



Nota Científica

Noteworthy records of two species of mammals in the Sierra Madre de Oaxaca, Mexico

Registros notables de dos especies de mamíferos de la Sierra Madre de Oaxaca, México

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Abstract. We conducted mammal surveys in the Sierra Madre de Oaxaca (Sierra Norte) in Oaxaca, Mexico, and recorded the occurrence of two conspicuous mammal species: the spider monkey (*Ateles geoffroyi vellerosus*) and the coyote (*Canis latrans cagottis*). Spider monkeys has not been previously recorded in the Sierra Madre de Oaxaca, and coyotes have not been previously observed in Mexico at elevations as high as the present one (3 200 masl) in the Sierra Madre de Oaxaca.

Key words: Oaxaca, Sierra Madre de Oaxaca, *Ateles geoffroyi*, *Canis latrans*, distribution.

Resumen. Se efectuaron colectas de mamíferos en la Sierra Madre de Oaxaca (Sierra Norte) en Oaxaca, México, y se registró la notoria presencia de dos mamíferos: el mono araña (*Ateles geoffroyi vellerosus*) y el coyote (*Canis latrans cagottis*). El mono araña no se había registrado previamente en la Sierra Madre de Oaxaca, en tanto que el coyote, no había sido registrado en México a tan gran altitud (3 200 m) como la de la localidad de captura.

Palabras clave: Oaxaca, Sierra Madre de Oaxaca, *Ateles geoffroyi*, *Canis latrans*, distribución.

The spider monkey (*Ateles geoffroyi*) ranges from southern Tamaulipas in Mexico to Panama in Central America (Hall, 1981). It is considered by the Mexican legislation as endangered species (SEMARNAT, 2002). It has been recorded twice previously in Oaxaca, first in the west of Tuxtepec region (Hall y Kelson, 1959), and at second in the Istmo de Tehuantepec and the Sierra Atravesada (Chimalapa mountains; Briones-Salas y Sánchez-Cordero, 2004; Goodwin, 1969; Hall, 1981). During a survey of mammals in the municipality of Comaltepec, on the Sierra Madre de Oaxaca region (known locally as the Sierra Norte) Oaxaca, we sighted an adult male spider monkey on 25 July 2004. This male was resting, feeding, and later moving through majahua (*Helicocarpus* sp., Family Tiliaceae), guarumbo (*Cecropia*

sp., Family Cecropiaceae) and capirote o tunchin (*Miconia* sp., Family Melastomataceae) trees, in the cloud forest edge and evergreen tropical rainforest at Vista Hermosa, 1 km NE of La Esperanza (17°3'53"N, 96°20'22"W, elevation 1,398 masl). We observed this same individual in August, September, and November of 2004.

This sighting represents the most recent record of *A. geoffroyi* in Oaxaca. The site is 64 km southwest of the nearest previously known locality at San Juan Bautista Tuxtepec, Tuxtepec municipality (18°05'10"N, 96°07'26"W, elevation 20 masl) (Hall and Kelson, 1959). Considering the wide range of distribution of the subspecies *A. g. vellerosus* (Hall, 1981), the observed animal probably belongs to this subspecies. People living in the area told us through interviews that there are groups of this species in nearby localities of difficult access (Laa-du, Ixtlan). It could be that this individual was displaced from a spider monkey troop, or that was migrating to another region.

On the other hand, the coyote (*Canis latrans cagottis*) is one of the largest and most common carnivores in Oaxaca, inhabiting the Sierra Madre de Oaxaca (Cerro San Felipe, coniferous forest, 2,500 masl); Valles Centrales (Etla, coniferous forest, 2250 masl), Sierra Madre del Sur (Yautepec, tropical deciduous forest, 650 masl) and Istmo de Tehuantepec (Tequisistlan, coniferous forest, 1,150 masl)(Goodwin, 1969; Hall, 1981; Briones-Salas y Sánchez-Cordero, 2004). The elevational range in which this species has been recorded in Mexico is from sea level to 1,700 masl (Baker and Greer 1962, Goodwin 1969).

On 11 January 2001, we trapped an adult male coyote, (weight: 12.0 kg; total length: 1,164 mm) in the Santa Catarina Ixtepeji region, Santa Catarina Ixtepeji Municipality, Ixtlan district ($17^{\circ}10'15''N$; $96^{\circ}39'16.5''W$). The elevation of the capture site was 3,239 masl; the vegetation is coniferous forest, with *Pinus oaxacana*, *Pinus teocote*, *Pinus ayacahuite*, *Quercus acutifolia*, *Quercus rugosa*, *Abies guatemalensis* and *Abies oaxacana* as dominant species. The nearest locality where this species was previously recorded is 11 km to the south in San Felipe del Agua (Cerro San Felipe), 6 km N of Oaxaca city, Oaxaca de Juarez Municipality ($17^{\circ}06' N$; $96^{\circ}43' W$; 1,585 masl) (Hall and Kelson 1959). We captured three additional coyotes at the same locality in September 2001 (subadult male, weight: 10.8 kg; total length: 1,163 mm), March 2002 (subadult female, weight: 7.0 kg; total length: 1,014 mm) and September 2002 (young male, weight: 7.5 kg; total length: 1,000 mm). All individuals were captured by soft leg-hold traps, immobilized by chemical techniques, and attached with a radio-collar in order to infer the home range size and other basic biological data for this region of Oaxaca (Marín, 2004).

The elevation of the locality is the highest (3239 masl) ever recorded for coyotes in Mexico (Baker and Greer 1962, Goodwin 1969, Hall 1981).

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Literature cited

- Baker, R.H. and J.K. Greer. 1962. Mammals of the Mexican state of Durango. Museum of Michigan State University, Biology Series 2: 29-159.
- Briones-Salas, M. and V. Sánchez-Cordero. 2004. Mamíferos. In Biodiversidad de Oaxaca, A.J. García, M.J. Ordóñez y M. Briones-Salas (eds.). Instituto de Biología, UNAM; Fondo Oaxaqueño para la Conservación de la Naturaleza, and World Wildlife Fund, México, D.F. p. 423-447.
- Goodwin, G. 1969. Mammals from the state of Oaxaca, Mexico. Bulletin of the American Museum of Natural History 141: 1-269.
- Hall, E.R. 1981. The mammals of North America, vol. 2. Wiley, New York. 1175 p.
- Hall, E.R. and K.R. Kelson, K.R. 1959. The mammals of North America. Ronald, New York, 1:xxx+546+79, and 2:ix+547-1083+79.
- Marín, A.I. 2004. Ambito hogareño del coyote (*Canis latrans*) en Ixtepeji, Sierra Madre de Oaxaca. Tesis, Maestría en Ciencias Universidad Autónoma Metropolitana, México, D.F. 84 p.
- SEMARNAT (Secretaría del Medio Ambiente y Recursos Naturales). 2002. Norma Oficial Mexicana NOM-059-ECOL-2001. Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo. Diario Oficial de la Federación, Segunda sección, marzo 2002.