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## Reintroduced Andean tapir attacks a person in the Antisana Ecological Reserve, Ecuador

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The mountain tapir (Tapirus pinchaque) is often perceived as a peaceful and quiet animal. This view has been re-enforced by domestication accounts that suggest mountain tapirs can be very docile and friendly after a relatively short time (Crandall, 1964; Gale and Sedgwick, 1968). However, wild tapirs are known to occasionally display aggressive behaviour, which when directed towards humans can cause dangerously deep wounds (Schauenberg, 1969). In our own work, we have observed aggressive behavior by females protecting their calves. (Castellanos, 1994; Downer, 1996; Castellanos, 2013). Farmers have also reported observing tapirs displaying similarly aggressive behavior when defending themselves from Andean bear predators (Tremarctos ornatus). Finally, it has been also been reported that male mountain tapirs can fight fiercely among themselves inflicting deep bites on ears and hind limbs (Schauenberg, 1969). We do not understand what triggers such behaviour, nor whether such behavior is common in the species, or if it is a trait that varies across

There are few documented cases of wild releases of captive-bred mountain tapirs. A unique case occurred in the 1990s with a female tapir named Esperanza, released in the Bosque Protector Pasochoa (or Protected Forest 'Pasochoa') in Ecuador. Though she was born in the wild, she was rescued as a calf, reared in captivity and subsequently released at eight months of age. Esperanza was released wearing a radio collar, which allowed her to be tracked for 14 months following her release (Castellanos, 1994). During her eight months in captivity, and the 14 months following her release, we did not register a single display of aggression. In a similar case, a male tapir named Poncho, rescued in 2005 as a calf and kept in captivity on a farm in the Corporacion Autonoma Regional Alto Magdalena, Colombia (Sergio Sandoval, pers. com.). Here, as in

the case above, there are no registered displays of aggression towards humans. Contrastingly, a number of fatal attacks inflicted by wild lowland tapirs (*Tapirus terrestris*) (Haddad *et al.*, 2005), and non-fatal attacks inflicted by captive Malayan tapir (*Tapirus indicus*), Baird's tapir (*Tapirs bairdii*) and lowland tapirs have been reported (Naish, 2013). In all cases, attacks were perpetrated by females rearing calves.

In August 2011, a male mountain tapir calf was rescued in Los Cedros, Quijos Alto, Antisana Ecological Reserve, Ecuador. The animal, named Leo, was cared for and raised in captivity on a farm (Gómez et al., 2013). In December 2013, the tapir was released approximately four km away from the farm in an area of cloud forest. The tapir was fitted with a leather collar to allow identification. In the months following his release, Leo frequently returned to the farm where he had been cared for, to feed on plants in the garden before returning to the surrounding cloud forest. Leo, now an adult animal of about 180 kg visited the farm on February 27, 2015 and, attacked, one of his original caretakers for no apparent reason. The man was trampled and bitten, especially around the head and hands. Only the timely intervention of park ranger Leopoldo Gomez saved the victim's life.

It is important to note that the region where *Leo* was originally released is known to be an area of high tapir/human conflict. The family that raised *Leo* reported two previous attacks by wild mountain tapirs on humans. The first occurred when three adult tapirs, possibly in courtship, chased a person forcing him to seek refuge on top of a large rock. The second happened when an adult tapir attempted to bite a lumberjack. Upon investigation, we learned Leo was involved in two additional incidents prior to the nearfatal event. On one occasion, *Leo* chased a neighboring farmer who defended himself using a club. In the other incident, he reportedly lunged towards the park ranger that had rescued him as a calf, biting only his backpack.

Given the seriousness of the case, members of IUCN/SSC Tapir Specialist Group/Ecuador and the authorities of the Ministry of Environment of Ecuador (MEE), decided to relocate Leo to a remote cloud forest of Cayambe Coca National Park (CCNP), over 20 km away from region where Leo was raised in captivity. The decision was taken to both safeguard the life of the animal and the people of the community. Unfortunately, this action was never carried out. Following a series of additional incidents in late March and early April this year in which Leo posed significant threats to humans, the MEE Authorities, local farmers and biologists decided that Leo should not be released under any circumstances due to his extraordinarily aggressive behavior towards humans. Consequently, he euthanized on April 3, 2015 by an MEE veterinarian.

The reasons underlying *Leo's* aggressive behavior are unknown. One hypothesis is that there was a

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Figure 1.'Leo' homing in the Gómez family farm wearing his leather ID collar. Photo by: Leopoldo Gómez

sexually active female in the region. Due to his very close interactions with humans during early development, he may have confused humans with potential competitors. Perhaps he simply felt threatened and was defending his territory. Another hypothesis is that Leo contracted a disorder that has made him aggressive and intolerant towards humans. Leo was rescued when only a few weeks old at the bottom of a sheer rock face. It is likely that he suffered an accident in which he fell down the cliff, separating him from his mother, and forcing her to abandon him. He was alone and starving upon rescue, yet it is not known exactly how many days he was without his mother (Gómez et al., 2013). It is possible that Leo suffered a traumatic experience caused by the impact of his fall or the starvation he endured at such a crucial period in his development. This could potentially have triggered him to develop a behavioural disorder that has made him particularly vicious towards humans. Such a disorder could also have been caused by a traumatic experience during captivity or since his release. Similar behavioral disruptions have been observed in elephants (Bradshaw et al. 2003). Could Leo have suffered post-release psychological trauma after being rejected by his 'human family' on his return 'home' that provoked hyperaggressive behaviour?

Given the uncertainty surrounding what might trigger aggressive behavior in tapirs, it is highly recommended that people who come into contact with tapirs either in captivity or in the wild, take every precaution to avoid injury to both human and tapir. Ultimately, this case highlights the lack of knowledge on tapir behavior, and the impact habitat loss, encroachment, and persecution have on individual tapir behavior. Continued monitoring

of tapir behavior in areas of diverse conflict is vital to help us understand how tapir/human interactions might be altering and affecting tapir behavior.

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## References

Bradshaw, G.A., Schor, A. N., Brown, J.L., Poole, J H. and Moss, C J. 2005. Elephant breakdown. Nature. Vol 433, at: http://www.nature.com/nature/journal/v433/n7028/full/433807a.html . Accessed May 12, 2015.

Castellanos, A 1994. El tapir andino (*Tapirus pinchaque* Roulin): crianza de un ejemplar en el bosque protector Pasochoa y notas ecológicas en el Parque Nacional Sangay, Ecuador. Tesis de licenciatura,

Facultad de Filosofía y Ciencias de la Educación, Universidad Central, Quito, Ecuador.

Castellanos, A. 2013. Iridium/GPS Telemetry to Study Home Range and population Density of Mountain Tapirs in the Rio Papallacta Watershed, Ecuador. Tapir Specialist Group Newsletter, 31(22):20-25.

Crandall, L. S. 1964. Family Tapiridae. Pp. 499–504 in Management of wild animals in captivity. University of Chicago Press, Chicago, Illinois.30–35.

Downer, C. C. 1996. The mountain tapir, endangered "flagship" species of the high Andes. Oryx 30:45–58.

Gale, N. B., and C. J. Sedgwick. 1968. A note on the woolly tapirs (*Tapirus pinchaque*) at Los Angeles Zoo. International Zoo Yearbook 8:211–212.

Gómez, L., Urcuango, R., Romero, A., Urgiles-Verdugo, C., y Gallo, F. 2013. Manejo Semi-In situ de un ejemplar de tapir de montaña (*Tapirus pinchaque*), en la localidad de Cuyuja, Reserva Ecológica Antisana, Ecuador. Primer Congreso Latinoamericano de Tapires- Segundo Congreso Ecuatoriano de Mastozoología, pp 109. Puyo Pastaza, Ecuador.

Haddad, V., Chagas Assunção, M., Coelho de Mello, R.
& Ribeiro Duarte, M. 2005. A fatal attack caused by a Lowland tapir (*Tapirus terrestris*) in southeastern Brazil. Wilderness & Environmental Medicine 16, 97-100

Naish, D. 2013. Tapir attacks past, present, but hopefully not future. at: http://blogs.scientificamerican.com/tetrapod-zoology/2013/08/11/tapir-attacks-past-present-not-future/. Accessed May 12, 2015.

Schauenberg, P. 1969. Contribution a` l'e´tude du tapir pinchaque, *Tapirus pinchaque* Roulin 1829. Revue Suisse de Zoologie 76:211–256.