

ATTACKS BY ANDEAN BEARS ON LIVESTOCK IN THE COSANGA RIVER WATERSHED, ECUADOR

By: Armando X. Castellanos P.
Fundación Espíritu del Bosque
Reina Victoria 17 - 37 y La Pinta / Quito - Ecuador
Tel: (593-9) 936 01 29
Fax: (593-2) 250 44 52
E-mail: zoobreviven@hotmail.com

Until 3 years ago there were no confirmed reports of Andean Bears attacking livestock in Ecuador. Since then, accusations of bears preying on cows have increased, especially in the Cosanga River Watershed, on the slopes of the northeastern mountain range of the Napo Province, which occupies an surface area of approximately 22,289 hectares and has mountainous terrain with a range of altitudes from 1,000m to the 3,600 m.

Because the attacks were most intense in the Cosanga River area, the Corporation Jatun-Sacha/CDC, a conservation NGO that works in the region, asked me in May of 2001 to verify and record the bear attacks on livestock, and to look for management alternatives to diminish human-bear conflicts. I suggested initially that the "problem bears" should be caught and tagged with a radio collar to find, by means of monitoring, the ecological reasons the bear was attacking livestock. Sadly, lack of resources for capture and pursuit didn't allow that idea to come to fruition. Instead I used indirect methods to study the bear(s), such as recording tracks, marks on trees, and following trails. In the event of each attack I gathered hair and feces of the "killer bear", so-called by local farmers, to determine if it was one bear or several that were attacking livestock in Cosanga, by means of molecular genetic analysis carried out by Dr. Manuel Ruíz-García.

Although the genetic results were not yet ready I sensed, based on tracking, records, and the testimonies of affected farmers, that it was a single bear, perhaps male, that attacked in the region. Most reported events happened in a hollow known as Oritoyacu. Here the bear built tree nests before beginning to hunt, from which it watched the herd and made sure there were no caretakers nearby. It generally attacked cows that were alone and pastured very close to the forest. On other occasions it crossed the pastures until arriving at its prey. The bear sometimes pursued the herd to make it turn, then caught a cow, which it devoured alive, not caring if it was asleep or standing up. The bites and scratches generally began between the shoulders. The dead or agonized cow was then dragged for more than 80 m, sometimes uphill, toward the foot of the tree nest, generally located inside the forest. There the bear finished devouring the cow in several visits. On some occasions the viscera must have been consumed in the high part of the tree nests, because cow feces were found in such nests.

In Cosanga there have been 25 confirmed attacks on livestock so far, in which 15 cows, a bull, three male calves and three female calves died; two cows and a calf were wounded. The death of four cows was reported in a single incident.

Additionally the remains of a young horse and a danta, or tapir, (*Tapirus pinchaque*) which had been eaten by a bear were found. In these cases I could not confirm whether they had been killed by the bear.

In December of 2001, a woman was pursued by a bear when she tried to frighten it when it began to eat one of her cows alive. In January of 2002, a farmer was also pursued when he tried to drive away a couple of bears that were eating a dead cow. In both cases, it seems that the bear was defending its prey in the presence of intruders.

Since the problem of the attacks appeared in Cosanga, the "killer bear" survived several of the farmers' attempts to kill it. Several times it was shot and fed poisoned animals. Since the farmers could not destroy it quickly, they believed this animal was enveloped in a mystic and enigmatic atmosphere. To prevent the bear being murdered, the only option was to remove it from the area. To that end I arrived at an agreement with the farmers of the region and I made contacts with international zoos to trade the bear for GPS collars and input devices, which would be used to begin behavioral studies on the bears of the region. These arrangements had the approval of the Ministry of the Environment. In March of the present year the "killer bear" ran out of luck when it was killed in a place at which it arrived for the first time, having left its usual hunting grounds. Indeed, the "killer bear" was an 118kg male with a thin build for his size, according to local informants. Since then there have been no more attacks on livestock reported, but has the problem definitively been resolved?

Since my arrival in Cosanga the deaths of two Andean bears that were involved in attacks have been confirmed. Incredibly, none of the identified bear hunters has been punished. Only deep ecological investigations will provide data demonstrating the reason bears attack livestock. I think that it is not abnormal behavior for this species. Perhaps the lack of food in the forest to satisfy metabolic needs and the offer of live prey in pastures causes the bear to become a predator of livestock, because it is easier to attack a dull, heavy cow than a speedy deer or tapir.