# **Neovison vison**

This species is not complete.

December 17, 2013 by Amber Lankford

Author(s) Expertise: 1
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Sensitivity Factor	Sensitivity 1 - 7 (one being least sensitive, seven being most sensitive)	Confidence 1 - 5 (one being least sensitive, five being most sensitive)
Generalist/Specialist	2 Medium-Low	2 Poor
Physiology	4 Medium-High	2 Poor
Life History	4 Medium-High	3 Fair
Habitat	7 Extremely High	2 Poor
Dispersal Ability	2 Medium-Low	2 Poor
Disturbance Regimes	2 Medium-Low	2 Poor
Ecology	3 Medium	2 Poor
Non-Climatic	5 High	2 Poor
Other (weight)		

Sensitivity Score: 53 Medium

# **Sensitivity Score**

100 \* [(0.5 \*(Dispersal Distance + Dispersal Barriers) + Disturbance Regimes + (0.5 \* Generalist/Specialist) + Physiology + (0.5 \* Life History) + Sensitive Habitats + Ecology + Non-Climatic Stressors + (Other \* Weight) / 49 + (7 \* Weight)]

Note: if Sensitive Habitats are identified, this factor automatically gets a value of seven, otherwise it remains zero.

Confidence Score: 1 Very Poor

### **Confidence Score**

The Confidence Score is an average of the Confidence column above.

Overall User Ranking: 3 Medium
Author Expertise: 1 (low)
Common Name: American mink
Is this Species completed: No
Taxonomy This is a description of the whole group
Scientific Name: Neovison vison
Geography: Idaho
Realm: Terrestrial
Kingdom: Animal
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae
Genus: Neovison
<b>Global Rank:</b> G5 (1996)
Rounded Global Rank: G5 - Secure
IUCN: Least Concern ver 3.1 - 2008

<sup>-</sup> Generalist/Specialist

Broadly, where does this species fall on the spectrum of generalist to specialist?:

2

Confidence in your assessment of the degree to which the species is a generalist or specialist:

2 Poor

Please further describe the relationships that make the species more of a specialist:

Forages primarily in proximity to water

### Comments:

Very adaptable, consumes a wide variety of prey.

### **Citations:**

Burgess, S.A., and J.R. Blder. 1980. Effects of stream habitat improvements on invertebrates, trout populations, and mink activity. Journal of Wildlife Management 44:871-880.

### Physiology

### Species' physiological sensitivity:

4

Confidence in how physiologically sensitive the species is to climate change:

2 Poor

Please specify whether or not this species is physiologically sensitive to one or more of the following:

temperature

### Please describe any specific physiological sensitivities:

Long tubular body shape (higher surface area to volume ratio) makes this species more susceptible to extreme temperatures.

### Citations:

Lariviere, S. 2003. Mink. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd Ed. Editors: Feldhamer, G.A, B.C. Thompson, and J.A. Chapman. The John Hopkins University Press, Baltimore, Maryland, USA.

### Life History

### Species' réproductive strategy:

4

Confidence in your assessment of the species' reproductive strategy:

3 Fair

### Is the species polycyclic, iteroparous, or semelparous?:

Iteroparous (reproduces in successive cycles--characteristic of K-strategists)

### Average length of time to reproductive maturity:

1 year

How many surviving young can an individual produce during a single reproductive event under optimal conditions?:

4

How many reproductive events can an individual undergo in a single year under optimal conditions?:

1

#### Citations:

Lariviere, S. 2003. Mink. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd Ed. Editors: Feldhamer, G.A, B.C. Thompson, and J.A. Chapman. The John Hopkins University Press, Baltimore, Maryland, USA.

### Sensitive Habitats

### Depends on the following sensitive habitat types:

Coastal Lowlands/Marshes/Estuaries/Beaches

Wetlands/Vernal Pools

Seeps/Springs

## Confidence in whether the species depends on the listed sensitive habitat types:

2 Poor

### Comments:

Strongly associated with availability to water and associated aquatic prey. Found along streams and rivers as well as large wetlands and open water with irregular shorelines.

#### Citations:

Lariviere, S. 2003. Mink. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd Ed. Editors: Feldhamer, G.A, B.C. Thompson, and J.A. Chapman. The John Hopkins University Press, Baltimore, Maryland, USA.

#### Dispersal Ability

### Maximum annual dispersal distance:

25-50km

### **Confidence in maximum annual dispersal distance:**

3 Fair

### **Confidence in barriers to dispersal exists:**

1 Very Poor

### Please select the types of barriers relevant to dispersal:

Road (Highway)

Road (Arterial)

#### Citations:

Northcott et al. 1974. Dispersal of mink in insular Newfoundland. Journal of Mammalogy 55:243-248. Lariviere, S. 2003. Mink. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd Ed. Editors: Feldhamer, G.A, B.C. Thompson, and J.A. Chapman. The John Hopkins University Press, Baltimore, Maryland, USA.

Disturbance Regimes

How sensitive is this species to one or more disturbance regimes:

2 slightly sensitive

Confidence in how sensitive is this species on one or more disturbance regimes:

2 Poor

Please check all disturbance regimes upon which the species is sensitive:

Flooding

Drought

Ecological Relationships

Please specify which of the following (if any) are sensitive to climate change for this species:

habitat

Confidence in how sensitive the species is to other effects of climate change on its ecology:

2 Poor

Which types of climate and climate-driven changes in the environment affect these aspects of the species' ecology?:

precipitation

How sensitive is this species? ecological relationships to the effects of climate change?:

3

Interacting non-climatic stressors

To what degree do other, non-climate-related threats, to the species make it more sensitive to climate change?:

5

Confidence in the degree to which non-climate-related threats affect the species' sensitivity to climate change:

2 Poor

Please check all of the stressors that make the species more sensitive to climate change:

direct human conflict (including harvesting) pollution

#### **Comments:**

Species is very sensitive to pollution. As top predators they accumulate toxins and heavy metals. They have a low tolerance for mercury intoxication. Presence of other heavy metals has led to parasitism, low body mass, low population densities and morphological abnormalities. Due to their sensitivity, they are sometimes used as bio-indicators of environmental toxicity levels

### Citations:

Lariviere, S. 2003. Mink. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd Ed. Editors: Feldhamer, G.A, B.C. Thompson, and J.A. Chapman. The John Hopkins University Press, Baltimore, Maryland, USA.

### Overall User Ranking

In your opinion, how would you rank the overall sensitivity of this species to climate change?:

3

Confidence in your overall assessment of the sensitivity of this species to climate change:

1 Very Poor

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Source URL (retrieved on 2018-10-16 07:03): http://climatechangesensitivity.org/species/neovison-vison

#### Links:

[1] http://climatechangesensitivity.org/printpdf/895