

REPORTS

FEATURE

Grizzly Management Practices Questioned

“We're all wrong, we've been wrong for years.”

That's how wildlife biologist Rob Wielgus of UBC's Centre of Applied Conservation Biology sums up BC grizzly bear hunting policies. He fears that killing adult male grizzlies for trophies leads to “sexually motivated murder” and to the decline of bear populations.

A decade of research on wild grizzly bears shaped his opinions. Two five-year studies compared a hunted population in Alberta's Kananaskis region with an un-hunted one around Selkirk, BC. Costing \$1 million — most from American organizations — the research took Wielgus through his Ph.D. degree and launched his career as a scientist.

If his recommendations are heeded, then grizzly hunting in BC will be cut back and perhaps stopped altogether.

“I'm not anti-hunting,” he explains. “I was a big game hunter for 20 years. But I don't think grizzly bears can stand being hunted, especially the small population in southern BC.”

The key to his concern is his theory about what happens to mating patterns when grizzly bears are hunted.

“Big game hunting has always centered on the older, larger male. Each trophy bear is worth thousands of dollars.”

In the wild the biggest male bears have multiple female mates, who breed only with them and give birth to only their cubs. The males are territorial. They defend their home range — and the females and cubs — from the intrusions of other males.

Wielgus' research suggests that when hunters kill big males for trophies this social system is thrown badly out of balance. With a resident male dead, younger males immigrate into his old territory seeking mates. “The females are besieged by a number of unwanted suitors.”

He thinks that to force females to breed with them the immigrant males will resort to infanticide, killing any cubs she had by her old consort. “Cubs are killed for sexual purposes, to encourage the females to mate. Females with cubs will not mate for three or four years. If a male kills her cubs, the female will go into heat.”

His first clue to the process was seeing females with cubs living in poor quality habitats. It happened in the hunted population but not in the un-hunted one. “We found that sexually mature females were avoiding immigrant males because the



males tried to kill the females' cubs, in order to bring the females into heat. It's a case of sexually motivated murder. African lions do it, too.

“With this killing of cubs, the population's overall ability to reproduce itself is reduced. The stage is set for a population decline. But the inflow of many younger males into an area may mask this effect. Based on raw numbers, population numbers seem to be rising, not falling then...boom...they're in decline!”

The present justification for hunting grizzly bears in BC is based on long-standing ideas about the impact of trophy hunting on game populations. The belief was that killing trophy-sized males does not damage — and may even increase — a pop-

ulation's ability to reproduce itself.

The theory holds that with trophy males gone, the females mate with whatever males are available — smaller, younger males who would ordinarily lose out to bigger, stronger males when competing for mates. Thus impregnated, females give birth to just as many young as they would were the population left un-hunted. So the population's overall ability to reproduce itself remains the same. Also, with the large males gone, more food and other resources may be available for the females and their growing young.

But these models are based on deer studies. Valid for deer, in Western Canada they were broadly applied to other species. Wielgus is at odds with this unscientific approach. “Up until now, no one ever tested this theory, and it appears to be wrong, at least in my study area.

“When I started studying grizzly bears, I believed it like everybody else. But years of research changed my mind. I did a one-hundred and eighty degree turn on this thing. You have to follow the data.

“Deer aren't bears and bears aren't deer. Bucks never kill fawns. Deer populations have always had predators

and their reproductive behaviours can compensate for hunting. Before hunters with guns, grizzlies didn't have any predators at all.”

Having changed his own mind, Wielgus wants to change the minds of others. “Existing hunting policies need to be reviewed. We should err on the side of caution.”

His ideas for change in hunting policies are unpopular with some of BC's wildlife management community but the logic of his arguments are winning him converts. Chuckling, he attributes the backlash his ideas first met more to the foibles of human nature than the rigor of scientific reason. “When you come up with something that challenges an accepted belief, a lot of people don't like it.”

— Gordon Young