

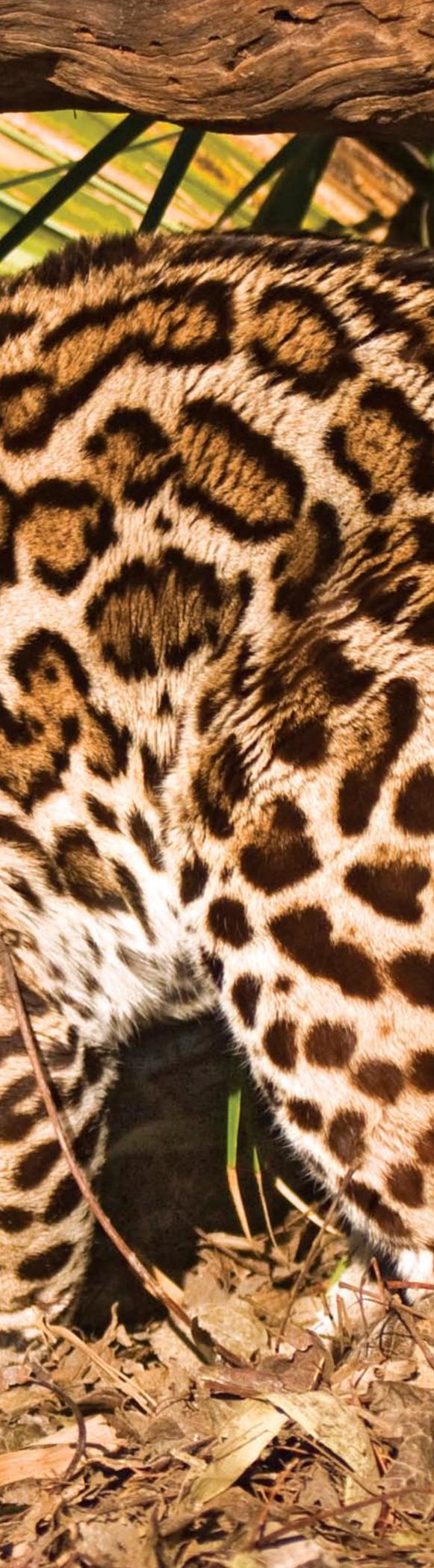
Valley Cat:

Ocelot Conservation and Recovery in South Texas

The “leopard cat” of the Rio Grande Valley’s thornscrub. The ocelot’s striking fur once attracted trappers; now, shrinking habitat and isolated populations are its biggest threat.

Photo by **Larry Ditto**





article by **Henry Chappell**

The ocelot's plight – and possible doom – comes into view as your plane descends on Harlingen International Airport. Viewed from a few thousand feet on a clear day, green cropland, broken here and there by roads and development, stretches to the horizons.

About 30 miles north of Harlingen, along Highway 77, near Raymondville, in Willacy County, hope appears suddenly in the form of thick brush or “South Texas thornscrub,” as Rio Grande Valley farmland gives way to mixed brush and grassland.

Here, on private ranchland, in a few preserved or restored islands of brush, between 30 and 40 ocelots hunt, mate and raise their young, disturbed only occasionally by biologists' live traps and the mild indignity of sedation, vaccinations, blood testing and locating collars. Another small population of about the same size survives some 40 miles southeast on the Laguna Atascosa National Wildlife Refuge.

That's all of the wild ocelots in Texas. Although the little cats are far more abundant on the brushier ranches in Tamulipas, Mexico, the populations are isolated from one another by the Rio Grande and vast areas of development and open country where retiring, brush-loving ocelots won't venture, and highways where they shouldn't venture, but sometimes do.

The tiny populations hang on because Laguna Atascosa soil is too salty for agriculture and because a few ranchers on

both sides of the Rio Grande, wildlife biologists and other dedicated conservationists believe that a future without ocelots is a future much diminished.

Their diligence and generosity may not be enough. Computer modeling at Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville suggest that the Texas populations could disappear within 50 years due to genetic erosion caused by isolation. Inbreeding and concomitant loss of genetic diversity leads to lower birthrates and weights, reduced disease resistance, and an overall decrease in ability to adapt to changing environments. Testing shows markedly less genetic diversity in the Willacy County cats than in the Mexican population, and far less than the diversity indicated by samples taken from 1895 specimens at the Smithsonian.

Ocelots once ranged over southern Texas from the dense chaparral of the Rio Grande Valley and Brush Country east to the Big Thicket and well into Central Texas where they thrived along brushy creek bottoms. Early settlers in deep East Texas reported small “leopard cats,” distinct from larger “leopards,” or jaguars. There are even a few records of ocelots in North Texas, and the cats probably ranged into Arkansas and Louisiana as well.

Across the Rio Grande, ocelots inhabited nearly all of Mexico and Central and South America to Argentina.

Within this vast range, several subspecies evolved to fit conditions that vary



Photo by **Larry Ditto**

Unless you happen to see an ocelot as it darts across the road at dusk or dawn, chances are slim of seeing one of the little cats in its dense thornscrub habitat.

from Amazon rainforest to the Northern Andes to the South Texas Brush Country.

In general, ocelots are about the same size as bobcats, but more lithe and elegant, measuring around three feet in length, plus an 18-inch tail, and weigh 25 to 35 pounds. Males are slightly larger than females.

Much to the ocelots' peril from fur hunters and trappers, its striking pelage is short but luxuriant with parallel black stripes on the nape, black spots and rosettes along the sides, and black striped tail. "Leopard cat" seems apt.

In Texas and northern Mexico, ocelots mate and bear young year-round. Females typically den in slight depressions in dense cord grass or brush and average 1.3 kittens per litter after gestation of 70 to 80 days. Autumn and winter newborns

are vulnerable to occasional South Texas northerners. Kittens open their eyes 15 to 18 days after birth and begin hunting with their mother at about three months old.

Adult ocelots are highly territorial. Like other felines, they are solitary but not anti-social. The ranges of males and females overlap, and both fight over territory and potential mates. Older adults often sport battle scars. Typical home range for a single ocelot runs one to four square miles but may extend to seven square miles depending on quality of habitat and prey abundance.

Ocelots are crepuscular (active at dawn and dusk) and nocturnal hunters, feeding on rabbits, cotton rats, birds, small reptiles and occasionally fish and amphibians. Other than domestic fowl, ocelots pose little threat to livestock. Their

rarity and retiring nature and the incompatibility of their dense thornscrub habitat with agriculture tends to keep them out of trouble with stock.

Their habitat is often described as impenetrable. That's certainly the case for humans, cattle, horses and other large mammals. While a dense, thorny overstory of mesquite, lotebush, spiny hackberry and blackbrush provides ample concealment from potential predators and cover for stalking prey, it also shades out grass and herbaceous undergrowth, providing open pathways at ocelot eyelevel.

Although humans

have hunted ocelots for fur and ritual purposes for thousands of years, serious decline began with development of commercial fur markets and clearing of land that came with intensive settlement. In the Rio Grande Valley, as much as 98 percent of ocelot habitat has been removed for agriculture and development.

Although legal trade in ocelot hides ended in the United States some three decades ago with the little cat's addition to the Federal Endangered Species list, an international black market, aided by lax or uneven law enforcement, continues to threaten populations south of the border and, indirectly, the tiny populations in Texas.

In 1982, as a graduate student, Corpus Christi-area native Mike Tewes trapped his first South Texas ocelot on the Corbett Ranch. The country and work suited him, so he stayed close to home. Currently, he's Regents Professor and coordinator of the Feline Research Program at Caesar Kleburg Wildlife Research Institute at Texas A&M University-Kingsville.

Burly, bearded and affable, Tewes seemed upbeat even as he described the ocelots' decline. I can easily imagine him sweating in the brush with his students, fussing over traps, syringes, vials, notebooks and sedated felines.

"I definitely think things have gotten worse," he said. "When I started research, Highway 77, which goes down into the Valley, was only two lanes. Now it's four lanes. Overall, the road network has really expanded. Road kill is far and away the most important cause of death by humans."

As surrounding lands were cleared for agriculture, Willacy County, historian, writer and rancher Frank Yturria noticed an increase in ocelots and other wild fe-



Sometimes you get chicken; sometimes you get feathers – or a knockout jab in your rump. An ocelot is drawn to one of Tewes' traps as part of research on the Yturria Ranch.

Photo by Grady Allen

David Shindle hands over a sedated ocelot to Tewes. The ocelot is weighed, measured,





Photo by Larry Ditto

Rancher Frank Yturria, with grandson George Farish, has set aside some 3,500 acres of his Willacy County ranch for ocelot conservation.



Photo by Larry Ditto

Dr. Mike Tewes (right) describing ocelot research to Arturo Caso (left) and grad student Jennifer Korn at the Yturria Ranch.

lines killed along the roads.

“There were ocelot, cougar, jaguar. Some of the ones that survived crossed the fence and moved to my property,” he said.

A lifelong nature lover and avid quail hunter, Yturria’s South Texas roots go back to the late 1840s when his great-grandfather Francisco Yturria moved from Matamoros to Brownsville where he established himself in ranching and banking.

A few years back, Yturria invited Mike Tewes down to survey likely habitat.

“Mike came down and trapped a number of ocelots, and I knew then that we had to preserve something for them.”

Yturria started by establishing a 500-acre easement with the U.S. Fish & Wildlife Service. In prior years, he’d implemented a brush-clearing program to increase graz-

ing range for cattle, but as his interest in ocelot conservation grew, he decided to reestablish native brush. About two years ago, he made a deal with the Nature Conservancy to add a 900-acre easement for conservation and restoration. A year later, he added another 1,300 acres and is looking to add more.

Altogether, Yturria has set aside about 3,500 acres for ocelot conservation. To fund research, he endowed the Frank Daniel Yturria Chair for Wild Cat Studies, which Tewes currently occupies.

“I consider the Yturria easements the heartbeat of the Willacy County population,” Tewes said.

Yet the tiny population remains imperiled by genetic exhaustion, and currently there are no viable corridors between the larger more genetically robust

Mexican population. Furthermore, the thick mature brush required by ocelots takes years to establish.

In 2008, Yturria’s friend Barry Putegnat reported ocelots at Rancho Caracol, his wing-shooting resort 150 miles south of Brownsville in the Mexican state of Tamaulipas. Sure enough, Tewes and fellow researchers Arturo Caso and Sasha Carvajal-Villareal verified 34 individual ocelots at Rancho Caracol and trapped and fitted 11 with radio collars.

“I expected to find ocelots there, but nowhere near this many,” Tewes said.

The team also verified the presence of cougar, jaguar, bobcat and jaguarundi. More encouraging yet, the property is surrounded by thousands of acres of thornscrub.

“So far, Mexican ranchers have been very enthusiastic about our research and ocelots in general,” Tewes said. “They think it’s really neat that they have ocelots on their property.”

Tewes and his team are building a case for a modest translocation program in which three or four ocelots per year would be trapped in Mexico and added to the Texas populations.

“I’ve been pessimistic for a long time, but in the last two years I’ve become quite optimistic for a number of reasons,” Tewes said. “First, the U.S. Fish & Wildlife Service is doing a lot of good work with landowners and they’re finally restoring brush at Laguna Atascosa. Also, Texas Department of Transportation is planning ocelot underpasses along FM 106 where a lot of cats have been killed. Then there’s the potential translocation project with Mexico, and this past year I’ve really emphasized working with a core group of landowners to form a consortium to develop ways to

has blood drawn, tagged and fitted with a new radio-transmitting collar, and once revived, it’s off in a cloud of dust.

Photos by Grady Allen



better provide for the cats.”

Tewes stressed that unlike the Laguna Atascosa NWR and much of the land left in thornscrub in Mexico, the Willacy County properties could be profitably cleared and put into agricultural production. The ranchers have made the decision to set aside habitat for ocelots.

Frank Yturria sums up the ranchers’ commitment: “Landowners have to think about the future. This country has 300 million people now. What’s going to happen when we have 600 million? Is this area going to be covered with asphalt? Will the traditions of the old-timers be gone forever? That’s why I’m doing what I’m doing. This will remain a green island with wildlife on it.”

Then there’s the besieged ocelots’ persistence, epitomized by legendary Y11, a male trapped and collared on the Yturria Ranch in 1996. Assuming he was a year old when trapped, Y11 is now 15 – a decent lifespan for a pampered housecat. Typically, wild ocelots live four to eight years. Fifteen years of hunting for a living, fighting for mates and territory, somehow avoiding disease, rattlesnakes, automobiles.

Texas Parks and Wildlife Department biologist Sam Patton photographed Y11 18 miles southeast of the ranch, on the Arroyo Colorado Unit of Las Palomas Wildlife Management Area, several times between 2000 and 2003, and again in January 2006. In March of the same year, he was trapped again on the Yturria Ranch. Researchers have photographed Y11 on the ranch as recently as June 2009. He may still be out there.

This record of Y11’s extraordinary range and resilience provides the first and, so far, only documentation of an ocelot traveling between the Willacy and Cameron County populations.

Surely – or hopefully – other ocelots have made similar journeys. Could it be that the two populations aren’t quite as isolated as researchers have long believed? On an ominous note, could genetic erosion worsen if Y11’s tenuous network of corridors is broken?

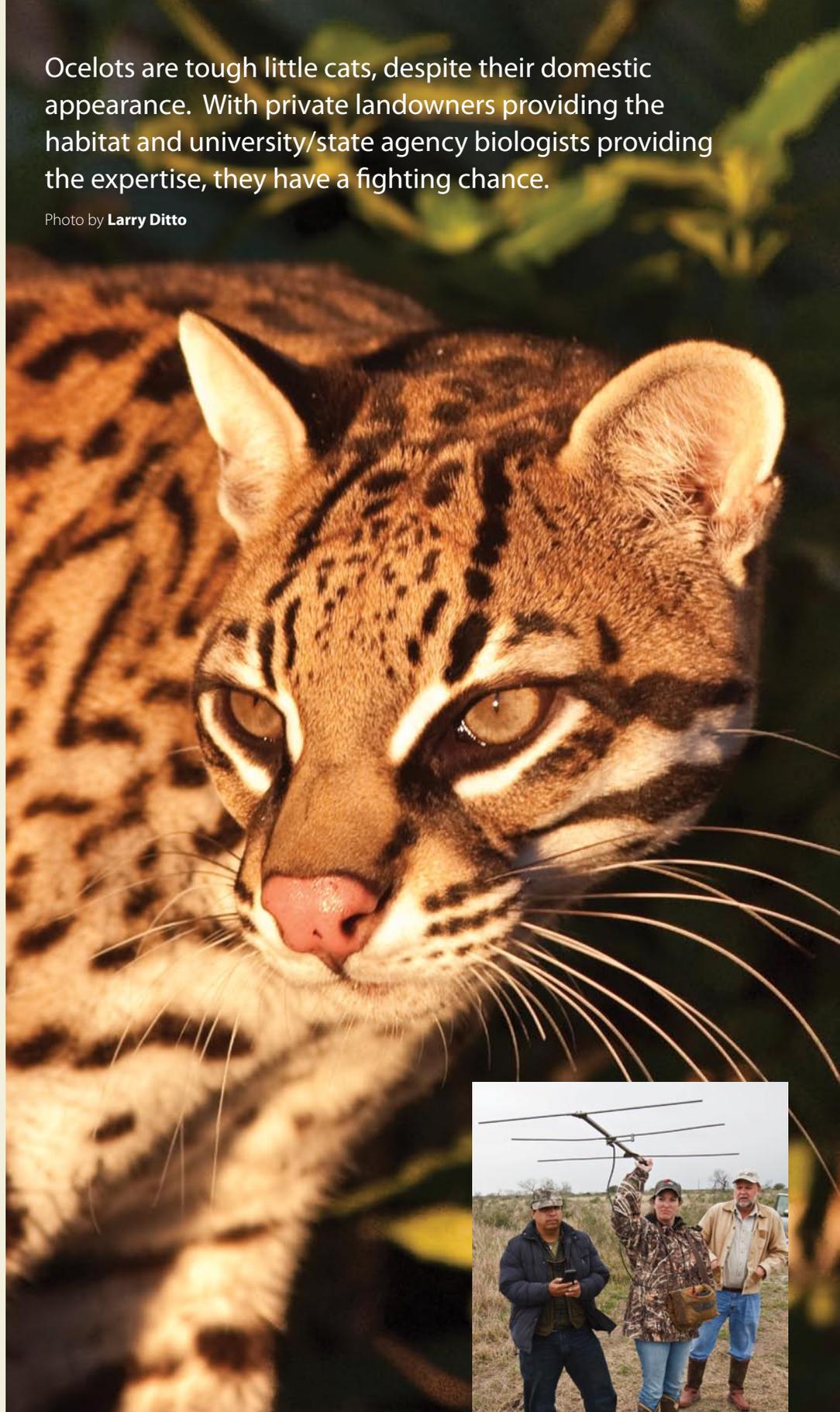
Scientific details and speculation aside, Y11’s story reflects the tenacity of life and offers a lesson in endurance and adaptability.

Texas’s ocelots don’t need to be “saved.” They just need a fighting chance.



Ocelots are tough little cats, despite their domestic appearance. With private landowners providing the habitat and university/state agency biologists providing the expertise, they have a fighting chance.

Photo by **Larry Ditto**



Using radio-tracking gear and GPS, Caso, Korn and Tewes can track the movements of their tagged ocelots.

Photo by **Larry Ditto**