

Alces alces

This species is not complete.

January 10, 2014 by Amber Lankford

Author(s) Expertise: 3

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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		
Physiology	4 Medium-High	3 Fair
Life History	6 High	3 Fair
Habitat	7 Extremely High	3 Fair
Dispersal Ability	1 Low	1 Very Poor
Disturbance Regimes		
Ecology		
Non-Climatic		
Other (weight)		

Sensitivity Score : 32 Medium

Sensitivity Score

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

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:

Author Expertise:

3

Common Name:

Moose

Is this Species completed:

No

<p>Taxonomy This is a description of the whole group</p> <p>Scientific Name: Alces alces</p> <p>Geography: Idaho</p> <p>Realm: Terrestrial</p> <p>Kingdom: Animal</p> <p>Phylum: Chordata</p> <p>Class: Mammalia</p> <p>Order: Artiodactyla</p> <p>Family: Cervidae</p> <p>Genus: Alces</p> <p>Global Rank: G5 (2006)</p> <p>Rounded Global Rank: G5 - Secure</p> <p>IUCN: Least Concern ver. 3.1 - 2008</p>
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— Physiology —

Species' physiological sensitivity:

4

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

3 Fair

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

temperature

Please describe any specific physiological sensitivities:

Moose can become heat stressed when temperatures rise above -5C in winter or above 14C in summer. These may limit the southern and to some extent the elevational extent of moose.

Citations:

Bowyer, R.T., V. Van Ballenberghe, and J.G. Kie. 2002. Moose: *Alces alces*. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd edition. Editors: Feldhammer, G.A., B.C. Thompson, and J.A. Chapman. Johns Hopkins University Press, Baltimore, Maryland.

Life History

Species' reproductive strategy:

6

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:

females 2 years

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

1-2

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

1

Comments:

Twins occur when females are in very good physical condition. Twinning rate can be used to assess the general health of the overall population. Males mature at 1 year, but may not have the opportunity to mate until they are 8 years old.

Citations:

Bowyer, R.T., V. Van Ballenberghe, and J.G. Kie. 2002. Moose: *Alces alces*. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd edition. Editors:

Feldhammer, G.A., B.C. Thompson, and J.A. Chapman. Johns Hopkins University Press, Baltimore, Maryland.

Sensitive Habitats

Depends on the following sensitive habitat types:

Seasonal Streams

Wetlands/Vernal Pools

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

3 Fair

Level of philopatry:

high

Comments:

Moose are found in areas that provide access to aquatic vegetation and particularly willow (Salix)

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Bowyer, R.T., V. Van Ballenberghe, and J.G. Kie. 2002. Moose: *Alces alces*. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd edition. Editors: Feldhammer, G.A., B.C. Thompson, and J.A. Chapman. Johns Hopkins University Press, Baltimore, Maryland.

Dispersal Ability

Maximum annual dispersal distance:

>100 km

Confidence in maximum annual dispersal distance:

2 Poor

Within the context of dispersal distance above, do barriers to dispersal exist?:

2

Confidence in barriers to dispersal exists:

1 Very Poor

Please select the types of barriers relevant to dispersal:

Road (Highway)

Arid lands

Comments:

Moose are documented to have dispersed over 100km, but average dispersal distances vary greatly by region and population.

Citations:

Bowyer, R.T., V. Van Ballenberghe, and J.G. Kie. 2002. Moose: *Alces alces*. In: Wild Mammals of North America: Biology, Management, and Conservation. 2nd edition. Editors: Feldhammer, G.A., B.C. Thompson, and J.A. Chapman. Johns Hopkins University Press,

Baltimore, Maryland.

Disturbance Regimes

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

Fire

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Interacting non-climatic stressors

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

habitat loss or degradation

direct human conflict (including harvesting)

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