Bear Attacks of 1999 – Complete Summary

BEAR SAND OTHER TOP PREDATORS

Lake Clark N. P. Bears

Searching for Grizzlies in the Bitterroots

The Elusive Canada Lynx

BEARS Gallery

BEARS \$4.75 (CANADA \$6.95) - VOL 2 ISSUE 2

www.bearsmag.com

The Cat You Never See:

The Elusive Canada Lynx By James Halfpenny, Ph.D.

The cat footprints in the snow were large, about four-inches in diameter, the detail fuzzy at best. The cat was alternating between walking and trotting gaits, though most of the distance, the cat had been trotting. About halfway through a small clearing, there were six sets of hind footprints paired side-by-side, as if the cat had been hopping on a make-believe pogostick. Each pair of tracks was about two feet farther along than the previous set. Then, the cat returned to a walking pattern.

My search for the elusive Canada lynx of Colorado was successful, but it generated a mystery about lynx behavior. Why pogo?! The search started in 1979, funded by a first-of-its-kind tax initiative for the United States. Concerned Colorado citizens were allowed to donate one dollar of their income tax refund to be used for research into nongame wildlife. This forward-thinking initiative was soon followed in many more states, but the status of the lynx remained shrouded in the fluffy snows of the high mountains.

The lynx is the largest of the two bob-tailed cats of North America. It is gray in color with large hair tufts on its ears and completely black around the tip of the tail. Bobcats may have tufts, but they are usually shorter, and the black is only on the top of the tip of the tail. Careful, some bobcats living in the high mountains may also be gray colored; fur buyers call these bobcats lynx cats, but they are not lynx.

Still in the year 2000, little is known about this rare, elusive, secretive cat of the high mountains. The U.S. Fish and Wildlife Service finally recognized that populations of Canada lynx are so low that they deserve special protection under federal laws. In March of this year the Service listed the lynx as a threatened species in the lower 48

states.

For my part, 1979 marked the beginning of over two decades of pursuing lynx behavior and ecological knowledge in the field. My story is but part of a larger story of biologists and managers coming to grips with a littleknown species. Let me share with you the challenge of knowing the Canada lynx and its future.

Over the next 11 years, I spent seven winters in the field looking for lynx at least part of the time. At that time, the best way to locate lynx was by snow tracking. Funds were provided by the Colorado Non-Game Tax Checkoff project and several environmental impact surveys of proposed ski areas or expansions of ski areas. On two of the seven winters, my two helpers and I covered 4,000 miles by snowmobiles and skis on backcountry trails. Other winters, we covered several hundred miles searching for tracks.

Our efforts were rewarded as we documented the survival of lynx in five

A Naturalist's World

Presents A Celebration of Bears



A video 9 years in the making. Jim and Diann tell all-well show all-about the bears that is! A fun video celebrating the diversity of bears: size, shape, color, and behavior. Includes 7 subspecies: black bears, spirit bears (Kermodes), glacier (blue) bears, Kodiaks, coastal brown, interior grizzly, and polar bears. From Yellowstone to Alaska to Canada, it's all there. You'll be amazed at bear antics. Excellent for classroom use. VHS, 28 minutes. TO ORDER: Send \$19.95 to address below.

TRACKING THE GREAT **BEARS OF NORTH AMERICA**



Black, glacier blue, white Spirit (Kermode). Kodiak brown. coastal brown, interior grizzly, Khutzeymateen grizzly, and polar

Get to know all the bears with Dr. Jim Halfpenny, BEARS columnist, carnivore ecologist and animal tracker, and Diann Thompson. Study bears up close. Learn about their evolution, natural history, ecology, management, and future. Photography possible. On-site field classes from Yellowstone to Alaska to Canada. Many offerings each year. Contact us for more information at the address below.

Jim Halfpenny & Diann Thompson P.O. Box 989-B Gardiner, MT 59030 www.tracknature.com (406)848-9458

areas of Colorado: Guanella Pass, Vail Ski Area, Frying Pan River, East Fork of the San Juan River, and Hell's Hole on Mt. Evans. The presence of lynx at Vail Ski Area has proven to be the focus of considerable controversy between conservationists and recreationists. All concerned are waiting the directives for lynx management that will follow its recent federal listing.

About ten years ago, Bill Ruediger (USFS), among others, was instrumental in the formation of the Western Forest Carnivore Committee, an international, ad hoc committee of federal. state, provincial, and private individuals concerned with the future of lynx, fisher, marten, and wolverine. During regular meetings of ecologists from western North America, it soon became apparent that lynx were in low numbers everywhere. Worse yet, a reoccurring theme kept coming up. In the southern extent of their range, the lower 48 states, lynx populations were being snuffed out like candles. Biologists could no longer find lynx where they had before.

Currently in the west, breeding populations are established in Idaho, Montana, Washington, and Wyoming, with possibly some lynx just hanging on in Colorado, Utah, and Oregon. Lynx may migrate long distances during the peaks of population highs in Canada and are occasionally documented outside their normal ranges, but they probably do not become established.

Therefore, the committee tackled the question of how to prove the existence of low-density, slow-reproducing, wide-ranging species using non-lethal detection methods to reliably verify their presence. My part was to ramrod the chapter called, "Snow Tracking," in the manual, American Marten, Fisher, Lynx, and Wolverine: Survey Methods for Their Detection (USDA Forest Service, General Technical Report, PSW-GTR-157, available at www. psw.fs.fed.us/Tech Pub/Documents/GT R-157/GTR157_TbleCont.html). The manual also explains the use of photographic bait and trackplate stations.

Besides information about presence or absence, snow tracking revealed many details about lynx and their lives.



One day, a pile of grouse feathers revealed the origin of paired lynx hind footprints. Lynx often spook grouse into the air and will leap vertically several times in occasionally successful attempts to grab the flying birds. Lynx also make large vertical leaps to pick squirrels from branches. Tracking also revealed that unlike house cats, bobcats, and cougars, lynx seldom bury their scat. Creatures of dark forests and twilight, lynx day beds do show that they will lie on an exposed ridge sunbathing on a cold winter's afternoon.

If you would like to try your luck at documenting lynx by snow tracking, let me provide some hints. Lynx tracks lack detail because their feet are mostly covered with hair. Additionally, as professional tracker Sue Morse of Jericho, Vermont has shown, naked toe and interdigital pads are greatly diminished in size to reduce heat loss to the snow through conduction. The naked toe pads are only about 1/4 inch in diameter.

Lynx evolved large feet to travel on fluffy snow; even young lynx get large feet early in life. Lynx seldom exceed 35 pounds, yet their feet are larger than those of a 140-pound mountain lion. To be considered as coming from adult lynx, tracks should be longer than 3.0 inches and wider than 3.7 inches (minimum outline measurements, see *BEARS And Other Top Predators*, 1(3):11 for details on how to make correct track

measurements).

The trail of a lynx is distinguished by the trough created in the snow as it drags its hairy foot. Hair marks exceed in width those made by the weight-bearing portion of the foot. The average stride of a walk is 30 inches and that of a trot is 40 inches.

The newest technique for locating lynx comes straight from criminal law enforcement—DNA fingerprinting.

Carpet hair snags (four-inch squares of carpet nailed to a tree and soaked with super catnip) cause the territorial lynx to scent mark. The lynx rubs the scent glands of its cheeks on the carpet and the biologist gets a few hairs which can be analyzed for their genetic content.

Genetic analysis of the hair reveals species, individual identity, and even information about maternal lineage.

Even with all of these techniques and listing under the Endangered Species Act, the Canada lynx will need all the help it can get. Habitat destruction, especially from winter recreation and lumbering, are threatening the remote dense forests where lynx live. Highways are creating uncrossable barriers fragmenting populations. Please review and comment on forest development plans for any areas where lynx may exist.

