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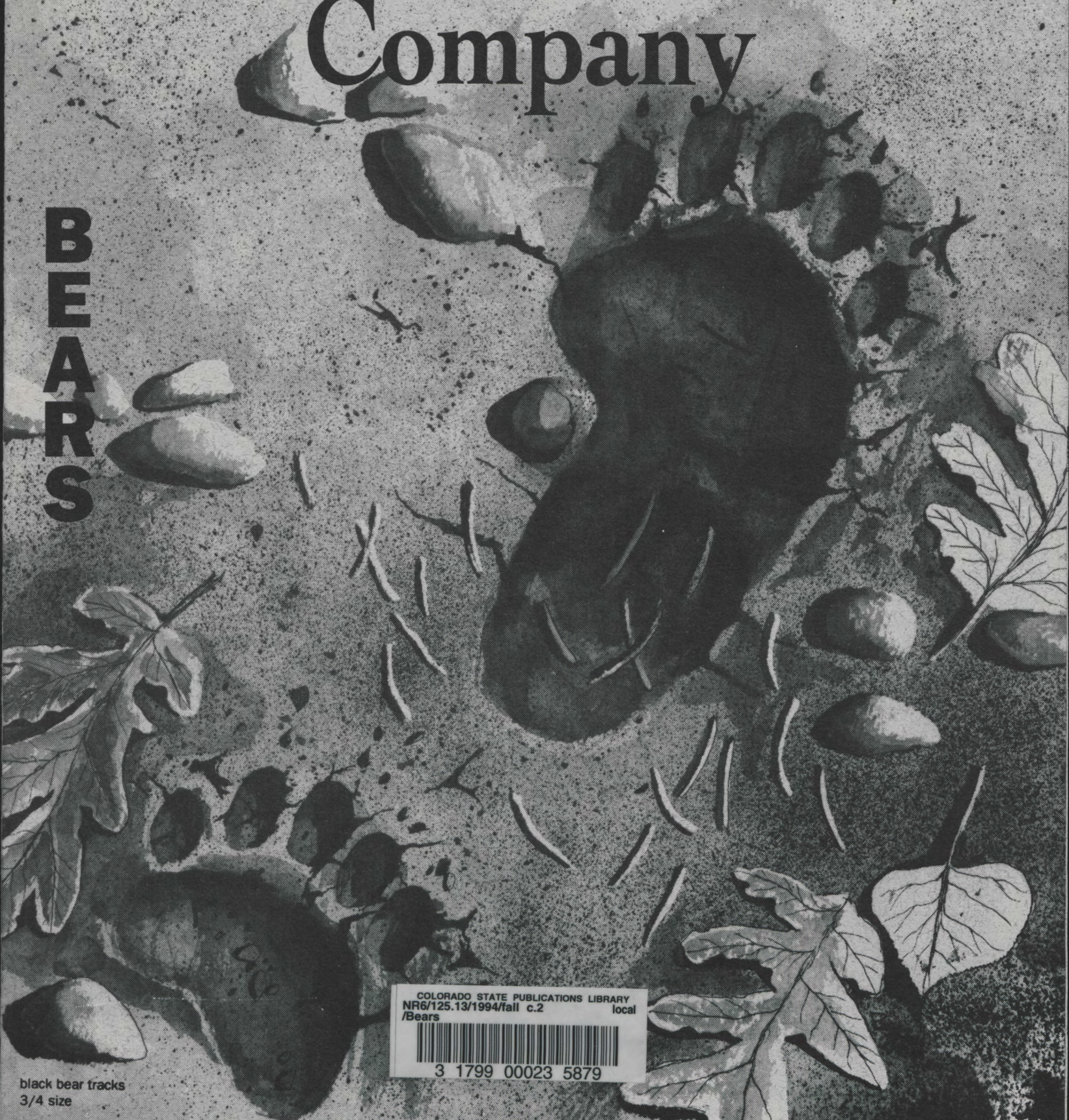
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1994 FALL COMPENDIUM OF WILDLIFE APPRECIATION




Colorado's Wildlife Company

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black bear tracks
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Living With BEARS

Since the days when Daniel Boone "kilt a bar" and carved his triumph on a tree, humans moving into bear habitat has meant conflicts between the two species. Bears used to be feared as ferocious wild animals, and despised as killers of livestock. Not until Yogi and Boo Boo came along did we begin to soften our image of wild bears. That change coincided with an increasingly urban population, one which has a minuscule chance of ever encountering a bear in the wild. Yet ironically, bear-human conflicts are increasing in Colorado as the expanding human population also moves into desirable mountain areas, and into bear habitat.

Farmers and ranchers traditionally regarded bears as pests to be destroyed by any means. Wildlife management reflected that attitude for years until 1935, when Colorado declared the black bear a game animal and afforded it protection under state hunting regulations. Over succeeding decades Colorado's human population changed. From 1950 to 1990 Colorado's urban population more than tripled. By 1990 only 17.6% of the state population of 3,294,394 lived in the country. As city-dwellers outnumbered rural populations, Coloradans adopted an increasingly humanistic attitude towards bears. Today fewer people are raised with a hunting tradition; there is rising interest in wildlife conservation and animal welfare among the general public, and some segments of the population oppose hunting outright. Reflecting these changing attitudes, in 1992 Coloradans approved Amendment 10, banning the spring bear hunt and outlawing the use of dogs and bait in hunting bears. "It's not that most people are opposed to hunting," says DOW bear researcher Tom Beck, "but they want it done in a humane and fair manner." Using dogs and bait to hunt bears, and killing females while they still have dependent cubs, conflicts with many people's sense of fair play. "This new group places a high value on bears," Beck adds, "more in line with the reverence afforded bears by Native Americans."

As the population booms, formerly rural areas—like those around Durango, Telluride and the foothills of the Front Range—are developing at a rapid rate. As we develop our state, and humans encroach on bear habitat—both to live and recreate—the chances for bear-human conflicts increase. **High numbers of problem bears coin-**

cide with concentrations of humans, not bears, says Beck.

During late summer and fall, bears feed ravenously—up to 20 hours a day—to put on enough fat to survive winter hibernation, which may last six months. Bears are opportunists; they'll take food where and when they can find it. When people leave garbage out in campgrounds or around their homes, it attracts bears. **Once bears associate people with food, they often become problem bears, usually an eventual death sentence for the bear.** These very strong animals may tear into campers and enter homes seeking food.

Unless they have learned to associate humans with food, bears are generally shy and wary, avoiding people as much as possible. Bear attacks are rare. For every death caused by a black bear, there are 17 deaths from spiders, 25 from snake bites, 67 from dogs, 150 from tornadoes, 180 from bees and hornets, 374 from lightning and 90,000 from homicides.

We have a responsibility toward Colorado's bears to protect them from becoming "humanized"—that is, attracted to places of human activity in search of food. "A fed bear is a dead bear," is an unfortunate truism. If a problem bear is still a nuisance after all garbage and other attractions have been cleaned up, it is trapped, tagged and moved to a new location. But a bear is only relocated once. If it is trapped again, it is destroyed. District Wildlife Manager Bob Holder of Trinidad, who has had to trap and kill numerous problem bears, wishes the thoughtless people who leave out garbage had to "look into those brown eyes and squeeze the trigger."

Calling the Division of Wildlife to remove a bear is not a good option, say DOW bear experts, because a relocated bear carries its association of humans with food wherever it's moved. "The need to prevent bear conflicts through education, proper trash storage, control of bear attractants, etc., is critical," says DOW biologist Kathi Green. DOW personnel answer hundreds of inquires and complaints about bears, to which they send out information outlining specific solutions. These complaints are also entered into a statewide database detailing bear problems. The Division uses billboards, signs in campgrounds, public talks and media interviews to educate the public on how to avoid problems with bears. But, Green stresses, it is ultimately the public's

responsibility to prevent problems.

We cannot expect bears to change, and we don't want them to. Black bears, wild and wary, are a wonderful part of Colorado's natural heritage. It is up to humans living and recreating in bear habitat to alter their habits and activities. We must learn to live responsibly in bear country, not the other way around.

HOW PEOPLE GET BEARS INTO TROUBLE

- ... Trash left out around homes and campsites. This includes trash set out the night before trash pickup.
- ... Feeding pets outdoors.
- ... Hummingbird feeders filled with sweet-smelling/tasting liquid.
- ... Suet/peanut butter/bacon grease feeders for birds and squirrels.
- ... Greasy barbecue grills left outside.

The Division of Wildlife publication "Living in Bear Country" details how to live responsibly around bears, avoid conflicts and what to do if you encounter a bear. It is available from DOW offices or by writing Colorado Division of Wildlife, Public Information, 6060 Broadway, Denver, CO 80216.

People who live in bear country will almost always tell you so. While it is sometimes presented as a warning, it is in reality an effort to describe some ephemeral value of the land. Most people will never see a bear in their mountains, yet the mere possibility of doing so imparts some vital uncertainty, mystery, danger, need for respect and greater depth to the landscape. We need bears in our mountains.

- Bob Hernbrode, CDOW



Black Bear or Grizzly Bear?

It isn't easy to tell the difference between grizzly and black bears; the standards of size and color aren't enough. Even bear researchers are sometimes fooled.

Here's a comparison of general physical characteristics between the two.

Keep in mind that individuals vary with sex, age and time of year. Lighting conditions, angle of the animal, length of observation and other factors can influence the appearance of the following characteristics.

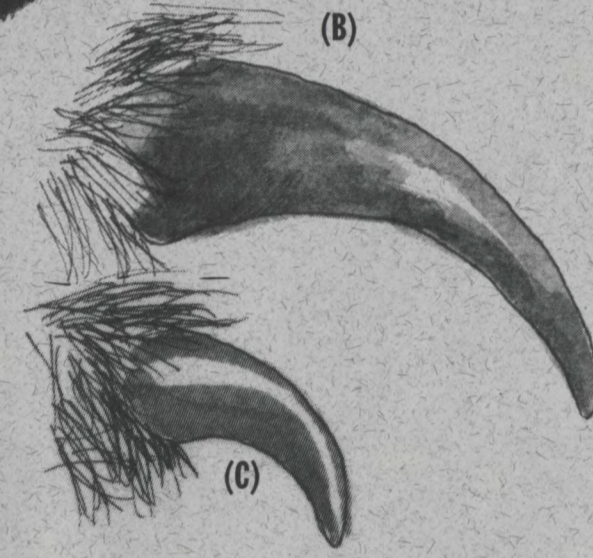
GRIZZLY BEAR *Ursus arctos*

- "Dished" face in profile.
- Very long, light-colored claws, usually at least 1 3/4 inches long.
- Smaller, rounded ears.
- Shoulder hump.
- Shoulder hump is highest point of the body.
- Hind foot track has a pointed heel and lacks a wedge in the instep.
- A straight line drawn across the top of the main pad on a front foot track will not intersect the toepads.
- Many adult males have a grizzled cape of long hair across the shoulders.

BLACK BEAR *Ursus americanus*

- Straight or flat face.
- Shorter, dark-colored claws, rarely more than 1 1/2 inches long.
- Larger, more erect, more pointed ears.
- No hump (though a hump may seem visible in some postures).
- Back is highest point of the body.
- Hind foot track has a rounded heel and a wedge in the instep.
- A straight line drawn across the top of the main pad of a front foot track will intersect the smaller toe pads.
- No cape or grizzling pattern on the coat.

* Can you identify the illustrations (A, B, C, D, E, F) as black bear or grizzly bear? (Answers below)



Grizzly Bears, Are You Out There?

Everyone thought there were no grizzly bears left in Colorado until a man killed one (in self-defense) in the San Juan Mountains in 1979. Though some Coloradans think a few grizzly bears still survive here, the Division of Wildlife does not believe there are grizzly bears in Colorado and the state Wildlife Commission officially opposes the reintroduction of grizzly bears.

But what would happen, what would it mean, if some were found here? "It would be a surprise, just like it was in 1979," says Judy Sheppard, terrestrial nongame specialist for DOW. The Division would launch a public awareness campaign detailing what it means to have grizzly bears in the area, how to safely conduct yourself and what it would mean to kill a grizzly bear. Under the federal grizzly bear recovery plan, Colorado is not considered a high priority area for survival and recovery of the species. If there are grizzly bears out there, it's an isolated population, explains Sheppard. "Before we did anything (to work on grizzly bears), we would have to look at the relative priority of Colorado to national recovery, and weigh the costs and benefits," she continues. Resources for endangered species recovery are limited and need to be focused on areas with the best chance of establishing viable populations. The Nongame and Endangered Wildlife Program is currently in the process of preparing a contingency plan in case grizzly bears are proven to still live in the state.

Jasper Carlton of the Biodiversity Legal Foundation, who has been actively involved in the search for Colorado grizzly bears, says the real issue is preserving the natural ecosystem of the San Juans, not just for grizzly bears but for all plants and animals that are part of that system. He has seen no credible evidence supporting the presence of grizzly bears in the San Juans, but feels we should protect that area — by limiting access and controlling development — because of its outstanding natural values. "It's one of the last opportunities we have in the southern Rockies to restore and maintain the biological integrity of one of our last large ecosystems," he says.

BEAR FACTS

- Black bears mate in May and June but the embryo does not implant in the female's uterus until she enters the hibernation den in November. If food is scarce and the female has not put on enough fat, the embryo will not survive.
- Cubs are born in mid-January during hibernation. The mother bear nurses her cubs, though she does not resume eating or drinking until after leaving the den in late April and early May.
- At birth a black bear cub weighs only about half a pound. Adult males average between 180 and 300 pounds, but may weigh 500 pounds or more. Adult females range between 120 and 250 pounds, but may weigh under 100 pounds and up to about 300.
- During hibernation, some of a bear's body processes slow but its temperature only drops a few degrees, unlike hibernating small mammals, whose body temperature drops nearly as low as the surrounding environment. A bear roused from hibernation can be alert and ready to run instantly.
- Hibernating bears may go more than 200 days without eating, drinking, urinating or defecating. Their bodies "recycle" protein byproducts, thus lean body mass (muscle tissue) doesn't change appreciably. Energy for body processes comes from fat accumulated before denning. Bears emerging from hibernation have little interest in eating or drinking. This "walking hibernation" lasts about two weeks.
- On average, 40-50% of black bear cubs die by one year of age (from a variety of causes), even when food is abundant. Cub survival can be much lower when food is poor.
- At least 90% of a black bear's diet is vegetable material. Much of the meat they eat is insects and carrion.
- Mortality caused by humans — hunting, poaching, killing of problem bears — is the leading cause of death among most black bear populations.
- Black bears range in color from black and dark brown to cinnamon or even blond.
- Bears have an acute sense of smell. They can scent a person as much as a mile away and detect molecules of food on clothing that had been carried in a backpack with food.
- The strength of bears is also legendary. They have been known to tear into freezers, rip into vehicles and campers and smash down doors and walls to get to food.
- Bears are very intelligent and curious and have good memories. A bear which has learned that ice chests contain food may curiously approach a car, peek through the window, see an ice chest and break into the car. A female black bear learned to use rocks to trigger traps. She would wait in a nearby tree for the traps to be set, coming down when the humans had left to trigger the traps and eat the bait.

DOW WORKING FOR WILDLIFE

GRIN AND BEAR IT!

Colorado's black bears have been smiling for the camera this summer as part of the Division of Wildlife's black bear population estimation research. Now in its second year, the study seeks to better estimate the density of bears in different habitats, to aid in estimating statewide bear populations. The debate over Amendment 10, which banned spring bear hunting and the use of dogs and bait at any time, highlighted the need for more information about Colorado's black bear population.

Last year, bears were trapped and tagged. Many were radio-collared and their movements monitored. This year bears were "captured on camera." Information gathered in the study will be used to improve bear management.

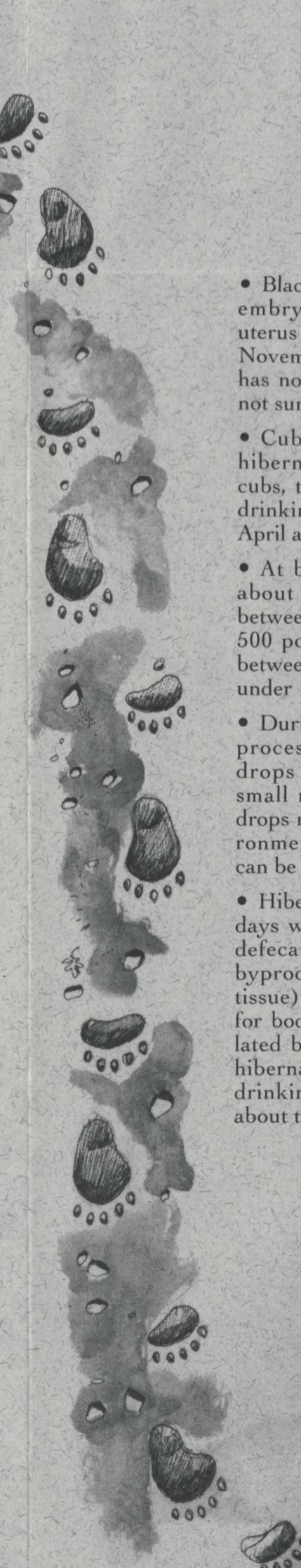
The first year of the study produced what DOW bear researcher Tom Beck considers a big benefit — a better bear trap. The equipment formerly used — leg snares and traps made from pipe culverts — caused injuries to the animals, such as broken legs, chewed off toes, broken teeth and cut gums and mouths. The new cage-like traps are built of steel wire, with a door that swings shut and locks once

a bear enters and trips a pedal on the floor. "The bears don't seem to fight," says Beck. "They flip the treadle a few times, then just sit down and wait."

Since previously-trapped bears often learn from the experience and avoid a conventional trap, the camera offers a different "re-capture" method. Drawn to a bait package hung from a tree (containing wonderfully fragrant rotting fish or fruit), the animals trigger the camera when they break an infra-red beam. Not only have Beck and his team gotten some strange photos of bears, they've photographed elk, mountain lions, deer and the occasional curious cowboy. The research team set up 45 camera stations, each in a four-square-mile grid. They change film every two weeks and location every four. Beck then analyzes the photos, hoping to identify previously captured bears by ear tags consisting of a unique combination of colored tags and streamers.

The study will eventually encompass three different areas of the state which differ in the type of bear habitat available. The summers of 1993 and 1994 focused on the Uncompahgre Plateau of southwestern Colorado. Next summer, efforts will move to Middle Park for two years. If all goes well, the area around Trinidad will be the final focus.

DOW currently estimates the state's black bear population at between 8,000 and 12,000, but Beck hesitates to make any guesses at the true numbers. "It wouldn't surprise me if those numbers are accurate," he says, "And it wouldn't surprise me if they're low."



* C,E,F black bear
A,B,D grizzly bear

SPIRIT BEAR

Since ancient times, bears have held a spiritual significance for cultures throughout the world.

Humanlike in their ability to walk upright, bears are often considered a link between people and animals. Myths from Asia, Europe and the New World refer to "bear people." Bears are strongly linked to healing, perhaps because they forage for plants, implying a knowledge of herbal medicine. Numerous common names for herbs and plants reflect this: bearberry, bear's paw, bear tongue, bear clover. Finally, because they hibernate, these special animals experience the ultimate magical transformation — they "die" and are "reborn" each year.

Many Native Americans hold a reverence for bears. The oldest dance of the Utes of western Colorado is the Bear Dance. Traditionally, the Bear Dance was celebrated in spring before the winter camp broke up and families went out to gather food



Zuñi bear fetish

and hunt game through the summer. Dancing the bear dance secures the animal's blessing and signals a time of rebirth and renewal.

The bear fetish, a stone charm carved in the shape of a bear, holds special power for the Zuñi Indians of the Southwest. Because the fetish is thought to contain a living power which can help its owner, it is treated carefully and with reverence. The fetish is fed ceremonially, usually with cornmeal, and kept in a special jar. Offerings of beads and feathers may be tied to it. Though much of the meaning of this talisman is secret to Zuñi medicine societies, the bear fetish has healing power — the power of the bear.

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