edited by DIANA PABST

Taking Stock of Tropical Biodiversity

When AAAS convened a group of Latin American and U.S. scientists in the heart of the Amazon last month to plan a joint biodiversity project, the delegates spoke earnestly about the need to protect the biological treasures of their countries. What impressed more than one observer, however, was how often the participants moved beyond research interests and stressed the need to link biological conservation with economic and social development.

"The scientists of Latin America have their feet planted firmly on the ground," said Enrique Martin del Campo, director of UNESCO's Latin American and Caribbean Regional Office for Science and Technology. "They are very close to the problems of development. The lack of resources even among scientists makes them much more conscious of the economic reality of their countries."

Support for "sustainable use" of biological resources emerged as an unexpectedly strong theme of the 2-day workshop in Manaus, Brazil, according to Jeff Stann, director of the Western Hemisphere Project in AAAS's International Directorate. The meeting was cosponsored by AAAS as part of a regional plan launched last year to strengthen the foundation for science in Latin American and Caribbean countries.

Policy-makers and government officials also attended the meeting, organized to help countries of the region determine their readiness to implement the international Convention on Biological Diversity.

Drafted at the United Nations–sponsored "Earth Summit" in Rio de Janeiro 2 years ago, the pact was signed by 169 nations and went into effect last December. It calls for all signatory nations to conduct inventories of their flora and fauna, develop biodiversity conservation strategies, and link those strategies to plans for economic and social development.

The delegates—from Brazil, Colombia, Costa Rica, Cuba, Chile, Mexico, Puerto Rico, Uruguay, and Venezuela, as well as the United States—worked to develop a framework for assessing institutional support, data collection and management capability, and education and training needs. The Latin American participants agreed to spend the next 12 months working with scientists and government officials in their countries to analyze "science capacity," then meet again to exchange knowledge and ideas and discuss possibilities for transnational cooperation.

Stann said the project's collaborative approach makes sense because biological assets in the region overlap. "The convention provides for each country's sovereignty over its biological resources. But species don't fall within political boundaries," he said. "Perhaps more than 80 percent of the species in Costa Rica are also going to be found in Honduras and El Salvador, for example."

"This project will be looking at those kinds of connections and what opportunities exist for regional cooperation," Stann said. Biodiversity inventories are under way in Costa Rica and Mexico, and those might serve as models for other countries, he noted.

Jose Israel Vargas, Brazil's minister of science and technology, said the project gives the scientists greater leverage in getting their message across. "Participation in this project will help them gain access to their governments and to the international organizations that can help them fund their efforts at developing biological resources," he said.

AAAS President Francisco Ayala said there are scientists in Latin America and the Caribbean working on biodiversity in isolation, with little financial support —public or private. "In some countries scientists have identified the goals and have the knowledge that is necessary. Our objective is to convince policy-makers to take these scientists seriously, and to see the benefits of doing so," said Ayala, who cochaired the workshop with Antonio Peña, past president of the Academia de la Investigacíon Científica in Mexico.

The biodiversity project is an outgrowth of the Western Hemisphere Science Collaboration Initiative, a blueprint for scientific development in Latin America and the Caribbean drafted last year by representatives of 11 countries ("Inside AAAS," 24 December 1993). The steering committee met in Manaus to discuss progress on its plan of action. One goal adopted was to put science and technology on the agenda of the summit of presidents in the Americas to be held in Miami in December. A likely topic is creation of a Pan American Science Foundation to strengthen support for research in the region and provide a stable base of funding.

For more information, contact Jeff Stann by phone at 202-289-6657; by fax at 202-289-4958; or via the Internet at jstan@aaas.org.

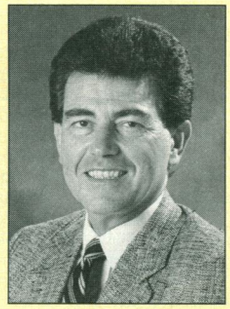
–Coimbra Sirica

SHARON GUYNUP

Bio-prospecting. A biologist collects plant and fungus specimens in a Costa Rican forest.

Broad Argument for Conservation

It is understandable that as a geneticist and evolutionary biologist, AAAS President Francisco Ayala would focus on biodiversity conservation as a key concern of his term. But he also cites moral arguments in making his case for the need to preserve the natural assets of the tropics.



Francisco Ayala

All living things "share a sacredness," said Ayala, who has written and spoken out widely on issues of science, philosophy, and religion. "The other moral argument is based on our own selfish interest," he added. "If we destroy our biological wealth we are depriving future human generations of that legacy. We have a duty to those future generations."

Ayala, a professor at the University of California-Irvine, was born in Spain and has been a frequent lecturer and visiting scientist in Latin America. Since taking office in February, he has spent considerable time working to promote support for science in the region.

He sees the biodiversity project as an opportunity for the United States to exercise scientific leadership in helping its neighbors use their resources wisely. "But it is not right for us to come in offering to 'conserve your biodiversity.' That would be trying to impose some kind of neocolonialism," he said.

"Our message, and the one that the scientists and politicians are beginning to act on, is that you don't want to kill the goose; you want to encourage the goose to lay more eggs."

Top Awards to "Science Update"

"Science Update," AAAS-produced educational radio spots heard by more than a million listeners a day, won two silver medals in an international competition last month. The awards were for best science and technology radio program and best writing in any category.

The contest, begun 35 years ago by an organization called The New York Festivals, honors outstanding work in radio and other communications. This year there were 1298 radio entries from 32 countries. "Considering the excellent radio programs done in England, France, Australia, Canada, and here in the United States, winning two silver awards is quite a feat," said producer Bob Hirshon.

"Science Update" is broadcast by 400 stations Monday, Wednesday, and Friday on the Mutual Broadcasting System's "America in the Morning" program and at other times by 140 Mutual stations. The 1000th show aired last month.

Writer Justin Warner said a surprising amount of work goes into the 90-second spots: Finding ideas, interviewing scientists and transcribing the notes, writing a script that gets the point across in the strict time limits—"from 88 to 92 seconds, not a second longer or shorter."

"Deciding what not to put in is perhaps the biggest challenge," he said.

"There's a delicate balance," he added, "between not making it so technical that listeners are overwhelmed, yet still including factual scientific information." Recent topics have included exopaleontology, a relatively new discipline that searches for microbial fossils on other planets, especially Mars; a possible beneficial use for the drug thalidomide to avert blindness in retinopathy; and an anthropological study of "insect cuisine."

CHRIS MCPHAUL

Special research consultants: Scientific and technical data and analysis are crucial for policy-making at the Environmental Protection Agency (EPA), and this summer nine guest scientists and engineers are applying their expertise to research issues at the agency in Washington, D.C. For 14 years AAAS has coordinated the Environmental Science and Engineering Fellows Program for the EPA. Past participants say they gained a better understanding of federal decision-making; EPA managers praise the quality of research. This year's group: from left, Leland Webster of Harvard Medical School; Eric Maurer, University of Kansas; Robert Buck, City University in London; Sue Ford, St. John's University; Marcelo Korc, Sonoma Technology Inc.; Jean Grassman, Columbia University; Milagros Simmons, University of Michigan; Krishendu Kar, West Virginia University; and Otto Gonzalez, University of Michigan.

Election Slate Addendum

The slate of election candidates for the **Section on Medical Sciences** was not included in the preliminary election announcement in the 24 June *Science*. The slate is:

Chair-Elect: Barry M. Brenner, Harvard Medical School; Irwin H. Rosenberg, Tufts University, Boston.

Member-at-Large of the Section Committee: Alvan R. Feinstein, Yale University School of Medicine; Ralph L. Nachman, New York Hospital-Cornell University Medical College, New York City.

Electorate Nominating Committee: Mary Ellen Avery, Harvard Medical School; Mary K. Estes, Baylor College of Medicine, Houston, Texas; Clark W. Heath Jr., American Cancer Society, Atlanta, Georgia; Albert J. Strunkard, University of Pennsylvania.

Media Reviewers Needed

Are you a scientist with a keen interest in better science communication? The AAAS-Westinghouse Science Journalism Awards program is seeking volunteers to review radio and television entries for scientific accuracy. The topics are diverse, so reviewers are needed in various disciplines.

If you plan to be in the Washington, D.C., area in August or September and would like to help with the screening at AAAS headquarters, call Ellen Cooper at 202-326-6431.

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Computer Issues: Call for Applications

Applications are invited for participation in the second conference on "Legal, Ethical, and Technological Aspects of Computers and Network Use and Abuse," cosponsored by the National Conference of Lawyers and Scientists, a joint committee of AAAS and the American Bar Association.

The workshop, scheduled for 7 to 9 October 1994 at a conference center not far from Washington, D.C., will weigh ideas about what is acceptable behavior in a shared computing environment. Discussions will center on three themes: (i) determining accountability and liability for network content; (ii) defining what network content is "public" and what is "private"; and (iii) what ethical, legal, and administrative frameworks should be employed for the global information infrastructure.

Up to three successful applicants will receive expenses to attend the workshop, which will have 40 participants from a variety of perspectives and disciplines.

Each applicant must submit a 1000-word paper addressing one of the three themes above (the papers will be circulated prior to the meeting), a short resume or biographical sketch, and a brief statement of how one's expertise or perspective might contribute to the meeting. The application deadline is 19 August at 5 p.m. EST. E-mail responses are preferred. Those selected will be notified by 9 September.

Send applications or requests for more information to: Deborah Runkle, Directorate for Science and Policy Programs, American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Phone: 202-326-6600. Fax: 202-289-4950. E-mail: drunkle@aaas.org.

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1993 Annual Report Available

The 1993 AAAS annual report has been published and individual copies are available free to members by request. The 40-page report, titled "The Promise of Science at Work," features highlights of last year, an update on programs, and financial statements. To receive a copy, call the Communications Office at 202-326-6440.