

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/326930652>

Unpacking the ‘canine conundrum’

Article in *Animal Conservation* · August 2018

DOI: 10.1111/acv.12441

CITATION

1

READS

257

2 authors:



Abi Tamim Vanak

Ashoka Trust for Research in Ecology and the Environment

63 PUBLICATIONS 1,130 CITATIONS

[SEE PROFILE](#)



Chandrima Home

Ashoka Trust for Research in Ecology and the Environment

14 PUBLICATIONS 122 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Chemical restraint of free-ranging animals [View project](#)



African elephant movement [View project](#)

RESPONSE

Unpacking the 'canine conundrum'A. T. Vanak^{1,2,3} & C. Home^{1,4}¹ Centre for Biodiversity and Conservation, Ashoka Trust for Research in Ecology and the Environment, Bangalore, India² Wellcome Trust/DBT India Alliance, Hyderabad, India³ School of Life Sciences, University of KwaZulu-Natal, Durban, South Africa⁴ Manipal Academy of Higher Education, Manipal, India**Correspondence**

Abi T. Vanak, Centre for Biodiversity and Conservation, ATREE, Royal Enclave, Srirampura, Jakkur Post, Bangalore 560 064, Karnataka, India.

Email: avanak@atree.org

doi: 10.1111/acv.12441

At the end of the Indian epic, the Mahabharata, the victorious Pandava king Yudhishthir and his brothers renounce worldly pleasures and make their final pilgrimage to the Himalayas. Throughout this arduous journey, they are accompanied by a stray dog. Eventually, only the king and the dog survive. At this point, Indra, the god of heaven appears and invites the king to board his chariot, but without the faithful dog, as it is considered unworthy of entering heaven. In some sense, this dual identity of the dog mirrors that of Cerberus, the hound of Hades. In Hesiod's description, Cerberus is friendly and welcoming to the dying, but if they attempt to return to the world of the living, the murderous nature of Cerberus is unleashed (Wasik & Murphy, 2012).

This duality of relationships between humans and dogs is reflected in many other mythological and historical writings (Wasik & Murphy, 2012). In the modern era, particularly in the western world, our relationship with the dog no longer has this ambiguity. Dogs are faithful companions, elevated to the level of family. In much of the rest of the world, however, our relationship with dogs poses a conundrum. For the most part, dogs are faithful companions; except that they also can harm humans via transmission of rabies (WHO/Department of control of neglected tropical diseases, 2018) and, at the extreme, attack and kill humans (e.g. <https://timeofindia.indiatimes.com/city/lucknow/dogs-maul-another-child-to-death-in-sitapur-toll-rises-to-14/articleshow/64221931.cms>, accessed on 16/07/2018).

Inadvertently, our close relationship with dogs has actually made them an invasive species, and now dogs also have large-scale impacts on native wildlife. Our study (Home, Bhatnagar & Vanak, 2018), demonstrates the threat posed by domestic dogs as predators and competitors of native species, with potentially large-scale edge-effects on wildlife populations within and around protected areas. The commentary pieces by Zapata-Ríos (2018), Young, Bergman & Ono (2018), and Allen (2018) have a common thread in their interpretation of this canine conundrum; i.e. does our proclaimed love for 'animals' really only extend to 'companion animals'?

Benjamin Allen articulates the lopsided emotions associated with domestic animals, even when they negatively

impact native wildlife. Standalone measures of population control such as trap-neuter-release (TNR), reducing access to food, and the use of canine shelters, not only reveal the lack of understanding of the scale of the stray dog problem, but also the inability to take necessary measures. The conundrum is one of choice: should people protect wildlife or stray dogs? From the fact that the global dog population is close to a billion, people seem to have chosen.

Zapata-Ríos stresses the importance of policy measures to address the issue of domestic dogs as an invasive species based on three principle premises; a cognizance of the ecological and human health impacts of dogs, a shift in human behavior while implementing policies of dog population control, and responsible dog ownership for reducing impacts. The author's own work (Zapata-Ríos & Branch, 2016, 2018) has shown similar impacts of domestic dogs on native species in the Ecuadorian Andes. In South America, the conundrum emerges from the strong bonds that people share with dogs, often resulting in stiff opposition to rigorous policies for dog population management (e.g. Montecino-Latorre & Martín, 2018).

Young, Bergman and Ono broaden the perspective by suggesting that dogs impede conservation goals by acting as agents of conflict. They present the conundrum at two levels: first, dogs are valued companions of humans, but when independent, they can revert to a feral state. Second, although self-evident, the solution to dog population management is increased awareness about the importance of human companionship to dogs.

Unstated in our study, and that of others, is the role of international animal welfare agencies in failing to show the leadership necessary to solve the problem. In many cases, these agencies only fuel the conflict. For example, in India and elsewhere in the world, they continue to showcase TNR as a humane population control method for cats and dogs, despite scientific evidence of its failure to be effective and sustainable (Loyd & DeVore, 2010; Totton *et al.*, 2010; Belo *et al.*, 2017). Furthermore, a neutered dog can still impact wildlife and human well-being. Notably, animal welfarists ignore the potential for prolonged suffering of wildlife when

they are killed by the weak and inefficient jaws of domesticated dogs.

The solution to the 'dog' problem requires a multipronged approach from rural and urban civic agencies, public health departments, animal welfare organizations and wildlife conservation groups. Together, they must work to articulate a common vision that balances conservation of wildlife and animal welfare. An argument that should be put forward more forcefully is that the welfare of companion animals such as dogs, is best served under the close guardianship of humans. There is no need to reinvent the wolf.

References

- Allen, B. (2018). And the people's choice award goes to . . . dogs: a comment on Home et al. *Anim. Conserv.* **21**, 283–284.
- Belo, V.S., Struchiner, C.J., Werneck, G.L., Teixeira Neto, R.G., Tonelli, G.B., de Carvalho Júnior, C.G., Ribeiro, R.A.N. & da Silva, E.S. (2017). Abundance, survival, recruitment and effectiveness of sterilization of free-roaming dogs: a capture and recapture study in Brazil. *PLoS ONE* **12**, e0187233.
- Home, C., Bhatnagar, Y.V. & Vanak, A.T. (2018). Canine Conundrum: domestic dogs as an invasive species and their impacts on wildlife in India. *Anim. Conserv.* **21**, 275–282.
- Loyd, K.A.T. & DeVore, J.L. (2010). An evaluation of feral cat management options using a decision analysis network. *Ecol. Soc.* **15**, 10.
- Montecino-Latorre, D. & Martín, W.S. (2018). Evidence supporting that human-subsidized free-ranging dogs are the main cause of animal losses in small-scale farms in Chile. *W. Ambio*. <https://doi.org/10.1007/s13280-018-1066-3>.
- Totton, S.C., Wandeler, A.I., Zinsstag, J., Bauch, C.T., Ribble, C.S., Rosatte, R.C. & McEwen, S.A. (2010). Stray dog population demographics in Jodhpur, India following a population control/rabies vaccination program. *Prev. Vet. Med.* **97**, 51–57.
- Wasik, B. & Murphy, M. (2012). *Rabid: a cultural history of the world's most diabolical virus*. New York: Viking Press.
- WHO /Department of control of neglected tropical diseases. (2018). WHO Expert Consultation on Rabies: WHO TRS N°1012, Third report. Geneva: World Health Organization.
- Young, J.K., Bergman, D.L. & Ono, M. (2018). Bad dog: feral and free-roaming dogs as agents of conflict. *Anim. Conserv.* **21**, 285–286.
- Zapata-Ríos, G. (2018). Dogs are more than wet kisses and tail wags: domestic dogs as invasive species. *Anim. Conserv.* **21**, 287–288.
- Zapata-Ríos, G. & Branch, L.C. (2016). Altered activity patterns and reduced abundance of native mammals in sites with feral dogs in the high Andes. *Biol. Conserv.* **193**, 9–16.
- Zapata-Ríos, G. & Branch, L.C. (2018). Mammalian carnivore occupancy is inversely related to presence of domestic dogs in the high Andes of Ecuador. *PLoS ONE* **13**, e0192346.