

Researchers find local wildlife protection safeguards entire range

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Wildlife conservation strategies may better protect mammals from human activities by treating animals' ranges as multiple interacting small populations, a study finds.

Charles Yackulic and colleagues analyzed historical range maps for 47 mammal species to find patterns that might help [conservationists](#) assess threats to animal populations from human encroachment.

According to the authors, an animal's habitable range contains different ecological niches that can provide valuable clues about the species resiliency.

Local [environmental factors](#) such as temperature and precipitation can influence how animals within the same species respond to disruptions to their habitats.

Understanding and incorporating these intra-species differences, the researchers find, can yield a more accurate picture of how animals' ranges collapse, on the path to [extinction](#).

Previous studies have found that population declines are piecemeal: animals' ranges shrink as smaller locally entrenched populations progressively die off. As such, evaluating and protecting these sub-populations individually bolsters the entire range.

The researchers note that defining and determining the spatial extent of

local populations is challenging.

However, protection measures that differ across the range as needed should constitute a more effective and sustainable overall conservation strategy, according to the authors.

Provided by Columbia University

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