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# IMPORTANT

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## ABSTRACT

**Introduction:** Interspecific interactions among tropical mesocarnivorous species and other mammalian trophic guilds have been poorly studied, despite their important implications in the survival, structure, demography, and distribution of these species.

**Objective:** To analyze if sympatric mesocarnivores coexist or compete in the axis of the temporal and spatial niche.

**Methods:** From January 2015 to December 2016 we recorded mammals with 26 stations of camera traps (in pairs, facing each other) along roads and animal trails, at Reserva de la Biosfera El Cielo, Tamaulipas, Mexico. We calculated temporal and spatial overlaps with the Czezanowski and Pianka indices.

**Results:** We obtained 239 margay, 118 ocelot and 22 yaguarundi records. Margay and ocelot were nocturnal (75 % of their records) and had a high temporal overlap (0.85); whereas yaguarundi was fully diurnal, suggesting it may be able to coexist with the other two species. The three species used similar habitats: yaguarundi had 0.81 spatial overlap with margay and 0.72 with ocelot; spatial overlap between margay and ocelot was intermediate (0.53).

**Conclusions:** There is no interspecific competition among these tropical mesocarnivores, probably due to antagonistic interactions leading to use of different parts of the temporal and spatial axes.

- \* Sample based on *Interacciones temporales y espaciales de mesocarnívoros simpátricos en una Reserva de la Biosfera: ¿coexistencia o competencia?* By R. Carrera-Treviño, et al. (*Revista de Biología Tropical* 66, 3 (2018): DOI 10.15517/rbt.v66i3.30418

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## RESUMEN

**Introducción:** Las interacciones entre especies de mesocarnívoros tropicales y otros gremios tróficos de mamíferos han sido muy poco estudiadas, a pesar de sus importantes aplicaciones en la supervivencia, estructura, demografía, y distribución de estas especies.

**Objetivo:** Analizar si los mesocarnívoros simpátricos coexisten o compiten en el eje del nicho temporal y espacial.

**Métodos:** De enero 2015 a diciembre 2016, registramos mamíferos con 26 estaciones de cámaras trampa (en pares, una frente a la otra) a lo largo de caminos y veredas, en la Reserva de la Biosfera El Cielo, Tamaulipas, México. Calculamos el traslape temporal y espacial con los índices de Czezanowski y Pianka.

**Resultados:** Obtuvimos 239 registros de margay, 118 de ocelote y 22 de yaguarundi. El caucel y el ocelote son nocturnos (75 % de sus registros) y mostraron un alto traslape temporal (0.85); mientras que el yaguarundi fue totalmente diurno, sugiriendo que puede coexistir con las otras dos especies. Las tres especies usaron hábitats similares: el yaguarundi tuvo un traslape espacial de 0.81 con el caucel y de 0.72 con el ocelote; el traslape espacial entre el caucel y el ocelote fue intermedio (0.53).

**Conclusiones:** No hay competencia interespecífica entre estas especies de mesocarnívoros tropicales, probablemente debido a interacciones agresivas que conducen al uso de partes diferentes de los ejes temporal y espacial.

- \* Ejemplo basado en *Interacciones temporales y espaciales de mesocarnívoros simpátricos en una Reserva de la Biosfera: ¿coexistencia o competencia?* Por R. Carrera-Treviño, et al. (*Revista de Biología Tropical* 66, 3 (2018): DOI 10.15517/rbt.v66i3.30418

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