

Society for the Preservation of Natural History Collections

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The 1988 annual meeting of the Society for the Preservation of Natural History Collections (SPNHC) was held 29 May to 3 June at the Carnegie Museum of Natural History, Pittsburgh, Pennsylvania. SPNHC is a multidisciplinary society composed of people from the fields of anthropology, botany, geology, paleontology, zoology, and others who are concerned with the development and preservation of natural history collections. The scope of the society includes practical and philosophical aspects of any direct or indirect activity providing improved care of specimens and related documentation and support materials.

Although many issues were discussed, the theme of the 1988 meeting was Conservation. The need for conservation of natural history collections was made abundantly clear by keynote speaker Peter Raven of the Missouri Botanical Garden, who stressed that natural history specimens can no longer be considered a renewable resource. The rate of habitat destruction and species extinctions makes natural history specimens as unique and irreplaceable as their human history artifact counterparts. Valuable insights into the practical aspects of caring for natural history collections were presented in 37 oral papers, 10 posters, and 9 workshops during four information-packed days.

There is a strong similarity of conservation concerns between natural history materials and anthropologic/ethnographic artifacts because of the materials involved. The majority of the invited speakers, including those in the symposium on controlling the environment, were conservators from fine art or human history disciplines. This fact reflects the present dearth of dedicated natural history conservators. It is to be hoped that the growing awareness of the need for conservation of natural history materials will

result in a larger pool of specialists in the near future. Meanwhile, the cross-fertilization between disciplines is as necessary as it is refreshing.

How specimens are initially prepared and the conditions under which they are stored can affect their long-term stability and their value for future scientific study. Several papers examined traditional preparation techniques and pointed out potential problems including harmful effects of certain plastics used to consolidate vertebrate fossils; chemical effects of biocides and other substances on amber; the disintegration of skeletal material following preparation with enzymes: and observed dimensional changes in proportional measurements of preserved fish. Clearly "it's always been done that way" is not a valid rationale for using a classical preparation technique. There is much scope for research into new materials and methods.

Documentation is as essential to any collection as the specimens themselves. Five posters presented various aspects of computerized cataloguing systems. In addition, two papers covered the documentation of treatment of paleontological specimens. The Conservation Committee of SPNHC is currently developing guidelines for minimum standards of specimen treatment documentation. New knowledge of the harmful effects of many chemicals to both humans and specimens makes this sort of documentation particularly important.

An interesting couplet of papers presented case histories outlining conservation problems encountered in closed and open dioramas. As is so often the case in environmental conservation, the biggest threat in both situations seems to be related to direct or indirect human intervention.

Direct application of an archeological conservation technique was demonstrated in the use of a method developed for conserving desiccated baleen artifacts to restore dried-out fossil bison horn sheaths. Just to show that not all the communication is one way, a study on the deterioration effects of micro-organisms in mammal hair should prove useful to ethnographic conservators working with fur and hair artifacts.

A day of practical applications offered tours of facilities of the Carnegie Institute and a selection of workshops. I attended excellent workshops on the selection and use of plastic films, care of library and archival materials, and introductory radiography. Others included monitoring environmental conditions, identification of insect pests, and computer applications.

The highlight of the meeting was a daylong symposium by Monona Rossol of Arts, Crafts, and Theatre Safety, on health hazards associated with natural history museums. Again, traditional methods were examined with respect to the many chemicals used, often without regard to their affects on the person using them or on people working in the surrounding areas. All participants left the symposium with a heightened awareness not only of the hazards of many commonly used materials, but the ways of avoiding those hazards either by using appropriate protective measures or substituting less hazardous substances. The symposium was particularly timely for Canadian participants. Legislation on the Workplace Hazardous Materials Information System (WHMIS) effective October 1988 will make knowledge and communication of material hazards in the workplace mandatory.

The meeting was well organized with plenty of time during breaks, poster sessions, and at the two social activities to meet colleagues and exchange ideas. In addition, the helpful staff at the Carnegie welcomed registrants to tour their facilities. Participants have been invited to submit their papers for publication to *Collection Forum*, the biannual journal of the society.

Although SPNHC is only three years old, membership is close to 200, with representation from nine countries on four continents. The breadth of disciplines and geographic regions represented underline the need for communication among natural history collection workers in order to protect our heritage of specimens that not only support the academic scientific disciplines, but preserve the history of the natural world. Next year's meeting, tentatively 9-13 July 1989, has potential for a strong earth science component as it will be jointly hosted by the Tyrrell Museum of Palaeontology and the University of Calgary. Anyone wishing more information about SPNHC should contact Stephen L. Williams, Section of Mammals, The Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, Pennsylvania, USA 15213.