

Information Crossfile*

Information delivery in an information-saturated world

IN TRYING TO MINIMIZE CHANCE, THE SAVVY GAMBLER may learn all he or she can about a horse's breeding and health, the odds of winning, and the conditions of the track by reading tip sheets and trade publications, but only the stable boy knows that Mr. Ed has a slight limp today. In a revealing new evaluation of information transfer, Seavy and Howell (2010) have learned that natural area managers are similarly committed to face-to-face consultations with subject-matter experts because that is what works best. With such vast amounts of knowledge at the fingertips of resource managers today, pinpointing and perfecting how exactly scientific evidence meshes with protected area management experience are more crucial than ever for making truly informed decisions.

Based on a survey of those involved in wetland restoration efforts in California, Seavy and Howell (2010) recommend that one-on-one interaction between ecologists and decision makers be made a priority, despite its relatively high cost. The authors acknowledge that this survey's bias toward bird habitat conservation and its small sample size (86 respondents) limit the applicability of its results. Nevertheless, they succeed in drawing several conclusions about how the ecologist–resource manager–information sharing dynamic can be improved.

Making a comparison to the light-years of advances in medicine brought forth by modern science, the authors discuss how California wetland conservationists are sifting through more than 50 years of ecological insights into natural systems and how they work. This explosion in information presents a tremendous opportunity to incorporate evidence-based knowledge into resource management prescriptions. However, as the authors suggest, “it is not yet clear how to provide information to managers most effectively.”

At a time when scientific evidence is pervasive and experience-based information is lacking in decision making, the survey evaluates the variety of high-quality information transfer methods. Seavy and Howell (2010) had the study participants rate the accessibility and importance of five forms of these sources. The authors suggest that “ecologists should not underestimate the importance of publishing their results and contributing to conservation plans,” as study participants deemed peer-reviewed publications and synthetic reviews important and available sources. Unpub-

lished reports were moderately important and low in availability. Looking ahead, the authors foresee a need for “well-organized clearinghouses that make this information available to a wide audience” as the body of ecological knowledge grows. Interestingly, Web-based tools were not yet considered important or widely available, at least not for riparian habitat conservation in California. The authors feel the use of Web-based tools would ideally provide managers with “decision support systems” via a library of electronic versions of peer-reviewed and synthetic articles and interactive applications. Making these tools available over the Internet, however, is not enough; managers require training in their use.

Practical advice in an ecologist's work needs to go beyond the typical concluding paragraphs in peer-reviewed manuscripts describing management implications. This study strongly suggests there is a need to apply the human touch and find opportunities for one-on-one interactions between ecologists and managers. Survey respondents rated this type of information transfer as the most important and least available source. In purely economic terms, this also is one of the least efficient methods of information transfer, though it should be done “to ensure that all the information is used effectively.” Through these interactions, when information flows freely in both directions, ecological science can be incorporated collaboratively and site-specifically into the decision-making process in resource management. Just as the daily race form gives only the bare essentials of horses at the track, managers should seek out ecologists with their ear to the ground before placing a bet on a resource management decision.

Reference

Seavy, N. E., and C. A. Howell. 2010. How can we improve information delivery to support conservation and restoration decisions? *Biodiversity Conservation* 19:1261–1267.

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*Information Crossfile synthesizes selected publications relevant to natural resource management. Unless noted, articles are not reviewed by reference source author(s).