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Ursus americanus

This species is not complete.
October 19, 2009 by Michael Case and Amber Lankford
Author(s) Expertise:
Print species as a PDF [1]

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	1 Low	3 Fair
Physiology	1 Low	1 Very Poor
Life History	6 High	4 Good
Habitat		3 Fair
Dispersal Ability	1 Low	2 Poor
Disturbance Regimes	2 Medium-Low	1 Very Poor
Ecology	1 Low	1 Very Poor
Non-Climatic	1 Low	2 Poor
Other (weight)		

Sensitivity Score : 20 Low

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: 1 Low

Common Name:
American black bear

Is this Species completed:
No

Taxonomy

This is a description of the whole group

Scientific Name:
Ursus americanus

Geography:
Idaho

Realm:
Terrestrial

Kingdom:
Animal

Phylum:
Chordata

Class:
Mammalia

Order:
Carnivora

Family:
Ursidae

Genus:
Ursus

Global Rank:
G5 (2003)

Rounded Global Rank:
G5 - Secure

IUCN:
Least Concern ver 3.1 - 2008

Species Element Code:
AMAJB01010

Generalist/Specialist

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

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

Comments:
Generalist omnivore. Found across a wide variety of habitats.

Citations:
Garshelis, D.L., Crider, D. & van Manen, F. (IUCN SSC Bear Specialist Group) 2008. Ursus americanus. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 15 January 2014.

Physiology

Species' physiological sensitivity:
1 low sensitivity

Confidence in how physiologically sensitive the species is to climate change:
1 Very 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:
Activity decreases below freezing or above 25C.

Citations:
Pelton, M.R. 2003. Black bear: Ursus americanus. In Wild Mammals of North America: Biology, Management, and Conservation, 2nd ed. Editors: Feldhammer, G.A. B.C. Thompson, and J.A. Clapman. Johns Hopkins University Press, Baltimore, Maryland.

Life History

Species' reproductive strategy:
6

Confidence in your assessment of the species' reprodcutive strategy:
4 Good

Is the species polycyclic, iteroparous, or semelparous?:
Iteroparous (reproduces in successive cycles--characteristic of K-strategists)

Average length of time to reproductive maturity:
females: 2-3 years ,

How many surviving young can an individual produce during a single reproductive event under optimal conditions?:
2-4

How many reproductive events can an individual undergo in a single year under optimal conditions?:
1

Comments:
Females breed every other year on average

Citations:
Pelton, M.R. 2003. Black bear: Ursus americanus. In Wild Mammals of North America: Biology, Management, and Conservation, 2nd ed. Editors: Feldhammer, G.A. B.C. Thompson, and J.A. Clapman. Johns Hopkins University Press, Baltimore, Maryland.

Sensitive Habitats

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

Level of philopatry:
medium

Comments:
Within Idaho, the species occurs primarily in forested areas

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:
2 Poor

Please select the types of barriers relevant to dispersal:
Road (Highway)
Arid lands

Comments:

Females generally have shorter dispersal distance than males. Gene flow in black bear is closely associated with high forest cover and mid-elevations. Gene flow appears to be inhibited to some degree by non-forest land cover types. Roads, while not absolute barriers, may affect the effectiveness of dispersal particularly at high density because of risk of collision.

Citations:
Chepko-Sade, B.D., and Z.T. Halpin. 1987. Mammalian Dispersal Patterns: Effects of Social Structure on Population Genetics. The University of Chicago Press, Chicago, Illinois. Cushman, S.A., K.S. McKelvey, J. Hayden, and M.K. Schwartz. 2006. Gene flow in complex landscapes: Testing multiple hypotheses with casual modeling. The American Naturalist. 168:486-499. Garshelis, D.L., Crider, D. & van Manen, F. (IUCN SSC Bear Specialist Group) 2008. Ursus americanus. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 15 January 2014.

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:
1 Very Poor

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

Ecological Relationships

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

How sensitive is this species? ecological relationships to the effects of climate change?:
1 (not sensitive)

Interacting non-climatic stressors

To what degree do other, non-climate-related threats, to the species make it more sensitive to climate change?:
1 not at all

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:
habitat loss or degradation

direct human conflict (including harvesting)

Comments:
Conflict with humans where natural food sources are limited, or where bears have become habituated to getting food from human sources can be harmful.

Overall User Ranking

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

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