



## Terrestrial characteristics: Down woody debris

### Description

Down woody debris refers to large woody material lying on the ground. This usually refers to tree trunks, boles, or large limbs lying on the forest floor. Down woody debris tends to be more prevalent in mature forests that do not regularly experience understory fire.

### General Condition of Feature

About 60% of the Western Upper Peninsula contains enough down woody debris for this habitat feature to be considered as being in fair or good condition and about 10% is considered in excellent condition. Most of the remaining 30% is considered degraded.

### Associated Natural Communities

N/A – No defined natural communities

### Associated Species of Greatest Conservation Need

#### INSECTS

- zigzag darner (*Aeshna sitchensis*)
- arrowhead spiketail (*Cordulegaster obliqua*)

#### AMPHIBIANS

- blue-spotted salamander (*Ambystoma laterale*)
- spotted salamander (*Ambystoma maculatum*)
- four-toed salamander (*Hemidactylium scutatum*)
- boreal chorus frog (*Pseudacris triseriata maculata*)
- western chorus frog (*Pseudacris triseriata triseriata*)
- pickrel frog (*Rana palustris*)

#### REPTILES

- blue racer (*Coluber constrictor foxii*)
- northern ringneck snake (*Diadophis punctatus edwardsii*)
- western fox snake (*Elaphe vulpina*)
- eastern hognose snake (*Heterodon platirhinos*)
- smooth green snake (*Liochlorophis vernalis*)

#### REPTILES cont.

- wood turtle (*Glyptemys insculpta*)

#### BIRDS

- Spruce Grouse (*Falcapennis canadensis*)
- American Woodcock (*Scolopax minor*)

#### MAMMALS

- pygmy shrew (*Sorex hoyi*)
- water shrew (*Sorex palustris*)
- lynx (*Lynx canadensis*)
- American marten (*Martes americana*)
- least chipmunk (*Tamias minimus*)
- northern flying squirrel (*Glaucomys sabrinus*)
- woodland jumping mouse (*Napaeozapus insignis*)
- southern red-backed vole (*Clethrionomys gapperi*)
- southern bog lemming (*Synaptomys cooperi*)
- deer mouse (*Peromyscus maniculatus gracilis*)
- snowshoe hare (*Lepus americanus*)

### Associated Threats

#### MODIFICATION OF NATURAL PROCESSES

- Altered fire regime

#### HABITAT CONVERSION

- Incompatible natural resource management: The relatively young forests currently present on the landscape produce less woody debris than late successional forests.

#### CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices: Practices which remove all wood, including downed wood, eliminate woody debris.
- Removal of non-timber flora: Firewood collection eliminates woody debris.

#### EDUCATION

- Lack of scientific knowledge: The value of differing types, distributions and abundance of debris is not well documented.

### Conservation Actions Needed [Threats addressed]

#### LAND, WATER, & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using prescribed fire. [Altered fire regime; Incompatible natural resource management]
- Develop and enforce forestry best management practices which address the needs and values of wildlife. [Forestry practices; Removal of non-timber flora]

### Research and Survey Needs

- Document the historic and current range of variation of down woody debris. This includes variables such as species composition and size.
- Develop a methodology for quantifying down woody debris.
- Identify the characteristics of down woody debris that contribute to its value to wildlife and which species may be affected by changes in these characteristics.

Monitoring

- Track the abundance and distribution and wildlife use of down woody debris across the landscape with attention to individual characteristics such as woody plant species and structural components.