

# UNBEARABLE DAMAGE

## Foresters look to protect trees from black bears

By **MATTHEW WEAVER**  
Capital Press

For more than two decades, Monika Wood has been part of an effort to re-establish trees native to the forests of northern Idaho.



Monika Wood

They include western white pine and western larch, which are planted for their resistance to fires, insects and disease.

“We’re really trying to restore what should be here historically,” said Wood, north zone culturist for Idaho Panhandle National Forests.

But Wood and other foresters have to deal with a pest.

A really big pest, one that can grow to about 600 pounds, reach 5 to 7 feet tall standing on its hind legs and has big claws. It’s the black bear.

Much to the consternation of foresters, white pine and western larch are the exact species favored by black bears as they emerge from their winter hibernation.

Wood has worked at the Priest Lake ranger station for 23 years, and said bears snacking on the trees has been a consistent problem.

“When they come out of their den, they want those sugars and it just so happens those trees are really starting to wake up, too, so they smell delicious,” Wood said.

### Bark damage

The bears love to peel bark off the trees to munch the newly formed sapwood beneath. If they scrape it all off, it kills the tree, taking away the xylem and phloem in the cambium of the tree, which would otherwise allow water to move from the roots up the tree stem, said Ron Durham, land resource supervisor at the Idaho Department of Lands office at Priest Lake.

A single bear can strip as many as 70 trees a day, a USDA study found.

“Sometimes it’s just one side,” he said. “Sometimes it’s not all the way around but still, that just slows the growth of the tree down and damages the wood.”

The damage makes it easier for insects to infest the wounds, and for diseases and fungi to enter the wood, Durham said.

“When you manufacture that log, if and when the tree does become harvestable, that first 8 to 10 feet’s probably going to be all rotten,” he said.

Site, elevation and snowpack level vary, but trees in Priest Lake typically reach 70 years old.

“At age 35 to 40, we go into a stand and see that it’s been hit — we’d normally want to hold onto that stand another 20 to 30 more years,” Durham said. “But then damage affects the growth.”

Once bears hit a particular area, they know they can return and cause even more damage. Some areas are hit several years, Durham said.

The cost of the damage adds up for the state and federal governments and a handful of private landowners in the region, many of whom raise the forests to supplement their farming or ranching income.

In 2014, the Department of Lands estimated financial losses on Priest Lake endowment lands due to tree mortality from bears. Five sites were inspected, and the cost of the bear damage was \$968 to \$1,582 per acre.

Wood estimates it costs about \$200 per acre to plant new trees. Seedlings cost \$1 to \$2.

“It’s something we’ve been struggling with for quite some time,” said Durham, of the IDL.

However, the damage has become more costly in the last 10 years, mainly due to bears damaging younger stands.

Black bears also eat lodgepole, cedar and ponderosa pine, but their favorites are definitely white pine and larch, Wood said.

“It’s an easy, fast food source for them, and they don’t have to work very hard at it,”



Idaho Department of Fish and Game

Black bears are damaging beneficial trees in the Priest Lake Basin of Northern Idaho. Foresters are working to find ways to stop the bears, including barriers and targeted hunting. The bears appear to have learned the behavior.

she said. “I know it’s been happening for as long as black bears have been in the Priest Lake Basin. It’s just part of nature. I just think the checks and balances are out of whack a little bit, maybe.”

Managers estimate one black bear per square mile in the Priest Lake Basin — one of the highest densities in the state, Durham said.

The entire 185,000-acre state forest has damage throughout, he said.

The biological carrying capacity is 1.5 to two bears per square mile, said Kiira Siitari, environmental staff biologist with the Idaho Department of Fish and Game.

### ‘A new tool’

The behavior appears to be learned, said Chris Schnepf, University of Idaho Extension educator for forestry in Coeur d’Alene.

“I think it’s just a new tool in the bear toolbox,” he said. “One bear figured it out and taught the cubs, and then those cubs grow up and teach their cubs.”

Forest stewards hope to find a way to help the bears unlearn the behavior.

“Since it’s passed on socially, you hope those bears don’t get out much,” Schnepf said with a laugh.

Wood has tried directional felling of trees to create slash mats that bears don’t like to climb through or over — “make them work a little harder” — and found limited success.

“The bears sometimes stay away, but often it just causes them to go higher in the canopy,” Wood said.

Managers also tried leaving 8-inch spacing between trees to create a bear barrier.

“And that hasn’t worked,” Wood said. “They go after unpruned trees with canopies all the way down to the bottom.”

The bears may be going after trees with blister rust cankers. Trees send sugars to points of injury to seal off infections, Wood said.

“It’s been a struggle,” she said.

### Targeted hunting

To help protect older trees, foresters are directing hunters to specific areas where the bears are targeting trees that are 30 to 40 years old, particularly white pine stands, said Siitari, the biologist for the game department.

“We’re a little limited on reaction time,” she said. “A lot of times when you go out and see the damage, it’s years old. So that’s a big frustration.”

Black bears are managed as a big game species. In other parts of Idaho, dogs and hunting over bait may be used. But because the grizzly bears that are also in the area are federally protected as an endangered species, dogs and bait aren’t allowed in most of northern Idaho.

The Priest Lake area is in grizzly bear country, which limits black bear management options, Siitari said.

The cause of the damage appears to be limited to black bears, Schnepf said.

The game department is

considering extending the hunting season, which is currently April 1 to June 15. No expansion dates have been proposed, Siitari said.



Kiira Siitari

Any season changes would be subject to public comment and the approval of the Idaho Fish and Game Commission.

The earliest that process could begin is next year, Siitari said.

About 150 to 200 black bears are harvested each year.

Because of the grizzly restrictions, increasing harvest quotas may not help foresters in Priest Lake, Siitari said.

“This is an evolving issue,” Siitari said.

Durham, with the lands department, hopes numbers be-

come available in future years to show whether increased hunting has helped.

“What do you do? We’ve been managing an asset for 30 to 40 years, and all of a sudden, that asset gets wiped out by a bunch of bears,” he said. “We’re working diligently, methodically and thoughtfully trying to resolve (the situation).”

Through good communication with the game department and the public, Durham hopes to help reduce tree mortality to “a level we can accept,” he said.

### Feed the bears?

Most research indicates the best option is to feed the bears, which would be too costly for resource managers, Wood said.

Black bears are also a problem in parts of western Oregon and Washington, where agencies do feed the bears. But

### American black bear

**Binomial name:** Ursus americanus

**Height:** 3 feet at the shoulder, 5-7 feet tall standing upright

**Weight:** 100-600 pounds depending on age, sex and season

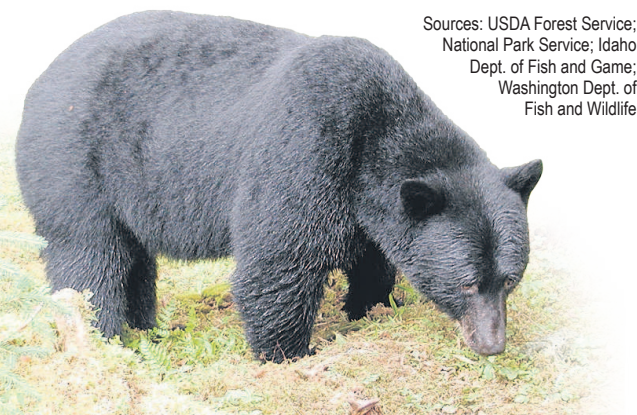
**Average life span:** 15-25 years

**Diet:** Omnivores, their diet consists mostly of herbaceous plants and grasses in spring; adding insects, grubs, berries, fish and small mammals in the summer and fall. Bears will take larger game such as deer and elk. Although rare, bears have been known to take livestock.

**Known for:** A keen sense of smell and curiosity make them skilled scavengers. Their strength and surprising speed make them potentially dangerous.

**Range:** Found throughout Alaska and Canada, American black bears occur in the Pacific Northwest and California; from the northern Rocky Mountains to the Southwest and northern Mexico; the northern Great Lakes; and areas of Northeast, Southeast and Gulf Coast states where habitat is plentiful.

**Black bears in Idaho:** The Gem State has approximately 30,000 square miles of black bear habitat. Although the exact population is unknown, their social system limits density to 1.5 to 2 bears per square mile in the best habitats.



Sources: USDA Forest Service; National Park Service; Idaho Dept. of Fish and Game; Washington Dept. of Fish and Wildlife

Matthew Weaver and Alan Kenaga/Capital Press

Schnepf, with UI Extension, said that can be controversial.

“One is the whole issue of feeding wildlife — there’s a number of issues associated with that,” he said. “The other is that you’re giving these bears food at a time when they’re most limited. Do you end up growing more bears as a result of that and just making the problem even worse?”

Applying some sort of bitter chemical to the tree also isn’t

feasible. It would be a huge cost, Wood said, and the U.S. Forest Service doesn’t have the necessary work force.

Wood is open to suggestions. She’d welcome a researcher to help her figure something out, she said.

“I have had nobody give me a real solid answer,” she said.

“I am not a wildlife biologist, I do not know bear behavior. I know trees.”

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