

## EDITORIAL

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# Wildlife research in the developing world

Scientific research is a complex and challenging activity. More obstacles are faced in research on wildlife compared to other forms of research as the subjects under investigation must be located, monitored and data collected in what are often difficult and unpredictable environments. Furthermore, wildlife across the world are under threat. With growing problems such as climate change, invasive species, disease and wildlife trade, the need for quality research into wildlife is paramount.

Much like the distribution of wealth, the distribution of wildlife around the Earth is disparate. Many developing countries are listed as biodiversity rich; in fact, the majority of biodiversity rich areas are found in so-called developing nations (Mittermeier *et al.* 1997; Myers *et al.* 2000). However, wildlife in developing countries are challenged by an additional suite of threats, particular to the economic status, government structure and socio-cultural conditions of these regions. In combination, this often results in greater risks and more extreme pressure on biodiversity and wildlife in developing regions (e.g. see Xie & Wang 2006).

The need for quality research on wildlife in developing countries is essential to address global issues such as climate change, wildlife trade and conservation. Data from these regions is also necessary to complete our understanding of the Earth's fauna and to create a balanced and complete picture of animal life. Unfortunately for researchers wanting to contribute to our global understanding of zoology and threats to animals, the language of science is English. Developing nations are not short of brilliant and talented researchers working on problems of international appeal and interest. However, the need to communicate in a language that is not their first is another barrier for researchers in developing countries when disseminating information on wildlife.

Special attention needs to be given to zoologists working in developing nations. Mechanisms are required to ensure a balanced flow of research is reaching a global audience. Only from this exposure, can international collaborations form, knowledge be shared, and research teams cooperate on new projects. For example, international collaboration has been a key driving force in organizing research of mammals across China and influencing the sys-

tematic study of animals in this developing country (Smith & Yan 2008). Greater international exchange resulting from the publication of work from disadvantaged regions will result in capacity building for local zoologists. With high-quality zoological data and publications from developing regions, methodological and conceptual developments and techniques can be shared.

Through *Integrative Zoology* (INZ), the International Society of Zoological Sciences is committed to ensuring that quality research conducted by authors from disadvantaged nations is given a fair chance of publication in an international arena. During the first three years of publication (2006 to 2008), nearly 40% of material published by INZ was authored or co-authored by scientists from the developing world. This attribute makes INZ truly international and clearly committed to assisting researchers whose first language is not English.

The publication of a large volume of research arising from disadvantaged nations and by authors from these nations is possible because of the editorial structure employed by INZ. Much has been written about the need to maintain a high standard of English usage in scientific journals (e.g. Gopen & Swan 1990; Joshi 2007). Often, such essays, editorials or opinion pieces recommend the use of commercial editing services (Ludbrook 2007). Furthermore, the majority of large-circulation journals suggest the use of professional editing services prior to submission. If a paper of lower-quality English is selected for review by these journals, having the manuscript reviewed for English syntax and structure is invariably a condition of resubmission.

*Integrative Zoology* does not reject papers because of sub-standard English, nor does it insist upon the use of commercial or professional editing services as a prerequisite for the submission and resubmission of manuscripts. In addition to scientific editors and copy (production) editors, the editorial structure of INZ includes associate editors who work closely with authors on selected papers to improve their English. This is labor intensive and time consuming, but as INZ grows, the International Society of Zoological Sciences will continue to provide an avenue for high-quality researchers from disadvantaged nations to publish their work in an international setting.

This special issue of INZ contains studies on wildlife authored or co-authored by researchers from across the developing world. Ren *et al.* (2009) examine patterns of seasonality in the home ranges of Yunnan snub-nosed monkeys in China. Also from southern China, Pan *et al.* (2009) describe corridor use by Asian elephants and Chen *et al.* (2009) examine the distribution of the Indo-Pacific humpback dolphin.

Several papers in this issue arise from continental Africa: Evangelista *et al.* (2009) test a passive tracking method for the Ethiopian wolf; Fagir and El-Rayah (2009) presents extensive data on parasites collected from Nile rats in Sudan; Fanini and Fahd (2009) discuss the role of storytelling and the flow of environmental education related to herpetofauna in Morocco; seasonality of fleas inhabiting small mammals in Tanzania is investigated by Laudisoit *et al.* (2009); and Soliman and Mohallal (2009) compare seasonal patterns of reproduction for two gerbil species in Egypt.

Content from South Asia is featured as Das (2009) reviews the threat of climate change and the need for a coordinated assessment of Bangladesh's zoological resources.

Finally, this special issue features an important study not conducted in the developing world by Nicholson and van Manen (2009), but with results that may be applied to large mammal management in countries of need.

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