

Date: May 11, 2011

FOREST SERVICE CONSIDERING RESTRICTIONS FOR NORTHERN REGION CAVES

MISSOULA, Mont. – Due to the westward spread of white-nose syndrome among bats, Regional Forester Leslie Weldon is considering potential restrictions for caves and abandoned mines on National Forests and National Grasslands in the Northern Region of the U.S. Forest Service. The Northern Region encompasses North Dakota, Montana, north Idaho, and northwest South Dakota.

White-nose syndrome (WNS) is a fungal disease that has killed more than one million bats in the New England, Mid-Atlantic, and Southeastern states as well as eastern Canada. It was first detected in 2007 in New York State and has spread to 15 eastern states and three eastern Canadian provinces as of April 2011.

"Our biologists in the region have been following the research as well as the continued spread of WNS," said Weldon. "While access to most caves is effectively closed off by the snow, we've been discussing the potential for temporary closures or access restrictions with caving groups and partners."

Weldon says the Forest Service does not take the prospect of restricting public access lightly, but considering the devastating economic and ecological impacts WNS could bring to the region, a reasonable approach to this problem is necessary.

Public input will be considered before making a decision. Comments may be sent to the regional forester via email at usfs_r1_regional_forester@fs.fed.us, by mail to 200 E. Broadway, Missoula, MT 59807, or by fax to (406) 329-3411. Comments should be sent by May 28, 2011, so they may be considered.

In September 2010, the U.S. Fish and Wildlife Service's National Wildlife Refuge System closed their caves and abandoned mines and implemented research and monitoring protocols in a national effort to slow the spread of white-nose syndrome (WNS) in bats.

The closest suspected case to Forest Service caves in the Northern Region is less than a thousand miles away. Confirmed cases are just outside that range, with new cases announced recently of WNS spreading into Ohio, Indiana and Kentucky. Bats play a valuable role in pest control and can eat between 50 to 100 percent of their body weight of insects every night.

Chris Servheen, regional white-nose syndrome coordinator for the U.S. Fish and Wildlife Service, says that minimizing cave entries, not using caving equipment that has been used in states and provinces

where the disease has been detected, and decontaminating all equipment before entering a new cave are all important measures to help protect against the spread of the disease.

"Spores of the white nose fungus have been found on the clothing and gear of people who have been in infected caves, so the possibility of humans moving these spores across the environment and into new cave is possible," said Servheen.

That evidence combined with the fact that WNS has somehow made its way to North America from Europe brings significant concern to land managers.

"Because the potential exists to inadvertently transmit this fungus from cave to cave, I don't believe we can approach this issue with a wait-and-see attitude," said Weldon. "Once one cave in the region is affected, the likelihood increases for a more rapid spread among the bat population."

If some sort of closure order were to go into effect, Weldon says the region could institute a permit-based system for entry into Forest Service caves. The agency would continue to work with partners in order to carefully collect data on bats and cave conditions to inform future decisions on bat and cave conservation. Clean gear requirements and decontamination procedures would need to be followed for all cave entries.

"This is an issue that will take the efforts of all state, federal and tribal land management agencies working together with partners, researchers and those in the recreational caving community," said Weldon. "With everyone's assistance we hope to slow the spread of this disease."

Background

In the April 1, 2011, issue of the journal, "Science," researchers estimate that of the one million bats already killed by WNS, there are between 660 and 1320 metric tons of insects that are no longer being eaten. The article also estimates the economic importance of bats in agriculture at roughly \$23 billion dollars a year nationally.

Agriculture is a multi-billion dollar industry and accounts for about 20% of all jobs across North Dakota, Montana and Idaho. The estimated annual avoided-cost value of bats across North Dakota, Montana, and Idaho is nearly \$2.7 billion, nearly one-third of the market value of crops sold across the three states. The amount of harvested cropland and the market value of crops sold are taken from the 2007 USDA Census of Agriculture and the estimated value of bats is based on the assumption that bats provide \$74.1/acre of avoided-cost value.

State	Harvested land	Estimated value	Market value of	Proportion of
	(acres)	of bats (U.S.\$)	crops sold (U.S.\$)	market value
Idaho	4,225,786	313,130,743	2,324,789,000	0.13
Montana	9,163,867	679,042,545	1,273,721,000	0.53
North Dakota	22,035,717	1,632,846,630	5,038,521,000	0.32

In addition to the economic benefit bats provide, they also reduce environmental impacts that an increase in pesticides would cause to offset by losing the natural benefits they provide. There may also be other environmental and ecological impacts we may not see for years.