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Letter: Media misinformation threatens conservation

Impact Article Statement: Media coverage of trophy hunting highlights the potential for

misinformation to enter public and political debates on conservation issues. We argue that

misinformation should be a major concern for all involved in conservation.

Running Head: Misinformation and conservation

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LETTER to Conservation Biology

Title: Media misinformation threatens conservation

Media misinformation is an increasing concern in conservation; climate change denial, for example, is particularly pervasive (Wong-Parodi and Feygina, 2020). Here, we consider simplistic and inaccurate coverage of trophy hunting (TH) in mainstream newspapers (print and online). This is particularly timely as the UK and US consider laws to restrict or ban trophy imports and exports (DEFRA, 2019; US Congress, 2019).

The dominant media narrative is beguilingly simple: 'well-loved animals are on the brink of extinction, people pay to kill them, this is horrible, and if we stop it we will save species'. This provides a perfect media combination: peril (implied extinction risk), emotion (repugnance at killing for fun), a 'villain', a 'victim', and an action (donate/petition). The clear message in most coverage is that stopping TH would have immediate positive effects on conservation. However, the reality is not so simple.

TH can harm wildlife populations locally (Loveridge et al., 2007), but has also helped populations to increase, persist and recover (IUCN, 2016). By providing economic incentives to maintain habitats and species, TH can protect against far greater threats including habitat loss and indiscriminate killing (Lindsey et al., 2012). Understanding these complexities is critical for ensuring that policies do not unintentionally worsen conservation, human livelihoods and animal welfare outcomes (Dickman et al., 2019a). Unfortunately, media coverage acknowledging complexities is outweighed by the dominant, overly simplistic narrative.

Moreover, many media stories covering TH actively assert falsehoods. UK newspapers recently claimed that TH was speeding polar bears towards extinction (e.g. Roach, 2020) although polar bear hunting is sustainable, well-monitored, and only a small fraction of the quota goes to trophy hunters (Freeman and Wenzel, 2006). Similar falsehoods include UK trophy hunters targeting puffins in

Iceland ('puffingate' (Fontaine, 2019)); trophy hunters targeting UK cranes and buzzards (later corrected but not before widespread re-coverage (Horton, 2020)); and professional hunters in Zimbabwe reportedly offering to wound leopards to make them easier for hunters to shoot (strenuously denied by the outfitter involved) (Tiplady-Bishop, 2020). False "extinction narratives" abound, suggesting that TH is a major threat to species such as lions, elephants and rhinos (e.g. Christo (2020) for lions). In fact, TH does not currently threaten these or any species (IUCN 2019), but helps conserve populations of argali, markhor, black rhino, white rhino, lions, and many others (IUCN, 2016). Media stories also frequently (e.g. Dalton, 2020) conflate TH with poaching. Many communities in Africa and beyond support TH (e.g. Chaukura and al., 2020) but the voices of primarily Western animal protection organisations continue to drown out those of the citizens most affected (Madzwamuse et al., 2020). Claims that alternative wildlife-friendly land uses, especially photo-tourism, could replace TH (Novak et al. 2019) are wildly optimistic: many places are unsuitable for photo-tourism and offer no prospect of alternative wildlife-based land use for the foreseeable future (Dickman et al., 2019b). Indeed, current options for financing conservation outside protected areas, particularly in Africa, are limited (Roe et al., 2020). The most likely outcome of banning TH without viable alternatives would be large-scale conversion of wildlife habitat to agricultural monocultures, exacerbating threats to biodiversity (Dickman et al., 2019a). Conservation inevitably requires making decisions amid scientific uncertainty and deep divisions. Current discussions about the acceptability of wildlife trade and wet markets in the context of COVID19 provide a contemporary example. The complexities are such that conservation strategies can appear counter-intuitive and unpalatable, and those who oppose them usually do so volubly, often using unrealistic or false arguments. Despite the volume of misinformation, academics must resist the temptation to disengage with a media that prioritises simplistic narratives and falsehoods

over complexity and uncertainty. Engaging with the media, presenting evidence and communicating

uncertainty, is essential to counter the effect of conservation misinformation, the increasingly toxic influence of which should be of great concern well beyond the topic of TH.

References

Chaukura, al., e., 2020. RE: Communities response. Science eLetters 16th January 2020 https://science.sciencemag.org/content/366/6464/434/tab-e-letters

Christo, C., 2020. Can Africa's last lions be saved from human greed? The Hill.

Dalton, J., 2020. 'A global conservation disaster': Fury as Botswana sells 60 elephant shoot permits to trophy-hunters. The Independent 8th February 2020

https://www.independent.co.uk/news/world/africa/botswana-elephant-kill-auction-trophy-hunt-shoot-extinct-africa-a9325041.html [accessed 10/03/2020].

DEFRA, 2019. Consultation launched on the import and export of hunting trophies. Department for Environment, Food & Rural Affairs, London, UK

https://www.gov.uk/government/news/consultation-launched-on-the-import-and-export-of-hunting-trophies [accessed 10/03/2020]

Dickman, A., Cooney, R., Johnson, P. J., Louis, M. P., Roe, D. J. S., 2019a. TH bans imperil biodiversity Science 365, 874-874.

Dickman, A. J., Cooney, R., Johnson, P. J., Louis, M. P., Roe, D., 2019b. Nowak et al reinforce our fears regarding lack of proven alternatives for TH areas.

Freeman, M.M. and Wenzel, G.W., 2006. The nature and significance of polar bear conservation hunting in the Canadian Arctic. Arctic 59: 21-30.

Fontaine, A., 2019. Puffingate: Much Ado About Nothing, Probably. The Reykjavik Grapevine 31st July 2019 https://grapevine.is/news/2019/07/31/puffingate-much-ado-about-nothing-probably/ [accessed 10/03/2020].

Horton, H., 2020. Foreign trophy hunters preying on rare UK deer and country is major export site for bodies of endangered animals, campaigners warn. The Telegraph, 21st January 2020. https://www.telegraph.co.uk/news/2020/01/21/foreign-trophy-hunters-exporting-dead-birds-prey-britain-shooting/ [accessed 10/03/2020].

IUCN, 2016. Informing decisions on TH. IUCN, Gland, Switzerland.

IUCN 2019. *The IUCN Red List of Threatened Species. Version 2019-3*. http://www.iucnredlist.org. [Downloaded on 10 December 2019]

Lindsey, P. A., Balme, G. A., Booth, V. R., Midlane, N., 2012. The Significance of African Lions for the Financial Viability of TH and the Maintenance of Wild Land. Plos One 7, doi:ARTN e2933210.1371/journal.pone.0029332.

Loveridge, A. J., Searle, A. W., Murindagomo, F., Macdonald, D. W., 2007. The impact of sport-hunting on the population dynamics of an African lion population in a protected area. Biological Conservation 134, 548-558.

Madzwamuse, M., Rihoy, E., Louis, M. P., 2020. Contested Conservation: Implications for Rights,

Democratization and Citizenship in Southern Africa. Development, doi:10.1057/s41301-020-00237-1.

Nowak, K., Lee, P.C., Marino, J., Mkono, M., Mumby, H., Dobson, A., Harvey, R., Lindsay, K., Lusseau, D., Sillero-Zubiri, C. et al. 2019. TH: Bans create opening for change. Science 366: 434-435.

Roach, A., 2020. KILLING FOR KICKS: Sick trophy hunters 'are driving polar bears to extinction' as less that [sic] 25,000 remain in the wild. The Sun, 25 Jan 2020

https://www.thesun.co.uk/news/10818058/trophy-hunters-driving-polar-bears-to-extinction-norway-expert-warns/ [accessed 10/03/2020].

Roe, D., Booker, F., Wilson-Holt, O., Cooney, R. 2020. Diversifying local livelihoods while sustaining wildlife; exploring incentives for community-based conservation. Luc Hoffman Institute https://luchoffmanninstitute.org/wp-content/uploads/2020/02/Diversifying Local Livelihoods-2020 publication-FINAL compressed.pdf [accessed 10/03/2020]

Tiplady-Bishop, L., 2020. KILLED FOR FUN Evil trophy hunters 'PAY thousands to have leopards KNEECAPPED to make them easier to hunt'. The Sun, 31st January, 2020 https://www.thesun.co.uk/news/10862611/evil-trophy-hunters-pay-thousands-kneecapped/ [accessed 10/03/2020]

US Congress, 2019. H.R. 2455 – Cecil Act. https://www.congress.gov/bill/116th-congress/house-bill/2245

Wong-Parodi, G. and Feygina, I., 2020. Understanding and countering the motivated roots of climate change denial. *Current Opinion in Environmental Sustainability*.

https://doi.org/10.1016/j.cosust.2019.11.008