

XIXth Conference of the American Society of Primatologists, # 341, 1996.

Shideler, S. E., Savage, A., Ortuño, A. M., Moorman, E. A. and Lasley, B. L. 1994. Monitoring female reproductive function by measurement of fecal estrogen and progesterone metabolites in the white-faced saki (*Pithecia pithecia*). *Am. J. Primatol.* 32: 95–108.

Shideler, S. E., Munro, C. J., Johl, H. K., Taylor, H. W. and Lasley, B. L. 1995. Urine and fecal sample collection on filter paper for ovarian hormone evaluations. *Am. J. Primatol.* 37: 305–315.

Sousa, M. B. C. and Ziegler T. E. 1998. Diurnal variation in the excretion patterns of steroids in common marmoset (*Callithrix jacchus*) females. *Am. J. Primatol.* 46:105–117.

Sousa, M.B.C., Silva, H.P.A. and Vidal J.F. 1999. Litter size does not interfere with fertility in common marmoset, *Callithrix jacchus*. *Folia Primatol.* 70: 41–46.

Stevenson, M. F. and Rylands, A. B. 1988. The marmosets, genus *Callithrix*. In: *Ecology and Behavior of Neotropical Primates*, Vol. 2, R. A. Mittermeier, A. B. Rylands, A. F. Coimbra-Filho and G. A. B. da Fonseca (eds.), pp.131–222. World Wildlife Fund, Washington, DC.

Strier, K. B. and Ziegler, T. E. 1997. Behavioral and endocrine characteristics of the reproductive cycle in wild muriqui monkeys, *Brachyteles arachnoides*. *Am. J. Primatol.* 42: 299–310.

Torii, R., Moro, M., Abbott, D. H. and Nigi, H. 1998. Urine collection in the common marmoset (*Callithrix jacchus*) and its applicability to endocrinological studies. *Primates* 39: 407–417.

Van Schaik, C. P., Vannoordwijk, M. A., Vanbragt, T. and Blankenstein, M. A. 1991. A pilot-study of the social correlates of levels of urinary cortisol, prolactin, and testosterone in wild long-tailed macaques (*Macaca fascicularis*). *Primates* 32: 345–356.

Ziegler, T. E., Snowdon, C. T., Abbott, D. H. and Scheffler, G. 1994. The value of fecal steroids for estimating the timing of ovulation in New World primates. *Am. J. Primatol.* 33: 254.

Ziegler, T. E., Scheffler, G., Wittwer, D. J., Schultz-Darken, N. J., Snowdon, C. T. and Abbott, D. H. 1996. Metabolism of reproductive steroids during the ovarian cycle in two species of callitrichids, *Saguinus oedipus* and *Callithrix jacchus*, and estimation of the ovulatory period from fecal steroids. *Biol. Reprod.* 54: 91–99, 1996.

NEOTROPICAL ETHNOPRIMATOLOGY: AN ANNOTATED BIBLIOGRAPHY

Bernardo Urbani

This bibliographic review was compiled after the introduction of the word “Ethnoprimatology” by Leslie E. Sponsel (1997). I am including papers which take in Sponsel’s concept, all of them restricted to the Neotropics. In annotating these reference, the following entries are included: Ethnic group(s) / Primate species / Key word(s) / Locality(ies) /

and Country(ies). The selected works are only those which have ethnoprimateology as a central theme, other ethnozoological studies which mention primates among other mammals are not listed.

- Antolínez, G. 1944. El señor de los araguatos llorones [The lord of crying howler monkeys]. Newspaper *El Universal* (Caracas), 18th November. Reprinted in: *El Agujero de la Serpiente (Arqueología, Folklore, Etnología, y Mitología de Venezuela y Sudamérica)*. *Obras Vol. II*. 1998. Barreto O. (eds.), pp.154–156. Ediciones La Oruga Luminosa, Casa de las Letras “Gilberto Antolínez”, San Felipe, Venezuela.
- Tupi, Carib, Aztec / *Alouatta* sp. / Cosmology / Amazonia, Carabobo state, Central Mexico / Brazil, Venezuela, Mexico.
- Baker, M. 1992. Capuchin monkeys (*Cebus capucinus*) and the Ancient Maya. *Ancient Mesoamerica* 3: 219–228.
- Prehispanic Mayas / prehispanic *Alouatta palliata*, *Alouatta pigra*, *Ateles geoffroyi*, *Cebus capucinus* / History, Archaeology, Linguistic / Mayan area / Belize, Guatemala, Honduras, Mexico.
- Bierhorst, J. 1986. The monkey’s haircut and other stories told by the Mayas. Morrow, New York, USA.
- Mayas / *Alouatta* sp., *Ateles geoffroyi* / Folktale / Yucatán peninsula / Mexico.
- Braakhuis, H. E. M. 1987. Artificers of the days: Functions of the howler monkey gods among the Mayas. *Bijdragen tot de Taal-, Land-, en Volkenkunde* 143. Floris Publications, Dordrecht, The Netherlands.
- Prehispanic Mayas / prehispanic *Alouatta* sp. / Cosmology, Archaeology / Mayan area / Mexico.
- Bray, T. L. 1998. Monos, monstruos y mitos: Conexiones ideológicas entre la Sierra Septentrional y el Oriente del Ecuador [Monkeys, monsters and myths: ideological connections between the Northern Mountains and Eastern Ecuador]. In: *Intercambio y Comercio entre Costa, Andes y Selva. Arqueología y Etnohistoria de Suramérica*, F. Cárdenas-Arroyo and T. L. Bray (eds.), pp. 135–154. Universidad de Los Andes, Bogotá, Colombia.
- Equatorial Amerindians / *Aotus* sp., *Ateles* sp. / Cosmology / Equadorian Andes / Ecuador
- Castro, N., Revilla, J. and Neville, M. 1975. Carne de monte como una fuente de proteínas en Iquitos, con referencia especial a monos [Bushmeat as protein source in Iquitos, with special reference to monkeys]. *Rev. Forestal del Perú*. 5(1-2): 19–32. Reprinted in: *La Primatología en el Perú*, 1990, N. Castro-Rodríguez (ed.), pp.17–35. Proyecto Peruano de Primatología, Lima, Peru.
- Peruvian Amerindians and Creoles / *Lagothrix lagothricha*, *Alouatta seniculus*, *Cebus albifrons*, *Cebus apella*, *Ateles* sp., *Pithecia monachus* / Bushmeat / Iquitos and vicinity / Peru.
- Cormier, L. A. 1999. Cultural implications for neotropical primate conservation on the Caru Indigenous Reserve, Maranhão, Brazil. *Am. J. Primatol.* 49(1): 45–46.
- Guajá / *Alouatta belzebul*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus kaapori*, *Aotus infulatus*, *Saimiri sciureus*, *Saguinus niger* / Conservation, cultural construction / Maranhão / Brazil.

- Cormier, L. A. 2000. The ethnoprimateology of the Guajá indians of Maranhão, Brazil. Ph.D. Dissertation, Tulane University, Louisiana, USA. p.345. Abstract reprinted as "The ethnoprimateology of the Guajá indians of Maranhão, Brazil." *Diss. Abst. Int.* 2000. A61(4): 1494. Guajá / *Alouatta belzebul*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus kaapori*, *Aotus infulatus*, *Saimiri sciureus*, *Saguinus niger* / Conservation, cannibalism recreation, cultural construction / Maranhão / Brazil.
- Cormier, L. A. 2000. Cultural practices benefiting primate conservation among the Guajá of Eastern Amazonia. *Neotrop. Primates* 8(4): 144–146. Guajá / *Alouatta belzebul*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus kaapori*, *Aotus infulatus*, *Saimiri sciureus*, *Saguinus niger* / Conservation, cultural construction / Maranhão / Brazil.
- Cormier, L. A. In press. Monkey as food, monkey as child: Guajá symbolic cannibalism. In: *Primates Face to Face: Conservation Implications of Human and Nonhuman Primate Interconnections*, A. Fuentes and L. D. Wolfe (eds.), in press. Cambridge University Press, Cambridge, UK. Guajá / *Alouatta belzebul*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus kaapori*, *Aotus infulatus*, *Saimiri sciureus*, *Saguinus niger* / Conservation, cannibalism recreation, cultural construction / Maranhão / Brazil.
- Fleck, D. W., Voss, R. S., and Patton, J. L. 1999. Biological basis of saki (*Pithecia*) folk species recognized by the Matses Indians of Amazonian Peru. *Int. J. Primatol.* 20(6): 1005–1028. Matses / *Pithecia albicans* / Ethnoclasification / Río Gálvez / Peru.
- García del Cueto, H. 1989. Acerca de la connotación simbólico-ritual del mono en la sociedad prehispánica (Altiplano Central) [On the monkey symbolic-ritual meaning in the prehispanic society (Central Highlands)]. In: *Primatología en México: Comportamiento, Ecología, Aprovechamiento y Conservación de Primates*, A. Estrada, R. López-Wilchis and R. Coates-Estrada (eds.), pp.144–159. Universidad Autónoma Metropolitana-Iztapalapa. Mexico, DF. Prehispanic Central Mexican amerindians / prehispanic *Alouatta* sp., *Ateles* sp. / Cosmology / Central Mexican Highlands / Mexico.
- Gonzalez-Kirchner, J. P. and Sainz de la Maza, M. 1998. Primates hunting by Guaymi amerindians in Costa Rica. *Hum. Evol.* 13(1): 15–19.
- González-Zamora, A. 2001. Reflexiones sobre la relación hombre-mono en las diferentes culturas [Thoughts about the relationship human-monkey in different cultures] *Lab. Prim. Newsl.* 40(1): 18. Mesoamerican Amerindians / *Alouatta* sp., *Ateles* sp. / Cultural construction / Mesoamerica / Mexico.
- Guaymi / *Ateles geoffroyi*, *Alouatta palliata*, *Cebus capucinus*, *Saimiri oerstedii* / Hunting, conservation / Costa Rica.
- Hernández-Camacho, J. and Cooper, R. W. 1976. The nonhuman primates of Colombia. Appendix: Some vernacular primate names used by various indian tribes in Colombia. In: *Neotropical Primates. Field Studies and Conservation*, R. W. Thorington Jr. and P. G. Heltne (eds.), pp.67–68. National Academy of Sciences, Washington, DC. Colombian Amerindians / *Alouatta* sp., *Aotus* sp., *Ateles* sp., *Callicebus torquatus*, *Cebus* sp., *Lagothrix lagothricha*, *Saguinus* sp., *Saimiri sciureus* / Ethnoterminology / High and Lowland Colombia / Colombia.
- Karadimas, D. 1999. La constellation des quatre signes. Interprétation ethno-archéoastronomique des motifs de "El Carchi-Capul" (Colombie, Équateur) [The constellation of the four monkeys. Ethnoarchaeoastronomical interpretation of the "El Carchi-Capul" motifs (Colombia, Ecuador)]. *J. de la Soc. des Américanistes* 85: 115–145. Miraña, Pre-Columbian Amerindians / *Ateles* sp., *Aotus* sp. / Cosmology, ethnoastronomy / Colombian and Equatorial Andes and Amazonia / Colombia, Ecuador.
- Lizarralde, M. In press. Ethnoecology of monkeys among the Barí of Venezuela: perception, use and conservation. In: *Primates Face to Face: Conservation Implications of Human and Nonhuman Primate Interconnections*, A. Fuentes and L. D. Wolfe (eds.), in press. Cambridge University Press, Cambridge, UK. Presented as *Ethnoecology of Monkeys among the Barí of Venezuela: Perception, Use and Conservation*, at the symposium "What are we doing watching monkeys? Anthropological Perspectives and The Role of Nonhuman Primate Research." 1997. American Anthropological Association meeting, Washington, DC. Barí / *Alouatta seniculus*, *Ateles belzebuth*, *Aotus lemurinus*, *Ateles hybridus*, *Cebus albifrons* / Cultural construction / Sierra de Perijá / Venezuela.
- Mittermeier, R. A. 1991. Hunting and its effect on wild primate populations in Suriname. In: *Neotropical Wildlife Use and Conservation*, J. G. Robinson and K. H. Redford (eds.), pp.93–107. The University of Chicago Press, Chicago. Spanish edition: Mittermeier, R. A. 1997. La cacería y su efecto en poblaciones silvestres de primates de Surinam. In: *Uso y Conservación de la Vida Silvestre Neotropical*. J. G. Robinson K. H. Redford, and J. Rabinovich (eds.), pp.123–139. Fondo de Cultura Económica, Mexico DF. Tirio, Caribes / *Alouatta seniculus*, *Ateles paniscus*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus*, *Pithecia pithecia*, *Saimiri sciureus*, *Saguinus midas* / Bushmeat / Tirio Sipaliwini-Pouso Region / Suriname.
- Preuss, K. T. 1901. Der Affe in der mexikanischen Mythologie [The monkey in the Mexican mythology]. *Ethnologisches Notizblatt*. II(2): 66–76. Prehispanic Amerindians / *Alouatta* sp., *Ateles* sp. / Cosmology, Archaeological classification / Mexican Central and Southern regions / Mexico.
- Queiroz, H. L. de and Kipnis, R. 1991. Os indios Guajá e os primatas da Amazonia Maranhense: um caso de sustentabilidade de caça? [The Guajá Indians and the primates of Amazonia Maranhense: a case of sustainability?]. In: *A Primatologia no Brasil – 5*, S. F. Ferrari and H. Schneider (eds.), pp.81–94. Sociedade Brasileira de Primatologia and Universidade Federal do

- Pará. Belém, Brazil. Presented as *Os Índios Guajá e os Primatas da Amazonia Maranhense*. 1991, XVI Congresso Brasileiro de Zoologia. Bahia, Brazil.
- Guajá / *Alouatta belzebul*, *Chiropotes satanas*, *Cebus apella*, *Cebus olivaceus kaapori*, *Aotus infulatus*, *Saimiri sciureus*, *Saguinus niger* / Conservation, cultural construction / Maranhão / Brazil.
- Shepard, G. Jr. In press. Primates in Matsigenka subsistence and worldview. In: *Primates Face to Face: Conservation Implications of Human and Nonhuman Primate Interconnections*, A. Fuentes and L. D. Wolfe (eds.), in press. Cambridge University Press, Cambridge, UK. Presented as *Monkey Hunting with the Machiguenga: Medicine, Magic, Ecology, and Cosmology* at the symposium "What are we doing watching monkeys? Anthropological perspectives and the role of nonhuman primate research." 1997. American Anthropological Association Meeting, Washington, DC.
- Machinguenga / *Ateles paniscus*, *Alouatta seniculus*, *Aotus trivirgatus*, *Callicebus moloch*, *Cebus* sp., *Lagothrix lagothricha*, *Pithecia monachus*, *Saimiri sciureus* / Manú region / Peru.
- Sponsel, L. E. 1997. The human niche in Amazonia: Explorations in ethnoprimateology. In: *New World Primates. Ecology, Evolution, and Behavior*, W. G. Kinzey (ed.), pp.143–165. Aldine de Gruyter. New York.
- Amazonian Amerindians / Amazonian primates / Ethnoprimateological definition / Lowland South America / Amazon basin countries.
- Townsend, W. R. and Ramírez, V. M. 1995. *Cultural Teachings as an Ecological Data Base: Murui (Witoto) Knowledge About Primates*. Center for Latin American Studies, University of Florida, Gainesville. <<http://www.latam.ufl.edu/latinoamericanist95/townsend.html>>.
- Witoto / *Alouatta seniculus*, *Ateles belzebuth*, *Callicebus torquatus*, *Callimico goeldii*, *Cebuella pygmaea*, *Cebus apella*, *Saguinus fuscicollis*, *Saimiri sciureus*, *Lagothrix lagothricha*, *Pithecia monachus* / Ethnoprimateology / Río Caquetá / Colombia.
- Urbani, B. and Gil, L. 2001. Consideraciones sobre restos de primates de un yacimiento arqueológico del Oriente de Venezuela (América del Sur): Cueva del Guácharo, estado Monagas [Considerations on primate remains in an archaeological site in Eastern Venezuela (South America): Guácharo Cave, Monagas state] *Cave Munibe (Antropología-Arqueología)*. 53: 135–142. Presented at the V Jornadas Venezolanas de Espeleología 1999, Caracas, Venezuela and abstract printed as "Consideraciones sobre restos de primates de un sitio arqueológico del Oriente de Venezuela: Cueva del Guácharo (Mo. 1), estado Monagas." *Bol. de la Soc. Venezolana de Espeleología* 2000, 34: 70.
- Carib / prehispanic *Alouatta seniculus* / Archaeological interpretations / Guácharo Cave / Venezuela.
- Valadez-Azúa, R. 1989. Visión de los monos mesoamericanos por las culturas prehistóricas [Perception of the Mesoamerican monkeys by the prehispanic cultures]. In: *Primatología en México: Comportamiento, Ecología, Aprovechamiento y Conservación de Primates*, A. Estrada, R. López-Wilchis and R. Coates-Estrada (eds.), pp.160–175. Universidad Autónoma Metropolitana-Iztapalapa, Mexico, DF.
- Prehispanic Mexican Amerindians / prehispanic *Alouatta* sp., *Ateles* sp. / Cosmology, archaeology / Central and Southern Mexico / Mexico.
- Valadez-Azúa, R. and Childs-Ratray, E. 1993. Restos arqueológicos relacionados con monos mexicanos encontrados en "El Barrio de Los Comerciantes" de la antigua ciudad de Teotihuacan [Archaeological remains related to Mexican monkeys found at "El Barrio de Los Comerciantes" in the antique city of Teotihuacan]. In: *Estudios Primatológicos en México. Vol. 1*, A. Estrada, E. Rodríguez-Luna, R. López-Wilchis and R. Coates-Estrada (eds.), pp. 215–229. Asociación Mexicana de Primatología and Biblioteca Universidad Veracruzana. Xalapa, Mexico.
- Xolalpan people / prehispanic *Alouatta palliata* / Archaeological interpretation / Teotihuacan city / Mexico.
- Van Akkeren, R. 1998. The monkey and the black heart. Polar North in Ancient Mesoamerica. In: *Memorias del Tercer Congreso Internacional de Mayistas*. A. L. Izquierdo (ed.), pp.165–185. Universidad Nacional Autónoma de México, Mexico, DF.
- Prehispanic Mexican Amerindians / prehispanic *Alouatta* sp., *Ateles* sp. / Cosmology, Archaeology / Mexican highlands and Mayan area / Mexico.
- Acknowledgments:* Special thanks to Loretta A. Cormier, Robert S. Voss, Manuel Lizarralde and Leslie E. Sponsel for their contributions, and to Tania Urquiza-Haas for her comments.
- Bernardo Urbani**, Departamento de Biología de Organismos, Universidad Simón Bolívar, Apartado 47.028, Caracas 1041-A, Venezuela, e-mail: <urbani@cantv.net>.

NEOTROPICAL PRIMATE REMAINS IN CAVE DEPOSITS: AN ANNOTATED BIBLIOGRAPHY

Bernardo Urbani

The discovery of New World fossil primates has recently begun to be noticed by primatologists and speleologists, because of its interesting implications in both disciplines. The papers in this bibliography are only those printed in speleological publications, most still practically unknown among the primatological community. The listed entries considered are Primate species / Key words / Locality(ies) / Country(ies).

Gutierrez-Calvache, D., Jimenez-Vasquez, O. and Jaimez-Salgado, E. 1995. El registro fósil de platirrininos en las Antillas. Situación actual y perspectiva [The platyrrhine fossil record in the Antilles. Current status and