SPNHC NEWSLETTER

Society for the Preservation of Natural History Collections Volume 3 Number 2

LETTER FROM THE PRESIDENT

The promises made to us by Jane Danis about a good meeting in Alberta as well as any positive expectations that we had beforehand were not only satisfied but by far surpassed in every way. A legion of over thirty well coordinated and very eager volunteers and a raft of supporting organizations were all behind this great success. On behalf of all SPNHC members, I express appreciation and deep gratitude to all who labored to make this meeting an extraordinary one, in particular Emlyn Koster, Anthony Russell, Jane Danis, Herbert Rosenberg and Andrew Newman.

The Society has become incorporated and its bylaws have been revised and adjusted as required. A large number of the many accomplishments of the Society during this past year are quoted by the respective committees in the SPNHC Report of Committee 1988-1989, which has been compiled for and distributed to all of you.

We have successfully entered into a new phase of our Society, one of growth and consolidation that enhances our commitments and objectives for this ongoing year.

From Spain, the National Museum of Natural Sciences and the Superior Council of Scientific Research have reiterated their invitation to the Society to organize a special International Symposium on the Care of Natural History Collections for 1992 in Madrid to commemorate the five hundredth anniversary of Columbus' discovery of America. The Symposium will be held in the first half of May. The exact date will be announced in the near future; in any event it will precede the SPNHC 1992 Annual Meeting. A special committee has already started to coordinate the Madrid symposium.

The activities and efforts of the Society relating to education and training keep expanding to meet the demands of the membership. Apart from the particular objectives set by the respective standing committees, a new Sessional Education and Training Committee, chaired by Lynn Barkley, has been formed by the President.

By now, and for this year, many committees have filled their positions of members with highly qualified volunteers. I welcome all committee members to the heart of the Society where your work will shape its future.

1989 ANNUAL MEETING

"Did you see the teeth in that Albertosaurus!" "Wow, our Union didn't look like this!" You could hear such expressions of amazement during the week of July 23-28 in Drumheller and Calgary. Both meeting places, Tyrrell Museum of Palaeontology and University of Calgary had excellent facilities and many things for the 150 participants at the 4th Annual Meeting to marvel at.

In Drumheller, Sunday's pre-meeting activities included an all day tour of Dinosaur Provincial Park while

Council and Committee Representatives met, and the evening icebreaker afforded a chance to greet friends. Monday was devoted to technical sessions and evening tours behind the scenes of Tyrrell and in the badlands of Midland Provincial Park kept everyone busy. Tuesday morning, the panel on *Public vs. Research Access to Collections* stimulated lively discussions, and in the afternoon, the general business meeting included positive news about the strength and growth of SPNHC.

Cocktails and a dinner, sponsored by Spacesaver Corporation, at the University of Calgary awaited the registrants after the transfer to Olympic Village. Technical sessions on Wednesday were held in the ultramodern student union. Dinner at the Zoo was eye-level with polar bears, sea lions and beavers. Luckily, fish was not on our menu. Birds of prey demonstrated their flying skills, elephants greeted the guests, and tours of the Botanical Garden and Prehistoric Park topped off the fun filled evening. Thursday's tours and workshops on campus were extremely informative.

The Friday symposium, Storage Design and Materials for Natural History, and display of materials reemphasized how much more needs to be done. Gerry Fitzgerald entertained with a fast paced (and instructive) demonstration of how to build inexpensive, simple supports for oddly shaped or delicate specimens. The post-meeting tour of the Provincial Museum of Alberta at Edmonton concluded the hectic week.

The conference organizers, their institutions and able staff members, planned and executed an enjoyable and stimulating meeting.

ASC-SPNHC JOINT WORKSHOP

Ninety-two participants attended the 1989 annual Association of Systematics Collections (ASC) meeting in Lincoln, May 18-20. Workshops entitled Educating Systematists/Curators and Collection Management and Preservation included about 25 speakers, providing a variety of perspectives and information. The collection management workshop, co-sponsored by SPNHC, included several sessions: perspectives by curators, collection managers and directors; case studies of programs in collection management and preservation; and the role and activities of professional organizations (AAM, SPNHC, NIC, AIC) and funding agencies (IMS, NSF) to support collection care activities. Questions and information concerning assessment of collections, training, research and publication avenues, and funding were presented. In addition, there was discussion concerning the professionalization of collection managers both from the standpoint of need and requirements. A review of the workshop will appear in the December ASC Newsletter.

DUES

Dues notices for 1990 will be mailed on or about 1 October. By moving this date forward one month, it is hoped that fewer people will have conflicts with their holiday budgets. Please keep in mind that commitment to serving on a committee or running for Council requires that you remain a member in good standing.

CALL FOR NOMINATIONS

The Election Committee is now receiving nominations for the 1990 slate of officers. The positions which will be filled are: President-elect, Secretary, and two Members-at-large. Members are encouraged to send the names and addresses of possible nominees to the Nominations Subcommittee by December 1:

Wayne Lyons Anatomy Department Queen's University Botterell Hall Kingston, Ontario, Canada K7L 3N6

Bill Selden Geology Hall, C.A.C. Rutgers University New Brunswick, NJ 08904 USA

DOCUMENTATION GUIDELINES

The Conservation Committee and SPNHC Council would like to ask you to rigorously review and comment on two sets of documentation guidelines for the preparation and conservation of specimens. Approved and published as working documents, the guidelines for paleontological and geological specimens appeared in the Fall 1988 issue of Collection Forum (Vol. 4); the guidelines for biological specimens will be published in the Fall 1989 issue. In order to revise and improve these recommendations, the authors and committee need constructive criticism from others who will be using them in their work. Please send your comments and suggestions directly to the authors (addresses are included in journal articles).

COLLECTION FORUM

Authors are encouraged to submit manuscripts concerning the development, management and preservation of natural history collections for possible publication in Collection Forum, the SPNHC journal. Guidelines are included on the back cover of the journal or are available from the Managing Editor, Paisley S. Cato. Manuscript acceptance is based on comments by at least two reviewers in addition to the Associate Editor. Six free reprints are provided to the first author; additional reprints are available for a fee based on the length of the published paper. Authors are also requested to consider paying voluntary page charges (\$50/page) to help offset the high cost of publishing a journal; but all authors should realize that manuscripts are accepted regardless of ability or willingness to pay page charges. If there are any questions concerning SPNHC publications, contact the Managing Editor (#4).

COMMITTEE NEWS

Finance Committee and Treasurer report that the SPNHC application for determination of non-profit status in the U.S. under 501(c)(3) is still pending. Subscriptions, memberships and requests for back issues continue to arrive daily in the Treasurer's office. Membership has doubled since June 1988 due to the efforts of many people. A new chairman will soon be named to the Finance Committee. The committee will assist the Treasurer in fiscal management considerations as well as pursuing new avenues for perpetuating the current good health of SPNHC finances.

Conference Committee has produced a draft of a document to assist institutions that intend to host SPNHC Annual Meetings. During the coming year, these guidelines will be modified to reflect ideas developed at this year's Annual Meeting. The committee also assisted the Local Conference Committees in Drumheller and Calgary and will help the Local Committee in Chicago to insure a successful meeting.

Membership Committee created a membership database, produced a directory, wrote welcoming letters to new members, and worked hard to raise the membership to over 365 by mid-July. The Committee relies on the assistance of every SPNHC member to help promote the Society. With a little help and a lot of hard work, it should be possible to double the size of the Society by the next Annual Meeting and the Committee will be working in every way possible to accomplish this objective.

Resources Committee: Bibliography subcommittee will explore the possibility of working with National Institute for Conservation (NIC) to provide annotated bibliographic references on topics related to the care of natural science collections, if NIC develops its proposed information service. The citations could be entered into the worldwide Conservation Information Network, and could be accessed by SPNHC members through NIC. NIC hopes to be able to procure, and provide for a nominal fee, copies of hard-to-find papers as well as bibliographies on requested topics. Collections subcommittee will draft a preliminary letter concerning the prospect of a survey to locate orphaned natural science material which might be suitable and available for use in educational programs, and will submit the letter for Council's approval. The letter will then be sent to selected museums and universities in an effort to determine whether or not a survey would provide useful results. Computers & computer use subcommittee will prepare a brief report, updating the results of the survey on computer use, and submit it to the Newsletter for publication. They will explore, with the Newsletter editor, the possibility of publishing a brief questionnaire on a specific topic related to computers. Supplies & equipment subcommittee will pursue an

agreement with the Getty Conservation Institute to develop a cooperative project which would permit information on supplies and suppliers for natural history collections care to be entered into the Conservation Information Network, with SPNHC maintaining a proprietary interest in the information such that it could be made available to our members via the subcommittee. Any proposed agreement will be submitted to Council for review. The subcommittee will also continue to refine the survey form to be used in collecting data for the supplies and equipment database and will run another test, with a revised form, possibly at American Museum of Natural History. The subcommittee chair has expressed interest in preparing an exhibit on new natural history collections care supplies, similar to the display prepared for the Calgary symposium, for future Annual Meetings, if the Conference Committee and host institution are interested.

Resources and Conservation Committees will explore the possibility of using the proposed NIC information service as a means to assemble and perhaps disseminate the data in the Conservation Resources Directory. The committee will pursue an agreement with NIC which would allow SPNHC to retain a proprietary interest in the information, such that we might be able to publish the directory again, if desired.

Conservation Committee: Assessment subcommittee plans to develop a detailed outline of methods of assessing fluid collections. They will also explore the idea of assembling wet assessment kits and manuals for use by SPNHC members. Documentation subcommittee will edit for publication in Collection Forum, the suggested documentation guidelines for bioscience collections. The guidelines will be sent to a variety of scientific professional societies for review. The subcommittee is open to suggestions for other types of documentation for future projects. Research subcommittee distributed a list of research projects in natural science conservation to the Conservation Committee which will update and revise it, and possibly distribute it to a conservation database, such as Conservation Information Network. Ad hoc subcommittee on poster development will work on the text and basic design for a conservation poster.

Archives Committee approached the Smithsonian Archives and the Archives has formally agreed to serve as the official depository for the archives of SPNHC. They have forwarded an "Agreement of Transfer", a standard legal document which says, among other things, that SPNHC records, upon transfer, will become "archives passing to the Smithsonian." A copy of this agreement has been sent to the President for comment and Council approval. Material previously assembled will be transferred to Washington. Mr. William Deiss, Deputy Archivist, Smithsonian Archives, has kindly provided some

written guidelines for archives that outlines categories of records that should be included in the history of organizations such as SPNHC and these will be used to begin organizing SPNHC material.

Publicity and Liaison Committee has SPNHC posters and flyers available for members to take to professional meetings. In the U.S., contact Elana Benamy [(215)299-1137] and in Canada, contact Ingrid Birker [(514)398-4092] for copies. The committee, in conjunction with the Ad hoc poster subcommittee, will design a new information poster for display at the 1990 AIBS meeting in Richmond, Va. Members who have taken pictures at SPNHC annual meetings are invited to send prints for possible use in the poster.

The President has formed three new sessional committees to work on topics of special interest:

Logo Committee will review the ballots and numerous suggestions submitted in Drumheller and Calgary. There was no clear winner among the logo designs entered but the design with museum objects was favored, and the committee will work with this idea to create a unique SPNHC logo.

Education and Training Committee will organize special training courses/workshops to be held at Annual Meetings and also investigate the feasibility of registrants obtaining continuing education credits.

Committee for Evaluating Collection Support Positions will develop a profile of professionals who function as collections managers in the natural sciences and develop a profile of existing collection manager-type positions in Canada and the United States. There has been a growing concern over the lack of definition of "collection manager" type positions and professionals in the museum community. Who are they and what do they do? Descriptions concerning what they actually do as well as what they might be expected to do are varied and nebulous. Chaired by Paisley S. Cato, this committee will be contacting numerous SPNHC members and nonmembers for information.

CONSERVATION TRAINING COURSE

Janet B. Waddington, Royal Ontario Museum

The course Conservation of Earth Science Collections was held at the Conservation Analytical Laboratory in the Museum Support Center of the Smithsonian Institution from April 10-14, 1989. Sixteen participants included conservators, collection managers and curators from institutions in Canada and U.S., and two observers from the United Kingdom brought the attendance to eighteen. The primary instructors, Gerald Fitzgerald and Robert Waller, both from Ottawa, are the only conservators in North America specializing in earth science materials,

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having trained as a palaeontologist and mineralogist, respectively. There were also two guest speakers from the Smithsonian, Stephen Koob of the Freer Museum and Carolyn Rose of the Museum of Natural History.

The course covered aspects of environmental consideration, ethics and attitudes, documentation, conservation treatment, replication, exhibition concerns, and identification of funding sources. The close interrelationships between many of the topics meant that none could be fully covered without reference to others. In addition to lectures, each day included tours or practical demonstrations, with some hands-on applications. A comprehensive bibliography and literature were provided to all participants.

At the outset we were told not expect recipes for collection treatment. What was offered was the foundation to understand the mechanics of material/environment interactions and material deterioration so that we should be able to recognize potential problems. This, in combination with an understanding of the variety of different types of treatments that are applicable to different situations, will make it possible to devise the appropriate responses as needed.

The major focus of the course was on preventive conservation. Conservation treatment was presented as the minimum intervention required to stabilize the specimen. In all instances, the proposed use of the specimen must be considered when choosing a treatment. Application of any foreign material may invalidate future analysis of the specimen. The ethics of repair and reconstruction, even of display specimens, were discussed at length. Considerable time was spent on the need to document everything that is done to a specimen. Everything from collecting techniques, through preparation, to a history of the storage environment may be relevant to the future condition of a specimen.

Environmental considerations, taken as a whole, comprised the bulk of the course. This topic was subdivided in energy (temperature, radiation, and physical forces); materials (pollutants, oxygen, water); and people (the greatest single threat to collections).

Stephen Koob gave an interesting if somewhat technical account of synthetic materials used in conservation, particularly adhesives and consolidants. This included an explanation of the different types of synthetics and appropriate applications for each as well as a useful summary of the properties of natural and synthetic adhesives and consolidants used on earth science materials now and in the past. Application of this information will require a good deal of further reading on my part, but we were provided with an extensive bibliography on the subject.

The other guest speaker, Carolyn Rose, discussed the Conservation Survey Program of the Institute for Museum Services. Although the details of the program were

irrelevant to me, the survey questionnaire can be applied to self-examination of any collection.

A good yardstick for measuring the value of a course is how it can be applied. As a result of attending the course I have formulated the following plan for immediate implementation: 1) document existing environmental conditions in the storage area to determine what problems may exist; 2) consider solutions for problems that exist and set priorities for long and short term treatment as time and budget allow; 3) devise plans and policies to avoid creating conservation problems in the future; and 4) initiate a method of documenting specimen treatment.

This was an excellent course. Daily evaluation sheets asked the question "Was enough time spent on the topic?" It was tempting to answer "No" in every case, simply because all topics were so important. The course material could easily cover two weeks or longer, although I doubt whether the energy level of instructors or participants could have survived that long. As it was, it provided a comprehensive introduction to the subject of conservation, particularly for a non-conservator like myself, with practical and inexpensive solutions to many common problems.

IN PROGRESS......

The Museu Paraense Emílio Goeldi, founded in 1866, is a research institute concerned with the physical, biological and cultural environment of Amazonia. Research results from the institution have helped guide economic development in Amazonia, extension activities have allied the Museum with the community, and exhibits have engendered an appreciation for the wonders of this region and the promise it holds for humanity. In 1985, the Museum was added to the roster of prestigous research institutions by the Brazilian National Research Council. The Museum is set in 13 acres in the center of Belém and includes a zoobotanical park and aquarium in addition to the Museum building. The Department of Social Sciences includes anthropology, archaeology, linguistics, human geography and regional history, and houses 15,000 ethnographic objects. The Botany Department houses over 130,000 herbarium specimens, 4,000 fruit samples, 6,000 wood samples, and 4,000 pollen samples. The Zoology collections include 20,000 mammal skins, skulls and anatomical specimens, 54,000 bird skins, wet collections, skeletons, eggs and nests, 62,000 herpetology and ichthyology specimens, 660,000 insects on pins and in alcohol, 2500 miscellaneous arthropods and 2800 mollusks. The library and archives house over 200,000 books, pamphlets, periodicals, maps and manuscripts. The Museum publishes 5 scientific periodicals: Boletim do Museum Paraense Emílio Goeldi in 4 sections, anthropology, botany, zoology and earth sciences; Revista de Arqueologia, Memoirs of the Emílio Goeldi Museum; Arboretum Amazonicum; and the newest journal, devoted to museological studies, Ciências em Museus. For more

information about the Museum and its holdings, subscription information or guidelines for submitting manuscripts, contact: Dr. Guilherme M. de la Penha, Director, Museu Paraense Emílio Goeldi, Belém, Pará, Brazil.

The Durban Natural History Museum is a small museum with an exceptionally well-kept ornithology collection of 36,000 specimens, the vast majority of which are skin preparations. We have small numbers of alcoholic and osteological preparations and bird eggs. Five years ago, a decision was made to change to freeze-drying as the method of preparation and we now have over 600 freeze-dried specimens. As the new incumbent of the ornithological post at this museum, I am concerned about the long term prospects of these specimens. This is a plea for assistance. I ask for any published or unpublished reports on the long term survival of freeze-dried material. I intend to carry out tests of the rate of rehydration of birds of different sizes and will attempt to rehydrate specimens, remove material (e.g. stomach contents, muscle, liver) and then attempt to freeze-dry material again. If represervation is not successful, it suggests that the carcass should be removed before freeze-drying. Please assist me in my investigation by answering this questionnaire:

1) Has your instituion ever freeze-dried specimens

a) for display?

b) for research specimens in the permanent collections?

2) If no, why not?

3) If yes, what animal groups have been preserved and approxiamately for what period of time?

4) If the technique has been used, but now discarded, explain why.

- 5) Have any other problems been encountered with freeze-dried material, with specific reference to deterioration over time?
- 6) If freeze-dried material was to be reprepared as another type of preparation, which of the following would you select and why? a) osteological b) alcoholic c) skin.
- 7) Titles of relevant published literature. Please enclose unpublished reports, if these are not confidential.

Please send replies to: Dr. Aldo Berruti, Durban Natural History Museum, 4085 Durban 4000 South Africa.

One year after the inauguration of the Natural History Museum in Mexico City in 1964, Dr. Alfredo Barrera, the Museum's first director, established the National Insect Collection. The collection has grown to over 85,000 specimens and includes the Müller Collection of Mexican butterflies, the Halffter Collection of Scarabaeidae and the Young Collection of aquatic Coleoptera. In 1981, construction allowed the Collection to expand to 42 square meters and provided new facilities for the restoration and conservation of this material. The Collection benefits from the economic support of the Instituto de Ecología which shares the museum building and which contributes its research collections to the National Insect Collection. As part of the Biosystematics Insect Project, Dr. Pedro Reyes-Castillo, Director of the Museum and Ecology

Institute, initiated an automated cataloguing system known as the Entomological Cataloging System. The main objectives of the project are to: sort and inventory the entire collection, reorganize the collection taxonomically, make a directory of the specialists involved with the collection, revise and update the catalogue, and implement the automated cataloguing system. The system is designed for curatorial and administrative use and to assist with such tasks as cataloguing and locating specimens, printing labels and catalogues, monitoring loans and collection use, and answering research requests. The system uses several software packages including dBaseIII Plus, Lotus 1-2-3, and a graphics package on IBM PC AT and Equal Turbo microcomputers. For more information about the system and museum holdings contact: Biologist Gemma Quintero G., Museo de Historia Natural de la Ciudad de México, Apartado Postal 18-845, Delegacion Miquel Hidalgo, 11800 Mexico D.F., Mexico.

The Roger Williams Park Museum, Providence, founded in 1896, is undergoing its first comprehensive collection renovation project. The Museum is a municipal museum and has the only publicly accessible natural history collection in the State of Rhode Island. Complete modernization of the collection storage area, housed in the museum's basement, has entailed moving the entire collection to temporary storage in formerly public areas of the building (exhibit hall and auditorium). Among the museum's predominately 19th century vintage collections are marine invertebrates, vertebrates, birds' nests and eggs, paleontology, geology, herbarium, and ethnographic materials largely of Pacific Island and Native American cultures. While in temporary storage, collections will be inventoried and critical need specimens will be conserved. The basement will be upgraded to a modern. state-of-the-art museum storage facility with high-density mobile compactor units, collection-customized interiors, a conservation lab, and climate control. The collections are housed in a National Historic Register building in Roger Williams Park, a quintessential example of the Urban Parks Movement of the late 19th century. Museum renovations are funded as part of a \$20 million bond issue to provide Park-wide capital improvements.

..... Marilyn Massaro, Curator.

FROM OUR CORRESPONDENTS.....

This year in Fairbanks, Alaska at the Annual Meeting of the American Society of Mammalogists, the Committee on Information Retrieval announced completion of its 1988-89 survey on computerized information retrieval in mammal collections of North America. This survey represents an update of one that was conducted between 1982 and 1984. Reported trends toward use of microcomputers and commercially available database management software substantiated expectations. However, conversion to these products by many

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collections with previously established mainframe and mini-computer systems was more frequent than anticipated. Results of the survey have been compiled in a report that follows the format of the committee's 1985 report. Copies may be obtained after 15 October from Sue McLaren (#5).

During the 1989 SPNHC meeting in Calgary, I attended Workshop #2, Stable Polymers for Storage, Display and Packing which was expertly conducted by Scott Williams, organic chemist with the Canadian Conservation Institute, Ottawa. The workshop was much more than a good product/bad product review though materials which should be eliminated from our collections use were noted as were the properties which made them undesirable. Williams stated the function of a storage product as twofold, it should improve the state of the stored object and prevent deterioration of that state. Rule #1 in choosing storage material was defined as 'if neither of the above criteria is fulfilled then remove or avoid the product.'

A number of points were raised regarding a realistic approach to choice of a storage product. Will the product be in contact with specimen or not? If it is a non-contact product perhaps the stringency of the criteria one uses for selection may be reduced enabling the choice of more affordable products. The storage area can help determine what product to choose. Open or vented storage may prevent the buildup of outgasses. In an environmentally controlled room are gaskets on cabinet critically important? Another consideration is the physical properties of the product. Potential problems such as the cut edge of foam snagging or abrading objects should be recognized. The product itself may be the source of damaging components either inherently or as undesirable elements produced during degradation. Obnoxious properties of unsuitable products can have an adverse impact on collections. Ideally products in association with any object in storage, transit or on display should be completely inert in all environments, such a product is rare though polyethylene was cited as approaching this ideal. Williams feels the inappropriate application of storage materials causes the most damage to collections. He also urges striving for simplicity; the simpler the product and solution, the less chance of invasive interaction with specimens.

A subtitle for this workshop could have been 'Know Your Plastics'. Plastics, the basis for most storage products now available, were defined as a base polymer plus a variety of additives including plasticizers, stabilizers, processing aids, surface texturizers and activators, and/or end-use modifiers. Thorough evaluation of a product requires chemical evaluation, review of reports in the literature, the use of indicating papers, sandwich tests, head-space analysis of volatiles, determination of low levels of oxidation with the Russell effect, etc. However,

even without a state-of-the-art chemical laboratory, Williams demonstrated a number of uncomplicated tests one can perform which produce clearly observable results identifying some of the types of plastics encountered when selecting storage products or while evaluating products already in use.

Scott Williams supplied us with a wealth of useful information and insight on the hows and whys of polymer based materials. This is a workshop I would like to see allotted more time and offered again.

..... Julianne Snider, Illinois State Museum

Fourteen participants attended Workshop #6 entitled The Extraction and Preservation of Silicified Plant Remains from Ironstone Beds - A New Procedure, presented by Kevin Aulenback of the Tyrrell Museum of Palaeontology. We were all astounded at the spectacular results of the relatively simple acid preparation technique. Sedimentary ironstone is a mudstone which is cemented by calcium carbonate with free iron ions. Plant remains can be preserved in the ironstone as carbon, calcium carbonate or silica. The preparation procedure basically involves a hydrochloric acid bath at low temperature. With careful monitoring and handling, the results are three-dimensional specimens of silicified twigs, cones, needles, leaf sections, seeds and seed pods. With further processing pollen can also be recovered. We marvelled at the detail of the 65 million year old plant remains that Kevin has extracted from the Alberta badlands. Although Kevin considers this procedure to be in the developmental stages, SPNHC members encouraged him to publish his results and to carefully document his methods as they evolve. We also commented on the fragility of the fossil plant specimens and their need for special storage. There was little doubt in our minds that the procedure will continue to produce exciting results that will stun the paleobotantists. Ted Daeschler, Acad. Nat. Sci. Phil.

HEALTH AND SAFETY NOTES

Through the courtesy of Monona Rossol, SPNHC has been receiving ACTS FACTS, a monthly review of Federal regulations and notices which affect the health and safety of artists, theater or crafts people and is equally applicable to museum staff. It is published by Ms. Rossol and is available to individuals for \$10 per year (#13). It is impossible to repeat all the items of interest but I will briefly mention some.

OSHA (54 FR 2332-3983) final rule on air contaminants in the work place: wood dust - 8 hour Permissible Exposure Limit (PEL-TWA) of 5 milligrams per cubic meter (mg/m³) and 10 mg/m³ for 15 minute Short Term Limits (STEL) for both soft and hard wood dust; exception Western red cedar 2.5mg/m³ PEL-TWA; acetone - 750 parts per million (ppm) PEL-TWA with a STEL of 1000 ppm; styrene - 50 ppm PEL-TWA

OSHA (54 FR 12792-12868) update of Permissible Exposure Limits (PELs) now has an index and list of references. Index

and the PELs documents are available free to the public (#14).

NIOSH has published two supplements to the 1981 publication NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards. The 1981 volume and the 2 supplements are free, cite NIOSH number 88-118, supplement I-OHG and 89-104, supplement II-OHG (#15).

EPA (54 FR 16376-16380) has removed non-fibrous aluminum oxide from the SARA (Superfund Amendments & Reauthorization Act, Title III) but the fibrous form (manufactured as Saffil) was not removed from the list.

EPA (54 FR 16138-16142) added toluenediisocyanate (TDI) and all its isomers to the SARA list. ACTS counsels artists not to use TDI-containing products because of its extreme toxicity (e.g. 2 component polyurethane resins).

OSHA (54 FR 20672-20744) is proposing a strict limit for methylenedianiline (MDA) found in many plastics. It is so toxic OSHA proposes a 8 hour exposure limit of only 10 parts per billion (ppb). Watch for MDA in polyurethane foam components, epoxy resin hardeners, plastic coatings, etc.

EPA (54 FR 8484-9) acknowledges that it does not have sufficient data on 1,2,3-benzotriazole (used by some conservators) which is known to be moderately acutely toxic, to label it 'inert' in pesticides. EPA continues to solicit data on benzotriazole.

Silica fume is not the same as fumed silica. Silica fume, produced during electrometalurgical processes such as silicon chip manufacture, has an TLV (Threshold Limit Value) of 0.2 mg/m³. Fumed silica (Cabosil, Aerosil, etc.) does not have a TLV set and ACTS suggests keeping exposure to fumed silica as low as possible until more information is known or using other forms of silica which have TLVs of 10 mg/m³ such as silica gel or precipitated silica.

Department of Health and Human Services, Centers for Disease Control has a grant program (Program Announcement 916) for non-Federal conferences on disease prevention, health promotion, and information/education projects. Any museum or university considering holding a conference on health and safety may wish to explore this source for funds. Contact Monona for more information or assistance in applying.

PUBLICATIONS OF INTEREST

O Negro nos museus da Amazônia. Figueiredo, N., 1989. Ciências em Museus 1(1):17-30. Description of two African collections housed in Brazilian museums and Afro-Brazilian cultures and ethnographic objects.

Museus e Museologia: uma relação científica? Scheiner, T.C., 1989. Ciências em Museus 1(1):59-63. Discussion of the museum as an instrument of museology, as a field of experimentation in museological science.

Os Museus e sua Operação: uma bibliografia básica. Speiss II, P.D., 1989. Ciências em Museus 1(1):65-90. An annotated bibliography for all facets of museum operations, collections management, exhibitions, research, education, etc.

The Conservation of Ethnographic Skin Objects at the American Museum of Natural History. Kaminitz, M. and Levinson, J., 1988. Leather Conservation News 5(1):1-5. A summary of conservation procedures used during preparation of specimens for exhibit in the new Hall of South American

Peoples and brief descriptions of artifacts with specific treatments.

The development of a standard accelerated aging test for measuring the durability of leathers used in musical instruments. Pillingsrud, H. and Tancous, J., 1987. Jour. American Leather Chemists Assoc. vol.82. Describes aging test and its usefulness in determining the durability of a leather with undocumented tannage or animal origin.

Removal of insecticides from furs and skins, registration of conservation condition. Vingelgaard, V. and Schmidt, A.L., 1988? Talk given at the Inuit Clothing Conference, looks at the historical usage of DDT, Lindane and Methoxychloride (methoxyDDT), methods for removal, health hazards, and guidelines for handling contaminated objects at the National Museum of Denmark. Postprints may be available (#8).

Conservation of photographic materials-a basic reading list. New publication, free (#9)

Conservation of Natural History Specimens-Vertebrates. 77pp. booklet and video of demonstrations, from May 1988 course at Manchester Museum and Dept. Environmental Biology. (£6.50 and £15 respectively plus £1.75 postage)(#10).

Some Tests of Synthetic Paper and Polyethylene Sacks for Specimens Preserved in Fluids. Jannett, Jr., F.J., 1989. Curator 32(1):24-25. Kimdura may hold up well in 10% formalin but not in alcohols. (#11)

Optimal Management of Archeological Collections. Bleed, P. and Nickel, R., 1989. Curator 32(1):26-33. Describes basic considerations for storing excavated site materials.

Developing Chemical Pest Control Strategies for Museums: Effect of DDVP on a Museum Insect Pest. Williams, S. and Walsh, E.A., 1989. Behavior of DDVP in Storage Cases. Williams, S. and Walsh, E.A., 1989. Effect of DDVP on Museum Materials. Williams, S., Walsh, E.A. and Weber, S.G., 1989. Curator 32(1):34-69. Three papers on using DDVP safely and effectively.

An Inexpensive Apparatus for Degreasing Skulls. Jannett, Jr., F.J. and Davies, J.G. Curator 32(2):88-90. By modifying a plastic box, 36 skulls can be washed at once.

A Microcomputer DBMS for a Sound-Recording Collection. McVey, M.E., Fairchild, L. and Gaunt, S.L.L., 1989. Curator 32(2):91-103. Describes the use of *Advanced Revelation*, a commercially available package.

Reinventing the Wheel. Makela, R.R. and Leiggi, P., 1989. Curator 32(2):123-130. Describes Dino Wheel, a heavy duty cart for removing dinosaur bones from the field site.

Exhibiting Fauna-from Spectacle to Habitat Group. Wonders, K., 1989. Curator 32(2):131-156. Explores the changes in attitude of museum staff and the public toward taxidermy displays.

Public Access to Museum Information: Pressures and Policies. Stam, D.C., 1989. Curator 32(3):190-198. Application of the principles of Information Resources Management to assist museum in addressing these issues.

The use and conservation of palaeontological sites. Crowther, P.R., and Wimbleon, W. A. (editors), 1988. Special Papers in Palaeontology, no.40. Proceedings of 2 day meeting at Geol. Soc. London, 1-2 October 1987. 15 papers discussing site conservation, interface between professional and amateur collectors, prices of fossils, selection of questions and answers.

Fumigation in museums-a possible alternative. Child, R.E., 1989. Mus. Jour. 88(4):191-192. Description of the gas-tight Rentokil Bubble, a small, portable fumigation chamber that can be used with methyl bromide or ethylene oxide and has been

used with CO₂.(#12)

Lists, documents, objects: museum research and display. West, A., 1989. Mus. Jour. 88(3):193-197. Thoughts on visiting a museum collection in order to do research on objects and on the use and purpose of collections as academic repositories.

The marking of specimens of animal and plant species included in the appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Welsch, H., 1987. Courier Forsch.-Inst. Senckenberg 90:1-132. Describes the feasibility of marking speicmens to make it more difficult to misuse or contrevene the Washington Convention, marking methods for animals and plants, and legal restrictions.

Manual: collection, preservation and identification of insects and mites of economic importance. Jonathan, J.K. and Kulkarni, P.P. (compilers), 1986. Zoological Society of India, Calcutta, 300 pp. 27 papers from 1979 training course encouraging the proper collecting and preservation techniques so that specimens brought to the zoological survey for identification would be useful. (Caveat: some chemicals listed for preservation are toxic and proper safeguards are not mentioned. Check safety sheets before using any chemical. Ed.)

Technical Reports from Archives & Museum Informatics (#3). 5 books due in 1989, \$35 each: Functional Requirements for Exhibit Management Systems. Vol.2(4); Archival Methods. Vol.3(1); Archives and Museum Data Model and Dictionary. Vol.3(2); Requirements for Membership and Development Systems. Vol.3(3); Software for Archives and Museums: a directory. Vol.3(4).

Palaeontographical Society Monograph Series. Volume 141 (for 1987) published in 1989 contains 3 Numbers (#1): 576. Ordovician (Llanvim) trilobites from SW Wales. Kennedy, R.J., 55 p., 14 pls. (£20); 577. Llandeilo and Caradoc graptolites from the Builth and Shelve inliers. Hughes, R.A., 89 p., 5 pls. (£22); 578. British Cretaceous echinoids. 1. General introduction and Cidaroida. Smith, A.B. and Wright, C.W., 101 p., 32 pls. (£34).

Good but Cheap: Safe Materials to Use in Storage. Mibach, L., 1989. List distributed at Ohio Museums Association Annual Conference March 12-14, 1989. (#6)

Archival Quality Storage Products. Kishinami, C.H., 1989. List distributed at SPNHC Meeting, July 28, 1989. (#7)

Editor's Note: It has been called to my attention by conservators, S. Koob and C. Hawks, that the method described by Brunstetter, R.T., 1988, (Curator 31(2):106-107) may damage specimens and is not recommended. Cited in SPNHC Newsletter 2(2):6.

Catalogues and price lists of current publications are available from: Palaeontographical Society (#1) Museum Documentation Association (#2) Archives & Informatics (#3)

MEETINGS

Archaeological Sciences '89. Sept. 20-22, West Yorkshire. Conference topics include: physical and chemical analysis of organic and inorganic material and conservation. Contact: University of Bradford, Dept. Archaeological Sciences, Bradford, West Yorkshire, England BD7 1DP.

Mountain-Plains Museums Association Annual Meeting. Oct. 16-19, Oklahoma City. Topic of interest to natural history collections professionals include: Collection Policies - evolution and refinement, Documentation of Collections, and The Landscape as a component of your museum. Contact: Peter Tirrell, Museum of Natural History, 1335 Asp Ave., Norman, OK 73019, (405)325-4712.

The Stability of Minerals. Dec. 18-20, London. Mineralogical Society's winter meeting. Contact: Dr. G.D. Price, Dept. Geological Sciences, University College London, Gower Street, London, England WC1E 6BT.

Locality Data for Natural History Specimens: GIS Technology. Apr. 19-22, 1990, Toronto. Workshop held in conjunction with the Association of American Geographers. Contact: AAG, 1710 16th St. NW, Washington, D.C. 20009.

Society for Preservation of Natural History Collections 5th Annual Meeting. May 7-11, 1990, Chicago. Suggestions for conference themes are being taken by David Willard, Field Museum of Natural History, Chicago, IL 60605, (312)922-9410.

Congress of Ideas. May 9-13, 1990, Chicago. American Association of Museums Annual Meeting. Contact: AAM, Suite 200, 1225 Eye St. NW, Washington, D.C. 20005.

II Triomous. May 14-18, 1990, Rio de Janeiro. The International Triennial of Museums of Rio de Janiero. Call for Papers: one topic of interest: The Challenge of the Environment-how to preserve collections coming from different parts of the world? Appropriate technologies, research laboratories, the role of museums. Abstracts due: 28 November 1989. Contact: Executive Secretariat, Adam Congressos e Eventos Ltda, Av. Almirante Barroso, 63/10th fl, 20031 Rio de Janiero, RJ, Brazil.

Biological Sciences. Aug. 5-9, 1990, Richmond. Amer. Inst. Biological Sciences and Association of Systematics Collections joint annual meetings. Contact: Louise Salmon, AIBS, 730 11th St. NW, Washington, D.C. 20001; (202) 628-1500.

9th Triennial Meeting of ICOM-Committee for Conservation. Sept. 1990, Dresden. Call for papers: from Natural History Collections Working Group for inclusion in the Preprints, due 1 December 1989. Contact: C.V. Horie, The Manchester Museum, The University, Manchester, UK M13 9PL.

Announcements that reached us too late:

Sept. 7-9. Megafauna and Man: a discovery of America's heartland. Sponsored by Mammoth Site of Hot Springs, South Dakota, Inc. and Northern Arizona University, Flagstaff.

Sept. 9-10. Dinosaurs Rediscovered. A symposium sponsored by the Neville Public Museum, Green Bay, WI.

Sept. 10-14. Museum Documentation Study Tour, York, England.

Sept. 14-18. Sharing the Information Resources of Museums: the Third Annual Conference of the MDA.

CALL FOR CREATIVITY

The Ad Hoc Poster Subcommittee plans to initiate a series of attractive, educational posters dealing with common conservation problems and methods for display in collection areas, museum offices and staff lounges. We need catchy titles, clear explanatory test, attractive images and ideas for subjects. Some possible topics are 'effects of light on specimens', 'what pH is and how to measure it', and 'how to buy a cabinet'. Relay your ideas to Jane Deisler (#16).

SPNHC 5th ANNUAL MEETING May 7-11, 1990 Field Museum of Natural History Chicago, Illinois

WORKSHOPS AND TRAINING

Compiled by Lynn Barkley, Resources Committee

September

- 5-8. Annual Instructional Meeting for Archive Conservators; Wales; Julien Thomas, National Library of Wales, Aberyathwyth, Dyfed SY23 3BU
- Geological Curators' Group: University collections what price the 1990 orogeny?; UK; Andy Newman, tel: 091/232-2359
- Institute for Museum Services (IMS): Meeting the demandtraining and guidance for general operating support field reviews; Seattle; IMS, tel: (202)786-0539
- 10-14. Museum Documentation Association (MDA): Museum documentation study tour; UK; MDA, tel: 0223 242848
- 10-15. Getty Conservation Institute (GCI)/Amer. Chem. Soc.: Environmental chemistry symposium; Miami; Frank Preusser, tel: (213)822-2299
- 12-15. Center for Professional Advancement (CPA): Ceramics manufacturing technology; New Jersey; Mrs. Lezenson, tel: (201)613-4500
- 12-15. CPA: Applied surface and colloid chemistry; New Jersey; SEE Sept. 12-15
- 13-14. NWMAGS: The role of the manager; UK; NWMAGS, tel: 0254 670211
- Scottish Museums Council (SMC): Recognising problems in collections and giving preventive treatment; Edinburgh; Margaret Greaves, SMC, 20-22 Torphichen St., Edinburgh, EH2 8JB
- 14-18. MDA Third Annual Conference: Sharing the information resources of museums; UK; MDA, tel: 0223 242848
- 15. Yorkshire & Humberside Museums Council: Research and documentation; UK; Mrs. Platt, tel: 0992 556649
- 17-21. National Park Service (NPS): Curatorial methods and issues; Denver; Jean Dinwiddie, tel: (303)969-2776
- 18-20. CPA: Adhesion science and technology; San Francisco; SEE Sept. 12-15
- 18-22. CPA: Fermentation biotechnology; New Jersey; SEE Sept. 12-15
- 20-29. University of Victoria: Collections management; British Columbia; Joy Davis, tel: (604)721-8462
- 22-23. Denver Museum of Natural History: Natural history collections care; Denver; Joanne Carter, tel: (303)370-6353
- IMS: Meeting the demand training and guidance for general operating support field reviews; Pittsburgh; IMS, tel: (202)786-0539
- 25. AMSSEE: Pest control; UK; Anne Murch/Gill Parker, tel: 01-600-0219
- 25-26. NPS: Archaeological protection training for cultural resources; Salt Lake City; Bill Butler, tel: (303)969-2875
- 27-28. NPS: same as 25-26; Billings, MT; SEE Sept. 25-26
- 27-1 Oct. AICCM/ICOMOS: Conservation in context artefact and place; Australia; The Conference Committee, P.O. Box 20468, Melbourne, V1C 3001
- SMC: Development planning in museums; Edinburgh; SEE Sept. 14

October

- 2-3. CPA: Moisture management in food systems; Florida; SEE Sept. 12-15
- 2-4. CPA: Flexible packing technology; Chicago; SEE Sept. 12-15
- 2-4. CPA: same as Sept. 18-20; New Jersey; SEE Sept. 12-15
- 5. SMC: Basic documentation; Edinburgh; SEE Sept. 14
- 11. Museums Association (MA): Insurance; UK; Mark Taylor, tel: 01-404-4767
- 11-13. CPA: Additives for coatings; New Jersey; SEE Sept. 12-15
- 12-13. NPS: same as Sept. 25-26; New Mexico; SEE Sept. 25-26
- 16. IMS: same as Sept. 9; Baltimore; IMS, tel: (202)786-0539
- 16-18. CPA: Organic additives in ceramic processing; New Jersey; SEE Sept. 12-15
- 17-18. NPS: same as Sept. 25-26; Phoenix; Holly Dunbar, tel: (415)556-5190
- 18. MA: Glass in museums; UK; SEE Oct. 11
- 18. SMC: Disaster control planning; Perth; SEE Sept. 14
- 18-20. CPA: Extended shelf-life of foods; Chicago; SEE Sept. 12-15
- 18-26. Nat'l Gallery of Canada/Canadian Conservation Inst. (CCI): Shared responsibility-a seminar for curators and conservators; Ottawa; Marion Barclay, (613)990-1941
- 19-20. NPS: same as Sept. 25-26; Reno; SEE Oct. 17-18
- 19-20. WORKSHOP: The secret museum-from architecture to exhibit support; Ohio; Intermuseum Laboratory, Allen Art Building, Oberlin, Ohio, 44074
- 22-27. United Kingdom Institute for Conservation (UKIC): Conservation for curators; UK; Shelley Hart, tel: 0243 63301 or Laura Drysdale, tel: 01-354-5729
- 23-3 Nov. NPS: Curatorial methods; West Virginia; Connie Hudson Backlund, tel: (304)535-6371
- Biological Curators' Group: Curation of marine and microscopical specimens; UK; Derek Whiteley, Secretary, City Museum, Sheffield, S10 2TP
- 30-1 Nov. CPA: same as Oct. 2-4; Florida; SEE Sept. 12-15
- 30-1 Nov. CPA: Microwave technology and application for industry; New Jersey; SEE Sept. 12-15
- 31-1 Nov. ARAAFU: Conference on the conservation and restoration of cultural property; Paris; Conference Secretary, tel: 42 93 22 45

November

- 13-14. CPA: same as Oct. 2-3; Chicago; SEE Sept. 12-15
- 13-16. CPA: Evaporation technology; Chicago; SEE Sept. 12-15
- 16-17. CPA: Asbestos management; New Jersey; SEE Sept. 12-15
- 20-29. University of Victoria: Natural history curatorship; Royal British Columbia Museum; SEE Sept. 20-29
- 27-28. NPS: same as Sept. 25-26; New York; Deborah Burnett, tel: (215)597-9153
- 29-30. NPS: same as Sept. 25-26; Ohio; SEE Nov. 27-28

December

- 4-7. CPA: Acid gases nox and sox removal technology; New Jersey; SEE Sept. 12-15
- 13-15. CPA: Introduction to pulp and paper technology; Chicago; SEE Sept. 12-15
- 14-15. CPA: same as Nov. 16-17; Houston; SEE Sept. 12-15

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CONTACTS AND SUPPLIERS

- The Palaeontographical Society, The Geological Museum Bookshop, Exhibition Road, London UK SW7 2DE
- Museum Documentation Association, Building O, 347 Cherry Hinton Road, Cambridge UK CB14DH
- Archives & Informatics, 5600 Northumberland St., Pittsburgh, PA 15217
- Paisley S. Cato, Dept. Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843
- Suzanne McLaren, Section of Mammals, Carnegie Museum of Natural History, 5800 Baum Blvd., Pittsburgh, PA 15208
- Lisa Mibach, Mibach and Associates, MPO Box 623, Oberlin, OH 44074; tel: (216)775-1404
- Carla H. Kishinami, Zoology Dept., Vertebrates, Bernice P. Bishop Museum, Honolulu, HI 96817
- Ms. Marianne Stenbaek, Centre for Northern Stud. Res., McGill Univ., 550 Sherbrooke St. West, Montreal, Canada H3A 1B9
- National Archives of Canada, Bookstore, 395 Wellington Street, Ottawa, Ontario, Canada K1A 0N3
- Dr. G. Murphy, Development Officer, Dept. Environ. Biol., The University, Manchester UK M13 9PC
- 11. Munising Paper, Kimberly-Clark, Neenah, WI 54956
- 12. Rentokil Group, Felcourt, East Grinstead, W. Sussex, England RH19 2JY
- 13. Monona Rossol, 181 Thompson Street #23, New York, NY 10012
- OSHA Publications Office, Dept. Labor, Rm-3101, 200 Constitution Ave. NW, Washington, D.C. 20210
- 15. NIOSH Publications, 4676 Columbia Parkway, Cincinnati, OH 45242
- Jane Deisler, Curator, Corpus Christi Museum, 1900 N. Chaparral, Corpus Chirsti, TX 78401; tel: (512) 883-2862