## Decline in habitat reducing number of martens in Sierra

## By Science Daily

The reclusive American marten is getting even harder to find in the Sierra Nevada, according to a study by a team of researchers from the U.S. Forest Service and Oregon State University. A new study at the Sagehen Experimental Forest found that marten detections have dropped 60 percent since the 1980s — a decrease that may be caused by a degradation of the wooded areas in which they live, researchers say.

Their findings appeared in the current issue of the Journal of Wildlife Management.

"Previous work had revealed that marten populations in the northern Sierra and southern Cascades in California have become more fragmented since the early 1900s, but the current work at Sagehen may help explain the mechanism for this pattern," says co-author Bill Zielinski, research ecologist for the USDA Forest Service's Pacific Southwest Research Station in Arcata.

In the early 1900s, American marten could be found in many continuous areas in the higher elevations of the northern Sierra Nevada. Today, populations of the small mammal, which is related to the weasel family and looks like a cross between a mink and a fox, are isolated and discontinuous. Causes for this phenomenon are unclear, but researchers believe that timber harvesting and thinning — the removal of downed woody material on the forest floor — may play a part in the population decline.

The Sagehen Experimental Forest is located in the Tahoe National Forest about 30 miles north of Lake Tahoe and is managed by the Pacific Southwest Research Station and the

University of California, Berkeley. Researchers recorded marten detections using track plates — long, baited rectangular boxes which martens enter and leave their tracks on contact paper. The data, which was collected in 2007 and 2008, was then compared to survey results from 1980 to 1993.

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