

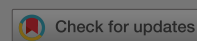
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Article

Spatial and temporal separation between the golden jackal and three sympatric carnivores in a human-modified landscape in central Bulgaria

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ABSTRACT

The range of the golden jackal (*Canis aureus*) in Europe has expanded from southern regions northward and westward, raising concerns of increased competitive interactions with other carnivores. In Europe, the jackal is most common in Bulgaria, where it co-occurs with the red fox (*Vulpes vulpes*), the European badger (*Meles meles*), and the European wildcat (*Felis silvestris*). The golden jackal is a highly adaptable species that can thrive in human-modified landscapes. In Bulgaria, the golden jackal is found in a wide range of habitats, including agricultural areas, forests, and urban areas. The golden jackal is a highly adaptable species that can thrive in human-modified landscapes. In Bulgaria, the golden jackal is found in a wide range of habitats, including agricultural areas, forests, and urban areas. The golden jackal is a highly adaptable species that can thrive in human-modified landscapes. In Bulgaria, the golden jackal is found in a wide range of habitats, including agricultural areas, forests, and urban areas.

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or microhabitats). Our findings indicate that spatial/temporal separation allows smaller species to avoid direct confrontations and agonistic competitions with jackals, resulting in successful co-occurrence.

KEYWORDS: Canis aureus competition ecological niche intra-guild interaction spatial niche temporal niche

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Additional information

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