

Gene Preservation Occasions Pair Of Conferences

Two related meetings on biological diversity have been scheduled 10 months apart in Washington, D.C., beginning with the U.S. Strategy Conference on biological diversity Nov. 16-18, 1981, co-sponsored by the Department of State and AID, and continuing Aug. 9-13, 1982, with a 5-day International Symposium and Workshop on the application of genetics to the management of wild plants and animal populations.

The Strategy Conference will seek to provide guidance to the U.S. government on how to proceed domestically and through international channels to promote the maintenance of biological diversity.

Vernon C. Gilbert, who is coordinating conference proceedings, described the aims:

- to review the scope, magnitude and sources of worldwide plant and animal species losses;

- to assess the economic, social, ecological, political and strategic implications to the U.S. and other countries of a continuing decline in species diversity, particularly as it may relate to world food supply, energy demand, and industrial output;

- to identify and evaluate technologies, institutions and scientific knowledge available for conserving biological diversity;

- to review the nature and effectiveness of U.S. government domestic and international policies and programs; and

- to recommend initiatives the U.S. should undertake to stimulate and assist an expanded worldwide effort in this area.

The rapid dwindling of genetic resources, worldwide, could reach ruinous proportions in the short space of a few human generations, Gilbert said. An important means of correcting this situation would be to increase the numbers of national parks, reserves and protected areas and to improve the management of the biological resources in these areas. This will be the subject of the second conference, in 1982.

Christine M. Schonewald-Cox, biologist in the WASO natural science division and Symposium Chairman, says: "The purpose of the second conference is to transfer new knowledge and technology to the field of biological resources management in order to improve the long term success and fiscal efficiency of biological resources management programs. An additional aim is to short-cut the decades it normally takes for such information to filter from academic circles to the remote field locations where biological resources management actually takes place.

"The importance of genetic data in promoting the health and adaptability of populations has been virtually unrecognized except in crop and livestock production, where management goals are less complex and more limited in scope," Schonewald-Cox points out. Recent developments, she maintains, have made it easier to genetically characterize populations so that managers can consider genetic factors along with other data in making management decisions.

The symposium and workshop will provide perspective on the potential for managing the genetics of biological resources. It will address specifically the problems associated with the management of wild animal and plant populations, primarily in the temperate zone. The increasing isolation of the protected areas where these populations still exist will be considered as such isolation interferences with historical patterns of movements and migrations between populations.

Other topics to be discussed include species declines, extinctions, the founding of new populations, the merging of separated populations, and the maintenance of natural diversity among populations and taxonomic units.

"We expect the symposium to identify gaps in our

knowledge, and to develop recommendations for interim management practices that could be implemented immediately," Schonewald-Cox said. "The shape of future studies also should emerge as we identify adverse conditions and trends known to be occurring or anticipated in protected areas."

Each of the five conference days will feature a one-topic section, where advances in knowledge and techniques will be presented from the pertinent academic and applied fields. These presentations will be followed by exploration of the relevance and feasibility of this information for resource managers. Limitations and advantages of diagnostic methods for recognizing problems and subjects for additional research will be discussed and summarized, including the testing of hypotheses in the field.

The conference wind-up will consist of formulating resources management initiatives, policy initiatives for state and federal governments, and recommendations for additional research.

Section topics for days one to five will be: the isolation of populations, the extinction of populations, the founding of new populations, the merging of naturally disconnected populations, and preserving the natural diversity of populations and taxonomic units.

Speakers will include botanists, zoologists, geneticists, biogeographers, systematists, field resource managers, wildlife biologists, and individuals engaged in genetic research and application from the fields of agriculture, horticulture and silviculture.

The audience will be individuals who hold field management and policy formulating positions in state, federal and international agencies or organizations that have an interest in natural resources management.