

LETTERS

Edited by Jennifer Sills

Hunted predators: Charisma confounds

IN THEIR PERSPECTIVE “When the hunter becomes the hunted” (19 June, p. 1312), R. Woodroffe and S. M. Redpath rightly pointed out that a social consensus, in addition to scientific evidence, is critical to effectively control species deemed overabundant, such as some predators, because social conflicts over the need for control undermine management decisions. We stress here that social acceptability is not a sufficient criterion to prevent misguided lethal management of wildlife pests, as acceptability subjectively depends on the target species’ charisma.

key ecological roles and are vital prey for emblematic and threatened predators (2, 3). Here, the broad social acceptability of their control, due to their lack of charisma or low public visibility, may hinder evidence-based management decisions.

For example, the European hamster was driven from pest to red-listed critically endangered species by poisoning; the ruthless control of prairie dogs contributed to the critically endangered status of the black-footed ferret (3); and plateau pikas and voles have been poisoned over thousands of kilometers in China and Europe, respectively (3, 4), with widespread unintended secondary poisoning of their birds of prey and mammalian predators (5, 6). A focus on large predator control as a reference for wildlife management conflicts may overlook wider issues involving fauna that have keystone ecosystem roles but no public appeal, and where social consensus leads to misguided management. In the case of noncharismatic small herbivores, as long

University of Porto, 4485-661, Vairão, Portugal. ²Instituto de Estudios Sociales Avanzados (IESA-CSIC), 14004, Córdoba, Spain. ³Instituto de Investigación en Recursos Cinegéticos (IREC, CSIC-UCLM-JCCM), 13005, Ciudad Real, Spain. ⁴Institute of Biological and Environmental Sciences, Zoology Building, Aberdeen AB24 2TZ, Scotland, UK.

*Corresponding author.
E-mail: mdelibesmateos@gmail.com

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Hunted predators: Intrinsic value

IN THEIR PERSPECTIVE “When the hunter becomes the hunted” (19 June, p. 1312), R. Woodroffe and S. M. Redpath summarize issues associated with lethal “predator control”—the killing of carnivores to benefit human industries (e.g., livestock production). We applaud their careful accounting of the ecological and economic trade-offs that accompany such actions, but we take issue with their assertion that “[p]ragmatic conservationists have long recognized that allowing some predator control—whether or not it achieves its stated aims—can help to build tolerance....”

This claim is problematic for three reasons: First, existing research indicates that lethal control is often ineffective for increasing tolerance for wildlife (1, 2). Second, as their own review makes clear, predator control often results in unforeseen ecological consequences (e.g., loss of ecosystem services). It is not only pragmatic for conservationists to oppose actions that may degrade ecosystem services and are ineffective for increasing tolerance, it is socially responsible. Finally, their claim relies on an ethical premise that few would accept: in essence, that it is acceptable to promote the killing of an organism as a means of reducing antipathy toward it. In fact, a recent study indicates most people believe that wildlife possess “intrinsic value,” which suggests that wildlife should be treated with regard for their own welfare, not just their utility (or lack thereof) to humans (3).

From an ethical perspective, treating wildlife with regard to their own welfare would require shifting the burden of proof such that those who advocate the use of lethal methods would be forced to provide strong arguments as to why such means were justified. That we still manage wildlife in a manner that so easily dismisses the



The black-footed ferret is an unintended victim of pest management.

Large predators exert fascination on the general public; hence, their control is usually unpopular [e.g., (1)], irrespective of the ecological desirability of management. By contrast, rodents and lagomorphs do not enjoy the same public appeal as predators. They are widely controlled on vast spatial scales, often with public funds, where they are perceived as creating damage to crops or forage used by livestock. Yet most of these persecuted herbivores play

as public society awareness about their ecological benefits is not increased, their population control will continue to be widely accepted and possibly used without rigorous scientific evidence, thus jeopardizing biodiversity conservation.

Miguel Delibes-Mateos,^{1,2*} François Mougeot,³ Beatriz Arroyo,³ Xavier Lambin⁴

¹CIBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos, InBio Laboratório Associado,

interests of wild animals and the preferences of the broader public suggests that the institution of wildlife management needs broader reforms than the additional stakeholder processes that Woodroffe and Redpath recommend.

Jeremy T. Bruskotter,^{1*} Michael Paul Nelson,² John A. Vucetich³

¹School of Environment and Natural Resources, The Ohio State University, Columbus, OH 43210, USA.

²Department of Forest Ecosystems and Society, Oregon State University, Corvallis, OR 97331, USA.

³School of Forest Resources and Environmental Sciences, Michigan Technological University, Houghton, MI 49931, USA.

*Corresponding author. E-mail: bruskotter.9@osu.edu

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Response

OUR PERSPECTIVE highlighted the need to base predator management on scientific evidence that is not only technically sound, but also accepted by stakeholders. M. Delibes-Mateos *et al.* argue that social acceptability alone is insufficient to justify control efforts. We entirely agree. As we explained in our Perspective, controlling populations of predators (and, by extension, other species with strong ecological interactions) can have unintended ecological consequences. Hence, decisions about control efforts should be informed by evidence of the likely impacts.

J. T. Bruskotter *et al.* raise concerns about our statement that “[p]ragmatic conservationists have long recognized that allowing some predator control—whether or not it achieves its stated aims—can help to build tolerance among land managers who might otherwise block conservation efforts.” They do not acknowledge the caveat that followed it: “Unfortunately, such compromise is not always effective.” Far from advocating ineffective predator control, we highlighted deficiencies in the evidence underlying some control programs and proposed an alternative approach.

Bruskotter *et al.* also suggest that decision-making should incorporate the ethical perspective of the general public, such that “those who advocate the use of lethal methods...be forced to provide strong arguments as to why such means [are] justified.” We agree that ethical considerations should inform decision-making, but we question the practicality of their suggestion. Decisions about carnivore management are made not just by “the institution of wildlife management” but also by private

individuals, often acting illegally, potentially influencing predator abundance over large areas (1, 2). Moreover, as we indicated in our Perspective, the “strong arguments” advanced by some stakeholder groups for or against predator control may not be accepted by others who hold different values. For example, evidence that localized killing of badgers increases disease risks to cattle (3) appears not to have deterred farmers from pursuing this practice illegally (4), undermining disease control efforts (5). Such observations underpin our call for engagement of multiple stakeholders to develop an agreed-upon evidence base, maximizing opportunities for both institutions and individuals to make decisions based on scientifically robust information.

Rosie Woodroffe^{1*} and Stephen M. Redpath²

¹Institute of Zoology, Zoological Society of London, London NW1 4RY, UK. ²Institute of Biological and Environmental Sciences, University of Aberdeen, Aberdeen AB24 2TZ, UK.

*Corresponding author. E-mail: rosie.woodroffe@ioz.ac.uk

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ERRATA

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