Models of wildlife tourism

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Catlin et al. (2011) [CJJ] interpreted Duffus and Dearden (1990) [DD, cited in CJJ] to argue (a) that wildlife tourism consists of destinations which grow from smaller numbers of specialist wildlife watchers initially, to larger numbers of generalised mainstream tourists later; and (b) that this produces impacts which exceed limits of acceptable change (LAC) and damage tourist experiences, businesses and wildlife alike. We suggest that this interpretation is incomplete and potentially misleading, for the following reasons.

The DD framework was conceptual, not predictive. It presented wildlife tourism as wildlife, tourism, and interaction. It noted the conceptual utility of destination life-cycle, leisure specialisation and LAC; but these are all untested or untestable. It did not claim a universal development trajectory.

The evidence presented by CJJ does not support their interpretation of DD. CJJ cite studies of polar-bear and whale-watching tourism in Canada, whale-sharks and dolphins in Australia, manatees in the USA, diving in the Philippines and an albatross colony in New Zealand. Only the whaleshark, diver and albatross cases used the DD framework, and each of these have different legal and management frameworks, not analysed by CJJ. Even in these three cases, it is unclear whether impacts were monitored, LAC approaches adopted, visitor numbers set by markets or regulation, or even whether prices declined.

The CJJ cases are a tiny ($\ll 1\%$) and atypical fraction of the global wildlife tourism industry (Buckley, 2010). They are inadequate to derive explanations, mechanisms or predictions. Most of the world's free-living wildlife tourism is regulated, whether in protected areas or other public lands, or private or communal reserves. This also applies to the whale-shark tours studied by CJJ. Inadequately-regulated growth is so unusual as to be newsworthy, as for example in the Galapagos Islands, or for domestic self-drive tiger watching in parks in Madhya Pradesh, India.

Tourism does indeed produce impacts on wildlife (Buckley, 2011). But wildlife tourism now: funds a significant part (5–50%) of operating costs for many public protected area agencies; provides political support for government funding for these agencies; and funds private reserves which conserve up to 10% of total remaining populations of some threatened species (Buckley, 2009, 2010). That is, tourism can produce benefits as well as costs for wildlife conservation.

The net gain or loss depends on the particular circumstances. There is no single pattern as proposed by CJJ. General models for wildlife tourism do indeed need wildlife, tourism and interaction components as proposed by DD, but these are much broader than interpreted by CJJ. Wildlife components need to include species life histories, population sizes and distributions. Tourism components need to include independent travellers, enterprises and clients, access and infrastructure, product design, equipment, expectations and interpretation. Interactive components include impacts, icon-species marketing, interpretation and visitor experiences.

Wildlife, tourism and interaction components are necessary, but not sufficient. A general predictive model of wildlife tourism also needs to include: the legal and social bases for land use and tenure; the authority and actions of management agencies and regimes; and non-tourism use and ownership of wildlife and other natural resources. These components determine: what wildlife is where; whether or not it is used for tourism, and of what types and under what conditions; and whether or not tourism contributes to wildlife conservation, or only creates impacts. These factors influence wildlife tourism options so strongly that a model without them has little chance of yielding accurate predictions. Such a model is possible, but has not yet been constructed.

References

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