

Can Experts Be Trusted?

Expert opinions are “a necessary evil” in environmental decision-making, according to Professor Mark Burgman. However, testing of the reliability of experts is “almost never employed in environmental decision-making” and “training of environmental experts is almost never employed in practice,” he writes in the June issue of *Australasian Science* magazine, published today.

Professor Burgman is the Director of the Australian Centre of Excellence for Risk Analysis in the University of Melbourne, and has extensive experience as an expert witness on environmental issues.

“When experts assume a position of authority, reinforced by professional membership, qualifications and status, it can intimidate people who want to examine expert judgments critically,” Professor Burgman writes. “Many people, including some risk analysts and experts, hold a flawed view that knowledge held by suitably qualified experts is a clear, objectively defined ‘truth’, while public understanding is fuzzy, oversimplified or corrupt.”

However, Professor Burgman argues: “It is not possible to delineate sharply between expert and lay knowledge. Decisions about who is an expert and what constitutes expertise should not be decided by arbitrary rules or qualifications, but by procedures that assess a claim of expertise.”

Professor Burgman says that “expert judgments are often unreliable and biased. Judgments about ‘facts’ are coloured by conflicts of interest. Experts are routinely overconfident in their own ability to estimate facts and are sensitive to a host of psychological idiosyncrasies.”

Professor Burgman proposes three options to improve trust in expert opinion: “To use tests to distinguish better between experts and non-experts, to train experts, and to use procedures that anticipate and deal with biases.” However, he laments that while these approaches “can ameliorate dominant individuals in group deliberations... they are rarely deployed in real situations”.

Professor Burgman concludes: “If we provide feedback systems so that experts can learn from their mistakes, and if we employ methods that avoid the worst psychological pitfalls, the quality of the information we glean from experts will improve substantially. It seems professionally negligent not to do so.”

Professor Burgman can illustrate these factors with case studies.

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