

Scientists using bears to battle bugs

Collar-mounted cameras will give scientists a grizzly's view of pine beetle devastation

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CanWest News Service

Sunday, May 13, 2007

Collar-mounted digital cameras will soon allow Alberta scientists to view pine beetle devastation through the eyes of roaming grizzly bears.

"We'll be able to see exactly what the bear sees, when they cross roads and when they see human activity," wildlife biologist Gordon Stenhouse says.

The Hinton, Alta.-based project leader of the Foothills Model Forest Grizzly Bear Research Program has been in the Kakwa region south of Grande Prairie, 450 kilometres north of Edmonton, fitting grizzlies with the high-tech collars that transmit pictures and GPS data on the bears. The area in the eastern slopes of the Rockies is the best remaining habitat for the bears in Alberta with an estimated grizzly population of six to 10 per thousand square kilometres. Its forests are also under attack by the mountain pine beetle.

Billions of the tiny, grain-sized pests crossed into northern Alberta last summer, inflating the number of infested trees to 3 million from 20,000 in only a few months. The bark-burrowers colonize and destroy a tree; the only solution is to harvest and process or burn the beetle-plagued trees. The bugs have destroyed more than 9 million hectares of B.C. pine in the last five years.

"It's too early to say what results we may find," Stenhouse said by cellphone from the remote region. "This is our first season of the study, and we are now capturing and collaring bears."

Grizzlies, he explained, can readily adapt to habitat changes. Unlike the woodland caribou, which need old-growth forest, the bears prefer to spend time on the edge of the forest where they find shelter and security nearby open areas where they eat grasses and berries.

Since he had previously studied grizzlies in the region, Stenhouse has a detailed picture on their habits before the pine beetles spread from B.C.

"I have all sorts of movement information and habitat-use information before pine beetle occurred," he said. "And now pine beetle is occurring and because I am a science type guy, I want to go in and understand what bears are going to do."

The GPS collars will track the speed and direction of the bears in the infected forests and

the tiny cameras will transmit a picture every 15 minutes. The results will then be compared with detailed forest maps showing both the spread of the pine beetle and the effects of foresters and companies working to deal with its onslaught.

Edmonton Journal

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