



A male owl photographed in 2003 in Birkenhead Lake Provincial Park, which was too small to provide an adjacent territory for its young. Both died within a year.

THE POWER OF ONE

NOT SEEN SINCE 2023, THE LAST NORTHERN SPOTTED OWL IN BRITISH COLUMBIA IS LIKELY GONE. BUT SHE REMAINS A POIGNANT SYMBOL AND A MOTIVATING FORCE.

BY **BRAD BADEL**
PHOTOGRAPHY BY **JARED HOBBS**

A FEW KILOMETRES down a muddy trail snaking through old-growth Douglas firs and cedars, Jared Hobbs stops and tilts his head back. A moment later, he lets out a resounding whoop. “Hoo ... hoo, hoo ... howoooo!” It’s the four-note call of a northern spotted owl, and it seems to hang in the muggy August air like an echo. Which, in a way, it is.

The trail leads through a deep valley on the edge of the Cascade Mountains, once a stronghold for spotted owls. Before European contact, there were an estimated 1,000 spotted owls in Canada, all of them in southwestern British Columbia. Hobbs, who has the slightly dishevelled look of a seasoned wildlife biologist, has spent more time observing them than likely anyone else in the country. Known for their polka-dotted plumage, spotted

owls tend to be reclusive but also surprisingly unafraid of humans — a “charismatic species,” as Hobbs calls them. He describes encounters over the years with young spotted owls, which were apt to perch near him as he wandered in their woods, seemingly as curious about him as he was about them.

There are three subspecies of spotted owls, with the range of the northern spotted owl extending from northern California to B.C. But their habitat is narrowly specific: they nest and hunt only in mountainous old-growth forests. Unable to build their own nests, the owls instead make their homes in the hollows or broken-off tops (known as “baskets”) of centuries-old conifers. The generous spacing between these forest giants is also ideal for their metre-wide wingspan.

As we walk through the forest, Hobbs consults a GIS map on the tablet he carries with him; it’s peppered with dots showing the nest sites he’s found over the last two decades, including one nearby. But the last actual owl sighting at this nest was recorded more than a decade ago.

It’s no news to anyone that since the advent of industrial logging, British Columbia’s old-growth forests have been steadily disappearing — and so, too, have the spotted owls that rely on this habitat. Today, there may be just one wild spotted owl in all of B.C. — a female, last seen in the Fraser Canyon about 40 kilometres north of where Hobbs is standing.

“All I see are ghosts now,” says Hobbs, gesturing towards the towering trees that surround us.



Jared Hobbs (BOTTOM RIGHT) has mapped (BOTTOM LEFT) spotted owl nesting sites for more than three decades. A male guards a nest site (TOP) in an old-growth Douglas fir.

WHEN HOBBS began studying spotted owls in the mid-1990s, there were around 30 breeding pairs in the province. In the early 2000s, he worked as a wildlife biologist for the B.C. government, slogging through rough terrain to find and map spotted owl nest sites, data the province could use to protect

the surrounding habitat from logging and other activities like mining.

The work was gruelling and time-consuming. By his estimate, Hobbs spent more than 200 nights a year sleeping in a tent or under the stars. He faced other challenges, too. His truck tires were slashed, and his truck doors keyed. He once woke up to find the remains of a spotted owl placed on a stump near his tent site. The culprit was never found, though it's a good bet it was someone affiliated with the logging industry. Still,

despite the obstacles, Hobbs and his team were able to put together a detailed map showing roughly 20 nest sites across the owl's range.




That map was used by the province to update its spotted owl recovery plan, released in 2006. The plan identified some 300,000 hectares (3,000 square kilometres) of habitat to be protected and launched a new captive breeding program for spotted owls. But it wasn't nearly enough, Hobbs says. A good-sized portion of the protected area had already been logged,

CRITICAL HABITAT FOR NORTHERN SPOTTED OWL

This area represents the best remaining habitat which, if protected, could support a viable population of Northern spotted owls. Protection for these 416,221 ha is supported by a federal decision under the Species at Risk Act. However, only areas within provincial parks and no-harvest zone wildlife habitat areas are currently protected.




Northern spotted owl range in Canada

PROVINCIAL WILDLIFE HABITAT AREAS FOR NORTHERN SPOTTED OWL

-  No-harvest zone
-  Conditional harvest zone *
-  Provincial Park






*There are 500 cutblocks (harvesting areas) currently approved in Conditional harvest zones.

CLEAR CUTS

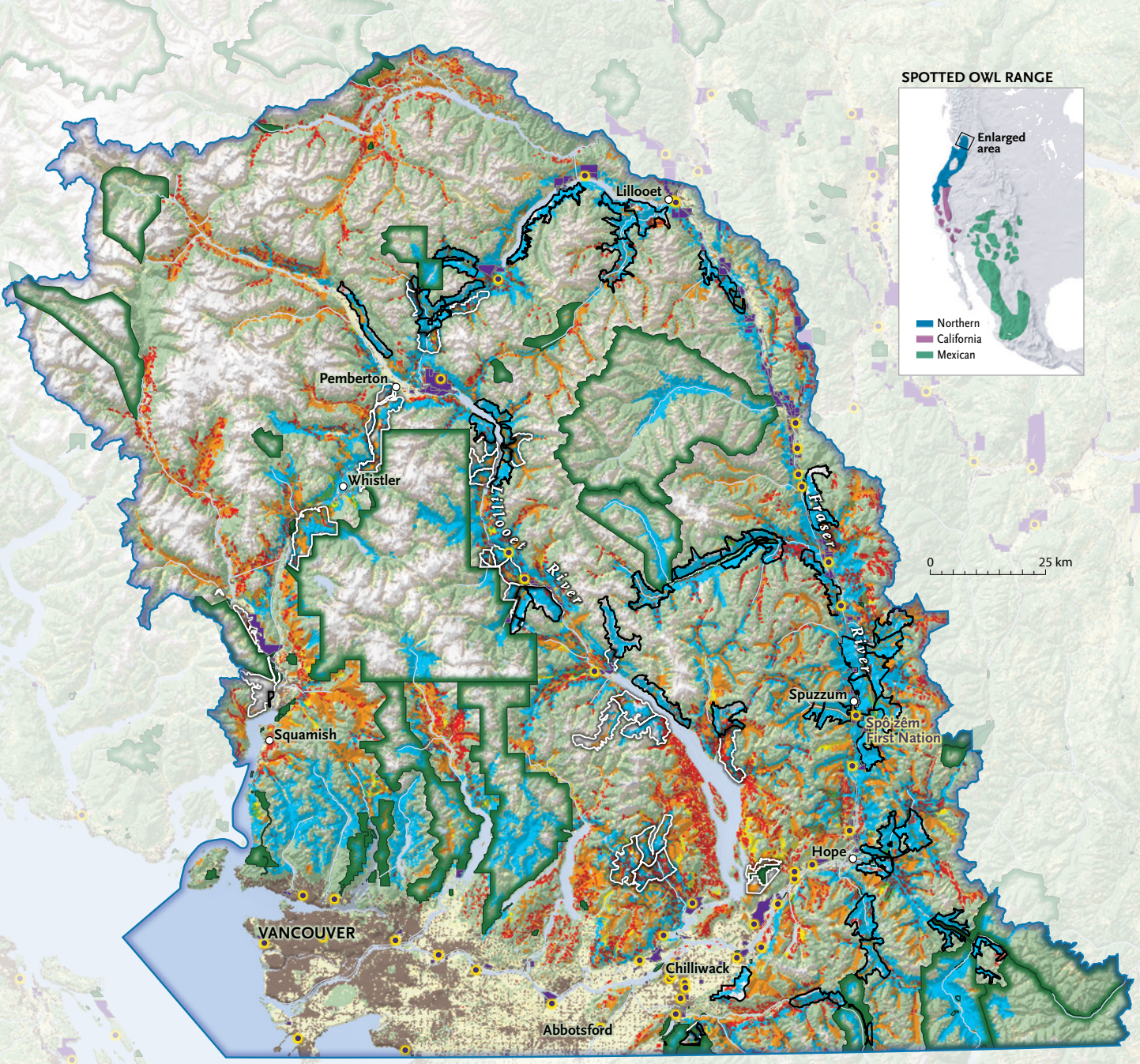
-  1995-2025
-  1965-1994
-  1934-1964

It takes approximately 500 years to regrow an old-growth forest.

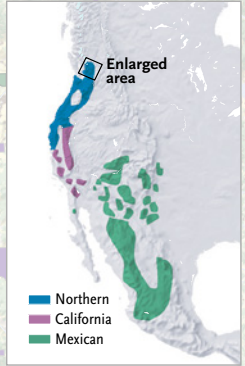
Land cover

-  Snow and ice
-  Bare rock
-  Forest
-  Agriculture
-  Urban

-  First Nation reserve
-  First Nation community



SPOTTED OWL RANGE





he says, so although it was protected, there were no old-growth trees there to provide viable spotted owl habitat. The plan identified these areas as “potential habitat,” but, as Hobbs points out, any new trees will not provide habitat for hundreds of years. Other areas with suitable old-growth forest that should have been protected in the plan were not, Hobbs says, a casualty of the logging lobby (the industry continues to harvest in areas federally designated as critical habitat).

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only in mountainous
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With a flawed recovery plan in place, the spotted owl population continued to plummet. The feeling among many conservationists was that the province was still committed to prioritizing logging, driving the spotted owl to extirpation while the federal government chose not to interfere. “The spotted owl is like the canary in the coal mine,” Hobbs says. “It’s sending us a very strong message that we’re not managing old-growth ecosystems properly, and I think we owe it to the owl to listen.”

In 2021, the environmental law charity Ecojustice, in partnership with the Western Canada Wilderness Committee and Spô’zê’m First Nation, launched a lawsuit against the federal government, alleging the government had failed to enforce protections under its own Species at Risk Act. In June this year, the Ministry of Environment and Climate Change released an updated spotted owl recovery strategy that calls for 400,000 hectares (4,000 square



kilometres) of forest to be protected for spotted owls, including nearly double the protected area outside of provincial parks (the parks already act as protected areas because no logging is allowed within them) than was set out in the provincial plan. For Hobbs, the release of the federal plan provides a glimmer of hope after decades



of frustration. But with just one wild spotted owl left, it may be too little too late.

UNTIL FAIRLY RECENTLY, little was known about spotted owls. They rose from obscurity to fame — or notoriety, depending on your perspective — during the so-called timber wars in the western United States during the 1980s and '90s. The timber wars pitted environmentalists against loggers in a bid to save old-growth forests across Washington, Oregon and northern California. The reclusive spotted owl, with its reliance on centuries-old conifers, became the poster child for that battle, its survival used as the rationale for halting the march of chainsaws

through these last stands of ancient forest. Prior to the timber wars, which made headlines across North America, few people had ever heard of the owls, and even fewer had ever seen one.

Eric Forsman, professor emeritus at Oregon State University, was an outlier. He has long been fascinated by the spotted owl, which he first encountered in the late 1960s while working as a fire lookout in the Cascade Mountains. “As luck would have it, there was a pair of spotted owls that occupied the area,” says Forsman. “One night I heard them calling, and that was the first time I had ever heard one clearly.” He returned the call, and shortly after, a pair of spotted owls appeared outside his cabin door, welcoming their new neighbour.

Forsman decided to focus on spotted owls for his graduate thesis. He spent the next several years hiking through the mountains to observe them, count them, study their pellets for clues about their diet and tag fledglings to better understand their travel patterns. “At

Spotted owls nest only in the hollows or broken-off tops of centuries-old conifers (OPPOSITE, BOTTOM and TOP LEFT). This old growth has been decimated by logging (OPPOSITE TOP). Photographed in May 2023, this fledgling (ABOVE) was a month old.

that point in time, no one had ever really done any long-term serious research on spotted owls,” he says. “There was very little known about them, and pretty much everything that we learned was new and exciting and interesting.”

Forsman found that spotted owl populations in the Pacific Northwest were declining at an alarming rate, largely due to habitat loss. He and other scientists studying spotted owls suspected the patchwork of old-growth forests left behind after logging was forcing young spotted owls to travel farther to find suitable homes, crossing broad expanses of clearcut. On these journeys, they were vulnerable to larger avian predators such as great

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horned owls, red-tailed hawks and golden eagles, as well as to starvation. If logging continued unabated, Forsman predicted old-growth forests would be gone in the Pacific Northwest within a few decades, and so, too, would the spotted owl.

In 1990, the U.S. federal government listed the spotted owl as a threatened species and, thanks to the work of Forsman and his colleagues, put the brakes on old-growth logging within its habitat. Not surprisingly, the decision was controversial. Industry experts predicted it would cost up to 30,000 jobs. Protests broke out in small towns whose population's livelihoods were tied to logging (a popular bumper sticker and T-shirt at the time read "Save a logger, eat an owl"). "When I started out, I certainly didn't have a clue that it was going to end up

basically bringing about a sea change in terms of how we manage our forest down here in the States," says Forsman of his research.

Yet despite the protections in place, the northern spotted owl population

"All I see are
ghosts now."

in the U.S. has also continued to drop. Adding to the spotted owls' challenges are barred owls. The bigger owls are better adapted to a fragmented landscape and have expanded west from their eastern range, displacing spotted owls, disrupting their nesting and out-competing them for food. Earlier

Stein River Nlaka'pamux Heritage Park (ABOVE) has one of the last best tracts of old-growth forest in B.C.; this female (OPPOSITE PAGE) was last seen in Sumallo Grove, B.C., in 2007.

this year, the U.S. Fish and Wildlife Service announced plans to cull as many as 450,000 barred owls over the next 30 years in an effort to save spotted owls. The proposal has been met with pushback from some environmental and animal welfare groups. But government scientists argue that if barred owls aren't removed, the imperilled spotted owl could go extinct in our lifetime. The B.C. government is taking a similar tack: as of 2023, 80 barred owls had been killed, with plans to continue culling and relocating in the future.



THIS PAGE, RIGHT: GREG KING; OPPOSITE: JOE FOY, WILDERNESS COMMITTEE

Forsman agrees barred owls pose a serious threat. But unless sufficient spotted owl habitat is protected, he says that simply culling a predator is unlikely to save the spotted owl. “My sense of what’s going on in British Columbia is that except for relatively small reserve areas, the old forests are still being harvested quite rapidly.”

THE LAST WILD spotted owl in Canada lives in an undisclosed forest somewhere near the town of Spuzzum, B.C. Or perhaps not.

If she’s still alive, the female, known as Skelúle? (sku-loo-la) from the word for owl in the Nlaka’pamux language, would be about 12 years old, making her a senior citizen when it comes

to spotted owls. She was last seen by researchers in the summer of 2023.

The mountainous landscape where Skelúle? lived can be a harsh environ-

ment, particularly in the winter. Squirrels and packrats — the favoured prey of spotted owls — tend to burrow deep into the snow when temperatures dip

below zero. And frequent icy cold snaps can be lethal to an older bird struggling to find food. But it’s not impossible to think that she is still out there, perhaps wondering where all her kin have gone. Skelúle? had shown herself to be remarkably tough, after all. A survivor, in the truest sense.

“The spotted owl is part of our stories of origin,” says James Hobart, a former chief of the Spô’zêm Nation. He remembers hearing their calls in the night when he was young. “There were stories of spotted owls stealing kids for being too noisy at night,” he says. “My mom used to terrify me when she’d tell that story, but whenever we heard an owl scream, we knew to be quiet.”

“If the forest isn’t healthy, then we know we’re not healthy.”



Cutblocks (ABOVE) in Spuzzum Valley, the last known location for a breeding pair of spotted owls in Canada; a young owl (OPPOSITE LEFT); protestors block a logging truck (OPPOSITE RIGHT) in California, 1989.

Hobart has been a long-time advocate for protecting spotted owls. Last year, he successfully pushed the province and federal government to halt logging of spotted owl habitat within the Spô'zêm Nation's territory in the Fraser Canyon. Spotted owls are considered spirit messengers from the tree canopy, Hobart explains. Just as salmon are indicators of a river's health, Hobart says owls tell us about the state of a forest. "They represent to us an oversight for the medicines that we harvest from the old growth. If the forest isn't healthy, then we know we're not healthy."

In 2022, the recovery and breeding centre run by the province released three captively raised spotted owls in the Spô'zêm territory, where a large

aviary has been built to temporarily house them. Sadly, two of the owls didn't survive their first winter, and the third was found injured on a nearby roadway and returned to the captive breeding centre, about two hours west in Langley, B.C. Since launching in 2007, the program has yet to successfully introduce a single bird into the wild. Indeed, the captive breeding program has endured numerous challenges. Spotted owls appear to mature more slowly in captivity, for example, taking up to eight years to reach breeding age (compared with three in the wild). There has also been a lower rate of eggs hatching healthy chicks. And the trickiest step of all might be releasing a captively raised bird into the wild, where it must quickly learn to hunt for its own food and avoid predators.

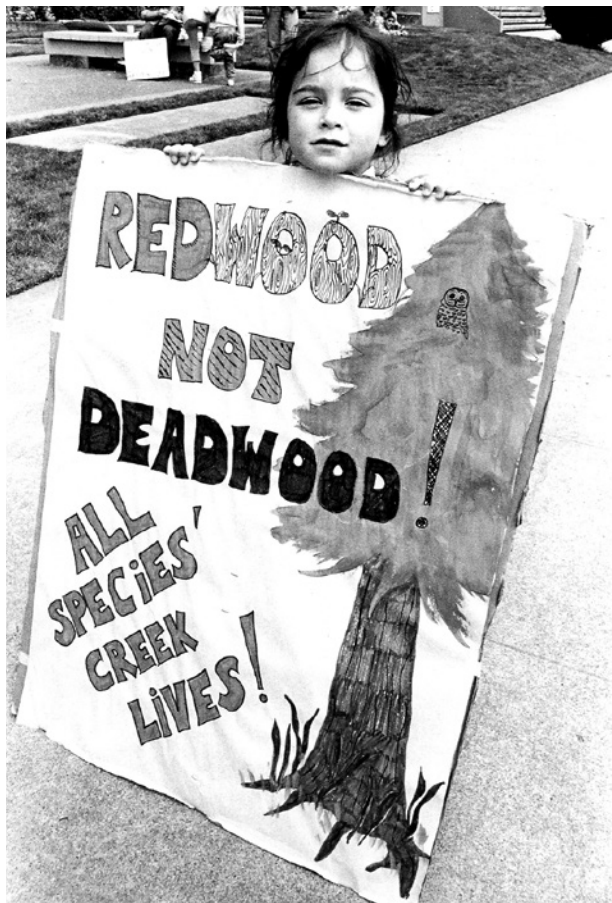
Despite the setbacks, Hobart remains hopeful. Work is underway to expand the aviary in Spô'zêm Territory so captive owls can spend more time there before being released, which Hobart believes will ease the transition and give the birds a better chance of thriving. "We're

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learning,” he says. “We’re still adamant that we can do this.”

As the saying goes, where there is life, there is hope. Joe Foy knows that better than most. A campaigner with the Western Canada Wilderness Committee since the late 1980s, he has endured his share of disappointment — the federal list of wildlife species at risk now includes 299 endangered species, with 23 of those already extirpated (no longer found in the wild in Canada). Every year, that list grows longer. And yet Foy notes that another charismatic

local is, for him, a model of what’s possible when everyone comes together.

By the early 1900s, the fur trade had decimated the global population of sea otters, taking it from upwards of 300,000 to just 2,000 by the early 20th century. Along B.C.’s coast, sea otters were wiped out entirely, the last one shot in 1929. But in recent decades, the B.C. population has staged a remarkable recovery, ballooning to 8,000 after just a few dozen otters were transplanted from Alaska in the 1960s. “Because we still had the habitat

and because they still existed in the U.S., they’re back, and their range is expanding,” says Foy. “With spotted owls, it’s why we argue the number one thing is nailing down the habitat.”

Foy began campaigning to protect spotted owls in B.C. in the mid-1990s, after seeing the protection measures enacted in the U.S. But there are clear differences between the two countries in terms of how species at risk are managed, he says. For starters, Canada didn’t have its Species at Risk Act until 2002 — nearly 30 years after the U.S.



OPPOSITE: Protests to save spotted owl habitat in front of Rideau Hall, Ottawa, in 2024 (BOTTOM LEFT) and in northern California in the 1980s and 90s. This tree (BOTTOM LEFT), ringed by activists in 1989, was logged soon after. **THIS PAGE:** An owl swoops down on prey, likely a bushy-tailed woodrat, at its nest grove.

Endangered Species Act. And unlike the U.S., Canada delegates much of its authority to protect species to the provinces, which, Foy says, can lead to a patchwork approach. “The federal government doesn’t come in with a heavy hand,” he says. “It tries to coax and mince around various issues, and that’s resulted in a very dire state for our species at risk.” Still, he hopes the federal government’s updated spotted owl recovery strategy will be a turning point, a case of “build it and they will

come.” Though the forests are silent now, perhaps that 400,000 hectares contains enough contiguous old-growth habitat to support just one pair of spotted owls. It would be a start.

FOR MUCH OF OUR HIKE, Jared Hobbs can’t resist calling out for spotted owls. “Old habit,” he says, with a shrug. Each time, his call is met with silence. After about two hours of hiking, including a stretch of bushwhacking, we eventually find the tree where he’d located a spotted owl’s nest years ago. It’s an old cedar with a hollow nook partway up, where a branch had broken off.

“This is the one,” Hobbs says, glancing up from his GIS. The nest, however, is long gone — likely blown down in a windstorm. The empty nook stands as a reminder of how quickly the evidence of a species can disappear. “It’s sad that it’s not here,” Hobbs says as we sit down

for lunch. “But it’s also amazing to be here in this place and get to tell the owl’s story. I think it’s appropriate.”

He launches into a description of one of the spotted owl’s most remarkable traits: its hearing. As nocturnal hunters, spotted owls rely heavily on their hearing to locate prey. The feathers that ring their head — known as a facial disc — help direct sound to their ear openings. The openings themselves are slightly offset, which helps the owl to precisely triangulate where a sound is coming from — even the faintest rustling of a tiny mouse beneath the snow.

“I have no doubt of the owl’s ability to hear,” says Hobbs, looking up at the tree. “But I wonder if we’ll hear the message the owl is trying to tell us.”

We eventually pack up and wind our way back out the trail. Hobbs calls out the four-note hoot of the spotted owl the entire way. 🦉