Common Name: American pygmy shrew **SPCN**

Scientific Name: Sorex hoyi
Taxon: Mammals

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G5

New York: S4? Tracked: No

Synopsis:

This tiny shrew is also in contention for the status of one of the world's smallest mammals with adults weighing 2-3 g (Feldhamer et al. 2007, Saunders 1988). In the Eastern U.S. they are distributed from Maine westward through New York, Michigan and Wisconsin south to North Carolina (Hamilton 1943). In North America the pygmy shrew occurs throughout most of the boreal and northern temperate forests, and along a narrow corridor extending southward in the Appalachians into North Carolina (Saunders 1988). Within these regions pygmy shrews inhabit deciduous, coniferous, and mixed forests, marshes, bogs, and disturbed areas. Moist forest floors with accumulated debris provide optimum habitat (Saunders 1988). Also use grassland- herbaceous and shrubland-chaparrel habitats. This shrew appears to prefer grassy openings of boreal forest (Nature Serve 2012). These shrews make tiny burrows beneath stumps, fallen logs and the leaf carpet of the forest (Hamilton 1943). This species is considered secure in Canada but either not ranked or no information for other states adjacent to New York with the exception of "Vermont which considers it imperiled. Nine records exist for Essex County otherwise population trends or extent of occurrence in New York outside of the Adirondacks is little known.

Distribution (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%		Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Unknown	Unknown
26% to 50%	X	Uncommon			
> 50%		Rare	X		

Habitat Discussion:

The pygmy shrew occurs throughout boreal and northern temperate forests in New York, occurring in deciduous, coniferous, and mixed forests, marshes, bogs, and disturbed areas (such as clear cuts) (Saunders 1988). Moist forest floors with an accumulation of debris offer optimum habitat, providing ideal sites for tunnels that form the burrow system.

Primary Habitat Type
Boreal Forested peatland
Mixed Hardwood Swamp
Mixed Northern Hardwoods
Mountain Spruce-Fir Forests
Spruce-Fir Forests and Flats

Distribution:

Hall and Kelson (1959) list 3 locations in New York. Saunders (1988) mentions 9 locations in the Adirondacks. A search of the Buffalo Museum of Science collection and the former St. Bonaventure collections catalog found no specimens of pygmy shrew.



IUCN (2013)

Threats to NY Populations						
Threat Category	Threat	Scope	Severity	Irreversibility		
1. Residential & Commercial Development	Housing & Urban Areas (habitat loss)	R	L	Н		
2. Invasive & Other Problematic Species and Genes	Invasive Non-Native/Alien Species (hemlock woolly adelgid)	R	L	Н		
3. Climate Change & Severe Weather	Habitat shifting	Р	L	V		
4. Pollution	Industrial & Military Effluents (Heavy metals)	P	L	Н		

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Common Name: Least weasel **SPCN**

Scientific Name: Mustela nivalis

Mammals Taxon:

Federal Status: Not Listed **Natural Heritage Program Rank:**

New York Status: Not Listed Global: G5 New York: **S**1

Tracked: Yes

Synopsis:

Confusion has existed for a long time regarding the taxonomic status of this species and its subspecies (Sheffield and King 1994, Wilson and Reeder 2005). The least weasel (*Mustela nivalis*) was originally described as a separate species, Mustela rixosa, but it is now recognized as conspecific with the Eurasian "Mauswiesel," Mustela nivalis (Whitaker and Hamilton 1998).

The least weasel has a large range, occurring to the south, west and north of New York, although it is sporadically distributed or rarely encountered across much of its range (Svendsen1982). The species occurs throughout Canada and south into the east-central United States, from extreme western New York and western Pennsylvania southward into the mountains of North Carolina and Tennessee and westward through northeastern Kentucky, Ohio, northern Indiana and Illinois, and all of Michigan and Wisconsin (Whitaker and Hamilton 1998). There were previously only five records of least weasel in two locations in New York, all occurring prior to 1981 in Chautauqua County. On 28 July 2011, a road-killed least weasel was found on route 77 in Bennington, Wyoming County, which prompted a change in status in New York from SH to S1. Because of its small size, nocturnal habits, and secretive nature, the least weasel is perceived as rare but may simply be underdetected (Merritt 1987).

Distribution (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%		Abundant			
6% to 10%	X	Common			
11% to 25%		Fairly common		Unknown	Unknown
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

Least weasel habitat varies geographically and includes open forests, farmlands and cultivated areas, grassy fields and meadows, riparian woodlands, hedgerows, alpine meadows, scrub, steppe and semideserts, prairies, coastal dunes, and sometimes rural residential areas. Snow cover is not an obstacle, but the least weasel generally avoids deep dense forest and sandy desert (NatureServe 2012). Although many sources cite least weasels as habitat generalists (Kurta 1998, Merritt 1987), others state that the species tends to favor mixed grasslands, hedgerows, and meadows and marshes where prey is abundant (Merritt 1987, Wilson and Ruff 1999, Whitaker and Hamilton 1998). Weasels are seldom found far from water and in Central New York they are common in swampy lowlands and around marsh borders (DNR 1984).

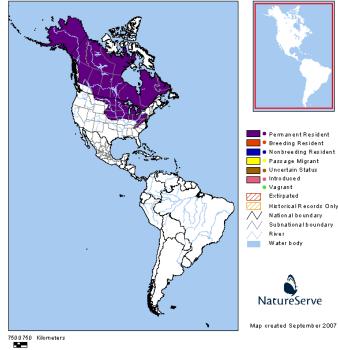
Primary Habitat Type		
Oak Forest		
Old Field/Managed Grasslands		

Pasture/Hay	
Powerline	
Wet Meadow/Shrub Marsh	

Distribution:

The least weasel has only been reported on 5 occasions in New York State. Four were reported taken by trappers in the Pennsylvania border regions of Chautauqua County in the late 1940s, of which one was examined and its identification was confirmed (Cook 1951). Another was collected within a mile of Fredonia, Chautauqua County in 1981; the specimen is in the collection of the New York State Museum (Svendsen1982).

On 28 July 2011, a road-killed least weasel was found on route 77 in Bennington, Wyoming County, on the shoulder of the west side of the road, near a small drainage way under the road near a tributary to Right Branch Cayuga Creek. The surrounding landscape is composed of agriculture with small remnant woodlots and riparian corridors. The weasel was found near one of these small riparian corridors (Somerville 2011).



NatureServe (2012)

	Threats to NY Populations						
Threat Category		Threat	Scope	Severity	Irreversibility		
1.	Residential & Commercial Development	Housing & Urban Areas (loss of habitat)	N	L	Н		
2.	Agriculture & Aquaculture	Annual & Perennial Non-timber Crops (shift to corn, soybeans from hayfields and pastures)	W	L	М		
3.	Pollution	Agriculture & Forestry Effluents (pesticides, herbicides, rodenticide)	W	L	М		
4.	Energy Production & Mining	Oil & Gas Drilling (Hydraulic fracturing)	P	L	Н		
5.	Transportation & Service Corridors	Roads & Railroads (Road mortality)	W	L	Н		
6.	Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (House cats, feral cats)	Р	М	Н		
7.	Biological Resource Use	Hunting & Collecting Terrestrial Animals (Trapping)	P	L	L		

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Common Name: North American least shrew SPCN

Scientific Name: Cryptotis parva

Taxon: Mammals

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G5

New York: SH Tracked: Yes

Synopsis:

Shrews are classified as insectivores, not rodents, and are among the smallest living mammals. The North American least shrew (*Cryptotis parva*) is the smallest of the North American shrews. It occurs from southern Wisconsin, southern Michigan, and central New York southward throughout the eastern United States. Across the Mississippi, it occurs to southern South Dakota, northeastern Nebraska, eastern Texas, and south through much of Central America (Whitaker and Hamilton 1998). At least in the northern parts of its range, it inhabits grassy, weedy, and brushy fields (Hamilton 1934, Komarek and Komarek 1938, Davis and Joeris 1945, Howell 1954, Layne 1958, Lindsay 1960, Gottschang 1965, Mumford 1969, Paradiso 1969, Choate 1970, Whitaker 1974). Least shrew has not been documented in New York since the 1930s and only a handful of records exist prior to that. The nearest population is in Connecticut where the species is listed as endangered.

Distribution (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%		Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Moderate Decline	Moderate Decline
26% to 50%	X	Uncommon			
> 50%		Rare	X		

Habitat Discussion:

The least shrew is a grassland species restricted to habitats that are free from grazing and intensive agricultural practices (Butchkoski 2010). Preferred habitats include meadows, pastures, and old fields (PNHP 2013). Least shrews create runways in the grass and burrows that are approximately 13 mm high and 18 mm wide (Whitaker and Hamilton 1998). The least shrew has been called the "bee shrew" or "bee mole" because it has been known to build its nest in beehives and feed upon the bees and their larvae (Whitaker and Hamilton 1998, Butchkoski 2010).

Primary Habitat Type		
Old Field/Managed Grasslands		
Powerline		

Distribution:

The least shrew is so rarely encountered in the state (only about a dozen specimens exist) that it is impossible to identify a population trend. Earliest records for New York include a specimen from West Point, Orange County in 1900 and North Rose, Wayne County in October 1913. Records also occur from

Staten Island, Tompkins County and Long Island, though none have been reported in the state since the 1930s (NYSDEC 2005). There are no current records of least shrew in New York.



IUCN (2013)

	Threats to NY Populations						
Thr	reat Category	Threat	Scope	Severity	Irreversibility		
1.	Residential & Commercial Development	Housing & Urban Areas (loss of habitat)	U	U	U		
2.	Residential & Commercial Development	Commercial & Industrial Areas (loss of habitat)	U	U	U		
3.	Agriculture & Aquaculture	Annual & Perennial Non-timber Crops (shift to corn, soybeans from hayfields and pastures)	U	U	U		
4.	Pollution	Agriculture & Forestry Effluents (pesticides, herbicides)	U	U	U		
5.	Natural System Modifications	Other Ecosystem Modifications (Natural succession)	U	U	U		

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