

## Record and track description of a Baird's tapir juvenile in the north of Oaxaca

Luis David Camarillo-Chávez<sup>1</sup>, Mario C. Lavariega<sup>1</sup> and Miguel Briones-Salas<sup>1</sup>

<sup>1</sup>Centro Interdisciplinario de Investigación para el Desarrollo Integral Regional, Unidad Oaxaca, Instituto Politécnico Nacional. Hornos 1003, Santa Cruz Xoxocotlán, Oaxaca, México 71230.

**The presence of Baird's tapir *Tapirus bairdii* in the Sierra Madre de Oaxaca in Southern Mexico has been previously reported by Lira *et al.* (2006), using track records and information obtained through interviews. Seven years later, its presence was confirmed with pictures (Lavariega *et al.*, 2013), bone remains, and tracks (Peña *et al.*, in press). Subsequently, after three surveys with camera traps in the Sierra de Villa Alta (17°29'23"N 96°7'45.6"W; 1499 masl), additional pictures of adult animals have been obtained (personal observation, Mario C. Lavariega; Figure 1)**

As part of the routine sampling activities established for recording medium and large mammals through the identification of tracks, well-marked Baird's tapir footprints and the tracks of a juvenile and an adult were found on February 15, 2014 in a muddy area bordering a stream in the mountain cloud forest in the Sierra Madre de Oaxaca (17°29'23"N, 96°7'47"W; 1530 masl). The Baird's tapir footprint has four toes, wide hoofs with round edges and hind footprints similar to the front, but with only three toes. In the tracks, back and front feet line up one over the other, corresponding with a walking or trot trail pattern (Aranda, 2000). The condition of the substrate resulted in good quality track impressions. The tracks were photographed and plaster casts of three tracks were made and were deposited in the Mammal Collection of the CIIDIR-Oaxaca (OAX.MA.026.0497).

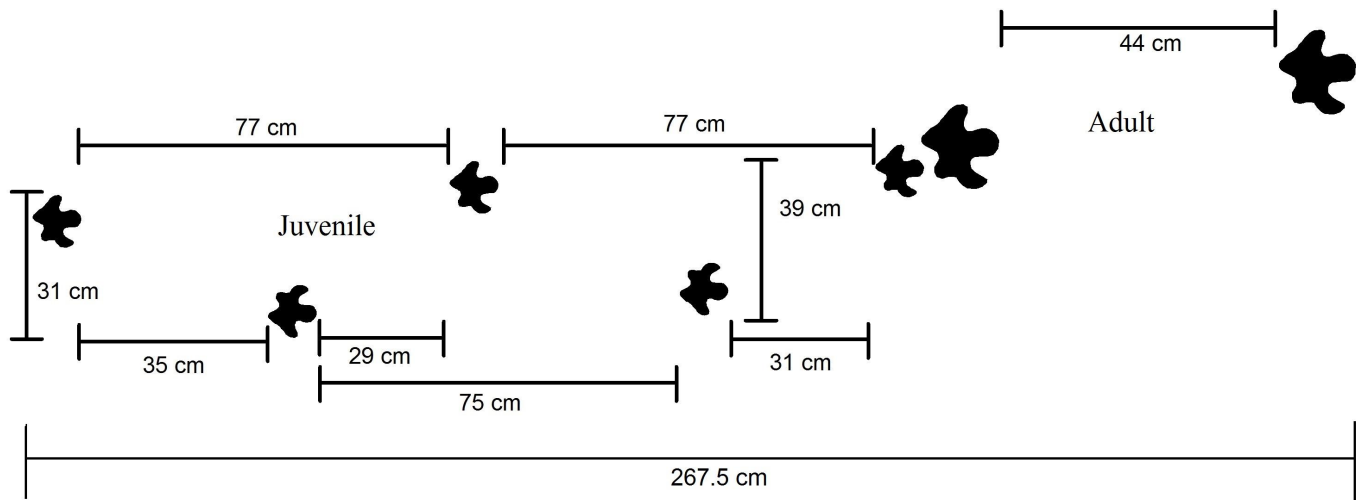
The juvenile Baird's tapir footprint in the mud was 13.5 cm long and 15.5 cm wide (Figure 2a) and the adult's was 16.0 cm long and 18.0 cm wide (Figure 2b). The adult footprint size lies within the reported footprint range: 15.24 cm to 20 cm long and 12.7 to 20 cm wide (Murie, 1997; Aranda, 2000; Pérez & Matus, 2010). The juvenile's track was composed of five footprints: three of the right hind foot and two of the left hind foot. The track measured 195 cm in length and 31 to 39 cm in width and the distance between the



Figure 1. Photograph of Baird's tapir taken with camera-trap in the north of Oaxaca, Mexico.



Figure 2. Tracks of Baird's tapir in the north of Oaxaca, Mexico: a) juvenile and b) adult.



**Figure 3.** Track of Baird's tapir in the north of Oaxaca, Mexico. Scheme based on photographs and field data.

juvenile and adult tracks was between 75 to 77 cm. For the adult tapir, three footprints of the right hind foot were found with a separation distance of 44 cm (Figure 3).

This finding, in addition to previous records, allows for the opportunity to further carry out research on the habitat conditions, home range and breeding sites of this species, which has been classified as endangered (IUCN, 2014) due to the threats posed by hunting and deforestation. The presence of a juvenile Baird's tapir represents strong evidence of reproduction of Baird's Tapir in the Sierra de Villa Alta, Oaxaca. This is relevant and highlights the value of the mountain cloud forest for the conservation of this species, because it lies within the limit of the species distribution in Mexico and for all the species. As Lira *et al.* (2006) have also noted, it is necessary to develop further studies in adjacent regions with areas of potential tapir habitat (such as Ixtlan, Veinte Cerros, Sierra Mixe) in order to promote conservation strategies in this region.

- Peña-Azcona, I., Gómez-Ugalde, R.M. & Briones-Salas, M. In press. Nuevos registros de tapir centroamericano *Tapirus bairdii* en el Distrito de Tehuantepec, Oaxaca, México. *Acta Zoológica Mexicana* (nueva serie).
- Pérez, C. & Matus, E. (2010). El tapir *Tapirus bairdii* en la región sureste del Área de Protección de Flora y Fauna Balam Ka'ax, Quintana Roo, México. *Therya* 1:137-144.

## References

- Aranda, M. 2000. Huellas y otros rastros de los mamíferos grandes y medianos de México. CONABIO, Instituto de Ecología A.C. Xalapa, México. 220 pp.
- IUCN (2015). 2015 IUCN Red List of Threatened Species. [www.redlist.org](http://www.redlist.org) [accessed 18 February 2015].
- Lavariega, M.C., Briones-Salas, M. & Rodríguez, C. (2013). Registro de tapir centroamericano (*Tapirus bairdii*) con cámaras-trampa en la sierra Madre de Oaxaca, México. *Revista Mexicana de Biodiversidad* 84:1007-1011.
- Lira, I., Naranjo, E.J., Hillard, D., Camacho, M.A., de Villa, A. & Reyes, M.A. (2006). Status and conservation of Baird's Tapir in Oaxaca, Mexico. *Tapir Conservation* 15 (1):21-28.
- Murie, O.J. & Elbroch, M. (2005). A field guide to animal tracks. Houghton Mifflin Company. New York. 375 p.