Funding bias and independent research

Many of us who study raptors adhere to a simple principle: Independent research should occur alongside research paid for by industries. Industry-funded research can be susceptible to 'funding bias'. This does not mean that researchers funded by the cigarette industry, chemical industry, sugar industry, forestry industry, pesticide industry, or by property developers, are corrupt researchers, or that they are being bribed, or their research is incorrect. In contrast, it simply means that a bias can occur in industry-funded research for a variety of reasons. Wikipedia says under 'Funding Bias':

"A company that hires researchers to perform a study may require the researchers to sign a nondisclosure agreement before they are funded, by which researchers waive their right to release any results independently and release them only to the sponsor. The sponsor may fund several studies at the same time, suppressing results found contrary to their business interests while publicizing the results that support their interests. Indeed, a review of pharmaceutical studies revealed that research funded by drug companies was less likely to be published, but the drug-company- funded research that was published was more likely to report outcomes favorable to the sponsor."

In the case of environmental impact or flora/fauna assessments it can mean developers shopping around until they get the assessment report they like and shelving unfavourable reports, and/or [private or industry] consultants or companies tending to give developers favourable reports so they continue to get assessment jobs from developers. A related issue is 'client capture' or 'regulatory capture' (e.g. see what Wikipedia says about the latter).

So, we welcome raptor research funded by mining companies, property developers, forestry companies and other industries, but we maintain that research independent of such industries should operate alongside it, and that both views should be considered. This principle can be strongly opposed by certain industries.

Independent researchers, in contrast to industry-funded researchers, may be more likely to include newer research, and research that runs contrary to industry goals. For example, Finn & Stephens (2017) argue that land clearing is an issue of animal welfare:

"Despite evidence of the harm that land clearing causes to individual animals, such harm is either ignored or considered only indirectly in environmental decision-making. We argue that the harm that land clearing causes to animals ought to be identified and evaluated in decision-making relating to land clearing and consider the following three propositions in support: (1) land clearing causes deaths that are physically painful and psychologically distressing because of their traumatic and debilitating nature; (2) land clearing causes physical injuries, other pathological conditions, pain and psychological distress over a prolonged period as animals attempt to survive in the cleared environment or in the environments they are displaced to; and (3) on the basis of current clearing rates, more than 50 million mammals, birds and reptiles are likely to be killed annually because of land clearing in Queensland and New South Wales. The scientific consensus about the harm caused by land clearing means that decisions to allow land clearing are decisions to allow most of the animals present to be killed and, as such, frameworks for decision-making ought to include proper evaluation of the harm to be imposed" (p. 377).

Views such as these may receive more prominence in reports from independent researchers than from industry-funded researchers.

Also, it could be beneficial to adopt processes for decision-making that involve a similar refereeing process to that adopted by ISI journals. For example, if corridor width, ecological trade-offs, offsets, or a buffer radius around a nest site is recommended by developer-funded ecologists, the evidence for making these recommendations could be passed to a panel of two independent referees; for example, specialists at a university, to evaluate the quality of this evidence, outside of the industry-funded process. Such a referee-based process could play an important role in ecology decision-making around issues such as land-clearing, buffers, trade-offs, offsets, and corridor widths.

Reference

Finn, H.C. and Stephens, N.S. (2017). The invisible harm: land clearing is an issue of animal welfare. *Wildlife Research* **44**, 377–391.

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