



SHORT COMMUNICATION

Raptor predation and new locality records for the poorly known Patagonian Weasel (*Lyncodon patagonicus*) (Carnivora: Mustelidae)

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Received 6 October 2006; accepted 14 December 2006

Keywords: *Lyncodon patagonicus*, Patagonia, Río Negro province

The Patagonian Weasel (*Lyncodon patagonicus*) is a small mustelid (head and body = 332–335 mm; tail = 90–98 mm [Redford and Eisenberg 1992]), with a size comparable to the long-tailed weasel (*Mustela frenata*). This species is one of the least known carnivores of southern South America, with few specimens deposited in museum collections (Redford and Eisenberg 1992; Prevosti and Pardiñas 2001). *Lyncodon patagonicus* is found in Argentina in herbaceous and shrub steppes and xerophytic woodlands from Salta province south along the western part of the country to Santa Cruz province and then into Chile along the southern Argentine border (Prevosti and Pardiñas 2001; Osgood 1943). Its habits are little known and the information about its natural history is mostly anecdotal (e.g. Cabrera and Yepes 1940; Redford and Eisenberg 1992). The available data indicate that *L. patagonicus* is nocturnal-crepuscular and that preys on fossorial rodents (e.g. *Ctenomys* sp., *Microcavia* sp.) and birds (Koslowsky 1904; Cabrera and Yepes 1940; Redford and Eisenberg 1992). The biology of this species is almost unknown, which contrasts with the much more abundant information available for the

neotropical weasels of the genus *Galictis* (Yensen and Tarifa 2003a, b). Due to the scarcity of knowledge on this species, it is classified as “Near Threatened” in the Argentinean Red Book (Díaz and Ojeda 2000). In this note we report the first record of raptor predation on *L. patagonicus*, and document new locality records for this species in northern Patagonia (Argentina).

We examined four incomplete specimens recovered from pellets of the black-chested buzzard-eagle (*Geranoetus melanoleucus*) deposited in the mammal collections of the Centro Nacional Patagónico (CNP #754, 755, 849) and Centro Regional Universitario Bariloche (CRUBM #134, 135, 136). The pellets were collected in early and mid-summer during the breeding seasons of 2000 and 2002: Estancia San Pedro (40°54'S, 70°42'W [incomplete right frontal and parietal; incomplete right hemimandible with incisors and premolars; incomplete left hemimandible with m1; isolated left P4 and M1]); Estancia El Desafío (41°18'S, 71°06'W [incomplete left maxillary and another cranial remains; isolated left C1 and P4 and right C1, P3 and m1]) and Estancia Calcatreo (41°43'S, 69°22'W [incomplete skull without incisors and canines; incomplete right and left mandibles without incisors and canines; right and left mandibles without incisors]). Additionally, a left incomplete mandible [CNP 755] with premolars and m1 was

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recovered in a sample of disintegrated pellets of an unidentified raptor from Estancia Maquinchao (41°42'S, 68°39'W). Cranial and mandibular remains of *Lyncodon patagonicus* (de Blainville, 1842) can be recognized on the basis of the following characters: small size; absence of P2/p2 and m2; narrower premolars; reduction of the protocone shelf on P4; postorbital constriction narrower than the minimum interorbital breadth; and anterior border of the maseteric fossa ending behind the posterior border of m1 (Pascual 1958; Prevosti and Pardiñas 2001).

These localities are mostly within the Sub-Andean and Oriental districts of the Patagonian Phytogeographic Province (sensu León et al. 1998). The climate in the region is cold and dry. Average annual temperatures are between 6 and 8 °C. The annual mean precipitation of between 200 and 500 mm falls mostly in the winter (Paruelo et al. 1998). Estancia Calcatreo and Estancia Maquinchao are located in north central Patagonia, a region without previous records of *L. patagonicus* (see Prevosti and Pardiñas 2001, Fig. 1). These new records extend the range of the species in north central Patagonia more than 20,000 km².

Raptor predation upon mustelids is uncommon in southern South America. Among raptor species present in Argentina and Chile, the black-chested buzzard-eagle has been reported taking *Conepatus humboldti* in southern Chile (Iriarte et al. 1990), and *Conepatus chinga* and *Galictis cuja* in northwestern Argentine Patagonia (Massoia and Pardiñas 1986; Hiraldo et al. 1995). *G. cuja*, in addition, was registered as a part of the diet of the great horned owl (*Bubo virginianus*) in the Santa

Cruz province, Argentina (Massoia et al. 1993). The records here described show that the patagonian weasel is preyed on by the black-chested buzzard-eagle. Number of prey individuals taken was always low, suggesting that mustelids are occasional prey.

Acknowledgements

R. Chaname and D. Voglino provided the samples from Estancia Calcatreo and M. Sahores from Estancia San Pedro and Estancia El Desafío. A. Andrade and C. Panti collaborated with the identification of the materials from Estancia Calcatreo and Estancia Maquinchao. We are very grateful to U.F.J. Pardiñas for his charismatic help. To Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) for financial support.

References

- Cabrera, A., Yepes, J., 1940. Mamíferos Sud-Americanos. Ediar, Buenos Aires.
- Díaz, G.B., Ojeda, R.A., 2000. Libro rojo de los mamíferos amenazados de la Argentina. Sociedad Argentina para el Estudio de los Mamíferos.
- Hiraldo, F., Donázar, J.A., Cevallos, O., Travaini, A., Bustamante, J., Funes, M., 1995. Breeding biology of a Grey Eagle-Buzzard population. *Wilson Bull.* 107, 675–685.
- Iriarte, J.A., Franklin, W.L., Johnson, W.E., 1990. Diets of sympatric raptors in southern Chile. *J. Raptor Res.* 24, 41–46.
- Koslowky, J., 1904. Dos mamíferos de Patagonia cazados en el valle del lago Blanco (Territorio del Chubut). *Rev. del Museo de La Plata* 11, 129–132.
- León, R.J.C., Bran, D., Collantes, M., Paruelo, J.M., Soriano, A., 1998. Grandes unidades de vegetación de la Patagonia extra andina. In: Oesterheld, M., Aguiar, R., Paruelo, J.M. (Eds.), *Ecosistemas Patagónicos*. *Ecología Austral* 8, pp. 125–144.
- Massoia, E., Pardiñas, U.F.J., 1986. Algunos mamíferos depredados por *Geranoaetus melanoleucus* en Corralito, Pilcaniyeu, provincia de Río Negro. *INTA, ACINTAC-NIA* 3, 24–26.
- Massoia, E., Chebez, J.C., Heinonen Fortabat, S., 1993. Depredación de pequeños mamíferos por *Bubo virginianus* en el Lago Cardiel, Departamento Lago Buenos Aires, Provincia de Santa Cruz. *Bol. Cient. Asoc. Protec. Nat.* 26, 17–21.
- Osgood, W.H., 1943. The mammals of Chile. *Field Mus. Nat. Hist. Zool. Ser.* 30, 1–268.
- Paruelo, J.M., Beltrán, A., Jobbágy, E., Sala, O.E., Golluscio, R.A., 1998. The climate of Patagonia: general patterns and controls on biotic processes. In: Oesterheld, M., Aguiar, R., Paruelo (Eds.), *Ecosistemas patagónicos*. *J.M. Ecología Austral* 8, pp. 85–101.

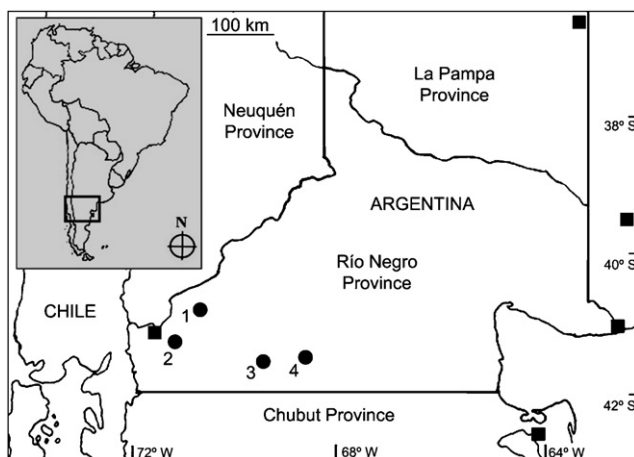


Fig. 1. Squares: previous locality records for *Lyncodon patagonicus* in northern Patagonia, Argentina (see Prevosti and Pardiñas, 2001 for a complete reference); Circles: new locality records for *Lyncodon patagonicus* in northern Patagonia, Argentina: (1) Estancia San Pedro (40°54'S, 70°42'W); (2) Estancia El Desafío (41°18'S, 71°06'W); (3) Estancia Calcatreo (41°43'S, 69°22'W); and (4) Estancia Maquinchao (41°42'S, 68°39'W).

- Pascual, R., 1958. *Lyncodon bosei* nueva especie del Ensenadense. Un antecesor del huroncito patagónico. Rev. del Museo de La Plata, Serie Paleontología 4, 1–34.
- Prevosti, F.J., Pardiñas, U.F.J., 2001. Variaciones corológicas de *Lyncodon patagonicus* (Carnivora, Mustelidae) durante el Cuaternario. Mastozoología Neotropical 8, 21–39.
- Redford, K.H., Eisenberg, J.F., 1992. Mammals of the Neotropics. Vol. 2. The Southern Cone. Chile, Argentina, Uruguay, Paraguay. University of Chicago Press, Chicago.
- Yensen, E., Tarifa, T., 2003a. *Galictis vittata*. Mammalian Species 727, pp. 1–8.
- Yensen, E., Tarifa, T., 2003b. *Galictis cuja*. Mammalian Species 728, pp. 1–8.