



EFBC/Feline Conservation Center

<http://www.cathouse-fcc.org>

DEDICATED TO THE PROTECTION AND PRESERVATION OF ENDANGERED FELINES FALL 2000 2000

Cat Updates:

We have two new residents! A bobcat kitten and an Amur leopard cub. Our Amur leopard breeding program is recognized worldwide, as well as our experience in hand-raising cubs. So, when a female Amur leopard at the Audubon Zoo in Louisiana was aggressive with her litter of cubs (killed one and bit off the tail of the other), it was recommended they send the cub to our facility. The little tail-less female cub, Svetlana (known as Lana), arrived here on 18 July at 4 weeks of age. Some zoos won't display a "less-than-perfect" animal. We have no such problems here! So far she's too young to be out in the display cages, but soon visitors will be able to watch her grow up. Lana is a sweetheart, and will be used in our breeding program in the future. She's the Number 4 female in the American Amur leopard PMP program. She is related to our male Freddi. Not having a tail doesn't slow her down at all - she's very adventurous.

Our other new resident is a bobcat kitten. We don't breed bobcats here, because they're not an endangered species. Although our primary focus is breeding purebred endangered species of cats, we are also home to a few "rescue" cats. Unfortunately there are many, many captive exotic cats in need of sanctuary homes because of the pet trade - yes, people actually buy tiger, lion, and cougar cubs thinking they'll be just like a housecat! There are many sanctuary facilities across the United States that specialize in rescuing these animals when the owners can't handle them any more. Many of our visitors think that's where our cats come from, but they're wrong - only a few are. Rescue cats in general should not be bred because their bloodlines are unknown, or because it's just not necessary - there are too many generic

cats in captivity already. It's better to save the limited cage space available for the rarest, most valuable bloodlines and species.

Back to our new arrival. Apparently, someone found a bobcat kitten in the desert outside Rosamond and took her home to make her into a pet. PLEASE never pick up wild animals you might see! They haven't been abandoned by their mother, who was probably hiding or off finding food. The kitten was not friendly to them and they didn't feed her correctly. She arrived here with a calcium deficiency, but she's recovered now. We named her "Willow" after the nearby Willow Springs racetrack. She was traumatized by human contact when she arrived, but she's calming down week by week, and is quite friendly with us now, as long as we don't try to pick her up or corner her in her cage.

Fabulous Feline Follies

Thanks to all the guests that came out this year - you missed a great evening, if you weren't there! Held in August for the first time, the weather cooperated by not being too hot or too windy. "Zoo to You" educational trainers were on hand, walking a full-grown tiger, cougar, and 9 month old fishing cat on leashes around the guests. One lucky person won a raffle to have the tiger lick a raw egg off his hands! The fishing cat they brought is an animal that was born here, daughter of Rocky and Shada. It was nice to see her all grown up and acting very well-behaved. The "Zoo to You" display was very well-received - if you missed this event, pay attention next year and plan to come!

More Special Events

The last Twilight Tour (evening open house) for this year is 23 September. Also, Scott and Nicole Pearson plan to host another fun Cocktail Party fundraiser, in early November. This will be the third annual Cocktail Party. This year Scott will be in charge, as Nicole (a member of our Board of Directors) just had her first child on 2 August - a boy, Benjamin. Congratulations Nicole & Scott! VIP guests at the Cocktail Party will be able to meet Lana the Amur leopard cub up close and personal! Watch the web site for details.

Raffle Winner

This year's 50/50 Raffle Winner, drawn at the Summer Twilight Tour, was Allan & Karlene Hill of Kent, Washington. They graciously donated their \$1640 in winnings to Project Tiger!

Donations

Pam Rose, one of our volunteers, donated a Pentium computer system. Thanks Pam!

David Lewis and Adrienne Ayres, longtime adoptive parents of some of our cats, donated a long list of computer equipment. Thanks!

Lauren and Leanne Black and their friend Emily Burton sold some of their toys at a stand and door-to-door to raise \$25 for the cats. Thanks Girls!

Museum Exhibit

Updated schedule for the "Cats: Wild to Mild" exhibit, put together by the Los Angeles Natural History Museum, with some help from us: Oct 7 2000-May 13 2001, Mesa Southwest Museum, Mesa, AZ. June 16-Sept 9 2001, Pink Palace Museum, Memphis, TN. Oct 13 2001-Jan 6 2002, Chicago Academy of Sciences, Chicago, IL. Jun 8 - Sep 2 2002, New Mexico Museum of Natural History & Science, Albuquerque, NM

Volunteer of the Quarter

Pam Rose is our Volunteer of the Quarter. Pam's been volunteering at the compound for 3 years. She heard about the compound on the internet, and was so impressed by her visit that she makes

the long drive up from Orange County to volunteer. She especially loves how well we take care of our animals and the compound, and the relationships we're encouraged to form with the animals.

Interns

More and more students from around the world have been contacting us about internships at the compound. Previously we introduced Agnes Bernais, a student from France. She's returned home, but we have two more interns this quarter.

Myla McPhail is visiting for the summer from England. Her research involves observing all of our (many!) leopards every 2 hours during the day and recording their activities.

Jeff Conrad is a former volunteer who moved to Georgia to attend vet school. His wife Ann also was a volunteer here. Jeff worked very hard while out here to save money and take prerequisite classes at the local college. Vet school is very tough to get into, but Jeff scored very high on his entrance exams and had no problems getting in. He's now close to graduating, and spending time as an intern here and at two vet facilities in Southern California. He and Ann are looking forward to moving back out here, and we hope he picks a job close enough that they can come back out and volunteer again! Jeff and Ann are also the adoptive parents of our bobcat Willow. He's studying wild cat anesthesia medications and methods while out here.

Cat News from Around the World

Indian Express, 11 May 2000

Altogether 16 persons were killed by tigers in Sunderbans in the first four months of this year. April alone accounted for eight deaths. All eight had gone to the forest to collect honey during the one-month honey collection season. Last year, only three persons died during the season.

Boston Daily News, 18 May 2000

A Vermont family had to shoot a rabid bobcat that tried to enter their house. It was only the

second rabid bobcat in 40 years found in New England.

Caspar Star-Tribune, 22 May 2000

A mountain lion crashed into a house in Cody, Wyoming through a plate glass window. The residents hid in a bedroom, then opened a window in the bedroom and hid in the bathroom, The cougar left the house by itself.

Bergen Records, 7 June 2000

The first modern wildlife surveys of Cambodia's jungles disclosed encouraging signs of tigers and leopards, but conservationists warned that the endangered cats are under immediate threat from poachers. Ten species of globally threatened mammals and the first-ever photographs of Cambodian tigers in the wild were captured by cameras.

The Johannesburg Mail & Guardian, 15 June 2000

South Africa's premier game reserve, the Kruger National Park, is selling off its wildlife without restrictions to unscrupulous hunting outfits. At least six lions have been sold in the past year to outfits that have been implicated in "canned" hunting, where the animals are killed in small



Felitarian of the Year was Nancy Vandermey, presented by Joe Maynard

enclosures or after they have been drugged. Park officials say they want to avoid selling lions to a hunting outfit, but the documents offering the cats for sale do not stipulate this. Willem Gertenbach, general manager of nature conservation at the Kruger, says the park decided to sell the cats after they left the park twice and ate cattle belonging to the Malumulele community along the north-west border of the Kruger. The money raised will be used to compensate the community.

Calgary News, several stories, June-August 2000

Three orphaned cougar cubs were released into the remote backcountry of Banff National Park in late June. The cougars had been living at the Calgary Wildlife Rehabilitation Society since January when their mother was struck by a vehicle in the park. The cubs were radio-collared to track their movements. The cats made at least two kills and were traveling great distances, but came into contact with humans 5 times. Two of the cubs were recaptured after they came within 3 meters (10 feet) of campers at Banff, and now live at the Calgary Zoo. Wardens were still searching for the other cub.

Many sources, July 2000

13 tigers died within a few days at a zoo in Nandankanan, India. The zoo was home to over 60 tigers, including about 30 white tigers. These tigers are highly inbred and have a high mortality rate. The reported cause of death has ranged from trypanosomiasis, to a bad batch of a vaccine for trypanosomiasis, to contaminated meat. Zoo officials are under investigation by the local government.

Scrapps Howard News Service, 19 July 2000

Lions have regional accents different enough that a Simba from South Africa sounds like a Bubba to lions in Tanzania. Jon Grinnell, an assistant professor of biology at the College of Wooster, has preliminary data that shows the structure of lion roars differs by region somewhat like accents in people. Grinnell's field experiments involve playing recorded roars over loudspeakers and then observing the lion's reaction. He has been able to show through analysis that the structure

of roars he has recorded of South African lions is different in quantifiable, though subtle, ways from those he has studied in Tanzania in East Africa. Another experiment indicated that lions still recognized the roar of a former companion that had been removed from their territory two years before. Lions' voices can travel up to five miles in optimum conditions.

Chicago Sun-Times, 19 July 2000

The first documented wild mountain lion in Illinois since 1862 was killed by a freight train near the Fort Kaskaskia Historic Site. The cat was a 110 pound male.

The Orange County Register, 14 August 2000

Coal Canyon, a vital mountain lion corridor in northern Orange County that was about to be sold and developed, will instead be preserved as wilderness. It is the last remaining link for lions and many other animals between the Cleveland National Forest and the Chino Hills; blocking it could have caused local extinctions in the Chino Hills and further shrunken an already dwindling range for lions to roam.

THE SOUTH AMERICAN ORIGINS OF THE PUMA

By Francis Kornegay

Amid the excitement generated by the mapping of the human genome, a much less celebrated but no less fascinating genomic map has emerged for the mountain lion in a report, "Genomic Ancestry of the American Puma." Publishing in the *Journal of Heredity* [2000:91 (3)], M. Culver, W.E. Johnson, J. Pecon-Slatery, and S.J. O'Brien present findings from a genomic DNA analysis of 315 pumas of specific geographic origin resulting in a profile that traces the origins of the North American puma to two colonization events from eastern South America, described as "a centrum of puma genetic diversity." In the process, their analysis also manages to resolve "six phylogeographic groupings or subspecies" out of an International Species Indexing System that recognizes 32 subspecies ranging from the Yukon to the southern cone of South America.

The puma evolved from a common ancestor with the Afro-asiatic cheetahs (*Acinonyx jubatus*, *pardinensis*, etc.) and the American jaguarundi (*Herpailurus yaguaroundi*) during the late Miocene (5-8 million years ago), comprising with these three, a sister sub-lineage of the pantherine cat lineage. The puma and the jaguarundi are estimated to have last shared a common ancestor until about 4.2 million years ago. Puma evolution was accompanied by the parallel development of American cheetah-like forms in *Miracinonyx trumani* and *studerii* as well as an apparent Rancholabrean precursor puma species, *Felis (Puma?) inexpectata*. The latter was larger than the extant puma and more cursorial or cheetah-like. A synthesis of findings from the genomic history of the cheetah and the jaguarundi with that of the puma as well as from the fossil history of their relatives would round out what should be an intriguing biogeographical saga of the evolution of this sub-lineage.

With regard to the pumas evolution, according to Culver et al., the marked uniformity of its mitochondrial DNA and a reduction in microsatellite allele size expansion indicates that the contemporary North American puma population is one that derived from a recent (late Pleistocene circa 10,000 years ago) replacement and recolonization by a small number of founders who themselves originated from eastern South America some 200,000-300,000 years ago. The re-colonization of North American pumas coincided with a massive late Pleistocene extinction event that eliminated 80% of the mammalian mega-fauna in North America and "may have extirpated pumas from that continent as well." The North American lion, the cheetah-like pumas and the great sabertooth sub-families, *Smilodon* and *Homotherium* would have perished in this event as well.

Extant puma lineages diverged approximately 390,000 years ago. North American pumas shared a common ancestor less than 20,000 years ago. The new sub-specific resolution recognizes the following breakdown: the North American (NA) puma, *P. c. cougar*, embracing 15 subspecies under the old classification, including the Florida panther (*P. c. coryi*); the Central American (CA) *P. c. costaricensis*; and four South American subspecies: Eastern South

America (ESA), *P. c. capricornensis*; Northern South America (NSA), *P. c. concolor*; Central South America (CSA), *P. c. cabrae*; and Southern South America (SSA), *P. c. puma*. Culver et al. estimate that "most likely modern North American pumas descended from a founder event involving a small number of individuals who migrated out of South America approximately 10,000-20,000 years before the present and subsequent to the abrupt Pleistocene extinction of large mammalian species." Thus, compared to all other puma subspecies, the North American puma exhibits the least genetic diversity, making it the apparent product of a population bottleneck comparable to that of the African cheetah. The North American puma founder event is approximately the same age as the cheetahs (i.e. ~10,000 years ago).

The fact that North American puma fossils date to more than 300,000 years is seen as indicative of a recent replacement of North American pumas that suffered extinction during the late Pleistocene by a small number of South American ancestors of their modern North American descendants. The extant pumas of Eastern South America, by contrast, reflect the greatest genetic diversity. "As ESA is the population distinguished by the most ancestral and central mt DNA haplotypes, modern puma genomic diversity likely traces its origin to near or within the ESA locale," one that comprises several bio-geographic zones bordered by the Amazon, Rio Parana, and the Paraguay rivers.

These findings not only provide us a new perspective on the puma, the quintessential big cat of American legend and lore, it also changes the picture of the Great Faunal Inter-change across the land bridge between North and South America. Many Central and South American animal species that we may have thought were the result of colonizations from north to south may in fact have originated south of the border, and more than once.

Feature Cat - Caracal

Caracals are sometimes called desert lynxes; they have short tails and tufted ears like the lynx and bobcat, but they have short, solid reddish colored fur. The name Caracal is derived from the Turkish

word *karakulak*, meaning *black ear*. Melanistic, or all black, caracals have also been reported. They prefer scrubby arid habitats such as dry woodlands and savannah. Their size ranges from 24 to 40 pounds (11 to 20 kg). Caracals are the largest of the African small cats and can take prey larger than themselves, such as small antelope. Most often they feed on rodents, hares, and birds. Like the serval, they can leap 10 feet in the air to knock down birds. They're still common in southern Africa but in Asia they're endangered. Threats in the wild include illegal hunting and persecution by livestock ranchers. Ours are of the Turkmenian (*C.c.michaelis*) subspecies, and are a brother and sister born at the San Diego Zoo.

WISH LIST

Electric Golf Carts

4/0 THHN copper wire

75kw transformer 480-240/120

Landscape materials

Roofing materials

8x8x16 concrete block

Small pickup for yard use

Digital Camera