

Researchers track Colorado cougars

Under a full moon in the Rocky Mountain foothills, Mat Alldredge and his research team carefully recorded body measurements and took hair samples from a young female cougar. Denver and Golden, Colo., glittered below them on this January winter night, a view the young cougar shared with her mother and her uncollared sibling from their home range in Jefferson County's White Ranch Open Space Park.

"We're trying to understand how cougars live in developed, urban areas and how we can try to coexist with them," explained Alldredge, principal investigator for Colorado Parks and Wildlife's Front Range cougar project. Launched in 2007, the study has followed the movements and behaviors of 78 adult cougars outfitted with GPS collars.

The big cats are captured and tranquilized once per year using cage traps, snares, free-range darting, and occasionally tracking dogs, in order to replace collars, assess overall health and growth, and collect tissue, blood and hair samples. The data and GPS tracking have led to some surprising insights about Front Range cougars' lives. RHEA MAZE

1 ON THE MOVE

Each year, a few collared cougars take astonishing journeys. Last summer, AF22 and AF87 headed south from the Golden area at the same time and traveled just 5-10 miles apart for roughly 130 miles to Pueblo, Colo. Weeks later, for unknown reasons, both cougars began to head back north on the exact same day.

"That was baffling," Alldredge said. AF87 was the first adult female in the study to make such a trek, behavior usually seen in younger cougars. "Young adults (particularly males) are thought to be hardwired to disperse and not come back, but we've seen a lot of young adult females (like AF22) make a big loop at one-and-a-half to two years of age and then come back to establish a home range near their mothers."

A female's home range typically comprises about 40 square miles and often overlaps with those of her offspring and other female cougars. Adult males require a much larger territory, of about 200 square miles, and many young males find themselves sandwiched between cities and adult males' established territories. A few of the study's collared males have traveled as far as central Wyoming and New Mexico.

Females

● SW026

● AF22

● AF87

○ Project Boundary

Males

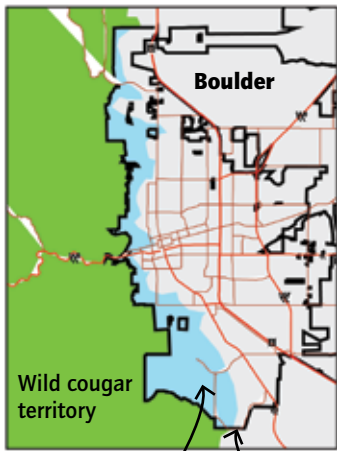
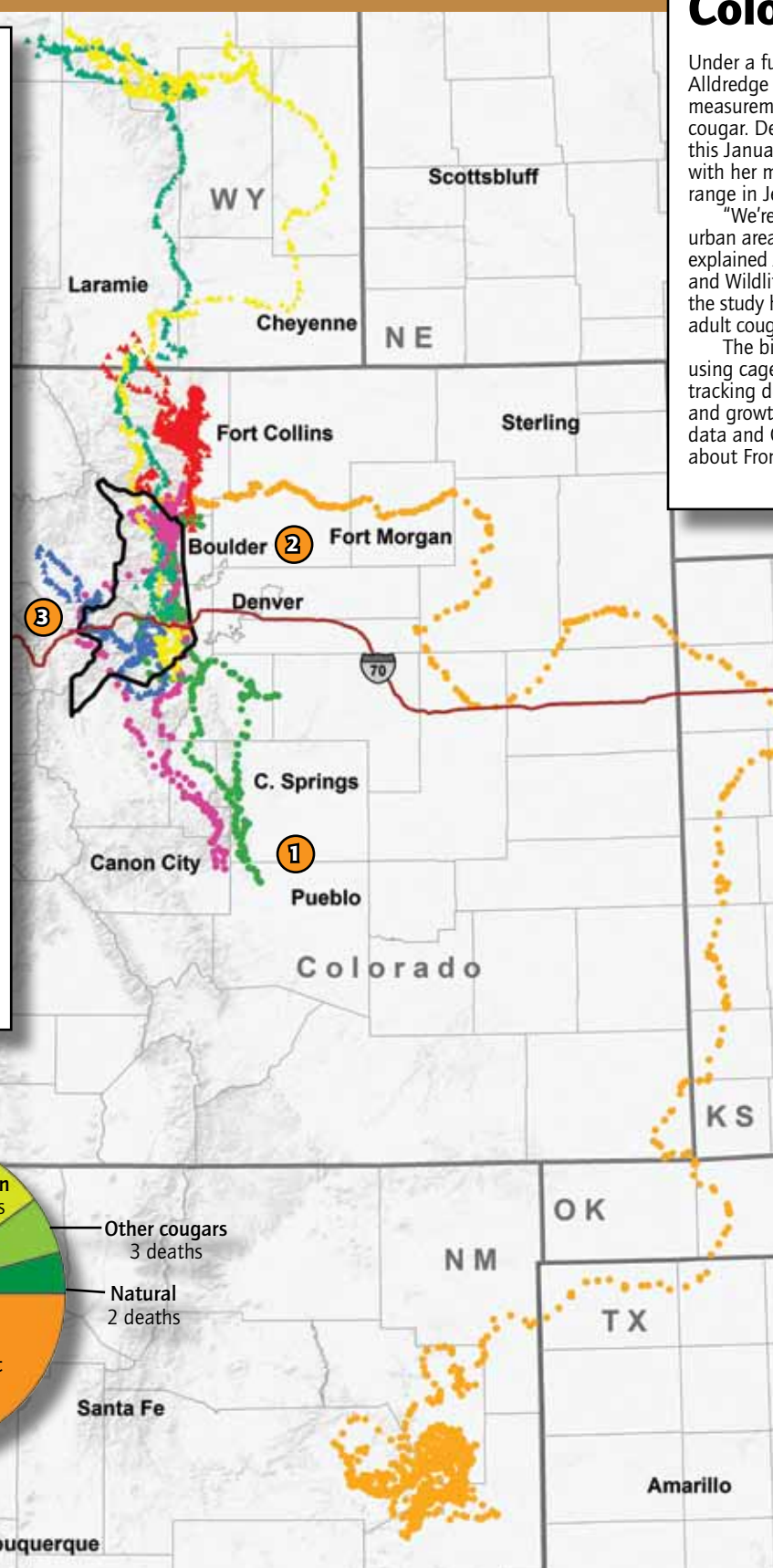
▲ AM80

▲ AM71

▲ AM606

▲ AM31

○ Project Boundary



Area of urban cougar sightings
Boulder city limits

2 A WALK ON THE URBAN SIDE

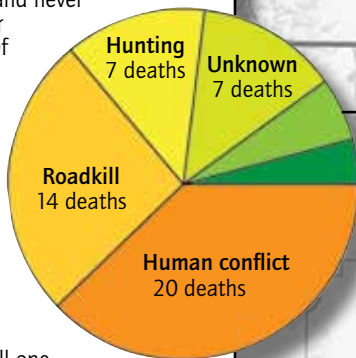
AF01, a female collared in the study's first year, spends months at a time in the foothills and occasionally drifts into nearby Boulder, Colo., to hunt at night.

Cougars like AF01 enter urban areas in search of prey, like deer and raccoons, and may take special precautions to avoid humans. The cougars who use urban areas do so primarily after dark, when it's quieter and less risky, and usually depart by daybreak.

AM99 was recently sighted by several residents of Lyons, north of Boulder. After a local dog treed him, neighbors gathered to watch wildlife officials tranquilize and lower him from the tree for later relocation to national forest. "Everyone there was rooting for him," Alldredge said. "The more people learn about cougars, the less afraid and more interested they become."

3 DANGER ZONES

AF22 was killed by a car on Interstate 70 and never returned to her home range. Of the study's 78 cougars, only 16 are active with functioning collars and 53 are known to be dead, evidence of their high mortality rate. Cougars occasionally kill one another and older cougars have died for unknown reasons, but humans are the main cause of death here.



foot cliffs. Local police officers tried to hold the animal back with pepper spray, but when "he came toward the glass, the police shot him."

Bystanders were horrified. Blogs and comments overflowed with protests. But Seth Riley, the principal investigator on the Park Service study, says that the saddest part of the story

came later, with the lion's DNA tests. "He had some unique genetic markers not seen in our other Santa Monica lions," he laments. "And he never got to pass them on."

Last year, the California Department of Transportation was turned down for a federal grant to fund the Liberty Canyon underpass. Riley insists

the cost is justified. "These mountain lions are the ultimate challenge for conservation," he says. "If the system is able to sustain large carnivores, it says something good about the way we're able to conserve it." If it's not, the fragment of wilderness known as the Santa Monica Mountains will devolve into another large urban park. □

MAPS COURTESY COLORADO DIVISION OF PARKS AND WILDLIFE