

Hair of the bear

On the ground, grizzly study a tough job

By JIM MANN

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CONDON — It's a sunny day, perfect for a bike ride and a short bushwhack on Spook Ridge high above Holland Lake.

It is an easy outing Monday compared to dozens of other excursions being carried out simultaneously across 8 million acres as part of the Northern Divide Grizzly Bear Project.

More common are grueling hikes on tight schedules, through rain and heavy brush, around cliffs, across creeks and over fallen timber.

The hard work is aimed at a simple objective: collecting bear hair.

Thousands of samples will be collected over the summer, serving one of the most complex wildlife research projects ever undertaken, a project that will provide an unprecedented DNA-based population estimate of grizzly bears in the Northern Continental Divide Ecosystem.

The site on Spook Ridge produces some results to the satisfaction of Jessica Lund, a field worker, and Melanie Parker, leader of a 1 million-acre subunit of the study area that straddles the Swan and Mission mountains.

It was only a couple of weeks earlier that Lund and another crew member had set up the site, saturating decaying logs with a stinky scent lure and surrounding the area with barbed wire. In the days that followed, the site attracted bears that left behind tufts of hair on the barbed wire.

Parker and Lund systematically collected eight hair samples, carefully storing them in bar-coded envelopes that eventually will be sent to a genetics laboratory for analysis.

More than 185 field workers are tasked with the same job across the sprawling study area, which roughly encompasses the Bob Marshall Wilderness Complex, Glacier National Park and surrounding lands.

Nearing the end of a nine-day work hitch, crew members based at Condon are starting to wear down physically, Parker said, but they remain enthusiastic about the project.

"It's awesome," Parker said. "People are so dedicated to this project."

The dedication, she explained, is due to a few things:

"First of all, it's cutting-edge technology in terms of wildlife monitoring. Second, it's the largest project ever to employ this technology. It's unfathomable that it's covering 8 million acres. And finally, it's looking at a question, if you live on this landscape, that people talk about all the time."

The perpetual question that comes up in bars and cafes, in camps and stores, is simple: How many grizzly bears are there?

For decades the best guesses have been based on flimsy observations and speculation.

It's a question that goes right to the root of most land management policies that pertain to grizzly bear conservation.

If there are more grizzly bears than people think, then should the population still be protected by the Endangered Species Act? Are Forest Service road management policies effective or are they excessive?

And what are the implications if there are fewer grizzly bears than expected?

The list of questions goes on.

"I guarantee you that people are going to be interested in the outcome of this, and then we'll debate for the next five years what the outcome means," Parker said with a chuckle.

The population study, headed by the U.S. Geological Survey, steers away from the policy ramifications, focusing squarely on acquiring a snapshot of the grizzly bear population in summer 2004.

Collected hair samples will essentially provide a genetic fingerprint that will identify individual grizzly bears across the study area.

Because the samples are being collected during four separate sessions, duplicate samples from the same bears will be collected. Through a "mark-recapture" statistical

analysis, researchers can produce a population estimate that goes beyond the minimum population that's based on individual bears that are identified.

While it's a complex study, the average field worker grasps the principles involved.

Jessica Penno, a 27-year-old Condon crew member who studies biology at the University of Victoria in British Columbia, was attracted to the job largely because of its enormity.

"It's the biggest large-carnivore project ever done. It will go down in history in that respect," said Penno, who has found the field work to be challenging so far.

She and fellow crew members typically set out for a day's work wearing rain gear from head to toe because the hair-snagging sites are rarely located conveniently off roads or trails. The preferred sites were selected and mapped using global positioning satellite systems over the last year based on the best quality bear habitat.

For a field worker in the rugged Swan and Mission mountains, that often translates to hikes through thick alder and mountain maple.

"I've never worked so hard so many days in a row," Penno said near the end of the nine-day hitch.

Penno and Lund spent their Fourth of July bushwhacking several miles up Crazy Horse Creek with Tom Parker, Melanie's husband.

On a map, the hike appears to cut through a drainage with a fairly gentle incline. But in reality, it turned out to be a rain-drenched slog through downed timber, with multiple creek crossings. At one site, the crew collected 43 hair samples.

"There was hair everywhere," Lund said.

"It was enough for a fur coat," joked Tom Parker, who has proved to be a valuable guide for reaching tough places. With 26 years of outfitting experience in the Swan Valley, Parker knows hidden game trails and other routes to some of the more remote locations where hair snagging "sets" will be located.

The Parkers run Northwest Connections, a community-based conservation education program based just north of Condon. It is the only nongovernmental organization that has been charged with the responsibility of managing one of the project's major subunits. Others are being managed by state, federal or tribal officials.

The Parkers were picked for the job largely as a result of their involvement with a study of black bears in the Swan Valley a couple of years ago.

Supervising field work over 1 million acres is a huge project in itself, says Melanie Parker, who has worked with crews based out of the Mission Valley along with the crews working out of Condon.

Parker considers the territory to be challenging because of the thick forests covering two rugged mountain ranges. It's also challenging because of the checkerboard land ownerships that dominate the region: a patchwork of state, federal and tribal lands, mixed in with Plum Creek Timber Co. land and smaller privately owned parcels.

Despite the challenges on the Swan-Mission subunit, Melanie Parker often wonders how crews working in the interior of the Bob Marshall Wilderness or Glacier National Park are holding up.

Some crews are spending their entire nine-day hitches on the trail, either camping out or sleeping in backcountry cabins.

"I think about them every day, especially when the weather is bad, and I know people are out there bushwhacking through rain and lightning storms."

She recalls overhearing a radio transmission from a crew in the wilderness that hiked all day, not reaching its destination until 8:30 p.m.

"That's a hard day," she said.

The hikes will get longer and harder as the summer progresses because the hair snag stations will be located at higher elevations, where bears are more likely to be in August.

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