

Outbreeding ideas for conservation success

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Interdisciplinarity is increasingly recognised as needed to tackle global challenges (Ledford 2015), a daunting example being the problems of conserving biodiversity. However, walls between disciplines have proven no less difficult than those between nations to tear down (Reagan 1987).

Interdisciplinary research suffers consistently lower funding success (Bromham et al. 2016) and there are still philistines who perceive it as the province of researchers “who aren’t good enough to make it in their own field” (Ledford 2015).

Challenging this stubborn disciplinary cartography remains, unfortunately, the exception in applied conservation research. As an illustration, the three international conferences that University of Oxford’s Wildlife Conservation Research Unit (WildCRU) organised during the past 15 years on canid, felid and musteloid conservation hosted, despite our best efforts, only a handful of delegates (out of a total close to 1000) with backgrounds genuinely beyond the biological sciences. Conservation scientists are sowing the seeds of inbred ideas that are decreasingly likely to germinate in today’s complex world. Emboldened by urgency and the prospect of gridlock (Hale et al. 2013), WildCRU and the international NGO Panthera recently experimented with an alternative meeting format in an attempt to break the mould and identify innovative conservation strategies to prevent the extinction of lions (*Panthera*

leo) in Africa (Bauer et al. 2015). In what we call the ‘Oxford Format’ (named after its venue, in the tradition of diplomatic mechanisms, e.g ‘Normandy Format’ to tackle the crisis in Ukraine), about 30 ‘lion insiders’ (lion ecologists, zoologists, geneticists from WildCRU and Panthera) brainstormed during 3 days with 30 ‘lion outsiders’ (leading international political scientists, economists, philosophers, development experts) at the “Cecil Summit” (see <http://www.ox.ac.uk/news/science-blog/cecil-summit-another-key-milestone-lion-conservation-movement>). The format began with short presentations by insiders (both researchers and those working with communities living alongside lions first hand) on the lion’s predicament, followed by short presentations by outsiders to provide radically different perspectives on this predicament. The unfolding discussions blended ideas that led to re-casting lion conservation as an issue fundamentally framed by economics and governance. Paradoxically, none of these discussions focused on lion ecology but all were critically relevant to lion survival in an increasingly crowded African continent. While stimulating novel ideas is a far cry from implementing them, the success of the first ‘Oxford Format’ summit in generating outbred ideas convinces us that the prize will be won by forcing, not just urging, interdisciplinarity to address conservation issues. There is no excuse left for inbred conservation thinking.

References

- Bauer, H., G. Chapron, K. Nowell, P. Henschel, P. Funston, L. T. B. Hunter, D. W. Macdonald, and C. Packer. 2015. Lion (*Panthera leo*) populations are declining rapidly across Africa, except in intensively managed areas. *Proceedings of the National Academy of Sciences* **112**:14894-14899.
- Bromham, L., R. Dinnage, and X. Hua. 2016. Interdisciplinary research has consistently lower funding success. *Nature* **534**:684-687.
- Hale, T., D. Held, and K. Young. 2013. *Gridlock: Why Global Cooperation is Failing when We Need It Most*. Wiley.
- Ledford, H. 2015. How to solve the world's biggest problems. *Nature* **525**:308-311.

Reagan, R. W. 1987. Remarks at Brandenburg Gate, Berlin, Germany, 06/12/1987
<http://www.archives.gov/historical-docs/todays-doc/index.html?dod-date=612>.