EDUCATION & AWARENESS

- Provide information to the public regarding the value of snags and cavities to wildlife. [Social attitudes]

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

Research and Survey Needs

- Evaluate whether there is a difference in the value to wildlife between natural and artificial snags and cavities.
- Evaluate the prevalence and condition of snags and cavities in the ecoregion.
- Determine the longevity of snags. Does this depend on the tree species or the feature type of the surrounding matrix? Are there other factors that affect the longevity of snags?
- Identify the characteristics of snags and cavities that provide benefits to wildlife and which species may be affected by changes in these characteristics. Is there an optimal number, density, or location of snags and cavities which may be incorporated into forestry prescriptions?

Monitoring

- Track the density and distribution of snags and cavities with attention to individual characteristics such as tree species and height.
- Track the use of snags and cavities by bats, owls, and hawks.