Putting Experts to the Test

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Expert knowledge – advice and-or recommendations from those who have spent much time researching and learning about a given subject area – is often used by resource managers who do not themselves have the time or resources to collect all the data necessary to make a sound decision.

That expert knowledge, which can be used in highly diverse situations in various ecosystems and geographical areas, can assist with forest management, eco-regionalization, species conservation or environmental impact assessment.

But some skepticism also surrounds the use of expert knowledge. Simply saying: “This is based on expert opinion,” doesn’t really cut it.

That’s because that knowledge can be collected, analyzed and used inconsistently. At times there is no documentation to say who provided the knowledge, what specific knowledge was provided or how it was evaluated and applied.

That makes it difficult to verify the accuracy of the information or to replicate the process. Because of that, it also leaves hanging in the air the question of just how credible and useful the expert opinion actually is.

But now, a writing team led by Dr. Ajith Perera of the Ontario Ministry of Natural Resources’ Ontario Forest Research Institute, has published a book that shows scientists and forest decision-makers alike that, when proper methods of collecting and applying expert knowledge are used, it can be a very valuable resource.

The book – Expert Knowledge and Its Application in Landscape Ecology – takes scientifically rigorous methods of collecting and using expert knowledge that have been developed in other disciplines and then adapts those for use in resource management and ecology.

The book introduces the concept of expert knowledge and describes its applicability, advantages and challenges. It includes definitions, methods and many case studies from across North America and Australia. It provides insight into what expert knowledge is, who can be considered experts and methods and applications of expert knowledge for a variety of conservation and management-related issues.

Some of the examples of how and where expert knowledge can be used in forest management and policy development include:

- Developing interim recommendations for best forest practices;
- Informing and calibrating decision support systems; and
- Interpreting maps and other data sources.

The book was produced partly because there is a need to structure the collection, analysis and use of expert knowledge so that it more closely adheres to the scientific method as practiced in empirical research. But it also helps meet a need to capture and archive expertise and knowledge that is rapidly dwindling in many forest management agencies where field experts retire and, for a variety of reasons, are not replaced.

Currently, expert knowledge is widely used in many countries. But, with this publication as a guide, expert knowledge can be even better used – in all countries.


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