

# Researchers provide potential explanation for declines in brown bear populations

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Animals may fall into what are called evolutionary and ecological traps when they make poor decisions using seemingly reliable environmental cues. For example, animals may select habitats to occupy based on food

availability, but mortality may be highest in habitats with the highest food availability. A new *Mammal Review* article examines how the brown (grizzly) bear can fall into such traps in human-modified landscapes, which may contribute to decreases in brown bear populations.

In their article, researchers describe evolutionary and ecological [traps](#) for [brown bears](#), and they propose mechanisms by which traps may affect the dynamics and viability of brown bear populations. There are six potential trap scenarios: food resources close to human settlements; agricultural landscapes; roads; artificial feeding sites; hunting by humans; and other human activities (including ecotourism and reindeer husbandry).

"Despite the interest in large carnivore conservation in human-modified landscapes, the emergence of traps and their potential effects on the conservation of large carnivore populations has frequently been overlooked," said lead author Dr. Vincenzo Penteriani, of the Spanish National Research Council (CSIC), in Spain. "More effort should thus be put into the consideration that traps may be behind the unexpected decreases of brown bear and other large carnivore populations in human-modified landscapes."

**More information:** *Mammal Review*, [DOI: 10.1111/mam.12123](https://doi.org/10.1111/mam.12123)

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