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Research note

Presence of the ocelot (*Leopardus pardalis*) in northern Jalisco, Mexico

Presencia del ocelote (*Leopardus pardalis*) en el norte de Jalisco, México

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Abstract. High-elevation records of ocelot in the municipality of Bolaños, Jalisco are presented. These records were obtained via camera trapping, and bridge a distributional gap between populations in Nayarit and Aguascalientes states.

Key words: geographic distribution, camera traps, Felidae, Bolaños.

Resumen. Se presentan registros del ocelote a gran altitud para el municipio de Bolaños, Jalisco. Los registros se obtuvieron vía trampas cámara y conectan las poblaciones de los estados de Nayarit y Aguascalientes.

Palabras clave: distribución geográfica, trampas cámara, Felidae, Bolaños.

The ocelot (*Leopardus pardalis*) is a small sized cat, which weighs up to 16 kg, and can reach 137 cm in total length with a height at shoulders of 50 cm (Murray and Gardner, 1997; Aranda, 2005). This cat is strongly protected by international wildlife and trade laws (Caso et al., 2008), and in Mexico is listed as an extinction-threatened species (Nom-059-Semarnat-2010). The historical distribution of ocelots in Mexico encompasses lowlands of both the Atlantic and Pacific versants from Sonora, Nuevo León and Tamaulipas southwards to the Yucatán Peninsula and Chiapas (Leopold, 1959; Hall, 1981; Aranda, 2005). However, few records support these rather generalized distribution maps, and only a dozen published records confirm the presence of this wild cat in states of western Mexico, most of them recent (e.g. De Villa-Meza et al., 2002; Chávez-León, 2005; Moreno-Arzate et al., 2011). With the increasing trend and use of camera trap surveying, new and unexpected records of ocelots across central Mexico have been documented, including high-elevation sightings within pine-oak forests. These include Iglesias et al. (2009) for Guanajuato ~2 000 m above sea level (masl), Bárcenas and Medellín (2010) for Aguascalientes 2 600-2 800 m asl, Martínez-Calderas et al. (2011) for San Luis Potosí ~2 400 m asl, and Moreno-Arzate (2011) for Jalisco ~ 2 000 m asl. Here, we present the first records of high-elevation ocelots in Sierra Los Huicholes, northern Jalisco.

Geographic coordinates are shown with reference datum WGS84. Photographs were verified by Francisco Botello and deposited at IBUNAM-CFB (Instituto de Biología, Universidad Nacional Autónoma de México, Colección de Foto Colectas Biológicas).

Between January 2011 and March 2012 we conducted a camera trap survey for inventorying mammals and other fauna in northern Jalisco. Thirteen camera traps (Trophy Cam™ Bushnell) were placed between 1 500 to 2 750 m asl in Bolaños, Huejuquilla El Alto, and Mezquitic municipalities. We accumulated a total of 1 490 nights/camera from this survey, and recovered 4 monochromatic photographs of ocelot from 3 different nights. On 9 January 2012, at 00:59 h we obtained 1 photograph (IBUNAM-CFB 9401) of a single ocelot near a stream on the vicinity of El Nalgazo, ca. km 22.5 of Bolaños-Huejuquilla El Alto road (21°53'26.20" N, 103°50'38.60" W; 2 097 m asl), in pine-oak forest. On 12 January 2012, between 22:36 and 23:31 h, 2 photographs (IBUNAM-CFB 9399-9400) of ocelots were obtained, and on 7 February 2012, at 03:29 h 1 additional photograph (IBUNAM-CFB 9402) was taken in the same location (Fig. 1). This camera was located 0.15

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Figure 1. Monochromatic photograph of an ocelot (IBUNAM-CFB 9402), recorded in Sierra Los Huicholes, Bolaños, Jalisco.

km SE km 16 of Bolaños-Huejuquilla road (21°52'2.40" N, 103°49'40.60" W; 1 597 masl), near a small stream in tropical deciduous forest. Because each photograph was taken in a different angle we couldn't determine the number of specimens photographed or their sex.

These new records for northern Jalisco bridge a 270 km gap between Nayarit and Aguascalientes (Fig. 2), ca. 138 km ENE from Mecatán, Nayarit (Hall, 1981) and ca. 132 km SSW from Monte Grande, Aguascalientes (Bárcenas and Medellín, 2010). Despite anecdotal observations of ocelots in central Jalisco as far as north of Guadalajara in Río Grande de Santiago canyon (Godínez, pers. comm.), there remains no solid evidence of its presence in the state beyond the Pacific versant lowlands and highlands. Recently, González-Saucedo and López-González (2011) gave insight on a series of low-cost corridors connecting several sierras in central Mexico, across which cougars (*Puma concolor*) disperse. Additional surveys with camera traps along Sierra Los Huicholes, Río Grande de Santiago and Juchipila canyons, as well as adjacent Sierra Morones and Sierra de Nochistlán (Sierra del Laurel), Zacatecas could aid with filling the gaps in this region and detect if other felids such as ocelots are using the same paths as dispersal routes across western-central Mexico.

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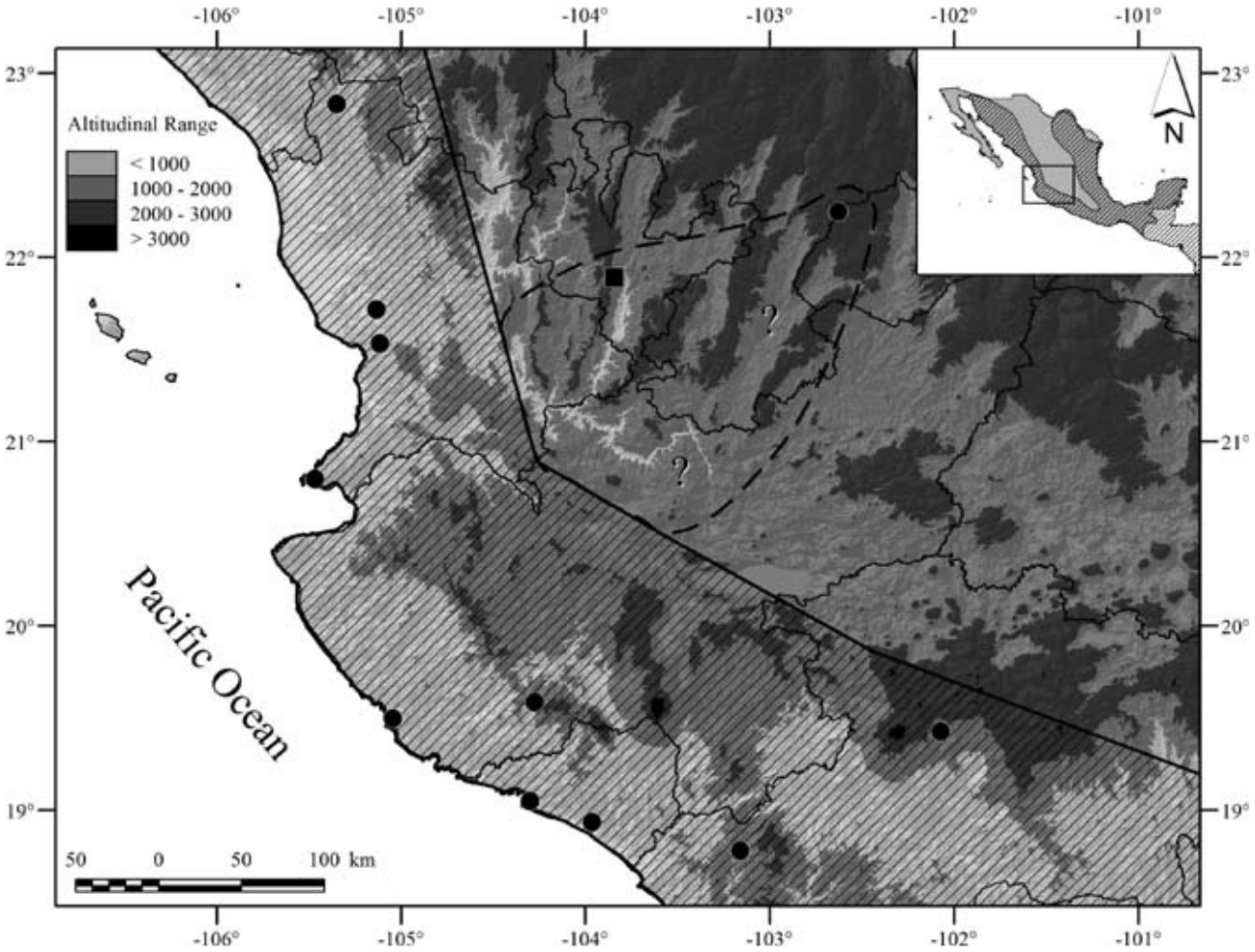

Figure 2. Map of western-central Mexico with previous records of ocelots (solid circles) and new records for northern Jalisco (solid square). The question marks indicate possible presence and corridors for ocelots. Continuous black lines delineate state boundaries, and hatched area represents current distribution of ocelot (Patterson et al., 2007).

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