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Abstract: The Onza, a puma-like felid of Northwest Mexico, has received renewed attention. It was noted as distinct from the puma in Spanish colonial and missionary chronicles, as well as in reports by modern-day Mexicans. *Acinonyx trumani* was originally thought to be a puma, but was reinterpreted in the 1970s as an archaic cheetah.

## TWO NEW ONZA SKULLS FOUND

The Onza, a supposed puma-like felid of Northwest Mexico, has been receiving renewed attention. It was noted as distinct from the puma in Spanish colonial and missionary chronicles, as well as in reports by modern-day Mexicans.

The stimulus for the renewed interest was a memorandum sent to various official American and Mexican agencies by West German mammalogist Helmut Hemmer proposing that the Onza may, in fact, represent the persistence of a North American Pleistocene cheetah into modern times. The fossil cat, *Acinonyx (Miracinonyx) trumani*, was originally thought to be a puma, but was reinterpreted in the late 1970's by paleontologist Dan Adams as an archaic cheetah. Some of the morphological characteristics described by Adams for the fossil cheetah were similar to those in modern Onza reports, particularly as described by Robert Marshall in his 1961 book *The Onza*, leading Dr. Hemmer to suspect that they might be one and the same animal. He presented his hypothesis at the Society-sponsored symposium "The Search for Unknown or Supposedly Extinct Animals," held as part of the III International Congress of Systematic and Evolutionary Biology (ICSEB III), at the University of Sussex, Brighton, England, on July 7, 1985 (see "ICSEB III Cryptozoology Symposium," *Newsletter*, Autumn, 1985).

Working in Tucson, Richard Greenwell and Wade Sherbrooke were able to track down Robert Marshall, who still possesses the Los Frailes Onza skull, which he recovered in Sinaloa, Mexico, in the 1950's, and which has no mandible. Mr. Greenwell took a cast of an upper tooth row of the skull to Dr. Hemmer, which he inspected the night prior to the Symposium. Dr. Hemmer felt that the dental



Longtime Onza investigator Robert Marshall (left), inspecting the Vega skull with Mexican rancher Ricardo Urquijo in October of 1985. (I.S.C.)

characteristics supported his hypothesis, but he needed to do further comparative work back at his laboratory at the Johannes Gutenberg University of Mainz.

Meanwhile, a search began for the long-lost Shirk skull, from a cat killed in Sinaloa in 1938 by Dale Lee, a well-known hunter who also lives in Tucson. It was the Shirk kill that first brought the Onza to public attention. Despite Mr. Lee's assertion that the cat was distinct from the puma, American zoologists dismissed the claim, and the subject was quickly forgotten with the advent of World War II.

Generally, Mexican peasants and ranchers describe the Onza as skinnier and longer-legged than the puma. It reportedly also leaves narrower and more elongated paw prints. Although it is said to be much more aggressive, it has a similar body coloration as the puma—in which there is already much regional and seasonal color variability—allowing the possibility that, as a consequence, the animal has remained unrecog-

nized by zoology as a different species.

Working with Mr. Greenwell, Troy Best, a biologist at the University of New Mexico, in Albuquerque, attempted to track down the Shirk skull, as it was believed to have been eventually deposited in a museum in the 1960's. This was relatively easy for him, as he had just completed measuring every puma skull in American collections (over 1,700) as part of a comprehensive new study of puma cranial morphology, and all his data was computerized.

Meanwhile, based on information provided by University of Arizona mammalogist E. Lendell Cockrum—who had examined the Shirk skull in the 1950's—Greenwell and Marshall established contact with Ricardo Urquijo, a Mexican rancher from Sinaloa, who had visited Dr. Cockrum some years before and who had a supposed new Onza skull. The area in question turned out to be the same one where the partial Los Frailes skull and lost Shirk skull were from, the foothills of the vast

Sierra Madre Occidental mountain range, between the towns of Culiacan and Mazatlan.

Greenwell and Marshall visited Sinaloa in October, 1985, and Mr. Urquijo produced the new Onza skull, which has a mandible and is in perfect condition. The skull, from a cat shot about 10 years ago by Mr Jesus Vega, was brought back to Tucson on a long-term loan.

Dr. Best, meanwhile, believed he had tracked down the Shirk skull at the Academy of Natural Sciences in Philadelphia. The location, La Silla Mountain, Sinaloa, and the year, 1938, were the same. Furthermore, Dr. Best found that, never having heard of the Onza at the time of the measurement, he had eliminated the skull from his study because of its peculiarities. However, when the skull arrived on loan to the University of Arizona, it was found to be a different skull (clear comparative photos of the Shirk skull still exist).

It had been donated to the Academy by R. R. M. Carpenter, and Mr. Lee confirmed that he and his brothers had taken Mr. Carpenter on "tiger hunts" to Sinaloa before the war. ("Tigre" is the common Mexican name for jaguar.) Nevertheless, the Carpenter skull is now considered to be from yet another Onza, as it possesses the same characteristics found in the other skulls: short nasals, high dome, wide post-orbital constriction, large braincase, rounded foramen magnum, narrow



The Vega skull, from a supposed Onza killed about 10 years ago. (I.S.C.)



Onza country. Onzas, reported to be different from pumas, sometimes descend to this sub-tropical lowland from the foothills of the vast Sierra Madre Occidental mountain range. (I.S.C.)

carnassials, and small post-canine gap. In addition, the second upper premolar ( $P^2$ ) is absent in the Vega and Carpenter skulls--a Lynx trait--but, curiously, is present in the Los Frailes and Shirk skulls.

Collaboration continues among Messrs. Best, Cockrum, Greenwell, Hemmer, Marshall, and Sherbrooke to determine exactly what the Onza is, now that new evidence has come to light. One priority is to visit Berkeley and compare the new skulls to the Pleistocene cheetah fossil material. The search for the missing Shirk skull will also continue, although its importance is now somewhat diminished by the acquisition of the Vega and Carpenter skulls.

Mr. Marshall, his enthusiasm restored after his book was ridiculed in the 1960's, is also planning an expedition into the Sierra Madre in an attempt to acquire a complete specimen. There would be many hazards, as the country is extremely rough—even horses cannot make it—and the expedition would require several months. Meanwhile, ranchers in Sinaloa have been alerted to the potential importance of a complete skeleton

whenever another Onza is shot—which apparently happens every 10 years or so, at least in the area in question. Further findings will be published in the Newsletter when available. □

"We have three principal means: observation of nature, reflection, and experiment. Observation gathers the facts, reflection combines them, experiment verifies the result of the combination. It is essential that the observation of nature be assiduous, that reflection be profound, and that experimentation be exact. Rarely does one see these abilities in combination. And so, creative geniuses are not common."

Denis Diderot  
Pensees sur l'Interpretation de la Nature, XV, 1753.

"It is perfectly rational to play a risky game; what is irrational is to deceive oneself about the risk."

Imre Lakatos  
"History of Science and Its Rational Reconstructions," in Scientific Revolutions (Ian Hacking, ed.), Oxford University Press, Oxford, 1981