



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 snags or cavities as a landscape feature in the Eastern Upper Peninsula is considered to be in fair, good, or excellent condition over much of the region (~80%). About 20% of the potential snag or cavity habitat is considered to be degraded or very degraded due to snag removal and a lack of mature woodlands.

Associated Natural Communities

N/A – No defined natural communities

Associated Species of Greatest Conservation Need

INSECTS

zigzag darner (*Aeshna sitchensis*)

BIRDS

Sharp-tailed Grouse (*Tympanuchus phasianellus*)

Merlin (*Falco columbarius*)

Red-headed Woodpecker (*Melanerpes erythrocephalus*)

Black-backed Woodpecker (*Picoides arcticus*)

Northern Flicker (*Colaptes auratus*)

Olive-sided Flycatcher (*Contopus cooperi*)

BIRDS cont.

Boreal Chickadee (*Poecile hudsonica*)

MAMMALS

silver-haired bat (*Lasionycteris noctivagans*)

northern bat or northern myotis (*Myotis septentrionalis*)

American marten (*Martes americana*)

northern flying squirrel (*Glaucomys sabrinus*)

southern red-backed vole (*Clethrionomys gapperi*)

deer mouse (*Peromyscus maniculatus gracilis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered fire regime

HABITAT CONVERSION

- Industrial, residential, and recreational development: Poor planning in road construction results in water retention and die-off of trees.
- Incompatible natural resource management: Different agency personnel may value snags differently in preparing for a timber sale, resulting in different retention rates. There is a lack of effort made in identifying snags and cavity trees prior to harvest.

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices: Snags may be viewed as a safety hazard during harvest.
- Removal of non-timber flora: Firewood cutting may pose a threat to standing dead wood.

EDUCATION

- Social attitudes: The public lacks education on the value of snags to wildlife.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using prescribed fire. [Altered fire regime; Social attitudes]
- Work with land managers to develop priorities for retention and creation of snags. [Incompatible natural resource management; Social attitudes]
- Develop and implement forestry best management practices which address the value of snags and cavities to wildlife. [Forestry practices]

EDUCATION & AWARENESS

- Create awareness in the general public of the value of snags and cavities to wildlife. [Social attitudes]

Research and Survey Needs

- Evaluate differences 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?

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: EASTERN UPPER PENINSULA

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.