

COULD THE JAGUAR BE POISED FOR RECOVERY IN THE UNITED STATES?

BY MICHAEL J. ROBINSON

The US Fish and Wildlife Service is developing a recovery plan for the jaguar. A recovery plan is a science-based roadmap to getting an endangered species away from the brink of extinction, and secure.

Furthermore, the agency is mapping out areas in the southwestern US for designation in 2012 as jaguar critical habitat. Critical habitat designation delineates the areas that are necessary to achieve recovery. Federal agencies may not take any actions that would adversely modify critical habitat. That proscription is why threatened and endangered species with critical habitat designated for them have been found to be twice as likely to have improving population trends as those without.

That the jaguar will receive these benefits is astounding given the Fish and Wildlife Service's decades of jaguar persecution, followed by further decades of maledictory neglect. But these belated and much-welcome administrative actions come just as approximately 350 miles of the US/Mexico border have been walled off, thereby blocking jaguar movements, as expanding residential and commercial development and new gargantuan copper mines threaten to further sever potential jaguar movement corridors in Arizona and New Mexico—and with no promise that a federal government still enthralled by the livestock industry, the jaguar's committed nemesis, will attempt in good faith to recover jaguars.

The Decline of a North American Native

If potential recovery of the world's third-largest felid, after the tiger and the lion, seems a minor miracle or perhaps mirage, it is at least as surprising to those who may happen upon the news that jaguars are even native to the United States. Jaguars were reported in North Carolina in 1700 and 1737, Louisiana in 1886, Texas up through 1948 when the last of an originally "vast number" of jaguars was killed, in northern Colorado in 1843, New Mexico and Arizona through the current era, and California, including the San Francisco Bay area in the early 1800s, with the last one shot near Palm Springs around 1860. Indian artifacts and accounts suggest an even broader US distribution.

Not only are jaguars indigenous, but paleontologists believe these spotted and occasionally melanistic cats

evolved in North America before colonizing southern climes. They disappeared from most of their US range during the nineteenth century due to clearing of forests, draining of wetlands, introduction of livestock, and persecution to eliminate a threat to stock and to acquire a beautiful pelt. In the Southwest, where aridity and rugged terrain curbed human development, jaguars persisted longer, not only sheltered by vast roadless areas but also bolstered by jaguars emigrating from Mexico.

In 1915, in response to the general threat of livestock predators in the western United States, primarily wolves, Congress initiated funding for a systematic program of predator extermination to be carried out by the US Bureau of Biological Survey, previously an agency devoted to scientific research. In 1918, the Biological Survey killed its first jaguar in the Santa Rita Mountains south of Tucson. In 1963, the Fish and Wildlife Service, the new name since 1940 for the Biological Survey, shot the last known female jaguar in the US, in the White Mountains of eastern Arizona.

Fish and Wildlife Service (FWS) trapped another jaguar in the same region the following year, and in 1965 and 1971 two more jaguars were killed by private citizens in southern Arizona.

In 1972, with the jaguar presumed extinct in the US and declining elsewhere in the western hemisphere due to habitat loss and hunting, the Fish and Wildlife Service placed it on the list of foreign endangered species under authority of the 1969 Endangered Species Conservation Act. Nonetheless, the agency issued "hardship permits" to safari companies to allow their clients to import into the US the trophies of jaguars killed in other nations, which otherwise would have been illegal.

After passage of the Endangered Species Act in 1973, FWS continued to list the jaguar as endangered only outside the US. In 1979, the agency admitted that jaguars should also be protected domestically, maintaining that only through an "oversight" had it failed to do so, and pledged to rectify that oversight "as quickly as possible." But it failed to follow through.

In December 1986, a southern Arizona rancher, using two or three successive packs of hounds over ten days, hunted down and shot a jaguar in the Dos Cabeza Mountains. The slaying did not violate the Endangered Species Act because US jaguars were still considered extinct rather than endangered.

Agencies Kill the Last Known US Jaguar

In 1992, biologist Tony Povlitis, Ph.D. petitioned to list the jaguar as endangered in the US, but Fish and Wildlife Service illegally ignored his petition. It wasn't until July 1997, as a result of a lawsuit by the Center for Biological Diversity, that jaguars in the US finally received federal protection.

The Endangered Species Act requires, with narrow exceptions, that FWS develop recovery plans and designate critical habitat for animals and plants that are listed as threatened or endangered. Nevertheless the agency did not designate jaguar critical habitat because, it claimed, that would likely make the species more vulnerable to poaching.

Nonetheless Fish and Wildlife Service stated: "Identification of this species' habitat preferences will be addressed through the recovery process." But then the agency failed to initiate a recovery planning process. It did not appoint a jaguar recovery team charged with developing a recovery plan.

Instead, it deferred to a new inter-agency group, the Jaguar Conservation Team, that had been founded and was chaired by the Arizona Game and Fish Department in order to forestall the jaguar's listing as endangered in the US. Among other empty promises, the Jaguar Conservation Team pledged to "provide long-term commitments to identify and eventually coordinate protection of jaguar habitat."

Dominated by the livestock industry, the team failed to protect any habitat, including even failing to meaningfully engage the Department of Homeland Security as vegetation was cleared, vehicle routes were developed, and most destructively, as a jaguar-proof wall was erected in jaguar habitat.

Slowed to inaction by filibusters in its habitat committee, self-pitying perorations on constitutional principles in its plenary sessions, and parliamentary legerdemain, the "Jaguar Conversation Team," as it came to be known, compensated for its anemic record by planning to capture a jaguar to affix a radio-collar for research.

Nobody could articulate, however, how the resulting information on jaguar habitat utilization would be used for conservation. Objections that capturing a jaguar for uncertain benefits did not justify the potential risks were swept aside. Furthermore, non-intrusive methods of research, including genetic analysis of the scat of jaguars that can be located through trained scat-sniffing dogs, were dismissed as inadequate, leaving capturing a jaguar as the interagency group's clear

preference. Yet, as an endangered species, to make capturing a jaguar legal, Fish and Wildlife Service would first have to issue a permit authorizing such "take."

On February 18, 2009, a jaguar whose photo had been repeatedly taken, first by a hound-hunter in 1996, and subsequently by trip-cameras, known as "Macho B" (his eponymous alphabetic predecessor, Macho A, having mysteriously disappeared from the same area of southern Arizona years before), was captured in a wire snare. The snare had been set by one of the Jaguar Conservation Team's central figures, Emil



Photo Credit: Arizona Game and Fish Department

Macho B caught in a FWS snare, February 18, 2009.

McCain, while he was working as a subcontractor for Arizona Game and Fish Department capturing mountain lions and bears for radio-collaring. Ostensibly, snaring a jaguar was a happy accident. Game and Fish personnel tranquilized, radio-collared and released Macho B. Twelve days later, after he did not move as far or as frequently as expected following his capture and after he was observed ailing, he was re-captured, diagnosed as terminally ill from kidney failure, and euthanized.

McCain subsequently pled guilty to violating the Endangered Species Act in deliberately and without a permit capturing Macho B through baiting, or directing a coworker to bait, the supposed cougar or bear snare set in a canyon that he knew Macho B traversed, with jaguar scat. Arizona Game and Fish also fired a low-level employee who had conspired with McCain on the cover-up. But the question of involvement of highers-up in authorizing or encouraging the capture remains unanswered.

The Interior Department's inspector general, investigating Macho B's death, concluded that Arizona Game and Fish did not have a permit for the capture, and stated that skinning the jaguar to preserve the

pelt, undertaken instead of a necropsy because a Fish and Wildlife Service supervisor was unfamiliar with the word “necropsy,” resulted in loss of information and left doubt as to what had ailed Macho B.

Although the entire corpse was not made available for a necropsy, some organs were preserved. A veterinary pathologist who examined the jaguar’s kidneys, but whose report was never released, told the Arizona Daily Star that the organs appeared healthy and that Macho B may have just suffered from dehydration.

Ironically, had the Jaguar Conservation Team monitored jaguars through a program of locating and analyzing their scat, we might have known more about Macho B’s underlying health than what may be reconstructed based on his incomplete remains.

At its inception in 1997, the Jaguar Conservation Team had stated, as part of its case to stave off federal protection, that it would “reduce risk of overutilization of the jaguar for commercial, recreational, scientific, or educational purposes.” But 12 years later, with little else to show for its efforts, the team and its powerbroker (the Arizona Game and Fish Department) had killed, for scientific purposes but absent the rigor of real science and outside the constraints of federal law, the last known wild jaguar in the United States.

Unnatural Resistance to Habitat Protection

Five years before Macho B’s death, beginning in 2003, the Center for Biological Diversity filed the first of a series of lawsuits to compel critical habitat designation and recovery plan development. In response, Fish and Wildlife Service renounced its previous rationale for not designating critical habitat, admitting that the Jaguar Conservation Team and Arizona Game and Fish routinely disclose jaguar locations on-line and elsewhere—so jaguars would not in fact be made more vulnerable by maps of critical habitat.

But the agency proffered a new rationale for the same position: critical habitat would not be designated because no areas in the US qualified as necessary to recover the species at large across the entirety of its range. And no recovery plan would be developed because of the futility of a US agency attempting to recover a species whose vast range was almost entirely outside US jurisdiction.

This position ran counter to a 2007 resolution by the venerable American Society of Mammalogists, that was supported unanimously by the approximately 500 of its members attending the organization’s 87th annual meeting held that year in Albuquerque. These scientists endorsed development of a recovery plan and designation of critical habitat for jaguars,

and described habitats for jaguars in the US, including Arizona and New Mexico, as “vital to the long-term resilience and survival of the species . . . especially in response to ongoing climate change.” The resolution added that “ecosystems in the United States in which jaguars formerly occurred are not intact without the sustained presence of jaguars.”

In 2009, the court struck down Fish and Wildlife Service’s positions on critical habitat and recovery planning, which led the agency to appoint a jaguar recovery team to write a recovery plan and draft a critical habitat rule for release in 2012. The Center for Biological Diversity has identified, mapped and recommended designation of 26 million acres as critical habitat in New Mexico and 27 million acres in Arizona.

Gila Headwaters as a Jaguar Recovery Area

Although jaguars were once widely distributed in the southern US, there are few parts of the jaguar’s historic northern range that are still capable of supporting these top-level carnivores today. The most ecologically intact landscape remaining for jaguars is the Gila headwaters ecosystem of southwestern New Mexico and southeastern Arizona, at the heart of which are the Gila and Apache national forests where Mexican gray wolves have been reintroduced. It was in a mixed-conifer forest at 9,000 feet elevation in the Apache National Forest where the last known female jaguar was killed in 1963, attracted by a predator-call and shot by a Fish and Wildlife Service sniper.

Since female jaguars are thought less likely than males to roam far from their natal landscape seeking mates and establishing new territories, the presence of a female dozens of miles from the international border suggests that this region may have been the last US locale for jaguar reproduction—a sign of its relative suitability or at least the relative security that the

ecosystem afforded even decades after jaguar reproduction elsewhere in the US had been choked off.

In significant respects the ecological

integrity of the Gila headwaters ecosystem has improved since the 1960s, due in large part to the late 1990s removal of livestock from hundreds of miles along the Gila River and its tributaries, enabling cottonwoods, alders, box-elders, sycamores and other riparian trees to mature, narrowing the river channels and improving habitat for many species of wildlife.

The Gila ecosystem includes millions of acres that are roadless, a variety of habitat types including desert grasslands and oak woodlands, and thousands of deer, javelina, elk, and other potential prey animals. The New Mexico Department of Game and Fish identified the Gila and Aldo Leopold wilderness areas within the Gila

TO TRULY CONSERVE THE SIGNIFICANT REMAINING ECOSYSTEMS IN WHICH JAGUARS CAN STILL BE RECOVERED, CRITICAL HABITAT MUST BE DESIGNATED AND A RECOVERY AREA DELINEATED

National Forest as having the largest extant of habitats with the greatest potential for supporting jaguars in the southwestern quadrant of the state.

There still remains potential connectivity for jaguars from the Gila to the nearest known breeding population of jaguars in Mexico, approximately 130 miles south of the international border. Indeed, people regularly report having seen possible jaguars—though none have been confirmed in the Gila headwaters ecosystem through a track, photograph or carcass since 1964.

The only region of the US where wild jaguars have been confirmed from the 1970s onward is the sky islands ecosystem in southeastern Arizona and southwestern New Mexico. This region consists of isolated mountain ranges surrounded by desert grasslands—though many of those grasslands and the verdant ribbons of green alongside the rivers and streams that ran through them are now dusty and dry, or paved over. This region lies between the US/Mexico border and the Gila headwaters further north, connected to the latter by the Gila River—long seen as a likely route for jaguars to reach the Gila.

The sky islands ecosystem, while vital jaguar habitat, cannot be expected to support enough jaguars to significantly shore up the small and vulnerable northernmost breeding population in Mexico and secure it against extinction. The Gila headwaters ecosystem, more ecologically intact, wetter, and supporting denser populations of jaguar prey animals, but with scant to inconclusive evidence of jaguars currently using that habitat, is vital to ensuring recovery.

Welcoming Jaguars Home

In May 1900, Forest Service ranger Jack Stockbridge witnessed a jaguar killing a calf along Hoyt Creek in the Black Range of the Gila National Forest, an area of rolling ponderosa forests and grasslands carved by arroyos and steep-walled streams that even then were muddied by erosion from cattle feeding on and trampling the native vegetation. He called the animal the “prettiest thing you ever looked at, yellow with black spots,” adding that “I didn’t happen to have any gun. When I got pretty close, away went this darned animal off into the brush.” He informed a local trapper, who caught the jaguar nearby and sold its 8-foot, 3-inch pelt in Magdalena, New Mexico for \$200, to be made into a rug.

On August 25, 1990, Doctors Gerald and Donna Jacobi, married biologists teaching at New Mexico Highlands University in Las Vegas, New Mexico, were driving off from having sampled streams in the Gila

National Forest, a scant few miles from Stockbridge’s jaguar encounter on Hoyt Creek ninety years previous, when they observed for around 30 seconds “a large cat (significantly larger than a bobcat) with a long tail, buffy or reddish-brown in overall color and with dark-patterned spots over its entire body,” loping through the trees fifty to sixty feet distant, according to a New Mexico Department of Game and Fish memo reporting on their call to the agency. “When



A diorama of jaguars in the Sky Islands, American Museum of Natural History

the car was stopped for a better view, the cat reversed its route and then crossed the road about 25-30 yards behind the observers.”

Nine decades makes some difference. This cat was surely better served by the Jacobis, dedicated to conservation, having contacted the state game department—unlike the 1900 jaguar betrayed to a hide-hunter. But New Mexico Department of Game and Fish failed to investigate the sighting, nor use its authorities or institutional bully pulpit to promote jaguar recovery. The 1990 jaguar—for what else could it have been?—probably had no more opportunity to perpetuate its kind than the one hunted down nearby in 1900.

As seen, just when legal protection for US jaguars was finally and belatedly secured in 1997, the US Fish and Wildlife Service similarly turned a blind eye to the jaguar’s plight which was a consequence of centuries of persecution, including half a century of the Fish and Wildlife Service’s own active hunting of jaguars. Given the growing scientific understanding of the vital role that top-level predators play in ensuring the health of their ecosystems, such neglect does a grave disservice to the public interest expressed in the Endangered Species Act’s first statement of purpose, “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.”

The Fish and Wildlife Service should not assume that

(Jaguar Recovery Continued)
the jaguar's present-day distribution is the maximal area where it can conceivably be recovered. Instead, the agency and its recovery team should consider the long tenure of the jaguar in North America, its evident adaptation to many different types of landscapes and disparate prey species, and the fact that jaguars were extirpated not entirely through habitat loss but also through a systematic government program of trapping, poisoning and hound-hunting, coupled with generalized public persecution.

There is no reason that jaguars can not be returned to a small portion of their originally vast home range in North America, to serve as part of a binational population that bolsters and significantly expands in sheer numbers and in distribution the vulnerable population now residing in Mexico.

To achieve a significant boost in jaguar numbers and genetic resilience, and to truly conserve the significant remaining ecosystems in which jaguars can still be recovered, critical habitat must be designated and a recovery area delineated—not just in the sky islands, but in the Gila headwaters as well. It is time to welcome the jaguar home.

Robinson is a conservation advocate for Center for Biological Diversity and author of Predatory Bureaucracy: The Extermination of Wolves and the Transformation of the West (University Press of Colorado, 2005.) He lives in the Gila headwaters ecosystem of New Mexico. References available by contacting Robinson directly at: michaelr@biologicaldiversity.org

EASTERN COUGAR DECLARED OFFICIALLY EXTINCT

On March 2, 2011—a date which marks the two-year anniversary of the killing of Macho B, the last known wild jaguar in the US—the Fish and Wildlife Service (FWS) declared the eastern cougar to be extinct. A status review could not authenticate any records of the puma subspecies since the last confirmed individual was killed in 1938 in Maine. Only one other subspecies of puma from the eastern US survives: the Florida panther. These panthers once ranged throughout the Southeast, but are now besieged by sprawl in a single, remnant population in South Florida.

“Official confirmation of the eastern cougar’s extinction is a belated warning that our ecosystems are out of whack,” said Michael Robinson, with the Center for Biological Diversity (CBD). “But we still have a chance to recover the Florida panther by saving habitat in its current range and reintroducing the animal to its historic range. If we can do that, we’ll help restore nature’s balance at the same time.”

On February 10, 2011, the CBD petitioned Interior Secretary Ken Salazar to reintroduce Florida panthers to the Okefenokee National Wildlife Refuge and surrounding lands in south Georgia and north Florida. Reintroduction is called for in the 2008 Florida panther recovery plan, but FWS is stalling, despite three studies identifying Okefenokee as suitable for reintroduction.

“It is still not too late for the Florida panther,” said Robinson. “To save the panther in its existing range, the Interior Department must designate critical habitat. To recover the panther and bring back the vanishing longleaf pine forest where panthers used to roam, reintroduction to the greater Okefenokee ecosystem is essential.”

In February 2010, several groups, including Conservancy of Southwest Florida, Center for Biological Diversity and Public Employees for Environmental Responsibility (PEER) filed a lawsuit challenging the Service’s denial of their petitions to designate critical habitat. This designation would give the panther the greatest protection available under the federal Endangered Species Act and promote its recovery from the brink of extinction. At present, about 120 Florida panthers survive in the wild, clinging to less than 5 percent of their historical range.

On April 6, 2011, a federal district judge dismissed the groups’ lawsuit. The judge’s order recognized the panther’s gravely imperiled status, citing prior cases which called the panther “one of the most endangered large mammals in the world.” Nevertheless the judge found that, because the panther was listed as endangered before the critical habitat provisions were added to the Endangered Species Act, the Service’s action was entirely discretionary and therefore not subject to judicial review.

But on April 20, 2011, conservation groups appealed to the 11th Circuit in the hopes of finally protecting critical habitat for the cat, which has been listed as endangered for more than 40 years.

Andrew McElwaine, president of the Conservancy of Southwest Florida, said: “In effect, the judge said the Service does not have to designate critical habitat for the panther because the panther has been endangered for too long. We trust the 11th Circuit will reverse.”

Last year, 23 panthers were killed, and at least 11 more have already died in 2011, mostly due to collisions with cars. “Unfortunately, the US Fish and Wildlife Service has an extinction strategy rather than a recovery strategy for the Florida panther,” said PEER Director Jeff Ruch, who also noted that the Service’s science has been manipulated to mask the truly dire plight of the panther.

“You can’t protect endangered species without protecting the places they live, and that’s what needs to happen to give the Florida panther any shot at survival,” said Robinson. “We’re confident that the appellate court will recognize that the Interior Department has the authority and the urgent responsibility to protect critical habitat for the panther, which is disappearing as gated subdivisions and strip malls replace forests and wetlands in South Florida.”

For further information on Florida panther mortality rates: WWW.FLORIDAPANTERNET.ORG



FLORIDA PANTHER STILL HAS A CHANCE

Florida panther in Big Cypress Refuge, Photo: Ralph Arwood/nps.gov