



## A GRIZZLY BIOLOGIST'S JOURNAL



**F**OR THE PAST 20 YEARS, I have been conducting grizzly bear research and management for Montana Fish, Wildlife & Parks along the Rocky Mountain Front. Since the mid-1970s, when the species was listed as threatened under the Endangered Species Act, the population of Northern Continental Divide Ecosystem grizzly bears has been slowly growing and expanding. Now they are spilling east from the Rockies into their historic low-elevation native prairie habitat, where they were exterminated in the early 1900s. As they reoccupy their traditional range, grizzlies are increasingly

coming into conflict with ranchers and others living along the Front. My job as one of FWP's four grizzly bear management biologists is to better understand grizzlies and find ways to reduce those conflicts. These photos, which I've taken over the past two decades, document some aspects of bear-human conflict issues. I hope they help people better understand why these conflicts occur and what ranchers, FWP, and the grizzlies themselves are doing to help people and bears coexist on the landscape.

—Mike Madel, Choteau

**G**rizzly bears, like this female I photographed at left, are intelligent, mysterious, and captivating creatures. But people haven't always thought so. Grizzlies were hunted, trapped, and poisoned nearly to extinction 100 years ago. By the 1930s, even seeing a track along the Rocky Mountain Front was rare. Over the decades, however, grizzly numbers began to grow. Below left is the Front overlooking Blackleaf Creek, 20 miles northwest of Choteau. It shows the diverse mosaic of habitat where the foothills turn into prairies, with riparian shrubfields and hay meadows. These low-elevation grassland habitats, also seen in the photo of sibling yearling bears below, are where grizzlies lived before white settlement. Now grizzlies have begun to reoccupy these areas, which are often private ranchlands. That's where many conflicts occur.

BY MIKE MADEL



**I** took the picture at left by crawling into a large den where a massive 465-pound female grizzly and three yearlings had hibernated the previous winter. Above right is biscuitroot, an important plant food dug up by grizzlies in subalpine areas.



**A**s grizzlies expand their home range, they move into areas used by humans. That's where the bears get into trouble, such as by tearing up beehives (left) for honey and larvae. Elsewhere, grizzlies have learned to feed on garbage, birdseed, and pet food left outside, putting them in close contact with people.



**M**any conflicts are between bears and ranchers along the Rocky Mountain Front. Dusty Crary (left), who raises cattle near Choteau, is a typical Montana rancher learning to deal with grizzlies. His land has some terrific wildlife habitat that naturally attracts grizzlies. Unfortunately, grizzlies occasionally prey on livestock, with young calves being the most vulnerable. Defenders of Wildlife, a national conservation group, has been helping Crary and other ranchers by compensating them for the market value of livestock lost to grizzlies.

**E**ach spring, newborn calves die of natural causes. Their carcasses become bear magnets. We encourage ranchers to remove any dead animals to remote areas of their ranch, away from homes, barns, and corrals. For



ranchers who don't have remote areas, we bring in a specially outfitted FWP truck (above left) and redistribute carcasses onto other lands. Another way of reducing conflicts is with aversive conditioning. We use rubber bullets or cracker shells (fired from shotguns), propane-operated scare guns, Karelian bear dogs, and electric fences, like the one above right erected around a sheep bedding ground. These scare tactics help bears learn to avoid human dwellings and areas where livestock frequent.



**I**f removing food attractants doesn't work and aversive conditioning fails, we trap and relocate problem bears. In the photograph above is a female grizzly and her two cubs, which were trapped near beehives they had been damaging. We tranquilized the bears, took tissue and blood samples, attached a radio collar to the mother so we could track her movements, and then relocated them to a remote site. We once thought it was best to take bears as far as possible from where they caused problems. But we found they usually returned. Now we relocate them in a remote portion of their home range, where they are familiar with the territory and can get back into natural feeding patterns. When coupled with preventive measures such as electric fences, this method seems

to work. In the photo at left, we are transporting a grizzly to a short-distance relocation site along Dupuyer Creek.

Ranchers, biologists, outfitters, and others who deal with bears are always learning new ways to reduce conflicts between bears and humans. They have to. Grizzlies will continue to expand into more and more areas as they reoccupy historic habitat. The better we can anticipate and prevent bear-human conflicts, the easier it will be for people and grizzlies to coexist. 🐻

