

## EDITORIAL

### Wildlife trade in Asia: start with the consumer

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The demand for wildlife-based traditional Asian medicine is a major driver of unsustainable and often illegal commercial exploitation of numerous species around the world (TRAFFIC, 2008). This demand affects some of the world's most threatened and high-profile protected species such as tigers (*Panthera tigris*), Asian bears and all five of the world's rhinos. Despite high level commitment and significant investments into the conservation of these species, populations are continuing to decline due to poaching for trade (Graham-Rowe, 2011).

Efforts to tackle unsustainable wildlife trade have largely revolved around the use of trade measures, including bans, and ever increasing enforcement effort against poachers and traffickers (Conrad, 2012; Walston *et al.*, 2010). All c.35,000 species listed in the appendices to CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) are subject to trade regulations, while trade in the high profile ones listed above, is severely restricted through Appendix I listings, which prohibits international trade. However, we know from history that such measures have and are being undermined by an illegal market that will be impossible to contain as long as there is a demand (Nijman, 2010). The recent loss of the last Javan rhino (*Rhinoceros sondaicus*) in Vietnam in 2011 to trade-driven poaching is a notable example (Brooks *et al.*, 2011). It is thus clear that a change in strategy is needed if we are to effectively mitigate the threat of wildlife-based traditional Asian medicine. It is perhaps time to reframe our view of wildlife trade from a supply-centric perspective to a demand-centric one and thus put the consumer at the heart of our strategies to tackle this threat to biodiversity.

In this way, understanding the consumer, through an analysis of consumption, demand elasticities, product attributes key to the consumer and markets for given products should be the first step in formulating a strategy to tackle threats to biodiversity from international and domestic trade. Only then can we target consumers in order to change preferences and behaviour towards more sustainable products. This will require both a robust biological underpinning and knowledge from fields such as social marketing and conservation psychology to enable conservationists to go beyond awareness raising or information provision frameworks such as certification schemes, as the links between these and actual behaviour change are tenuous at best. This is showcased in traditional Asian medicine by the trade in rhino horn and tiger

parts, where demand continues to be high despite a lack of evidence supporting the medicinal use of these products (Gratwicke *et al.*, 2008), or in the case of bears, where a synthetic alternative for their bile is available but consumers prefer 'real' bear bile (Dutton *et al.*, 2011). Only by putting human behaviour at the heart of our strategies to tackle unsustainable and often illegal international trade in natural resources, can we ultimately mitigate its impact on biodiversity.

There will no doubt be enormous challenges. Some of them are inherent to the problem being tackled, such as the resistance to change that exists in human societies, especially when practices have long-established cultural and social roots and the potential hostility of illegal trade syndicates. Others are related to conservation itself, such as the largely western values that characterise some conservation organisations today. This can become a barrier in two ways. Firstly, it hampers our ability to uncover the intricate social and cultural dimensions of demand for wildlife products. Secondly, it makes conservation efforts easy to label as foreign interference or eco-colonialism, especially given the authoritarian regimes that govern key countries in terms of demand for wildlife-based traditional Asian medicine. To mitigate these potential issues conservation will need to become a more inclusive endeavour, with greater participation from nationals in countries with demand, particularly with regard to data collection and stakeholder engagement. Bringing about behaviour change is a hard enough challenge, but whether conservation can recognise its need to change in order to tackle these issues, remains to be seen.

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