

Second Symposium on Zoology Scheduled for Havana, Cuba, 1991

The Second Symposium on Zoology will be held in Havana, Cuba, from 18-23 June 1991. All persons interested in zoology may participate in the Symposium as delegates. The registration fee (amount to be announced later) will include attendance to work sessions, documents, accommodations, and social functions. Special rates will be available for students and accompanying persons. The Organizing Committee is arranging scientific tours related to the Symposium. Concurrent with the Symposium, a scientific exhibition will be presented. The official languages of the symposium will be Spanish and English. Simultaneous translation will be provided for plenary sessions and main lectures. Paper abstracts and full texts may be submitted in Spanish or English for their publication.

Scientific Program

Papers will be presented in work sessions and as posters. The main topics of the Symposium will be:

1. Systematics
2. Ecology
3. Ethology
4. Zoogeography
5. Anatomy
6. Paleontology
7. Population Genetics
8. Applied Zoology
9. Medical Zoology
10. Preservation and better use of natural resources

Plenary Sessions

Opening and closing sessions, as well as main lectures, will be conducted as plenary sessions.

Free Papers and Posters

Time allotted for scientific paper presentations will be 10 minutes with 5 minutes for debate.

Satellite Meetings

Scientific societies devoted to zoology may hold work meetings during the Symposium. The Organizing Committee will be pleased to receive applications. Interested scientific societies and organizations should contact the Executive Secretary of the Symposium.

Accommodations

Havana has numerous fine hotels of different categories, including:

- First class hotel
 - single room
 - double occupancy
- Tourist class hotel
 - single room
 - double occupancy

Cuba Meeting (Continued)

To receive a Provisional Application Form (necessary to be included in future mailings), contact:

Rafaele Alayo
Secretario Ejecutivo
II Simposio de Zoología
Palacio de las Convenciones
Apartado 16046
La Habana, Cuba

Manomet Bird Observatory's Field Biology Training Programs

The Manomet Bird Observatory, in association with Ohio Wesleyan University, Earlham College, and Wheaton College, is offering several Field Biology Training Programs of interest to Society members in 1990-91, including:

Bird Communities of the Tropical Forest (28 January - 10 May 1991; U.S.\$1,000 travel expenses). Students will join the Observatory's research expedition to Belize to document the species, abundance, and habitat preferences of neotropical avian migrants during the northern winter. Belize has large areas of undisturbed habitat and much wildlife. Habitats include tall tropical forests, pine woodlands, savanna, small lakes, and river systems. Many animal species extinct or endangered elsewhere are common in Belize, including jaguar, howler monkey, tapir, and Ocellated Turkey. Whereas the present status of habitats and organisms in Belize is good, the natural ecosystem are beginning to deteriorate under pressure from increasing development and human populations. The results of the Observatory's baseline studies will be valuable to Belize's conservation efforts.

Introductory seminars on the ecology of tropical birds will take place at Manomet preceding field work. Traveling to Belize, the research team will explore the unspoiled rain forest of the Río Bravo Conservation Area in northern Belize. Students will participate in bird banding and censusing, documenting vegetational structure, and determine resource partitioning of non-breeding migrant and tropical resident birds. The research team will return to Manomet Bird Observatory to analyze and write up results.

Coastal Populations of Birds in Belize (28 January - 10 May 1991; U.S.\$1,000 travel expenses). Alan Poole and Kathy Parsons will lead students in exploration of the keys and mangrove islands of coastal Belize. A remarkable assemblage of birds,

including Ospreys, Snail Kites, Noddy Terns, Magnificent Frigatebirds, and numerous species of herons, egrets, and ibises, is found in the study area and remains unstudied.

After preparatory seminars at Manomet Bird Observatory, the research team will spend five weeks at a marine facility on Wee Wee Key, five miles offshore near Belize's barrier reef. Students will document bird diversity and abundance. Research will emphasize colony-site selection and the habitat requirements of colonially nesting waterbirds. The ecology of inhabited islands will be compared to similar, nearby sites that are not being used by nesting birds. Students will assist in aerial and water surveys of the majority of Belize's coastal islands. Students will enjoy opportunities to explore a tropical lagoon ecosystem and to become familiar with conservation problems in a developing country.

Shorebird Use of the Cabo Rojo Salt Flats, Puerto Rico (12 August - 13 December 1991; U.S.\$500 travel expenses). Students will join Society members Brian Harrington and Jaime Collazo on the extensive Cabo Rojo Salt Flats, a primary stopover site for shorebirds in the Caribbean. The Cabo Rojo Salt Flats provide 1,100 acres of wetland habitat for 24 species of sandpipers and plovers. The salt flats system is the largest and most important shorebird habitat on Puerto Rico. More than 40,000 shorebirds (primarily "peep" species - Semipalmated, Least, and Western Sandpipers) pass through the area during fall migration. Four species, including the Snowy Plover, are breeding residents. The diverse community of waders offers unlimited opportunities for the study of migratory and resident ecology, wetlands use and population dynamics.

The documented use of Cabo Rojo by shorebirds, coupled with the persistence of four endangered plant species, has prompted the U.S. Fish and Wildlife Service to name the privately owned salt flats as an area of critical wildlife value. Yet several development schemes threaten continued use of the wetlands by birds. Currently in place are salt extraction lagoons which affect water and salinity levels of the area. Conservation of natural resources in the Caribbean is a critical issue. Students' work will help in formulating a conservation strategy and management plan for the Cabo Rojo Salt Flats.

Students will join Brian Harrington for five weeks of preparatory seminars at Manomet Bird Observatory. During this time, they will also gain experience in shorebird identification and banding techniques. The research team will travel to Puerto Rico in late September to begin study of shorebird use of the Cabo Rojo flats, including turnover rates and activity budgets. Students will focus on

shorebird research under Dr. Collazo's direction, but will also be exposed to other research projects investigating the effects of reforestation on montane bird communities and the ecology of several species of sea turtles.

Students will be housed at the U.S. Fish and Wildlife Service headquarters at the Cabo Rojo National Wildlife Refuge, Boquerón. The field station provides comfortable living and work space, including computer facilities.

Tropical Forest Communities in Puerto Rico (12 August - 29 November 1991; U.S.\$950 travel expenses). Economic pressures are causing widespread destruction of one of the world's richest, most complex, and least understood ecosystems: tropical rain forest. This field semester in Puerto Rico immerses students in a rain forest Environment, as they conduct research with applications toward conserving the endangered biological diversity of the tropics. Since 1974, Manomet Bird Observatory's Nick Brokaw has studied forests of Central America and Puerto Rico. Students will join him in studies of factors controlling the structure, species composition, and consequences of disturbance in a Puerto Rican rain forest.

Students will begin the semester at Manomet with four weeks of reading and discussion about tropical biology, the ecology of tropical plants, the natural history of Puerto Rico, conservation issues of the tropics, and field methods. Then, during four weeks in Puerto Rico, research will concentrate on the ecology of trees in the Tabonuco Zone of the Luquillo Forest, but students will also visit upper montane, cloud, palm, and dry forest types. The research objectives are twofold: to test hypotheses about what produces and maintains biodiversity in tabonuco forest, and to study the process of forest recovery from disturbances, including logging. Such questions are especially important in the tropics, whose biological richness and vulnerability will be seen on this island in the West Indies.

A brochure with further descriptions of these and other Field Biology Training Programs, as well as application procedures, can be obtained by writing to:

Field Biology Training Program
Manomet Bird Observatory
Box 936
Manomet, Massachusetts 02345
U.S.A.
telephone: (508) 224-6521