

## **American Water Shrew (Eastern)**

*Sorex palustris albibarbis*

Federal Listing	N/A
State Listing	
Global Rank	
State Rank	S5
Regional Status	High

### **Justification (Reason for Concern in NH)**

Low trapping success in the White Mountains (Yamasaki 1997) seem to indicate that water shrews are less abundant than other shrew species. Little is known about the distribution and abundance of water shrews and is likely connected to its listing.

### **Distribution**

Little is known about the distribution and habitat of this species in New Hampshire. Trapping in the White Mountain National Forests indicates they can be found 100m from streams in mature northern hardwood stands (D.Rudis pers. commun., Yamasaki 1997).

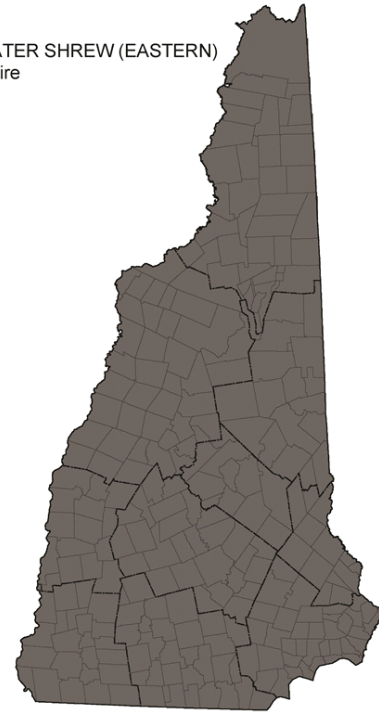
### **Habitat**

The water shrew is found throughout the boreal and montane regions of New England, Labrador, Nova Scotia, Alaska and Canada (Cook et al. 1997, DeGraaf and Yamasaki 2001). Water shrews are most often found near water and wet areas, especially those with grass-sedge marsh or shrub zones along ponds and streams in coniferous forests (Ozoga and Gaertner 1963, Rabe 1981, Timm 1975, Spencer and Pettus 1966, Wrigley et al. 1979). Water shrews are primarily insectivorous, but their diet can include slugs earthworms snails and some fish spp. (Conaway 1952, Conaway and Pfitzer 1952, Sorenson 1962).

**NH Wildlife Action Plan Habitats**

- Northern Swamps

Distribution of  
AMERICAN WATER SHREW (EASTERN)  
in New Hampshire



**Distribution Map**

**Current Species and Habitat Condition in New Hampshire**

There are insufficient data to draw conclusions about the population health or distribution of water shrews.

**Population Management Status**

There are no management efforts for water shrews in New Hampshire.

**Regulatory Protection (for explanations, see Appendix I)**

None

**Quality of Habitat**

Data collected to assess Eastern Brook trout habitat throughout the northeast may provide a good base for assessing water shrew habitat in New Hampshire.

**Habitat Protection Status**

There are no habitat protection efforts for water shrews.

## Appendix A: Mammals

### Habitat Management Status

There are no habitat management efforts for water shrews.

### Threats to this Species or Habitat in NH

*Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a “medium” or “high” score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.*

There are no threats ranked high or medium for this species.

### List of Lower Ranking Threats:

Species impacts from introduction of new predators into aquatic systems that cause changes in species composition alteration (bass)

Habitat degradation from removal of adequate riparian buffers that results in stream warming and bank instability

Habitat degradation from undersized stream crossings resulting in stream instability and sedimentation

Habitat impacts (fragmentation) from timber harvesting that removes an adequate riparian buffer

### Actions to benefit this Species or Habitat in NH

#### Educate public on the implications of introductions

**Primary Threat Addressed:** Species impacts from introduction of new predators into aquatic systems that cause changes in species composition alteration (bass)

**Specific Threat (IUCN Threat Levels):** Invasive & other problematic species, genes & diseases

**Objective:**

**General Strategy:**

**Political Location:**

**Watershed Location:**

#### Work with landowners and towns to help implement new stream crossing guidelines

**Primary Threat Addressed:** Habitat degradation from undersized stream crossings resulting in stream instability and sedimentation

**Specific Threat (IUCN Threat Levels):** Transportation & service corridors

**Objective:**

## Appendix A: Mammals

General Strategy:

Political Location:

Watershed Location:

### Identify and implement stream buffer requirements in NH

**Primary Threat Addressed:** Habitat impacts (fragmentation) from timber harvesting that removes an adequate riparian buffer

**Specific Threat (IUCN Threat Levels):** Biological Resource Use

Objective:

General Strategy:

Political Location:

Watershed Location:

### References, Data Sources and Authors

#### Data Sources

DeGraaf and Yamasaki, 2001

Information on habitat, population distribution, and status was collected from unpublished data, scientific literature, and limited agency data.

#### Data Quality

With the cooperation of the WMNF, Yamasaki conducted a 3-year systematic survey of small mammals between 1995 and 1997. This survey took place in potential habitats across three levels of vegetation management in the White Mountains region. Out of the 108 study sites surveyed across managed, unmanaged, and remote locations in the forest, capture rate for water shrew was 0.2 to 0.4 percent of the samples on the White Mountain National Forest and Maine (0.17 captures per 100 trap nights on White Mountains; Yamasaki 1997).

There is very little data on the condition of the species and its habitats statewide.

#### 2015 Authors:

Jillian Kilborn, NHFG

#### 2005 Authors:

#### Literature

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## ***Appendix A: Mammals***

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