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Nevada Site Office Environmental Management

EM NEWS FLASH

First Subjects in Mountain Lion Study Give a Sobering Account of Survival

Biologists leading a two-year study on the behavior of mountain lions living on or near the Nevada National Security Site (NNSS, formerly the Nevada Test Site) are gathering information on two new subjects. Preliminary results indicate that the recently collared mountain lions, or *pumas*, are roaming faster and further than expected, and that surviving the winter can be a losing battle, even for relatively healthy lions.

*Mountain lions are solitary predators known throughout the Americas as **pumas**, **cougars**, and **panthers**. While all of these names are considered correct, scientists usually refer to the cat as a **puma**.*

Puma 1—a 2 to 3-year old female—was captured on the morning of December 13, 2010, on Timber Mountain, located on the western edge of the NNSS. A week and a half later, trappers were able to snare and sedate a second female (a 5 to 6-year old) in the north central region of the NNSS. Before being released, each lion was fitted with a Global Positioning System (GPS) satellite collar to record its location six times per day.

Tracking results immediately showed the team, made up of scientists from the U.S. Geological Survey (USGS) and National Security Technologies, LLC (NSTec), just how far and how fast these mountain lions are ranging. Puma 1 left the NNSS, traveled to Bare Mountain near the town of Beatty, NV and then returned to the site, where it was last tracked near the northern border of the NNSS. Puma 2 roamed more than 20 miles to the Nevada Test and Training Range (north of the NNSS) where it was found dead, presumably from starvation.

While the loss of Puma 2 was difficult for the team, it wasn't entirely unexpected. "Winters are tough times for mountain lions, and this is when we see the most losses," said W. Kent Ostler, Senior Scientist with NSTec. "Though the deer herd experienced a rebound in 2010," he explained, "overall numbers have been



Puma 2 was captured, collared, and then released in late December 2010 in the north-central region of the Nevada National Security Site.

down due to low precipitation in the growing seasons of the past few years.” Ostler went on to say that Puma 2 appeared to be in good health at the time of capture, but researchers had documented only one kill (a coyote) during the entire month she was tracked. The team believes a post-mortem examination of the body will provide a more definitive cause of death.

Eventually the two-year study, funded by the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office, will be rounded out with a total of eight mountain lions. Tracking the animals over time will hopefully shed light on where these elusive predators live, what they eat, and how best to manage potential risks to workers who have experienced an increase in mountain lion sightings over the past five years.

“Even though the risk of an employee being attacked by a mountain lion is extremely low (only one attack has ever been documented at the NNSS),” said the federal Environmental Protection Team Program Manager Peter Sanders, “we want to assess where the risk is the highest since some new projects are being conducted in mountain lion habitat.”

Dr. David Mattson, a USGS wildlife biologist who is heading up the study, hopes the research at the NNSS will someday contribute to a long-term study that monitors mountain lion populations on a regional scale. Since 2003, USGS researchers have been able to track more than 60 mountain lions from northwestern Arizona to southwestern Utah.

Mountain Lion Facts

Weight: 90-130 pounds (female); 140-160 pounds (male)

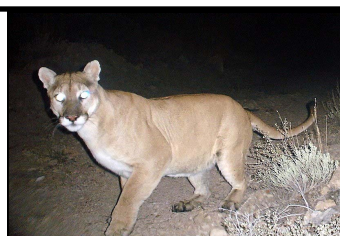
Size: 6-8 feet in length (including tail)

Life Span: 10-12 years in the wild; up to 20 years in captivity

Range: 10 square miles to 350 square miles; a typical female ranges fewer miles than a male

Habitat: Grasslands, swamps, and mountains throughout the Americas

Diet: Deer, rabbits, coyotes, young horses



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