

December 24, 2007

### **Study sheds light on grizzlies**

By JOHN CRAMER of the Missoulian

It's not the bruin superhighway, but the Swan Valley's grizzly bears often use four corridors to travel back and forth between the surrounding Swan and Mission mountains, an ongoing study shows.

Twelve of the valley's estimated 30 bears were tracked over the past five years, providing a glimpse into how they live and die in the Swan.

A collaboration between federal and state agencies and Plum Creek Timber Co., the study has been limited by a lack of funding, but the bears' high death rate has already prompted a number of management changes.

Among them are a \$10,000 reward for turning in grizzly poachers, more bear-awareness public education efforts and a decision by Plum Creek to only sell its lands in grizzly linkage zones to buyers who won't develop them.

Chris Servheen, grizzly bear recovery coordinator for the U.S. Fish and Wildlife Service, said the bears' 33 percent mortality rate in the Swan was unsustainable and directly linked to humans' presence in habitat where the grizzly was once king of the forest.

The causes of death couldn't be determined, but poaching, poison, traffic injuries and other human causes were suspected.

"It's the road to ruin unless we can find a way for these bears and people to live together," Servheen said.

The Swan Valley is a perfect natural laboratory to monitor the effectiveness of bear-awareness efforts because of its combination of good habitat and busy roads, intensive logging, and growing residential and commercial development.

The study highlights the need to preserve areas where grizzlies can safely travel between valleys and mountain forests and to find new ways for people and bears to live together, Servheen said.

The findings highlight grizzlies' vulnerability and the need for more funding to better understand the endangered species as it continues to repopulate its old habitat across the northern Rockies.

"We need to preserve these safe passageways," said Henning Stabins, a wildlife biologist for Plum Creek, which owns more than one million acres in western Montana. "We want a healthy grizzly bear population like everyone else" so it can be removed from the endangered species list.

The Swan Valley study, which started in 2000, is part of the Swan Valley grizzly bear conservation agreement signed by major landowners and government agencies in 1995.

The study had no dedicated funding or personnel, but was carried out by researchers who tackled the work as part of their regular job duties.

Using global positioning system collars, researchers followed 12 grizzlies that live in the checkerboard of public and private land

in the Swan Valley. The valley's population of about 600 residents is expected to grow as timberland gives way to residential development.

The study followed the bears for months at a time, tracking their movements hourly inside and outside the valley during the spring, summer and fall.

The bears crossed the valley most often in four areas that had fewer roads, fewer homes and businesses, and more forest cover for hiding.

Researchers were surprised to learn some bears spent most of their time in the valley bottom rather than moving to higher elevations, while other bears covered unexpectedly large territories of hundreds of miles before returning to the Swan.

“That was completely astounding,” Servheen said.

The bears were most active at night. Some male grizzlies changed their territories from year to year, while one female bear lived very close to homes, businesses, roads and hiking trails and never encountered people.

Some bears never left the valley. Others never crossed Highway 83, the main road through the valley, while others crossed repeatedly.

As a result of the grizzly conservation agreement and monitoring study, Plum Creek and the Forest Service have agreed to help protect the bear's habitat by building fewer roads, banning motorized recreation on their existing roads and protecting more streamside areas.

Plum Creek, the largest private landowner in the United States, and the Forest Service

also are cutting less timber, and only in areas and at times when it will not affect bears.

Plum Creek, which is selling much of its property in western Montana for residential development, has agreed to sell its lands in the grizzly corridors only to the Forest Service or to private buyers who adopt conservation agreements that prohibit development.

The company also agreed to sell its land between the bear linkage zones only to private developers who sign deed restrictions that prohibit fruit trees, outdoor barbecue pits, gardens without electric fences and other food sources that attract grizzlies.

The agreement's partners also state that its employees and contractors won't carry firearms in grizzly territory. Studies show bear spray is more effective than bullets in deterring a charging grizzly.

The study includes FWS, the Montana Department of Natural Resources and Conservation, the U.S. Forest Service, the Montana Department of Fish, Wildlife and Parks and Plum Creek.

The agreement coordinates activities among landowners and requires special management practices for logging and other forest uses.

The goal was to maintain grizzlies' ability to travel safely between the Bob Marshall and Mission wilderness areas, and to come up with a conservation plan that helped landowners to continue to live and work their lands.

The project's partners agreed to further bear-awareness efforts, such as containing fruit

trees, birdseed, pet food and other food that attracts bears, and to try to better understand the grizzlies' movements and causes of death.

The conservation area covers 369,000 acres, or 6 percent of the Northern Continental Divide Ecosystem, which is one of several grizzly recovery zones in the Lower 48 states.

In the Swan Valley, Plum Creek recently put 7,200 acres into a conservation agreement with state and federal agencies, while agreeing to sell another 1,700 acres to the state.

Stabins said the company tries to balance its business goals with the need to protect imperiled species.

“There are trade-offs, but environmental stewardship makes good business sense,” he said.