Correspondence regarding:

Sutherland, W.J. (2013) Review by quality not quantity for better policy, *Nature*, **503**, 167 (14 November 2013) doi:10.1038/503167a

Correspondence:

Beware the Oracle

William Sutherland's comments regarding the value of pollination services (*Nature*, **503**, 167; 2013) highlight the point that economic values are at best only as robust as the natural science upon which they rest. If the impacts of changes in pollinator populations upon agricultural production were known with certainty, then valuing those impacts would be a trivial task. It was precisely because of uncertainty in the underlying population ecology that we omitted estimates of pollination services from our economic analysis of the impacts of land use change within the UK National Ecosystem Assessment (Ch.26, *Technical Report*, UNEP-WCMC; 2011) which, to reassure Prof. Sutherland, was extensively reviewed both as part of the process of generating that report and through subsequent journal peer-review (I.J. Bateman et al., *Science*, **341**: 45-50; 2013).

While we agree with Sutherland that Delphi techniques are helpful in many situations, we urge caution in the case of environmental valuation. While the principles of valuation are well established, the empirical literature is rapidly developing (e.g. the spatial relationships between ecosystem services and their values remains under-researched). Just as a pre-Copernican Delphi analysis would have confirmed the prevailing geocentric consensus, we must acknowledge the dangers of groupthink within swiftly evolving literatures. This is why we rejected the common use of stated preference willingness to pay survey techniques as a way of valuing biodiversity (choosing instead to estimates the costs of ensuring species conservation). Such a rejection distances us from the consensus observed in the economic literature (which might well prevail in a Delphi assessment). However, we believe our approach conforms directly to the appeal for quality over quantity advocated in Prof. Sutherland's article. It would be interesting to see if he disagrees with our approach on this issue.

[287 words]

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