

Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form Common porcupine (*Erethizon dorsatum*)

Oregon Biodiversity Information Center

SPECIES ASSESSED

Scientific Name *Erethizon dorsatum*

ELCODE AMAFJ01010

Common Name Common porcupine

Element ID 7074

Species Concept Reference Citation

Wilson, D. E., and D. M. Reeder (editors). 1993. Mammal species of the world: a taxonomic and geographic reference. Second edition. Smithsonian Institution Press, Washington, DC. xviii + 1206 pp. Available online at: <http://www.nmnh.si.edu/msw/>.

CONSERVATION STATUS RANK

Assigned Rank **S3S4**

Rank Assignment Author E. Gaines

Rank Review Date 5/10/2019

Rank Factors Author E. Gaines

Rank Factors Date 02/07/2019

Calculated Rank S3S4

Rank Change Date 05/10/2019

Rank Methodology Used Rank calculator v.3.1x - 2011-2015 rank factors

Assigned Rank Reasons

Porcupines appear to be shifting away from forested areas, into drier habitats in OR. Over 2 million camera trap-nights (multi-species surveys) in OR and WA forests resulted in only 5 detections. Expert opinion (C. Appel, T. Bean, E. Beever, S. Matthews) is that they have declined in expected forest habitat, but to an unknown degree. Low reproductive rate makes recovering from declines more difficult. Species of Special Concern in CA.

RANGE/DISTRIBUTION

Range Extent

Rating 200,000-2,500,000 square km (about 80,000-1,000,000 square miles)

Comments Occurs statewide, though perhaps not in northern Coast Range.

Area of Occupancy

Grid Cell Size

Rating (as Number of 4 km² Grid Cells) G = 501-2,500

Comments Widely distributed, and present in much of state.

ABUNDANCE AND CONDITION

Number of Occurrences

Rating Unknown

Comments

Occurrences are not maintained for this species.

Population Size

Rating Unknown

Comments

There are more than 20 areas with known, current populations. Defining range extent for these populations is difficult.

Good Viability/Ecological Integrity

Number of Occurrences with Good Viability/Ecological Integrity

Rating

THREATS

Calculated Overall Threat Impact**Assigned Overall Threat Impact** BC = High - medium**Overall Threat Impact Adjustment Reasons**

Much is unknown, but threats from forest management, shifting habitats, forest predator reintroductions, road kill. Because of low reproductive rate they may be unable to recover or recolonize areas after a significant decline.

TRENDS

Short-Term Trend**Rating** F = Decline of 10-30%**Comments**

Consensus is that there has been some decline, but difficult to quantify.

Long-Term Trend**Rating** U = Unknown

ADDITIONAL SPECIES INFORMATION

Oregon Habitat Comments

Very wide range of habitats, ranges up to timberline, in arid deserts, coastal forests and marshes.

RANKING REFERENCES

<u>Short Citation</u>	<u>Author</u>	<u>Year</u>	<u>Full Citation</u>
Appel		2019	Appel, Cara. 2019. Personal communication to Eleanor Gaines re: American Porcupine. Research Associate, Humboldt State University.
Appel et al.		2017	Appel, C. L. , W. J. Zielinski, F. V. Schlexer, R. Callas, and W. T. Bean. 2017. Distribution of the North American Porcupine (<i>Erethizon dorsatum</i>) in Northern California. <i>Western Wildlife</i> . 4:17-28.
Appel, Belamaric, and Bean		2018	Appel, C.L., P. N.Belamaric, and W. T. Bean. 2018. Seasonal resource acquisition strategies of a facultative specialist herbivore a the edge of its range. <i>Journal of Mammalogy</i> 99:1159-1173.
Bean		2019	Bean, Tim. 2019. Personal communication to Eleanor Gaines re: American Porcupine. Assistant Professor, Humboldt State University.
Beever		2019	Beever, Erik. 2019. Personal communication to Eleanor Gaines re: American Porcupine. Research Ecologist, USGS Northern Rocky Mountain Science Center.
Matthews		2019	Matthews, Sean. 2019. Personal communication to Eleanor Gaines re: American Porcupine. Forest carnivore researcher, Institute for Natural Resources, Oregon State University.

RESOURCES

Oregon Biodiversity Information Center, Institute for Natural Resources
Portland State University, Mail Stop: INR, PO Box 751, Portland, OR 97207-0751 Phone: 503-725-9950

Additional ORBIC species ranking forms posted at
<https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Information on Natural Heritage ranking methodology is available at
<http://www.natureserve.org/biodiversity-science/publications/natureserve-conservation-status-assessments-methodology-assigning>

The Conservation Rank Calculator is developed and maintained by NatureServe and is available from
<http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

ASSESSMENT CITATION

Oregon Biodiversity Information Center. 2019. Oregon state rank assessment for Common porcupine (*Erethizon dorsatum*). Institute for Natural Resources, Portland State University, Portland, OR.