

PARTICIPATION IN ECOSYSTEM STUDIES

The work of the Subcommittee broadly overlaps that of other subcommittees, particularly Conservation of Ecosystems, Productivity of Terrestrial Communities, Productivity of Freshwater Communities, and Productivity of Marine Communities. Some aspects of the anticipated cooperation with these groups include the following:

1. Systematic Studies and Identification

The reliability of productivity studies and other studies of ecosystems depends on the correct identification of the component animal and plant species. Systematics and Biogeography regards as one of its functions the giving of advice and information concerning persons who may be able to provide identifications or to participate in field studies. Unfortunately, identification is impossible for many groups of organisms in many parts of the world, owing to lack of knowledge and shortage of qualified taxonomists.

Where the biota is poorly known taxonomically, as it is in most areas in the tropics, ecologists should single out key species in the productivity chains and limit their identification demands to these species. Dominant animals and plants can usually be identified.

The interests of ecologists and taxonomists largely coincide in the making of exhaustive inventories, whether of ecological sites or of localities where the biota is doomed to obliteration by human activities.

2. Site Selection

Systematists expect to participate in the selection of sites for major ecosystem studies, to insure involvement of qualified systematists and to effect maximum accuracy in identification.

3. Keys and Manuals

Systematics and Biogeography will encourage the preparation of keys and manuals, and lists of animal and plant species that will be useful to biologists working on various phases of the IBP program. Examples of such manuals are those on African mammals and on tropical American snakes and lizards, mentioned above.