

adores importantes del tapir centroamericano son el Jaguar (*Panthera onca*), el Puma (*Puma concolor*) y el Caimán del Magdalena (*Crocodylus acutus*).

Estado Actual y Amenazas: Su principal amenaza es la cacería, que ha llevado a la especie a la extinción en algunas localidades, especialmente en el Urabá, las serranías de Tripogadí y del Darién, así como en el Sinú, y en general en toda la costa Pacífica. El gran tamaño del tapir hace que éste sea una de las presas más buscadas por los cazadores. La carne es aprovechada para la subsistencia y en algunas ocasiones los excedentes son vendidos en los mercados locales como carne de monte. Al igual que los demás tapires, *T. bairdii* es una especie muy sensible a la intervención de su hábitat y a la cacería (BROOKS et al. 1997). Aparentemente sólo las poblaciones del Parque Nacional Natural Los Katíos y algunas áreas aledañas en la Serranía del Darién serían el último remanente de esta especie en Colombia. Aún ahí, la continua presión de caza ejercida por los pobladores vecinos al parque, que viven en una situación social muy compleja por el conflicto armado, puede eventualmente estar poniendo en serio riesgo su viabilidad poblacional. Ya ha sido considerada como extinta en el Parque Nacional Natural Ensenada de Utría por los propios cazadores Embera (ULLOA et al. 1996). Esta situación ha motivado a considerar las poblaciones colombianas bajo el criterio A de rápida reducción en el tamaño poblacional, en virtud de una obvia reducción poblacional proyectada o sospechada en los últimos diez años en niveles mayores o iguales al 80%, lo que implica una categorización de En Peligro Crítico CR (A2cd+3cd) siguiendo las definiciones de la Unión Internacional para la Conservación de la Naturaleza (UICN).

Medidas de Conservación Tomadas: Debido a las drásticas reducciones poblacionales causadas mayormente por la cacería indiscriminada, la especie se encuentra incluida en el Apéndice I de la CITES. Se sospecha que aún exista una población en el Alto Sinú, Parque Nacional Natural Paramillo, donde la reportó Hershkowitz; podría existir en los Parques Nacionales Naturales Orquideas, Tatamá y Farallones de Cali, pero aún no hay evidencia.

Medidas de Conservación Propuestas: La restauración de los bosques chocoanos, con vocación forestal y un adecuado manejo de estos recursos, podría compensar la pérdida de hábitat que ha sufrido la especie. Se requieren estudios de campo para determinar su presencia en muchos lugares, especialmente, en la Serranía del Darién y de Los Saltos, así como en el Alto Sinú, Parque Nacional Natural Paramillo, donde aparentemente se ha extinguido. Se requieren estudios de disponibilidad de hábitat y monitoreo de sus poblaciones con el objeto de plantear un eventual programa de reintroducción con alta participación comunitaria que garantice un mínimo de éxito. La evaluación de los efectos de la minería y extracción forestal y la integración de esta especie a programas de educación ambiental son actividades altamente recomendables.

Linking Mountain Tapir Populations in South-Western Colombia

By Sergio Sandoval Arenas

The mountain tapir (*Tapirus pinchaque*) is perhaps the most endangered species in the family Tapiridae. Remnant populations of the species inhabit Andean ecosystems of Colombia, Ecuador and northern Peru, mainly at elevations between 2,000 and 4,500 m above sea level. Current total counts probably number less than 3,500 individuals and 70% (nearly 2,500 individuals) among these inhabit the Colombian Andes, along the southern part of the Central and Eastern Cordilleras (Lizcano et al. 2002). Unfortunately, the species' distribution range overlaps with areas of high human development in the country. With humans occupying and transforming the Andean forests at the lower limits of its distribution, the mountain tapir has been displaced to the thick, high Andean forests and páramos to search for food and refuge.

Habitat loss is not the only threat that the mountain tapir faces in Colombia. Although animals could seemingly disperse along the higher elevation areas of the Andean cordilleras, habitat fragmentation is probably disrupting this continuity, breaking apart the last mountain tapir populations (Figure 1). Expert analysis suggests that a viable mountain tapir population must be composed of at least 1,000 individuals living in a continuous area of nearly 300,000 hectares (Montenegro 2002). This scenario is difficult to find inside any currently protected area in the Andes of Colombia, where the largest section of continuous protected habitat for the species hardly encompasses 20% of this extension (59,900 ha. in Sumapaz National Park; Lizcano et al. 2002; Figure 1).

Because it is unlikely that there will be a viable population of mountain tapirs inside just one national park, the integration of various protected areas may be an alternative for the conservation of this species. One of the places where this kind of integration could be successful in Colombia is at the southern limit of the Central Cordillera, in an area known as the Colombian Massif. A nearly continuous belt of páramos and Andean forests runs along the ridge of the cordillera, representing a potential high Andean corridor. Along this belt, three national parks have been established (Puracé, Nevado del Huila and Las Hermosas) and the areas between them seem to have relative low levels of human disturbance (Figure 1).

During 2004, a pilot project took place in the northern sector of Puracé National Park. The objective of the

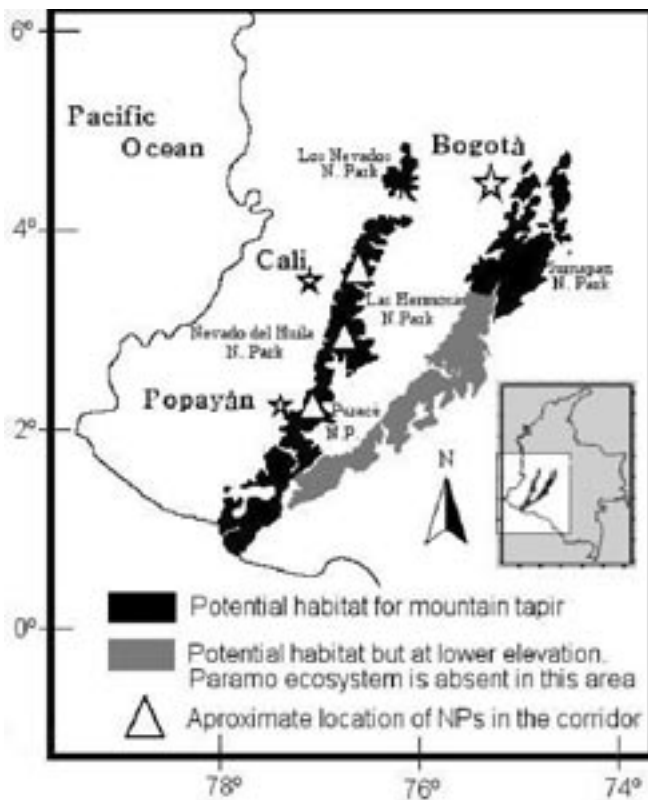


Figure 1. Remaining habitat of the mountain tapir in Colombia (Based on Colombian Ecosystems Map, Etter 1998).

project was to evaluate human threats and assess the status of mountain tapir populations in a representative area of the belt. Furthermore, after several meetings, agreements were secured with local agencies responsible for the environmental management of the areas included in the corridor. After one year of work it was concluded that the establishment of the corridor is possible and that the mountain tapir could be one of the focal species to be used in the monitoring process to evaluate the effectiveness of management of the area. It is necessary to initiate environmental education activities; young people in the area are ignorant of the existence of the mountain tapir and, although the adults have a positive attitude toward the species, the only benefit they perceive from it is the use of its body parts for traditional medicine.

There are several factors threatening the mountain tapir in the area, but maybe the worst of them is habitat degradation due to livestock introductions. The frequency of mountain tapir signs found in areas where livestock is kept tends to be low. Hunting is not very evident, but it occurs; it is probably not for subsistence purposes and may be an opportunistic activity (Figure 2).

Although at a large scale (1:2,000,000; Etter 1998) the corridor appears to be in place, upon closer inspec-

tion there could be several areas where the connectivity is lost due to habitat degradation. The goal on a second phase of the project will be to identify those critical gaps in order to implement site-specific ecological studies focused on mountain tapir dispersal patterns, and to develop environmental education programs for local people. If possible, future activities may include the use genetic and telemetry data as part of the monitoring process. The use of camera traps is being considered too.

Acknowledgements

I wish to thank the Los Angeles Zoo (USA), the Cali Zoological Foundation, the Colombian National Parks Unit and the Environmental Studies Group (GEA) of Cauca University at Popayan, for their support in the initial phase of this project. Special thanks to the people of Resguardo Indígena de Puracé for their assistance in the field.

Sergio Sandoval Arenas

IUCN/SSC Tapir Specialist Group (TSG)

E-mail: dantascol@yahoo.com.mx

References

- Etter, A. 1998. Mapa General de Ecosistemas de Colombia. Escala 1:2,000,000. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt.
- Lizcano, D. J., Pizarro, V., Cavelier, J. And J. Carmona. 2002. Geographic distribution and population size of the mountain tapir (*Tapirus pinchaque*) in Colombia. *Journal of Biogeography*. 29. 7-15.
- Montenegro, O. L. 2002. Evaluación del estado actual de la danta o tapir de páramo (*Tapirus pinchaque*) en la región andina oriental. Corpochivor. Garagoa. 17 pp.



Figure 2. An injured mountain tapir found in the northern sector of Puracé National Park in 2003. The wound (inset) was presumably caused by a hunter using a machete. Photo by Juan Carlos Gaitán 2003