Visual images promote effective science communication

DENNISON ET AL. (2007) PROVIDES a new process for integrating, interpreting, and communicating science—namely monitoring results—to varied stakeholders. This approach combines synthesis of key findings with information-rich visual elements (e.g., conceptual diagrams, maps, graphs, tables, and photographs). Investigators used the process in a case study of five National Park System units in the mid-Atlantic region, Antietam National Battlefield (Maryland), Assateague Island National Seashore (Maryland), Chesapeake and Ohio Canal National Historical Park (Maryland), Prince William Forest Park (Virginia), and Rock Creek Park (Washington, D.C.), which cover four physiographic provinces: Atlantic Coastal Plain, Piedmont Plateau, Blue Ridge Mountains, and Ridge and Valley. The conceptual diagrams are a means to present ideas, further develop ideas, and transcend jargon. These diagrams can also serve as models to explore specific hypotheses related to management actions. The authors stress the importance of synthesis and context, which "allows people to understand why you are measuring what you are measuring, or why you care about a certain issue." Hence, unlike Nisbet and Mooney (2007) (see previous summary) these authors do not propose "framing" an issue, but rather presenting "the facts" in a visually interesting and informative way. The conceptual diagrams assist scientists in helping an audience to see and interpret the data for themselves. The authors contend that the audience needs to know that the data exist. Though creating effective graphics can be time-consuming, according to the authors, the benefit is dramatically improved communication of science. They conclude that "only when effective science communication is achieved will the relevance of science to society in general be recognized."

Reference

Dennison, W. C., T. R. Lookingbill, T. J. B. Carruthers, J. M. Hawkey, and S. L. Carter. 2007. An eye-opening approach to developing and communicating integrated environmental assessments. Frontiers in Ecology and the Environment 5(6):307–314.

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