

BLACK HILLS LAND SNAILS AT RISK

“Land snails are a particularly practical group to assess the health of an ecosystem yet are a group that is most likely to be overlooked when considering management...” U.S. Fish and Wildlife Service

LAND SNAILS IN THE BLACK HILLS

The Black Hills of South Dakota and Wyoming support 35 species of land snails that vary in size, shape, and color. Some of these land snail species exist nowhere else on Earth, and others are considered very rare. They exist in an array of different habitats - from spruce forest to birch stands, and from dense ponderosa pine to meadows.

Land snails are an integral part of the web of life in the Black Hills. They consume organic material on the forest floor and recycle plant and animal waste. Without snails and other invertebrates such as worms, flies, and beetles, plant and animal waste would literally choke the Black Hills. Amphibians, reptiles, birds, and smaller mammals also feed on land snails, forming an important link in the food chain.

“CANARIES IN THE COAL MINE”

Land snails are exceptional indicators of forest health. Analogous to the “canary in the coal mine” concept, where miners would use canaries to monitor air quality, the health of land snail populations provide a window into the overall health of the Black Hills environment.

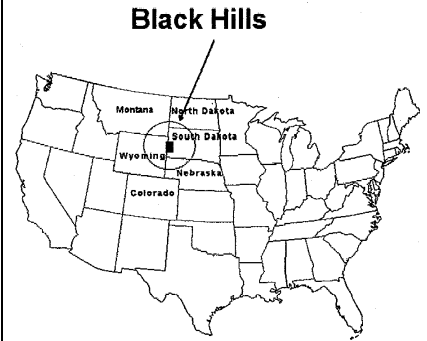
Land snails have specialized habitat needs, move extremely slow, and are more vulnerable to environmental changes, such as changes in temperature, water or soil chemistry, and weather. Thus, snails are very sensitive to habitat change and respond quickly when their habitats are destroyed or degraded.

An understanding of the health of land snail populations can aid in assessing the effectiveness of ecosystem restoration projects, assessing the status and health of other native plants and animals, and measuring the effects of land management activities. Essentially, land snails can help tell us what’s right and what’s wrong for the forest.

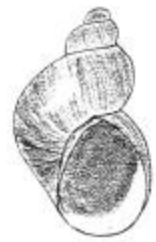
THE NEED FOR STRONG PROTECTION

Many land snails in the Black Hills are at risk and without immediate help, might go extinct. Because protecting land snails ultimately protects forest health, it is crucial that they receive the strongest protection possible to ensure the long-term health of the Black Hills and to prevent their extinction.

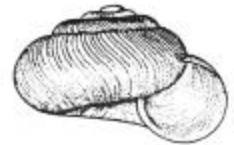
Unfortunately, the importance of land snails in the Black Hills has long been overlooked. Activities like grazing, logging, road building, and mining have degraded much of the Black Hills and in most cases destroyed land snails and their habitat. Some snails have been pushed to extinction, while others, like the Cockerell’s striate disk and Black Hills mountainsnail (all one word) are following. As a result, the overall health of the Black Hills has greatly declined in the past century. It is common sense to protect the canary in the coal mine to ensure the health of the Black Hills and our environment.



RARE LAND SNAILS IN THE BLACK HILLS



frigid ambersnail
(*Catinella gelida*)



Cockerell’s striate disk
(*Discus shimeki*)



Black Hills mountainsnail
(*Oreohelix cooperi*)

Illustrations from “Land Snail Survey of the Black Hills National Forest, South Dakota and Wyoming, Summary Report, 1991-2000,” by T.J. Frest and E.J. Johannes.



Biodiversity Conservation Alliance
PO Box 1512
Laramie, WY 82073
(307) 742-7978
www.voiceforthewild.org



The Xerces Society
4828 NE Hawthorne
Portland, OR 97215
(503) 534-2706
www.xerces.org