

BURROWING PARROTS

GIANT FISH OWLS

ARCTIC POISON

POLAR BEARS

SVALBARD

# WILDLIFE CONSERVATION

CONSERVATION SOCIETY

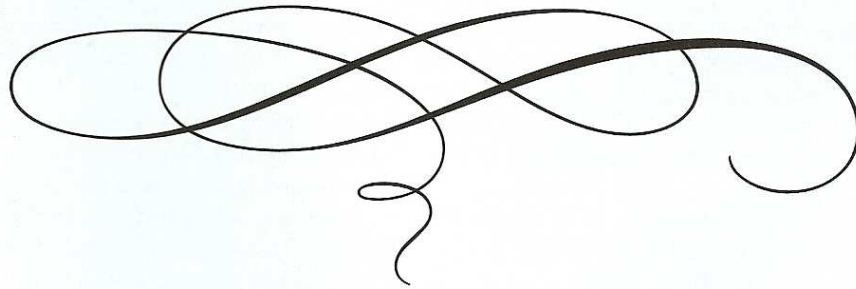
April 2009



CAT  
CARING  
Capacity



# THE *SECRET* FAMILY LIFE of COUGARS



**I**n America's folklore, cougars are *ghost cats*. Historically, they were considered "sneaky predators and evil-doers." Out of this fear and ignorance, they were hunted nearly to extinction.

Today, cougars—also known as mountain lions, pumas, and panthers—are one of the most misunderstood of all the big cats. Until recently, they were considered solitary animals that come together only to breed. But GPS (global positioning system) data and DNA tests are illuminating the shadows of cougar life and revealing the softer side of these secretive felines: their altruistic family life.

BY LAURA BOWERS FOREMAN

The first time I encountered a mother lion was in the wilds of central Washington while working with cougar biologist Ben Maletzke, a Washington State University doctoral candidate. During his eight-year study, Maletzke, a man in his early thirties, has participated in dozens of mountain lion captures.

“You lead,” he said, as he handed me a GPS receiver.

With a pounding heart, I took the device that would guide us to the radio-collared mother at her den and began bushwacking my way through the dry Ponderosa pine scrub. Holding a radio antenna, Maletzke kept abreast of me as we navigated the steep hillsides of the Cascade Mountains. Suddenly, the crack of dry timber broke the still air. The cougar had bolted from a pile of brush and disappeared into the undergrowth. Clearly, she was frightened, not fearful.

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Maletzke signaled me to walk toward a slash pile. He crawled into a small opening in the timber and pulled out a growling kitten. He handed the young male to me so he could feel around for more kittens. With gloved hands, I took the tiny cat and held him close. Soon his hissing and growling quieted.

“Looks like there’s only one,” Maletzke reported. He picked up the antenna. “The mother is circling nearby, watching. We need to be quick to minimize her stress.”

In that moment, the illusion of a crazed, snarling cougar vanished, and I saw the world through the eyes of a protective mother cougar. I, too, was raising children and understood her anxiety. I helped Maletzke tag and weigh the four-week-old kitten.

“Their secretive nature is the species’ best survival skill, so cougars are rarely seen. That’s one reason why it’s so difficult to get accurate population estimates,” explained Maletzke. “Unlike wolves, they won’t let us observe them directly.” He checked the mother’s radio signal, then continued, “She knows not to challenge us. It would be too risky. Her best bet is to hide, wait until we leave, and then move her kittens.”

From the data collected from GPS collars on the relatively stable cat population around Cle Elum, Washington, biologists have gained a window into the daily lives of how mother cougars hunt and care for their young. Though it is

too early to draw conclusions, the data indicate a variation of the pride behavior observed in African lions.

An African lion pride lives in open habitat and may have as many as 18 related females and 9 unrelated males. This coalition is possible because prey is physically large and gathers in herds. In other words, it’s easier to invite the family to dinner when you know there’s enough food to go around.

With cougars, biologists are observing a coming together of females and their offspring in ways that were previously unknown. “In generation after generation, we are finding that the territories of related females are either connected or overlapping,” Maletzke said, as he weighed the kitten with a hand-held scale. “The females reside within the dominant male’s much larger territory, but they keep a low profile to protect their young from dad’s determination to meet any challenge, even from his own sons.

“GPS data shows grandmothers, mothers, and daughters crossing paths and feeding at the same kill at the same time.”

After inserting an ear identification tag, he tucked the young cougar back into the den. In two weeks Maletzke would return, locate the new den site, and fit the kitten with an adjustable radio collar designed to expand as the kitten grows.

“We’ve even had a pregnant mother check in on her pregnant daughter just as the daughter’s delivery date approached,” he said.

“How are they communicating?”

Weeks later Maletzke called me on the phone. “We went back to collar that kitten and discovered the mother had a second, much larger kitten,” he said. His voice was tinged with excitement. “The new kitten was ten pounds heavier than the first kitten. This weight variation is unlike anything we have seen before so we think she is fostering an orphan. We took DNA samples to check it out.”

Later that summer, I walked along a ridge overlooking the Cle Elum valley with Washington Department of Fish and Wildlife biologist Gary Koehler. Koehler is Maletzke’s mentor at Washington State University, where Maletzke is seeking a PhD.

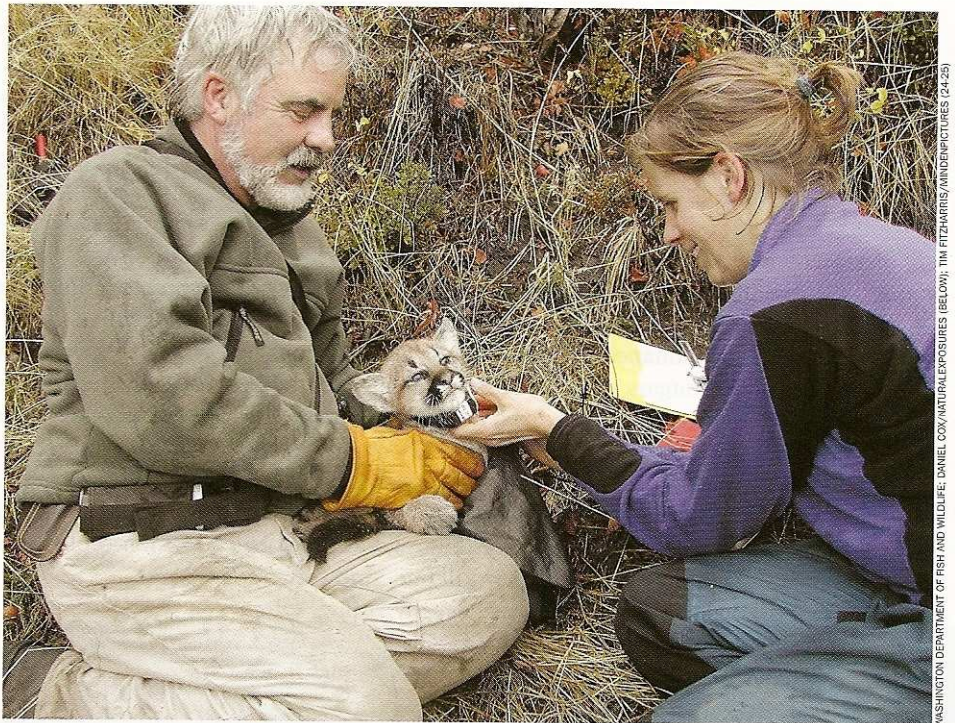
He knelt down and examined a pugmark in the thick, dry silt, then made a fist and compared it to the size of the track. “Adult male,” he declared with certainty.

“Dominant males maintain order,” he explained. “Young male cougars aren’t ready to challenge their fathers for territory, so as soon as they leave their mother, they head out, lay low, and try to avoid conflicts with other males. They hone their hunting skills and increase their strength and endurance. If they find enough deer and other prey and aren’t killed by hunters or male cougars, they are ready to breed. Then they’ll establish their own territory and defend two or three females.”

He looked across the distant ridges, rubbed his gray-



Wildlife biologists Gary Koehler and Hilary Cooley fit an expandable collar on a six-week-old cougar kitten (right). The data collected from GPS collars on the relatively stable cougar population around Cle Elum, Washington, has given biologists insight into the cats' daily lives, revealing a great deal about motherhood and cub-rearing (page 24 and below).



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE; DANIEL COV/ANTHRALEXPOSURES (BELOW); TIM FITZPATRICK/WIREIMAGE.COM (24-25)





“Our research shows that, without a **STRONG LEADER**, chaos ensues because the younger, insurgent lions battle for dominance.”

ing beard, and said with a sigh, “Too often trophy hunters kill the dominant male. Our research shows that, without a strong leader, chaos ensues because the younger, insurgent lions battle for dominance.”

In Cle Elum, cougars must constantly adapt as they deal with hunters, farmers and ranchers, and the interstate that dissects the region.

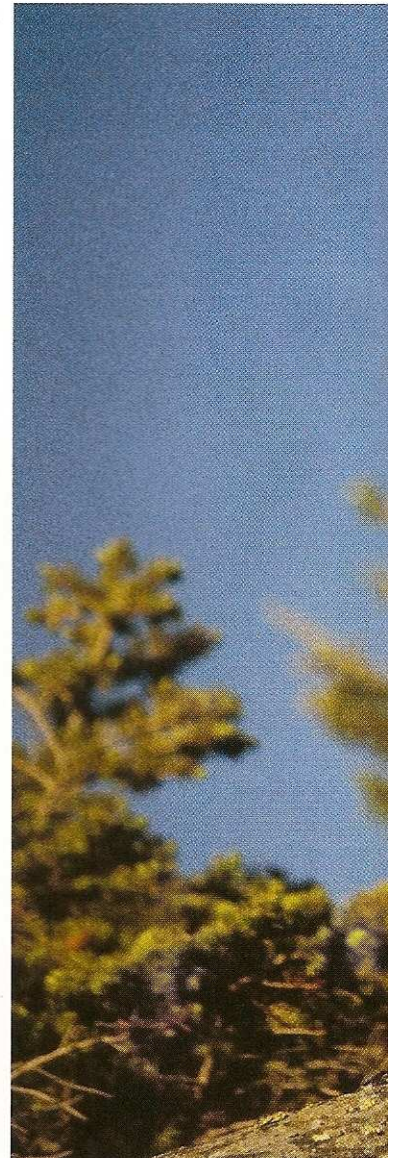
“These animals have an amazing ability to discern between prey and livestock,” said Koehler. “Our data show the cats are repeatedly in areas where there are sheep, horses, and cattle, but only rarely do they kill one. And the cougars that do make poor decisions are usually young. Often they’ve just dispersed. Without mom around, a sheep grazing in thick brush is a fast-food dinner for a hungry, inexperienced cougar. But, we can learn not to put our pets and livestock in harm’s way.”

As I listened to Koehler, I considered altruism among mountain lions. Helping close relations would help a cougar’s own genes survive. Living together would provide pro-

tection from predators and allow for group hunting. But it requires limiting aggression. Is this possible among mountain lions?

At the ninth Mountain Lion Workshop, held in May 2008 in Sun Valley, Idaho, Koehler introduced me to his colleague, the well-known cougar researcher Howard Quigley. Quigley has also observed a case of what appears to be cougar fostering in the Teton Mountains of Wyoming. A mother cougar with three 5-month-old kittens allowed orphaned 15-month-old kittens to join her family. “This is a huge dis-

**Mother cougars teach their young to hunt (right). A 100-pound radio-collared female killed a deer in the tall grass 150 yards from this residence near Cle Elum (below). Though the cat spent three days feeding on the kill, the homeowners never knew she was there.**





covery because we were witnessing something we hadn't seen before," Quigley said.

"Two of the older kittens were males, and by our current way of thinking, they would be considered a direct threat to her kittens. Yet, not only did this mother let them join her at a kill, they stayed all together throughout the winter and she taught both sets of kittens to hunt." Quigley smiled when he said: "People call this a blended family."

It is through GPS data that Quigley watches the movements of this expanded family. "This is not new behavior on the cougars' part," Quigley explained, "but rather a new window has opened to us with advancements in technology. We're seeing much more."

Does this mean that cougar mothers will adopt any orphaned cubs? Quigley is doubtful. "I suspect the adoptive mother may actually be a daughter of the mother who was killed by hunters. So the kittens she adopted would in fact

be her younger siblings. I wouldn't be surprised to discover they have the same father as well. DNA tests will tell us."

The tools for cougar research are improving, but funding for field projects is difficult to procure. And too often, rather than relying on available scientific data, states let hunting interests determine cougar population management policies. Since 1990, hunters have killed more than 3,000 cougars each year in the U.S. licensing practices in Washington allow hunting of both dominant males and females. It is critical that sport hunting management be based on sound science so stable populations no longer lose the animals that maintain order and teach the young.

*Laura Bowers Foreman's essays have appeared in the Seattle-Post Intelligencer and EarthLight magazine. Her latest, "Sleeping with Tigers," appears in the anthology Memoirs in the Light of Day (Lamberson-Corona Press, 2008).*

