IX. PLENARY SESSION

Untapped Resources and Opportunities for Building Sustainable Alliances

Moderator: Dr. Livingston Marshall, Associate Professor, Morgan State University Keynote Address: Dr. Michael Sissenwine, Science and Research Director, NEFSC, NOAA

Panelists: Ms. Cathy Fore, Manager, MEITP, Dept. of Energy

Mr. Justin Ahanhanzo, Consultant, UNESCO/IOC

Dr. Russell Schneider, Chief, Science Support, Storm Prediction Center, NOAA

Mr. Eddie Hanebut, President, Digital Quest

Mr. Robert Shepard, Executive Director, Science and Engineering Alliance, Inc.

(SEA)

Ms. Senayl Assefa, Project Coordinator, American Association for the Advancement of Science

Mr. Roy Pemberton, Graduate Student, Virginia Institute of Marine Science

Increased Interest in the Ocean and Environment

Dr. Michael Sissenwine began his talk by listing the ways in which interest in the ocean and environment has increased. Much of the attention comes through concern with declining resources, such as the decrease in salmon spawning, concern about marine mammals like whales, and the effect of pollution on the ocean. Other interest is garnered through popular media, including the growth of the Internet. The Internet provides easier and quicker access to essential materials. Scientific communities and laboratories can share materials through the Internet. The new interest in the environment comes with an interdisciplinary approach, combining business, government, and academic interests.

Current Protective Programs

These are programs that can capitalize on the interest in the ocean.

- ► The Ocean Act, a committee to govern how we use the ocean
- ► The Oceans Commission, a private sector analog supported by the Pew Ocean Commission
- Ocean Exploration Proclamation passed by President Clinton, a program designed to capture the public's attention by focusing on the excitement of ocean exploration and discovery
- Census of Marine Life, headed by Dr. Fred Grassle
- HMAP, a program to learn more about marine life through historical documents.

National Marine Fisheries Service Fisheries Observer Program

Mr. Roy A. Pemberton spoke about NMFS' Observer Program, which he felt offered ways to involve MSIs and HBCUs. He found out about these programs while an undergraduate in the Marine Science Department at Hampton University through the Federal List Server and Dr.

George Burbanck and Dr. Robert Jordan. Information was sent directly to his department from Ms. Gladys Reese at the NMFS/SEFSC Lab in Pascagoula, Mississippi. The cruises were conducted in Gulf of Mexico, Mid-Atlantic Bight, Gulf of Maine, and Georges Bank. Mr. Pemberton participated in the Gulf of Mexico Groundfish Survey Cruise in July of 1993. It was a great learning experience and opportunity, as well as a welcomed break from the Copepod identification work he was doing on the microscope. These cruises can be presented in the form of an internship, volunteer work, or in paid positions. As it did for him, it can get students exposed to "at sea sampling" and an opportunity to see the type of work involved in the Observer Program."

The Fisheries Observer Program provides an important link between the scientists and the fishermen. Although this link is rough and strained at times, the sea sampling program provides a real time view of what is happening out at sea in the fishing industry. The Observer Program provides training in monitoring a variety of fisheries, including Long Lining, Scalloping, Otter Trawl, Haul Seining, and Gillnetting. Information from Observer trips provide scientists with information on catch rates, fishing practices, gear modifications, age and growth data, environmental conditions, and by-catch data. Another goal of the Fisheries Observer Program is to monitor for fisheries gear interactions between commercial gear and federally protected species such as sturgeon, sharks, marine mammals, and sea turtles. Conditions under which these interactions occur, and the possible causes and solutions for them are being provided by the Fisheries Observer Program.

The Harbor Porpoise Take Reduction Team used observer data to identify the gear that is directly involved in interactions with harbor porpoise. They were able to pass regulations requiring fishermen to use the appropriate net twine and mesh sizes that had lower incidents of mortality for harbor porpoise. This would not have been possible without the observer data. Currently the Virginia institute of Marine Science (VIMS), the Virginia Marine Resources Commission (VMRC) and commercial fishermen from the State of Virginia are working with NMFS to reduce the incidental take of loggerhead sea turtles in the Chesapeake Bay. The observer data is being used to identify the conditions under which these takes occur and what gear is responsible.

HBCUs' Untapped Potential

Ms. Cathy Fore spoke about the need for HBCUs and MSIs to become more business aware, to market their technological facilities and capabilities. HBCUs must actively create their own entrepreneurial opportunities. Institutions of higher learning must become better business managers.

Sustainable Alliances

An excellent model of a sustainable alliance is the Science and Engineering Alliance (SEA) which was started by Lawrence Livermore National Laboratory, Prairie View A&M, Alabama A&M, JSU and Southern University in 1990. This alliance creates a virtual university of 33,000 students who benefit from the combined resources. SEA Partners work together with other private and public institutions to enhance and promote the capabilities of HBCUs. Dr. Robert Shepard

suggests that other groups form their own four to five member alliances, soliciting partners who balance strengths and weaknesses.

Partnering with Africa

The panelists expressed a strong need for a clearer process by which universities in Africa, and other developing countries, have the opportunity to work with U.S. universities and governmental laboratories. Some universities already do participate in the "twinning" program in which a university in Africa is paired with a university in the U.S. But this has not been put forth as a priority, and as such it has little financial support from U.S. AID. And the process of developing partnerships is not easy, as there is no central clearinghouse. Right now, much of this work is done on an individual basis, in which a few African students are provided with grants. The benefits to both countries and all the involved universities are great, and this is certainly an under tapped resource.

Dr. Brad Brown suggested that people interested in partnering with African universities should try to make direct contact with individual researchers either in a research laboratory such as NIOMR (Nigerian Institute of Oceanography and Marine Research) or an academic institution such as the University of Ghana, Legon. The Internet makes this possible.

Becoming Part of the Policymaking Decision

It is crucial to become part of the decision making process. By the time information reaches the Commerce Business Daily and the Federal Register notes, it is too late to influence the outcome. President Bush's decision to put \$1.4 billion over the next four years into HBCUs came through personal, direct lobbying by African-American leaders. HBCUs, as well as NOAA, need to develop and maintain strong contacts in the government to influence policy strategy and decisions.

Need for Better Communication

Dr. Gary Matlock of NOS asked: What can we do to better give people communications about programs like the National Fisheries Observer Program? What can we do to get more awareness of the kind of activities available? Dr. Roy Pemberton replied that this is a difficult problem. There is the problem of not having a central list serve, so information can reach the right people all the time. Currently, information goes up on bulletin boards at the science departments of colleges, but clearly this is not as effective as it needs to be. We do want to get more people involved, and we need to have more effective ways of reaching our target audience.