ENCLOSURE 1 TO APPENDIX I

Integrated Research Programs Approved by USNC/IBP

1. Aerobiology Program

Objective: To conduct and correlate on a world wide basis research on dispersal of air-borne biological material, including pollen grains, fungus spores, algae, pathogens, and insects that affect health of both animals and plants.

Program: There are firm requirements for better predictive techniques concerning the spread of crop disease and pests and other bacterial, viral and fungal diseases affecting man. Identification of more vulnerable periods in the life cycles of pests and microorganisms will lead to improved methods of control.

The IBP will afford means of standardizing observations and for establishing communication between investigators internationally. It will also provide a framework of interdisciplinary cooperation in many fields, including phytopathology, entomology, meteorology, oceanography and ecology. Scientists with existing projects will reconcile differences in methods of observation and reporting, and identify gaps in current efforts to solve these problems.

Funding: First year support required: $250,000
Five year support required: $16,000,000

Program Director: Dr. William S. Benninghoff, Department of Botany, University of Michigan.

2. Analysis of Ecosystems

Objective: To clarify by means of integrated research and multidisciplinary analyses the operation of ecosystems; that is, the interaction of all organisms with a defined environment including the atmosphere and soil.

Program: Research in ecosystem operations will probably prove to be the ultimate understanding of the environment and how man-made changes will affect it. Major studies will be done on the following types of regions: eastern forest, western coniferous forest, Arctic or Antarctic, western grassland and cultivated ecosystems, desert, and tropical forest. The study of tropical forests will be in cooperation with Latin American groups. Final site selections will be made by a special committee. Maximum use will be made of computer-oriented mathematical methods. Information