

Despite these threats, conservation efforts have seen results. The spectacled bear has returned to the Páramo de Las Delicias in the Guambiano Indian Territory. For about eighty years, the spectacled bear had disappeared from that region. Now, the Indian authorities are also making efforts towards bringing back Baird's tapir to the area. At this point, local Colombian scientists have identified that the three tapir species in the Andes region and west of the mountain range should be priorities for research and conservation efforts.

Latest Developments

In 2001 Emilio reported that the presence of *T. t. colombianus* had been confirmed during recent research trips to the areas of Magdalena Medio and Sierra Nevada de Santa Marta. The population at Magdalena Medio was small but not under any hunting pressure. However, fragmentation of the forest habitat is a problem and corridors between fragments should be developed. Sierra Nevada has intact habitat but there is hunting pressure. Emilio recommends the development of an education programme to improve the prospects for the long-term survival of this population.

This year's developments are not very encouraging regarding tapir survival in some areas. Emilio visited the Marías Mountains in mid February and found no traces of tapir. Indeed, local people had not seen sign of tapir since about 1975. The area is a very dangerous one and is the focus of heavy conflict. In addition, the area containing *T. t. colombianus* population in Sierra Nevada de Santa Marta, reported on above is also in a state of unrest. Hopefully, this population can survive this latest challenge to the tapirs of Colombia.

Emilio Constantino

*Biodiversity & Conservation Coordinator,
Red de Reservas Naturales de la Sociedad Civil
Avenida 9 Norte #22-07, Barrio Santa Monica,
Cali, COLOMBIA*

Phone: ++57 (2) 660 6133 / 2 653 4539

Fax: ++57 (2) 660 6133

E-mail: emilio@resnatur.org.co

*Editor's Note

It is with sadness that we report the death of Dr. Jorge Hernández-Camacho last year. His obituary will appear in the next edition of the newsletter.

News from the Field

■ CENTRAL AMERICA

Belize

Sharon Matola of the Belize Zoo has a number of reports from her field surveys including the sighting of 11 tapirs in four days on the one of the rivers of her field site. Sharon reports that her field team had one of their canoes attacked by an adult female tapir. She actually left a bite mark on the bow of the canoe! Sharon suggested that the female might have had a youngster in the bush nearby. In another report, Sharon describes interrupting a 3 m long crocodile, which had just drowned a young tapir of less than four months of age. Sharon moved the crocodile away with the paddle of her kayak and although the crocodile moved, he wasn't too keen to leave the site of the kill and continued to guard the tapir even when it was dragged onto a rock (see photo). This amazing event happened in the area, which is due to be flooded by the Chalillo Dam and highlights the potential loss of biodi-

versity that this dam would cause. This dam is described in the following also from Sharon.

The most robust populations of Baird's tapir found in Belize, are under determined threat by the proposed development of a dry season storage dam. The flooding of the area proposed would eradicate 90% of the riparian vegetation found there, and this is the very type of habitat, which provides ample food sources for herbivores. Joe Fragoso found, through his fieldwork in Belize in the 1980s, that this riparian or floodplain vegetation was the preferred food for tapirs. This has been confirmed from later fieldwork, where faeces, collected and analysed, was found to contain remains of herbaceous, floodplain vegetation only. These findings reinforce the important role that floodplain habitat plays for the preservation of this endangered species in the central Maya Mountains. Unfortunately, the area slated for the proposed dam is not replicated in other areas of Belize, and appears to be the most singular, important habitat for wildlife populations in the country.

Sharon Matola

Director, Belize Zoo and
Tropical Education Center
P.O. BOX 1787, Belize City, BELIZE
Phone: ++ (501) 81 30 04
Fax: ++ (501) 81 30 10
E-mail: belizezoo@btl.net

A crocodile guards the body of its drowned prey, a young tapir of less than four months of age. This amazing event highlights the potential loss of biodiversity in Belize in the area where the construction of the Chalillo dam is planned.

Photo by Sharon Matola



Field notes from Eastern Honduras: Tapirs (*Tapirus bairdii*) in the Rio Patuca region

By Josiah Townsend

During a herpetological expedition in July and August 2000 to the Rio Patuca in eastern Honduras some observations were made of Baird's tapir (*Tapirus bairdii*). The presence of tapirs in Honduras has been documented and IUCN representatives in the country estimate that 1000–2000 animals survive in the country today, with a majority of those inhabiting remote eastern Honduras. We surveyed the Rio Patuca as well as several of its tributaries: the Rios Casamacao, Zutawala, and Waspaesni. One adult tapir was sighted in the Rio Zutawala, and tracks were seen at locations farther up the Zutawala and also on the Rio Casamacao.

Region

The areas we visited are part of two designated protected areas: Reserva Anthropologica (R.A.) Tawahka and the newly created Parque Nacional (P.N.) Patuca. These are relatively large areas (ca. 2510 km² and 3750 km², respectively) and make up part of the largest contiguous stretches of intact forest in Central America. The lowland tropical forests of this region are currently protected by the following system of parks: Rio Platanio Biosphere Reserve, R.A. Tawahka, and P.N.

Patuca in Honduras, and the Bosawas National Park in Nicaragua. The continued contiguity of this corridor will be difficult to ensure because of the increasing and unregulated flow of *campesinos* into the region. These settlers establish a homestead along the river and then proceed to cut down the adjacent forest to clear land for their livestock and crops. Despite this human influx, which has increased markedly since Hurricane Mitch (October/November 1998), the region still provides large tracts of suitable habitat for tapirs and the other large mammals that have become increasingly rare throughout much of Central America.

Parque Nacional Patuca: Officially established on 20th October 1999, P.N. Patuca was created to protect a large swathe of forest that borders Nicaragua and is adjacent to R.A. Tawahka. Fundación Patuca, a German NGO, was instrumental in the creation of the park and is currently involved in its management, inventory of and research on its flora and fauna, and the development of sustainable agricultural practices for the *campesinos* that already live within the park's newly established boundaries. The park's terrain is typified by steep forested hillsides and small streams that drain into the Rio Patuca and its tributaries.

Observations

Evidence of tapir activity was observed at three different localities along tributaries of the Rio Patuca. Tracks of an adult tapir as well as a wallow were observed along a clay-bottomed stream that fed into the Rio

Casamacao. The topography of this area is characterized by steep hills and muddy streamside areas. Vegetation in the vicinity can be described as primary forest with a closed canopy and a minimum of secondary growth. The tracks were followed for a distance of approximately 0.5 km along the stream and then up an adjacent hill into primary forest.

Tapir tracks were also observed in an area of floodplain forest along the Rio Zutawala. The Zutawala floodplain is ca. 2 km wide, with the majority of this lying on the northern side of the river. The tracks were observed within 15m of the north bank of the river, on a game trail that ran roughly parallel to the river. Two days later, while travelling back down the Rio Zutawala towards the Patuca, a large adult tapir was spotted while sleeping in vegetation alongside the river. The tapir was startled by the sudden appearance of our boat and attempted to flee by swimming along the river's edge and climbing the steep bank.

While no *campesinos* we encountered claim to actively pursue tapirs as a food source, nearly all of them related that they do kill or attempt to kill tapirs when the opportunity presents itself. Tapirs are obviously the largest game animals available, and taking one not only provides a source of meat but also is considered a sort of status symbol.

Recommendations

Parque Nacional Patuca provides a large area that would provide a suitable location for the ecological study of tapirs. Given the accelerated rate of deforestation in the region coupled with the value placed on the tapir as a food item by *campesinos*, it would be advisable for interested parties to conduct a preliminary census of tapirs as soon as it is feasible. Secondly, an education campaign for the *campesinos* could be implemented to raise awareness of the endangered status of this animal and dissuade hunting of the animal for food.

Josiah Townsend

Division of Herpetology
Florida Museum of Natural History & Department of
Wildlife Ecology and Conservation
University of Florida
Gainesville, Florida 32611, UNITED STATES
E-mail: jtownsend@flmnh.ufl.edu

■ SOUTH AMERICA

***Tapirus terrestris* (LINNAEUS, 1758) (Mammalia, Perissodactyla) In an Area of Sub-tropical Forest in Southern Brazil: Diet, Habitat Use and Population Density**

By Renato de Oliveira Affonso

Renato de Oliveira Affonso, has completed his masters degree at the University of Rio de Janeiro, Brazil. His thesis is entitled *Tapirus terrestris* (LINNAEUS, 1758) (Mammalia, Perissodactyla) in an Area of Sub-tropical Forest in Southern Brazil: Diet, Habitat Use and Population Density. The study presents an analysis of data concerning the diet, habitat use, seed-dispersal role, and density of the lowland tapir population of the Parque Florestal Estadual do Turvo in the sub-tropical forest of the upper Uruguay river basin, Rio Grande do Sul State, Brazil. Tapir presence was determined by following fresh tracks and then counting tracks and faeces located by walking along 910 km cumulative transects of trail on roads and near creeks. *Syagrus romanzoffiana* (Arecaceae) was the main fruit in the diet of the lowland tapir, replaced by *Holocalix balansae* (Caesalpiniaceae) and *Campomanesia xanthocarpa* (Myrtaceae) when available. Viable seeds of this palm were found in dung piles, suggesting the possible role of tapirs as seed dispersers of this plant. The habitual deposition of dung piles in non-flooded areas could favour the germination of seeds. The water in permanent swamps, the availability of fruits and the presence of hunters seem to be the main reason for the differences regarding habitat use and density observed between the studied areas in the Park. The estimated density of the lowland tapir population is below the values observed for hunted areas in Amazonia. The seasonality of food resources may be partially related to the observed values for sub-tropical habitats.

Renato de Oliveira Affonso

E-mail: renato.tapirus@bol.com.br

Professor J.C. Voltolini of the Mammal Ecology Study Group at the University of Taubate, is starting a project with two students to monitor the movement in space and time of tapir, peccaries and their predators (pumas). Another project on track measurements is

trying to identify statistically significant differences among ages, soil type and, if possible, a regression model to predict tapir biomass. This site is crucial for these large mammals because there is one 40 km trail used by both poachers and animals throughout the year. Therefore, the presence of biologists is important to record tapir movements but is also important to monitor the area for the presence of poachers.

J. C. Voltolini

*Professor, Universidade de Taubate,
Departamento de Biologia
Praca Marcelino Monteiro 63. Taubaté, São Paulo,
BRAZIL 12030-010
Phone: ++55 (12) 225 41 65
Fax: ++55 (12) 232 29 47
E-Mail: jcvoltol@aquarius.com.br*

Ecuador

A semi-tame tapir has been the inspiration for the creation of a nature reserve near the village of Sarayacu in the Ecuadorian Amazon. The presence of the tapir meant that hunters in the area stopped hunting tapir for fear of killing this particular female. **Anders Siren** wrote to TPF and as a result the project was funded by Club Tapir. As a result, the reserve is now a reality and Anders has now turned the project over to the villagers although he will continue to oversee it.

Mountain Tapir Translocation Project, Northern Ecuador, October 1999 - May 2000

By Craig Downer

In November 1999, two expeditions took place into Sangay National Park. The first expedition was to my former radio-telemetry study area of the early 1990's, the Culebrillas sector of Sangay National Park. I discovered that a more intense invasion by domestic livestock was occurring in that area, driving the mountain tapirs further away from their former domain. The second expedition we made was to the Purshi sector of Sangay National Park. Here, I believed, we would have an excellent chance to observe mountain tapirs by walking along the recently constructed Guamote-Macas road. During our week's stay, we descended to

mid-elevation forests where we did finally see fresh tracks of a mountain tapir crossing the road. Most disturbing was the forest destruction occasioned by the road's construction.

During the first half of December 1999, three volunteers and I made the demanding expedition into the capture site at the salt lick below La Sofia. With three local guides, we observed several fresh mountain tapir trails coming and going from the traditional mineral seep area, which the tapirs have visited for generations according to native reports.

A capture strategy was formulated involving the baiting of the tapirs either with additional salt and/or preferred fruits and vegetables. It was determined that the broad river plain would be safe for helicopter entry after the tapirs were captured. We returned to camp after the strenuous expedition. I was looking forward to returning to the salt lick for the capture within a short time.

In Feb 2000, I made a trip to the Canyon Aguas Blancas, the Fundacion Golondrina's Reserve in northern Carchi, where the tapir pair is destined to make its new home. During my stay, we worked on the construction of 2.5-meter high poles, as per the corral specifications I had worked out with the advice of veterinarian Della Garell at the Cheyenne Mountains Zoo near Colorado Springs, USA.

In April 2000, we began final preparations for the translocation attempt. By mid-April, the Brazilian veterinarian, Dr. Jose Roberto Vaz Ferreira, from Sao Paulo State arrived. Immediately upon his arrival, we organized all equipment and supplies and drove north to Carchi. The helicopter preceded us to Tulcan, flying the day before from its base near Quito. The pilot and his helicopter remained on standby during all our capture attempts of the succeeding week. Since the veterinarian would not be available for more than a few days we decided to leave La Sofia for another opportunity and try the captures in the Garapatal and Culebrillas forested canyons just to the north of La Bonita. For nearly a week, we pursued the mountain tapirs near La Bonita with two hunter teams and their dogs. Although tracks of several mountain tapirs were trailed, these tapirs were very wary and were able to evade the hunter teams by sticking to higher, more precipitous terrain. They abandoned the canyons where we were trailing them for a higher and much more distant and inaccessible habitat to the west. On the final day, these tapirs were pursued to this distant region, but the ruggedness

of the terrain and dense forest exhausted the teams by midday, and we finally had to relinquish our efforts.

As the veterinarian and I concluded with our entourage, this expedition had not been in vain, for we had gained a measure of just how difficult it was to capture the tapirs in the vicinity of La Bonita, even with the best of available teams. It was agreed that we would have a much greater chance of success at the originally intended capture site below La Sofia at the salt lick where they are accustomed to come. At the veterinarian's suggestion, I have now adopted a plan to bait the mountain tapirs to accustom them to visiting the capture site over a longer period of time, two weeks to a month and possibly more.

Craig C. Downer
Wildlife Ecologist
President, Andean Tapir Fund
P.O. Box 456, Minden,
Nevada 89423, UNITED STATES
E-mail: ccdowner@terra.es

■ ASIA

Indonesia

Jeremy Holden working in Kerinci Seblat National Park in Sumatra has sent information and photos regarding the Malay tapir situation there. He writes: Here are the two images of tapir taken during daylight hours, plus a depressing picture of a tapir in a snare set for tiger.

The two daylight photographs represent the only full daylight images of tapir that we have made during over 150,000 hours of camera trapping in Kerinci. Previously we had made two images of tapir in daylight, but both – one early morning and one late evening – could be classed as crepuscular and not full daylight. The above images were made at a salt lick between 0800 and 1200h. I had followed this individual over approximately six kilometres and it had appeared in another of the camera traps along this route, but at night.

The trap picture was taken in August 1997 and shows a male tapir, that I had previously photographed on the camera traps, staked out as bait between two tiger traps. The tapir was almost certainly caught by accident in a powerful wire spring snare set for tiger.



Diurnal photographs of two Malay tapirs taken at Kerinci Seblat National Park in Sumatra. Photos by Jeremy Holden

The smashed up saplings around the trap were testament to the trapped animal's struggle, and a pool of blood and a slit throat evidence of how it was dispatched. The trappers then used the corpse as bait to bring in a tiger, placing another snare behind the corpse. Luckily, I found this trap the morning it had been set and could disarm it. When I visited the site two days later with rangers from the national park two Malay sun bears had been feeding on the tapir carrion. Both of these would, no doubt, have ended up as corpses too.

Jeremy Holden
Photographer, Flora and Fauna International
P.O. BOX 42, Kantor Pos, Sungai Penuh Kerinci,
Jambi, Sumatra INDONESIA 371000
Phone & Fax: ++(0) 7482 2267
E-mail: pop@padang.wasantara.net.id



This tapir was caught in a wire spring snare and then killed for use as tiger bait. Photo by Jeremy Holden

Also in Sumatra – **Matt Linkie** is undertaking field-work on the effects of deforestation on tapirs caused by subsistence farming. This work is taking place at the Kerinci Seblat national park and has been supported by TPF and Club Tapir.

Since 1983 **Marcel Silvius** has undertaken and (supported through project development and fundraising) many surveys in peat and freshwater swamp forests in Indonesia. These surveys, whilst not focusing on the Malay tapir, have contributed data on the occurrence of this species in Sumatra. Marcel believes that with the rapid demise of Indonesia's freshwater and peat swamp forests (its main habitats) due to reclamation for agriculture, unsustainable forestry practices (including clear felling) and the burning of millions of hectares associated with these practices, the species is becoming very much threatened.

Thailand

Tony Lynam reported the finding of a new Malay tapir area along the Thai-Myanmar border. He also reported that tigers, elephant and gaur were in reasonable abundance.

News from Captivity

Venezuela

Proyecto Danta – This project was reported on in the last edition of this newsletter and is a conservation project developed by Fundación AndígenA. The project has received support from the Tapir Preservation Fund in the past and another piece of the jigsaw was put in place when Denis Torres reported that Chorro de Milla Zoo in Merida, Venezuela received a female tapir, Simona, in August 2000. Simona is a mate for Pijigao who was already there. Simona was sent from Bararida Zoo and Botanical Gardens in Barquisimeto in Lara State, Venezuela. She was born in July 1998 and is named Simona because she shares her birthday with the national liberator of Venezuela, Simon Bolivar. The transfer of Simona was not without problems but took place thanks to cooperation between Fundación AndígenA, Chorro de Milla Park Zoo (Mérida,

Venezuela), Bararida Zoo and Botanical Gardens (Barquisimeto, Venezuela) and the Tapir Preservation Fund. It is an important development for tapir captive breeding in the region.

Denis Alexander Torres

President, Fundación AndígenA

Apartado Postal 210, Mérida 5101-A, Edo. Mérida, VENEZUELA

Phone: ++(58) 74 21 99 93

E-mail: fundacion_andigena@yahoo.com

Enclosure Effects on Tapir Breeding and Welfare

A project currently being supported by TPF and Club Tapir is that of **Lisa Nordstrom** who is examining the effects of captive enclosures on the health, longevity and breeding success of captive animals.