



## Fisher 47

A MOTHER'S CONTRIBUTION TO THE NEXT GENERATION **BY SEAN MATTHEWS**

DAWN YET TO BREAK AND COFFEE just brewed, Chuck Goddard muscles the trailer for his all-terrain vehicle (ATV) onto the hitch of his Ford F-150. Fog sits heavy in the Hoopa Valley, and a thin layer of dew covers the grass as he pulls out of the yard. Leaving the sleeping valley behind, he's well into the hills before the first rays of sunlight pierce the tree-line. It promises to be another fine day for tracking fishers.

It's late March in the coastal mountains of northern California. Winter snows are gradually receding, and observant eyes notice the first signs of spring.

Chuck drives for half an hour, winding along Pine Creek Road just above the meandering Trinity River, drinking from his thermos. Soon it's time to switch to the ATV. He straddles the seat and puts the four-wheeler in gear. Keeping his eyes riveted on the terrain ahead, he maneuvers around sections of road that had been washed out during a series of winter storms, devastating even by local standards.

Chuck is a wildlife technician for the Hoopa Valley Tribe, working for the past three years on a project to learn more about the elusive, forest-dwelling carnivore, the fisher.

He has been tracking Fisher 47 since she was captured in the winter of 2007 and fitted with a radio collar. For three days now, Fisher 47 has been hanging out in the same area, an indication at this time of year that she may have selected her natal den site—often a cavity high up in an old-growth tree—and given birth.

Fishers are members of the weasel family. They are about housecat size, with shorter legs, a longer, wedge-shaped snout, and a longer, bushier tail. Here in California, males weigh about eight pounds, twice the weight of females. Extremely agile on the ground and aloft, they spend as much time hunting for rats, squirrels, and rabbits on the forest floor as they do lounging in the treetops.

Fishers once ranged throughout the Pacific Northwest, but now none survive in the state of Washington. Two small populations persist in southern Oregon. In California, fishers occupy less than half their historic range. At this point, California's southern Sierra population appears to be isolated from the northern population. The loss of fishers throughout the region is attributed to over-trapping for

their fur and loss of habitat to commercial timber harvesting. Three times during the past ten years, petitions have been made to list Pacific fishers under the U.S. Endangered Species Act. In the northeastern U.S. and Canada, fisher populations seem to be recovering or stable (see “Reflections,” page 64).

Fisher 47 lives in one of the species’ last strongholds: the Hoopa Valley Indian Reservation in the rugged Klamath Mountains. More than 95 percent of the reservation’s 144 square miles is forested with Douglas fir, tanoak, madrone, Oregon white oak, and California black oak. The Hoopa Tribe has harvested Douglas fir on their land since the 1950s, and logging is the largest single source of revenue and employment for tribal members. Fortunately, tribal leaders have taken a conservation-minded approach to logging, which has allowed fishers to persist on the reservation. The Hoopa link the well-being of fishers and other forest animals to their cultural identity. The Wildlife Conserva-

tion Society (WCS) has been working with the Hoopa since 2004 to gather data that will help ensure the protection of the areas used by fishers during future timber harvests. To date, 38 fishers have been radio collared.

Like all reproductive females of her species, Fisher 47 plays a critical role in maintaining the population. Females can give birth at two years of age and produce an average of two kits each year. This three-year-old may already have had a litter the previous spring, and she has the potential to do so for several years to come.

Chuck maneuvers his ATV as far as the road will take him. Then he tightens his bootlaces, shoulders his equipment, and hikes into the forest. With a hand-held anten-

**The Pacific fisher (opposite, a newly tagged juvenile about to take off into the wild) is becoming increasingly rare in California. In one of the species’ last strongholds, on the Hoopa Valley Indian Reservation (right), WCS is working with the Hoopa tribe to learn why the fisher’s numbers have declined. Below: Chuck Goddard (on right) and Aaron Pole, both wildlife technicians for the tribe, plot bearings on a map to locate a radio-collared animal.**



WAX WITAKER (3)





na attached to a radio receiver hanging from his neck, he begins to pick up a “beep-beep” signal. The pulse rate indicates that Fisher 47 is not moving around. As the beeps grow stronger, Chuck is hoping to find the animal in a tree den. But he is also keeping one eye on the ground, in case he is hiking in to collect her carcass.

Chuck comes to a copse of tanoaks. He circles it and hones in on a tree with a partially concealed cavity in the trunk, an opening not much larger than a human fist, about 30 feet up. He is confident that he has found Fisher 47’s natal den, and that she is safely tucked inside with this year’s kits. He quickly jots down some notes, records the location, and hangs some flagging tape to mark the site so he can easily find it again. Then he makes the hour-long walk back to the road.

During the denning season, female fishers use an average of three to four dens. Most likely, they transfer their kits to a new den either to take advantage of fresh areas to hunt or to escape an infestation of fleas and ticks or a nosy bobcat or other predator.

After Fisher 47 switches to a second den, Chuck leads

**Below: Hoopa wildlife technician Rebecca Green holds Fisher 47’s female kit after the youngster was taken briefly from the den to be tagged. The kit is about three weeks old in this picture.**



a crew out into the forest to climb the den tree, this time an old, gnarled white oak. Dens are inspected to see how many kits each female produces. Later in the summer, after they become independent of their moms, each kit receives ear tags and is implanted with an under-the-skin transponder for identification purposes. When they are old enough, the young fishers will wear radio collars.

This year, Female 47 has contributed a light brown, 8.7-ounce female kit to the next generation of fishers on the Hoopa reservation.

Seven weeks after finding Fisher 47’s natal den, Chuck is out listening for her radio signal. The beeps are coming from an area several hundred yards away from her fourth den tree. He’s worried. Only a few days ago he tracked her to den number four, and it would be unusual for her to move again so soon.

Chuck collects his gear and heads into the forest on foot. High on a ridge, he comes across a grizzly scene—the remains of Fisher 47. He needs to act quickly to identify the predator responsible, and then find the orphaned kit. At seven weeks old, a kit still needs its mother to provide not only milk, but warmth. If she has not been with her youngster in the past 24 hours, it will not live long. Chuck knows this all too well. He has found three females killed by predators this season, and there were four kits that he didn’t reach in time.

Chuck radios his colleagues Rebecca Green and Mary Kotchwar and asks them to bring a camera to document the scene, plastic bags to collect samples, and tree-climbing gear. Within an hour, all three of them are on the trail, hiking to Fisher 47’s last known den. Based on puncture wounds to her head, they have determined that she was killed by a bobcat.

Arriving at the den site, Chuck scrambles up the tanoak tree and peeks into the cavity. It’s too dark to make out the den recesses. He reaches for the flashlight on his climbing harness. In an instant, he sees the kit, half buried in bedding material, alive and healthy. He expertly removes her and gently places her in a gear bag lined with a towel and heat packs.

Meanwhile, Rebecca and Mary contact their colleagues at the Hoopa Wildlife Office. The kit will be taken to the Humboldt Wildlife Care Center, a rescue and rehabilitation center in Arcata, California. She will be cared for by dedicated volunteers until she is eating solid food. The team hopes she then can be released back into the wild wearing a radio collar. With our help and a little luck, she will grow up to make her own contributions to this fisher population in the forests of the Hoopa.

*Sean Matthews joined WCS in 2001, directing studies of human-black bear conflicts in Yosemite National Park. He now directs the Hoopa Valley Fisher Project. To help in these efforts and to learn more about the conservation challenges faced by fishers, visit [www.wcs.org/hoopafisher](http://www.wcs.org/hoopafisher).*