ROADLESS AREAS OF OLD CASCADES

N O R TH W E S T DARKS WILDLIFE

HRON MOUNTAIN WILDFLOWER PARADISE THE LYNX AND THE BOBCAT



The **CATS** in Different Professions



Skatin' on Thin Ice-Bobcat, by Lee Kromschroeder.

he bobcat and lynx, although similar in overall appearance, really wear different hats. "Professionally," each occupies a different ecological niche. They live in separate habitat and have different food habits. The lynx is a specialist, the bobcat a generalist.

Bobcats, common Idaho residents, prowl almost every corner of the state, from the rugged Owyhee canyons to the brushy draws of the Palouse, from sagebrush prairies to the Bitterroot Mountains. Lynx, on the other hand, are rare in Idaho, typically more at home among the boreal forests of Alaska and Canada. They do, however, wander among pockets of alpine timber along the Selkirk, Bitterroot, and Sawtooth ranges.

Despite their separate realms, similarities in their appearance often confuse people. Both felids (from the Latin family name for all cats, *Felidae*) have stubby bobbed tails 2 to 4 inches long. Bobcat tails sport a black bar on the upper side, and lynx tails wear a black tip, but these "tell-tail" differences are too subtle for field identification of the elusive phantoms. Both have "sideburns" or whiskered tufts along their jowls. And the pale-colored bobcat of southern Idaho has a coat that almost matches that of the silver-gray lynx, a characteristic that has earned him the nickname "lynx cat" in trapping and fur-trading circles. (In northern Idaho, however, bobcats are more "bobcat-colored": brown to reddish-brown with black spotted, silky white bellies.)

Even the "hats" these cats wear can be misleading. Both have tufts of hair on the tips of their ears. Those on lynx may be up to 2 inches long, whereas bobcat tufts are much shorter—sometimes lacking entirely. But without seeing the two together, most people wouldn't notice the difference.

The one characteristic that does distinguish the two short-tailed felids, though, is their feet. Indeed, their feet are the badges of their professions.

Lynx, adapted to the snow-laden forests of the north, have paws the size of a mountain lion's, 3 to 4 inches in diameter. These "snowshoes" permit the 20- to 25-pound cats to float over deep, fluffy snow while hunting in winter. Bobcats weigh as much as lynx but have much smaller feet—half as large, in fact. They are better suited to places where snow isn't as deep, from central Mexico to the southern Canadian provinces, leaving the far northern forests to their cousins. Both species make their living preying on rabbits or rabbit-sized rodents. The bobcat menu is quite diverse, from cotton rats to cottontails. Bobcats can do quite well wherever fare is plentiful. Lynx, on the other hand, have a much more limited selection—almost exclusively snowshoe hares. Thus the range of lynx in North America closely follows the range of this hare, a boreal cousin of the jackrabbit. This can cause problems for a predator on the prowl.

Depending on a single source of food, lynx populations are on a perpetual roller coaster ride. Hudson Bay Co. fur-trading records dating back 200 years show a boom in lynx pelts every 10 years, followed by a bust when almost no lynx are taken. Biologists in Alaska and Canada have discovered the reason. When hares increase to the point of consuming all available forage, their numbers plummet. A year or two later, so do the numbers of lynx. This forageprey-predator cycle repeats at 10-year intervals throughout most of Alaska and Canada.

From 1982 to 1985, biologists Steve Knick and Ted Bailey documented a similar relationship in southeastern Idaho between bobcats and their prey,

Story by Gary M. Koehler





Watchful Eye—Lynx, by Rosemary Millette.

Artwork above: Courtesy Rosemary Millette and Wild Wings Inc., Lake City, MN 55041; 1-800-445-4833. Artwork facing page: Courtesy Lee Kromschroeder and Wild Wings Inc., Lake City, MN 55041; 1-800-445-4833.

cottontails and jackrabbits. Indeed, this mechanism operates whenever any felid depends on a single prey species. When times are good and prey is plentiful, cats produce more kittens. But as prey declines, fewer females become pregnant, fewer kittens survive, and the entire predator population tumbles.

In studies in the Salmon River Mountains in 1980 through 1985, I found that when bobcats rely on a more reliable food supply—in this case, mice—their numbers remain stable.

This may be true for Idaho's lynx, too, because snowshoe hare numbers don't rise and fall as they do in Alaska and Canada. Idaho lynx populations probably remain relatively stable except for the occasional addition of a few migrants that drift south from Canada when prey is scarce and they get desperate for a meal. Indeed, when I studied Washington's lynx I found consistently low numbers of adults and births, indicating how meager food supplies are at the southern edge of the boreal felid's range.

Unfortunately, humans may have unknowingly contributed to the decline in Pacific Northwest lynx during the past 50 years. In our zeal to protect forests from fires, we have eliminated the catalyst that produces lynx. Snowshoe hares, like moose, prefer the early successional forests that follow fires. These younger stands offer plenty of browse and cover. Fire suppression has turned the northern Rocky Mountain forest from a mosaic of young and mature trees into a field of patriarchs that offer little to hares. As hare habitat diminished, so did hares and, eventually, the lynx.

Times are changing, though. In a designated wilderness, fire plays its natural role. But it may be several decades before wildfire-touched lands can provide food, cover, and security for hares and lynx. The same benefits are possible after timber is harvested, if seedlings are allowed to come back as thick "doghair" stands—a forest management philosophy that runs counter to present silvicultural practices in many places. Striving to create younger forests for hares must be balanced by the need to maintain mature forests as denning cover for kittens.

Bobcats, too, can benefit from the supply of snowshoe hares, cottontails, and ground squirrels that find a home in younger, successional forests. But where their paths cross with the lynx, as in northern Idaho, wildlife agencies face problems managing both.

Luckily, this is possible because of salient differences in their haunts and behaviors. Lvnx seldom venture from isolated mountains. Even when winds howl and the snow-covered highlands appear stark and bleak, these masters of winter continue to seek hares. Bobcats, on the other hand, leave the uplands when winter arrives. In the Salmon River country, I found bobcats at 8000foot elevations all summer, but as snow began falling they descended to huddle along canyon bottoms where rodents scurry and snow isn't so deep. These differences in behavior and winter habitat selection allow bobcats and lynx to be managed with a discerning eye.

Northwestern states and provinces are privileged to offer homes to all three of the wild North American felids: mountain lion, bobcat, and lynx. This will continue as long as we consider their unique needs for space, habitat, and prey.

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Editor's Note: This story reprinted courtesy Idaho Wildlife magazine.