

# Wildlife at Risk

## Pygmy Rabbit

Washington Department of Fish and Wildlife

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Pygmy rabbits are found in the Columbia Basin (Washington) and Columbia Plateau and Great Basin (Oregon, Idaho, Montana, Wyoming, Nevada) of the United States. They are the only rabbits in the United States that dig their own burrows. They use deep soil habitat for burrowing, and, in Washington, have been found in deep loamy soils. They are also the smallest rabbits by weight recorded in published literature, and are dependent upon sagebrush for winter food.



*Pygmy rabbits recently known from one location in Douglas County.*

The pygmy rabbit was state listed as a threatened species in Washington in 1990 because of declines in population size and distribution due to habitat loss. It was reclassified to endangered status in 1993. In March 2003, the Columbia Basin pygmy rabbit was federally listed as an endangered species.



*Pygmy rabbit (Brachylagus idahoensis) - Photo by John Musser*

Historically, pygmy rabbits occurred in native shrub-steppe habitat in five Washington counties. Six populations were known as recently as 1997. Surveys in 2004 found no rabbits at historic sites. It is possible that future surveys may find additional rabbits in the wild.



*A pygmy rabbit looking out of a burrow.  
Photo by Keith Lazelle*

Causes of the sudden declines in the Columbia Basin Pygmy Rabbit population are largely unknown. Two of the populations were affected by fire. Other potential factors that may be responsible for the declines include effects of small population size (e.g. inbreeding), habitat degradation, disease, and predation.

Genetic work on pygmy rabbits found significant differences between rabbits from the Columbia Basin and neighboring states. It also found that loss of genetic diversity has occurred with the Columbia Basin pygmy rabbits since the mid-1900s.

A captive breeding program was initiated by the Washington Department of Fish and Wildlife and the U.S. Fish and Wildlife Service in 2001. Goals of the program are to maintain the genetic diversity of Columbia Basin pygmy rabbits, and to provide animals for release and recovery in the state. The captive breeding program is a cooperative project involving partnerships with Washington State University, the Oregon Zoo, and Northwest Trek Wildlife Park where captive breeding occurs.

Pygmy rabbits from both the Columbia Basin and Idaho are being raised in captivity. The Idaho pygmy rabbits were used to develop the

husbandry techniques for captive breeding pygmy rabbits, for research purposes, and to compare breeding performance with the Columbia Basin pygmy rabbits.

Captive breeding began with 18 Columbia Basin animals. Columbia Basin pygmy rabbits have had reduced reproductive performance in captivity when compared with Idaho pygmy rabbits. Attempts to increase numbers of Columbia Basin pygmy rabbits in captivity have failed. There are currently only 8 pygmy rabbits of 100% Columbia Basin genetics remaining in captivity.



*A pygmy rabbit exits an artificial burrow at the Oregon Zoo*

Crossing between Columbia Basin pygmy rabbits and Idaho pygmy rabbits has successfully increased genetic diversity and reproduction. Current captive breeding goals are to produce animals that have

at least  $\frac{3}{4}$  of their genetic makeup from the Columbia Basin for reintroduction efforts. As of December 2005, 81 rabbits remain in captivity, 9 of which are 100% Columbia Basin and 72 intercross Columbia Basin/Idaho pygmy rabbits.

Between 2002-2004, 42 Idaho pygmy rabbits were experimentally released at a site in Idaho. Rabbits were released in several groups at different times over two years. The project successfully documented survival and reproduction of Idaho pygmy rabbits following their release. Research is also being conducted on genetics, diet and behavior of captive rabbits, and disease issues.



*Native sagebrush habitat*

The Department of Fish and Wildlife is continuing to survey public lands and private lands (under landowner agreements) for pygmy rabbits. Pygmy rabbit populations are surveyed and monitored by looking for evidence of activity at burrows and through visual observations. Given the poor reproductive performance of Columbia Basin rabbits brought in from the last known population, capturing additional animals from the wild for captive breeding would provide a great contribution to the ongoing recovery efforts.



*Young pygmy rabbits born in captivity.  
Photo by Tara Magee*

The Columbia Basin Pygmy Rabbit Recovery Team is currently developing a federal recovery plan. The U.S. Fish and Wildlife Service is currently developing a programmatic safe harbor agreement to provide regulatory security for private landowners with reintroductions. The U. S. Fish and Wildlife Service oversees all aspects of conservation and recovery of pygmy rabbits in Washington.

For more information see our website [www.wdfw.wa.gov](http://www.wdfw.wa.gov) (click on Wildlife Science, then Endangered Species), or contact:

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