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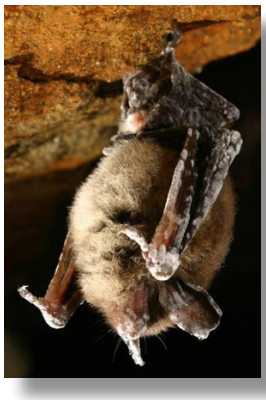
Patuxent Wildlife Research Center

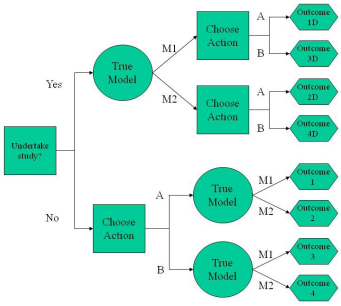
Structured Decision Making: Methods, Applications, and Capacity-Building



Little brown bat with white-nose syndrome. Source: Alan Hicks, NYSDEC.

The Challenge: The field of decision analysis is a rich and mature discipline that provides robust methods for helping decision makers understand the nature of their decisions, involve stakeholders and scientists in appropriate steps of the process, and develop transparent records for the public. The use of these structured approaches is emerging in natural resource management, and there is strong demand in our partner agencies for support for their application.

The Science: USGS Patuxent is a leader in developing new methods of decision analysis, and in delivering this expertise to its partner agencies. Working with the USFWS National Conservation Training Center, we offer approximately three workshops per year that seek to solve a dozen real management problems using an SDM approach. In addition, we coordinate and teach five courses at NCTC: Introduction to SDM, Advanced SDM Practicum, SDM:Tools, SDM: Facilitation and Eliciation, and Adaptive Management.



Decision tree illustrating the expected value of perfect information.

The Future: Working with NCTC, we have developed a professional development and mentoring program to build capacity in SDM. We have set up an exchange program with three labs in Australia that share similar interests, to build the theoretical and applied expertise in both countries. Finally, we have initiated a retrospective study of past applications to develop guidelines for best practices in SDM.

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