Dangers of Sensationalizing Conservation Biology

The global biodiversity crisis that spawned the discipline of conservation biology is closer to the forefront of the average person's thoughts than it has ever been. The shift in popular thinking about conservation issues is in no small way due to the impressive and relevant work of conservation scientists worldwide, many of whom have published their work and opinions in this journal. It is good science that provides the focus for the conservation spotlight, which continues to gain in intensity with problems such as anthropogenically driven climate change. That said, acknowledgment must be given to the power of advocacy wielded by people who have been successful in promoting awareness of conservation matters in the mass media (Paquette 2007)

The power of media, such as television, to influence public thought on conservation issues is, however, both a blessing and a curse. Its great benefit is that it promotes awareness of the natural world among the urbanized citizenry who are disconnected from the plight of biodiversity. Modern "nature celebrities" such as Sir David Attenborough, Jacques Cousteau, Al Gore, and Steve Irwin have fostered and promoted an appreciation and fascination of natural systems by people who would never otherwise have the opportunity to observe them. The curse, however, is subtler and insidious. The overarching requirement of popular entertainment is that it be eve-catching, sensational, and even eccentric if it is to attract sufficient attention to survive.

The recent death of celebrity naturalist Steve Irwin has resulted in a perceived martyrdom at a scale never before witnessed in conservation circles. His popularity was undeniable, but his reckless style of advocacy was a two-edged sword. His often unconventional antics, while entertaining, did not necessarily lead the viewer to adopt a greater respect and understanding for the species on show. One only needs to cite the pointless and abhorrent killing and mutilation of stingrays along Queensland's coast (BBC 2006) in the weeks following his death (acts which were, quite rightly, summarily condemned by Irwin's organization) to question at least some of his fans' true empathy with conservation issues.

Irwin's misunderstanding of fundamental ecological processes such as forest fragmentation, how invasive and domestic species can damage biodiversity values, and the sustainable use of wildlife (Simpson 2001) were particularly dangerous because of his ability to sway the public's (and their elected politicians') opinions (Campbell 2005). With such vast influence comes great responsibility. One particularly ironic example is that the Crocodile Hunter vehemently opposed any notion of sustainable harvest of crocodiles (Crocodylus porosus) in Australia, convincing many Australians (including politicians) likewise. Yet harvest as a management tool was in this case almost certainly responsible for saving saltwater crocodiles from near extinction. The highly controlled market for farmed skins essentially removed all incentive for illegal harvest (Webb & Manolis 1993). Furthermore, harvest models grounded in more than 20 years of painstakingly collected monitoring data show that a safari-hunting proposal posed no threat to population viability (Bradshaw et al. 2006).

Irwin's opinions about sustainable use of wildlife in general (e.g., the use of wild kangaroos for pet meat and human consumption) are well known, even though all available evidence suggests that in an increasingly drought-prone continent such as Australia, a reduced reliance on traditional hard-hoofed pastoralism would have remarkable benefits for the country's economy, threatened biotas, and fragile soils (Grigg 1989; Flannery 1998; Archer 2002; Thomsen & Davies 2005). In this light it is somewhat disconcerting that even the academic sector was prepared to bestow upon him the title of adjunct professor, an academic laurel normally recognizing years of scholarly endeavor (AAP 2006), despite his rudimentary understanding of and often incorrect statements about ecological processes.

The dangers of Irwin-style advocacy strike deeper than just the relative costs and benefits of sensationalist media and political sway. His legacy was built predominantly on capturing, handling, and therefore stressing normally reclusive and clandestine species for the benefit of public entertainment. The increasing scrutiny of field biologists by animal ethics committees (McMahon et al. 2007) stands in stark contrast to the brazen and sometimes ethically questionable methods Irwin employed to invigorate typically quiescent species—eventually to his undoing. Although never formally charged with ethical wrongdoing, even in circumstances requiring investigation (Department of the Environment and Water Resources 2004), it is highly implausible that any academic or governmental animal ethics committee would have sanctioned such behavior by their own researchers.

An excessive dumbing down of conservation science for the masses is, in our opinion, naïve because it risks further distancing lay people from the real and often harsh natural world ecologists work to understand. Advocacy in conservation biology desperately needs charismatic champions, but it does not need more overt sensationalism-we have no shortage of television programs and documentaries highlighting the dangers, curiosities, and bizarre aspects of animal and plant life. What we need are intelligent, informed, and respectful champions (we cite some above) that responsibly promote understanding and respect of the natural world, a realm from which the majority of our 6.5-billion-strong population has become largely dispossessed.

Corey J. A. Bradshaw,** Barry W. Brook,† and Clive R. McMahon*

*School for Environmental Research, Institute of Advanced Studies, Charles Darwin University, Darwin, Northern Territory 0909, Australia [†]Research Institute for Climate Change and Sustainability, School of Earth and Environmental Sciences, University of Adelaide, South Australia 5005, Australia

‡email corey.bradsbaw@cdu.edu.au

Literature Cited

- AAP (Australian Associated Press). 2006. Irwin was set to be academic. AAP, Sydney, Australia, 20 September. Available from http://www.news.com.au/story/0,23599,20445606-1702,00.html (accessed February 2007).
- Archer, M. 2002. Confronting crises in conservation: a talk on the wild side. Pages 12–52 in D. Lunney and C. Dickman, editors. Zoological revolution: using native fauna to assist in its own survival. Royal Zoological Society of New South Wales and Australian Museum, Mossman, Australia.
- BBC (British Broadcasting Company). 2006. Irwin fans in 'revenge attacks'. BBC News Online, 12 September. BBC, London. Available from http://news.bbc.co.uk/2/hi/asia-pacific/5338118.stm (accessed February 2007)
- Bradshaw, C. J. A., Y. Fukuda, M. I. Letnic, and B. W. Brook. 2006. Incorporating known sources of uncertainty to determine precautionary harvests of saltwater crocodiles. Ecological Applications 16:1436–1448.
- Campbell, I. 2005. Crocodile safari hunting proposal rejected—crocodile culls to continue. Media release, Minister for the Environment and Water Resources, Canberra, Australia. Available from www.

- environment.gov.au/minister/env/2005/mr06oct05.html(accessed February 2007).
- Department of the Environment and Water Resources. 2004. Investigation finalised. Media release. Australian Government, Canberra, Australia. Available from http:// www.environment.gov.au/media/deptmr/dp15jul04.html (accessed February 2007)
- Flannery, T. F. 1998. The future eaters: an ecological history of the Australian lands and people. Reed, New Holland, Australia.
- Grigg, G. 1989. Kangaroo harvesting and the conservation of arid and semi-arid rangelands. Conservation Biology 3:194-197.
- McMahon, C. R., C. J. A. Bradshaw, and G. C. Hays. 2007. Applying the heat to research techniques for species conservation. Conservation Biology 21:271–273.
- Paquette, S. R. 2007. Importance of the "Crocodile Hunter" phenomenon. Conservation Biology 21:6.
- Simpson, S. 2001. Interview with Crocodile Hunter Steve Irwin. Scientific American, New York. Available from http://www. sciam.com/article.cfm?articleID=0000462F-9484-1C75-9B81809EC588EF21 (accessed February 2007).
- Thomsen, D. A., and J. Davies. 2005. Social and cultural dimensions of commercial kangaroo harvest in South Australia. Australian Journal of Experimental Agriculture 45:1239–1243.
- Webb, G. J. W., and S. C. Manolis. 1993. Conserving Australia's crocodiles through commercial incentives. Pages 250-256 in D. Lunney and D. Ayers, editors. Herpetology in Australia-a diverse discipline. Transactions of the Royal Zoological Society of New South Wales, Sydney, Australia.

