



Ethnobotanical Leaflets



"Teaming with Life: Investing in Science to Understand and Use America's Living Capital"

An interview with Meredith Lane

By Miriam Kritzer Van Zant

"Teaming with Life" is the March, 1998 Report by the President's Committee of Advisors on Science and Technology (PCAST) Panel on Biodiversity and Ecosystems. This interview is concerned with the Report and its expected impact on biodiversity and ecosystems research in the 2000 and 2001 federal budgets (see below link).

Ethnobotanical Leaflets is fortunate to have had the opportunity to interview Dr. Meredith Lane, Professor in the Department of Ecology and Evolutionary Biology and Curator in the Natural History Museum at the University of Kansas, to obtain her unique perspective as Study Executive Director to the PCAST Panel that produced the "Teaming with Life" Report. She was extremely generous with her time and went beyond the norm in patiently giving personal insight with great intelligence, warmth and kindness. We would also like to thank Dr. Peter Raven, Director of Missouri Botanical Garden, member of PCAST and chair of the PCAST Biodiversity and Ecosystems Panel that produced "Teaming with Life" for asking Dr. Lane to answer questions on the Report for Ethnobotanical Leaflets.

"The Economic Value of Biodiversity and Ecosystems," a section within the Report, briefly discusses the general economic contribution of the following areas: Agriculture; Fisheries; Forest goods; Pharmaceuticals; Medical research tools; Nature, travel, horticulture and pets; Pollination; Seed dispersal; Grazing; Removal and storage of atmospheric carbon dioxide; and Flood control. A subsection entitled "Values of species diversity" is limited to examples from research on rice, corn and wheat, the only plant species in the Report for which dollar amounts are specified. This may be an area which economic botanists would both benefit and benefit from if they would take Dr. Lane's advice to offer opinion in the form of testimony to federal agencies working on these issues. According to Dr. Lane, the panel sees these major economic crops as a starting place to raise agency sensitivity to the importance of biodiversity. It may be possible to expand that vision from this point on.

The interview is long, but it seemed important to allow viewers to choose how much background

information they want and/or need to know on this topic. It also seemed important to keep the context of the answers intact. Readers can scan the questions and focus on what is most useful to them. At the end of the interview are links to web sites of interest, especially a link to the plain text of the Report itself. Once inside "Teaming with Life", pull down the Find button and type in a dollar sign (\$) to go to all the places where specific recommendations are made for the budget. There are also instructions on how to get a hard copy of the Report.

In hopes of whetting the viewer's appetite, here are a page of quotes from the introduction to the Report, specifying dollar expenditures (the body of the Report has many more budget suggestions) and some comments on topics of particular interest to economic and ethno-botanists. Square brackets within these quotes contain comments added for clarification by EBL.

"The biological, economic, and information science research, and the support for education, recommended in this Report will require the addition of up to \$200 million annually to current Federal expenditures in these areas."

"The Report recommends that total yearly expenditures for discovery of species and their genetic attributes be raised to a minimum of \$130 million (compared to current annual expenditures of \$74 million) phased in over three years."

"Investments in these sites [the Report lists, "National Forest Research Labs, Long-Term Ecological Research Sites, some National Parks, etc."] and their research-support facilities [the National Biological Information Infrastructure especially] should be increased by approximately \$55 million over the current \$300 million per year." [Much of this for what the Report calls, "theoretical work on fundamental ecological principles."]

"The Panel recommends that the National Science Foundation take the lead in an interagency granting program to make approximately \$24 million per year available for these highly interdisciplinary, extremely important, but currently unfunded areas." [Specified in the Report as, "interdisciplinary economic sociological, and ecological research on the relationship between the market economy and natural capital, between society and the biosphere," though the terms ethnobotany and economic botany are not actually used.]

"The Federal government should enable development of the 'next generation NBII [National Biological Information Infrastructure]' by investing a minimum of \$40 million per year for five years (and reasonable maintenance thereafter)..."

"The recommended increase (of about \$15 million to the current \$72 million per year) in informal education opportunities will strengthen the environmental literacy of the American public, and initiate a mechanism for development of scientifically sound curricula and teaching materials that would improve the environmental component of science education in the Nation's schools."

"The Panel's recommendations call for specific investment increases that total less than \$200 million per year (phased in over three years) for research, education, management, and the information infrastructure to support them all. Current Federal expenditures for biodiversity and ecosystems research and monitoring (which total approximately \$460 million per year) are too low..."

With that said, please enjoy the [Interview with Meredith Lane](#).

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