of the Figure 1 heading. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

SUPPLEMENTAL INFORMATION

Supplemental information including one table can be found with this article online at https://doi.org/10.1016/j.cub.2026.08.058.

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[1]Applied Ecology Unit, African Conservation Trust, Hillcrest, South Africa. [2]Discipline of Geography, University of KwaZulu-Natal, Durban, South Africa. [3]Research Department, Welgevonden Game Reserve, Vaalwater, South Africa. [4]Conservation Management, Ezemvelo KZN Wildlife, Hluhluwe-iMfolozi Park, South Africa. [5]Scientific Services, Ezemvelo KZN Wildlife, Hluhluwe-iMfolozi Park, South Africa.
*E-mail: paulbcryer@gmail.com

Letter

Primer on human–wildlife conflict misses the full picture

Adrian Treves[1,*], Naomi X. Louchouarn[1,*], and Erik Joaquín Torres-Romero[2,3]

The *Current Biology* primer on *Human–wildlife conflict* by Kaitlyn Gaynor and Jennifer Green[1] has many strengths. We agree with much of the content but highlight omissions of some important alternative hypotheses and worldviews. We call attention to a worldview that individual non-humans deserve consideration neglected in the primer. Also, we call attention to omissions of alternative hypotheses and foregrounding a non-leading hypothesis about tolerance for wildlife. The improvements to the primer we suggest would enhance the inclusivity of work on human–wildlife conflicts and also recognize the plurality of the scientific community. Therefore, we offer this letter to advance public understanding of coexistence with wildlife and place research on such topics on a firmer scientific footing.

We understand the journal format for primers prohibits in-line citations. All findings are provisional. In-line citations make the provisional nature and uncertainty of claims clearer as said claims might be contested or yield to other data. Lack of in-line citations presents a mirage of settled fact for a fast-growing, contentious field like ours. Gaynor and Green[1] bear no responsibility for the journal policy. We select two examples below to illustrate the mirage of settled fact. In one example, we agree with the authors' inference[1] and in the other example we do not. Both illustrate the need to treat alternative hypotheses with fair summaries and acknowledge our uncertainties. Any review or primer should aim for a pluralistic presentation of alternatives.

Below we present two examples that give the appearance of fact by not mentioning alternative hypotheses. The primer[1] presents a summary of top down effects of wolves on herbivores, which describes the effects of eliminating wolves on Yellowstone elk "[wolf]… absence relaxed top-down control on elk, allowing elk populations to grow and browse heavily on young willow, aspen, and cottonwood. The resulting vegetation decline cascaded through the ecosystem, with evidence that it reduced hiding cover for small mammals, limited berry production for bears, and altered riparian geomorphology." (p. R242)[1]. In our opinion, had Gaynor and Green begun with a summary of the more general multi-authored, global review of trophic downgrading across predator taxa and ecosystems[2], and perhaps ended there, they would have been on firmer scientific footing. The top-down effect of wolves on Yellowstone ecosystems is hotly contested[3], so treating those effects as settled facts denies the ongoing debate and risks playing into a mistrust of scientists on both sides of the issue. In this case, we agree on the importance of wolves to ecosystem health and structure, but our view is based on the strength of three independent studies from Wisconsin[4]. Rather than attempting a fairer summary of that scientific debate here, we are concerned more with the consequences for public policy and information when one hypothesis is deemed settled fact. Debate may be cut off when we dismiss alternatives. Hence our second example represents one in which we disagree with the view articulated in[1]. This disagreement gives us a better perspective on what has been lost when alternative hypotheses are ignored.

Gaynor and Green assert "The exclusion of people from protected areas … lowers tolerance for wildlife, thereby exacerbating human–wildlife conflict." (p. R243)[1]. While we agree that said conflicts are felt more strongly by people living near wildlife, this statement appears inaccurate as written for several reasons. First, the phrase "lowers tolerance" implies measurement of changes in individual tolerance, if one wishes to generalize as the quotation does. A recent review of studies of changes in tolerance for wildlife does not seem to support the claim[5]. Second, the

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relationship between protected areas and local tolerance is highly complex and may at times go in the reverse direction. Without a modifier such as 'is associated with low tolerance of a few individuals albeit not in the broader public', the quotation cannot be supported at present. Moreover, international publics have shown high and rising tolerance for conflict-causing wildlife[5], even as the number, size and prohibitions on uses of protected areas have increased worldwide[6]. Our caution is one about uncertainty and limits to inference to avoid over-generalizing about all protected areas, all animals, and all people. Furthermore, the former review[5] supports an alternative hypothesis that tolerance for wildlife declines among subsets of humans, but not the public as a whole; moreover those seem to change in relation to social norms, perceived risks and benefits, costs, and deeper values[5]; moreover, financial costs and benefits may be weaker than social norms or policy influences[7]. The latter hypothesis is the leading one because it explains more evidence, including cases in which tolerance for wildlife was higher when protections for areas or controversial species were greater. Returning to our theme, our evidence has been backgrounded or lost entirely in the assertion quoted above.

A primer implies an easy to digest set of fundamentals that can instruct students, non-specialists, etc. More important than fairness to us, emphasizing a non-leading hypothesis creates an impression of misinformation (unintentional sharing of inaccurate claims) that could harm sound public policy, in this case, about protected areas and people. Interest groups with narrow agendas can then seize on misinformation for campaigns of disinformation, so primers intended for a lay audience are particularly important avenues for presenting the plurality of views. One of the trickiest steps in summarizing a field for lay audiences, such as policy-makers, is to impartially present leading and non-leading hypotheses without undue influence of our own personal worldviews as scientists. Open, skeptical debate and independent review and replication by the diverse scientific community are our best defenses against treating contested claims as settled and against pseudo-science[8].

Similarly, ignoring common worldviews, such as moral consideration of individual animals, even if not the majority, may also risk undermining the goals of conflict resolution and coexistence with controversial wildlife. That is our second concern with the primer[1]. The injustice of backgrounding Indigenous worldviews, well handled by[1], is paralleled by a similar injustice in dismissing the interests or intrinsic value of individual nonhumans.

While correct that "zoonotic diseases may be transmitted from wildlife to domestic animals or people" (p. R241)[1], the converse — wildlife are exposed to human and domestic animal diseases — was never stated; another example: "Wild animals are often killed proactively or reactively to mitigate conflict…." (p. R241)[1]. According to the primer and a leading definition that has influenced the entire field[9], killing of wildlife also contributed to conflict. Therefore, killing to mitigate conflict may be misleading as humans killing wildlife perpetuates conflict rather than mitigates it — by the very definition accepted by the primer[1]. For our last example, "The retaliatory or preemptive killing of animals as a result of conflict can lead to population declines and initiate indirect effects that alter ecosystem functioning." (p. R242)[1]. That quotation ignores the suffering of the target wild animal and thereby also dismisses a worldview that individual lives matter. The primer as a whole wavers between human-centered views and eco-centered views but omits mention of these very different worldviews. Furthermore, it omits almost entirely views that individual animals deserve moral consideration[10]. We will defend to the end the authors' right to hold these worldviews, but we cannot endorse a primer that does not mention the plurality of contested hypotheses and worldviews in our field. If we miss that, we miss a hypothesis for why some conflicts escalate.

AUTHOR CONTRIBUTIONS

A.T. conceptualized, wrote, and revised this article. N.X.L. helped write and edit.

DECLARATION OF INTERESTS

The authors declare no competing interests.

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[1]Carnivore Coexistence Lab, Nelson Institute for Environmental Studies, University of Wisconsin, Madison, WI 53706, USA. [2]Ingeniería en Biotecnología-Universidad Politécnica de Puebla, San Mateo Cuanalá, Juan C. Bonilla, C.P. 72640, Puebla, México. [3]Tecnológico Nacional de México campus Zacapoaxtla. Subdirección de Investigación y Posgrado, División de Biología, Carretera Acuaco-Zacapoaxtla Km. 8, Col. Totoltepec, C.P. 73680, Zacapoaxtla, Puebla, México.
*E-mail: atreves@wisc.edu (A.T.); louchouarn@wisc.edu (N.X.L.)