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SPNHC NEWSLETTER

**Society for the Preservation
of Natural History Collections**

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Thermal Transfer Printers - Applications in Wet Collections

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Over the years, various methods and materials have been used for producing labels for wet collections preserved in alcohol or formaldehyde. Some methods have been more successful than others. The two best methods up until now have been:

1. Dot matrix printer printing onto Byron Weston Resistall paper (University Products Inc., P. O. Box 101, 517 Main Street, Holyoke, MA 01041; (800) 628-1912; www.universityproducts.com) (28# or 36# weights in laser or continuous pin-fed sheets) using ribbons re-inked with non-bleed alcohol resistant ink (previously obtainable from Charley Chapman, Automated Office Products Inc., 9700-A Martin Luther King, Jr. Hwy, Lanham, MD 20706; (800) 673-8553).
2. Laser printer printing onto Byron Weston Resistall paper using ribbons re-inked by Charley Chapman with alcohol resistant inks. These are then post treated by baking in an oven at 300°F for 5-10 minutes or spraying the label with a clear acrylic spray. This process secures the ink more permanently to the paper.

These techniques are, however, fraught with numerous problems:

1. Dot matrix printers are becoming more and more difficult to purchase and when you can find them drivers, in a lot of cases, do not exist for later versions of Windows.
2. Byron Weston Resistall paper is fairly acidic (pH 5.5-6.5) and leaches this acidity into the alcohol. No research has been done on the degree of elevation of acidity

due to this paper over time and what effect this may have on specimens.

3. Charley Chapman of Automated Office Products is deceased and the company has been sold to Mr. Min Ming. It is now called Access Computer Printer Products Inc. (1213 Crockett Lane, Silver Spring, MD 20904; tel (301) 384-1398; fax (301) 384-1944. Through various personal communications it has become apparent that the quality and consistency of these ribbons is poor. Mr. Ming is also not convinced there is a market for these ribbons and as such availability may be subject to change.
4. Laser printing of labels is not as effective as the impact printing of dot matrix printers. Most laser printers apply toner through a static mechanism. Some laser printers (usually mainframe printers) apply toner under pressure using high heat. Even so, and even with subsequent baking of labels, the print is liable to "float" off the paper in alcohol. It was also found that oils leached into the alcohol from specimens were liable to break down the acrylic coating thereby making the labels susceptible to abrasion once again. Both of these techniques were found to only delay the inevitable abrasion and loosening of print on labels.

It was due to these problems that we sought a better solution for producing labels for our ichthyology and herpetology collections here at the University of Kansas Natural History Museum and Biodiversity Research Center.

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Thermal Transfer Printers

This technique makes use of a technology which is common in the label printing industry (this technology is also used to print luggage tags by all major airlines, store price tags and bar codes) known as thermal transfer printing. A thermal transfer printer is a non-impact printer that uses heat to register an impression on paper. A thermal transfer printer has a print head containing many small resistive heating pins that on contact, depending on the type of thermal transfer printer, melt wax-based ink onto ordinary paper or burn dots onto special coated paper. A microprocessor determines which individual heating pins are heated to produce the printed image. The print head spans the entire width of the paper or medium to be printed on. There are two types of thermal transfer printers: direct thermal and thermal wax transfer.

Direct thermal: The direct thermal printer prints the image by burning dots onto coated paper as it passes over the heated print head. Direct thermal printers do not use ribbons. Early fax machines used direct thermal printing. Direct thermal printing requires that the media be heat sensitive.

Thermal transfer: This type of printer uses a thermal transfer ribbon that contains wax-based ink. Heat is applied to the ribbon using a thermal print head that melts the ink, transferring it to the paper where it is permanent after it cools. Thermal transfer printing can print on almost any type of media including metal, plastic, paper, etc.

There are various companies that produce thermal transfer printers – Datamax, Zebra, Intermec, Sato, etc. They come in various sizes and styles ranging from small portable desktop versions to larger industrial versions for large volume printing. They also vary in the quality of print with two variations common on the market – 203dpi and 300dpi.

The system we are presently using is the Datamax Prodigy Max 300 which is a 300dpi desktop, direct thermal/thermal transfer printer available for about \$1300.00 (Figures 1 and 2). We use this printer as a thermal transfer printer using an SDR ribbon which is a combination resin/wax ribbon with excellent smudge and scratch resistance. This printer also comes with various options including a present sensor for sensing label sizes and a cutter and tray for cutting and collecting labels.

Alpha Systems, a leader in automated data collection, mobile computing, bar code equipment, and media, has come up with a museum tag solution using this technology for printing labels for wet collections.

Using the thermal transfer printer technology together with the SDR ribbon and a 5.0 mil top-coated spun bound white polyester tag medium, they have produced a durable, long-lasting, scratch and smudge resistant tag which is unaffected by long-term exposure to alcohol or formaldehyde solutions and also does not leach any chemicals or substances into the alcohol or formaldehyde solution.

The spun bound polyester tag medium has been tested under standard ASTM code conditions in simulated long-term trials (Table 1).

Together with these supplier-provided statistics I have been conducting unscientific trials of my own ever since we began using this system. I placed printed labels into solutions of 99% ethanol, 70% ethanol, 40% formaldehyde and 10% formaldehyde. One set has been placed in the collection to simulate collection conditions while another set has been placed on a window ledge of an office in the museum in full sun to simulate the extreme. Over the two plus years that I have

Table 1: Testing standard ASTM code conditions of spun bound polyester tag medium

<u>Physical properties</u>	<u>Value</u>	<u>Test method</u>
Thickness (or compressibility)	5.0 +/- 10%	ASTM D 3652
Dimensional stability (%)	MD: 2.0 TD: 2.0	5 min at 394°F (190°C)
Tensile strength (psi)	MD: 17 000 min. TD: 21 000 min.	ASTM D 882
Elongation (%)	MD: 70 min.	ASTM D 882
Abrasion resistance	Slight scratching & dulling of surface	CS-17 wheels, 250 gm load, 50 cycles
Resistance to cleaning solution and water	Excellent	5 cycles, 10 minute immersion
UV light resistance	Slight yellowing and embrittlement of film	ASTM G 53 500hr
Service temperature	-40°F to 302°F (-40°C to 150°C)	

MD = minimum distortion
 TD = total distortion

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Presidential Report

IRIS HARDY,

Geological Survey of Canada (Atlantic), 1 Challenger Drive, P.O.Box 1006
Dartmouth, Nova Scotia, Canada B2Y 4A2

These are truly exciting times for SPNHC as we commence our 20th year together. A sessional committee has been struck under the guidance of Ann Pinzl to develop an anniversary logo, oversee events and special exciting publications on the history and membership of our society. It is timely that our next meeting in London, June 2005 will provide the necessary platform for SPNHC to interact with the European natural history community as we reach out to wider audiences on the international level and partner with other pertinent organizations such as the Geological Curators Group (GCG), Natural Sciences Collections Association (NatSCA) and the hosting institution Museum of Natural History (NHM), who together are promoting a general theme of current standards in the care and management of natural history collections.

This year's meeting, held at the American Museum of Natural History (AMNH) in New York, was hosted jointly by SPNHC and the International Society for Biological and Environmental Repositories (ISBER), the main professional body for managers of frozen tissue collections. The theme of bridge-building with other societies and disciplinary areas was promoted throughout the general session. More than 216 individuals participated and represented more than eight countries outside of continental North America. SPNHC has truly become an international partner in natural history collections care and management.

As we approach this special time it is interesting to note that we have continued to maintain the momentum started back in 1985 as a non-profit organization. At present we have some 12 standing committees, nine subcommittees and six sessional committees actively conducting the day-to-day business of SPNHC, and at the same time are maintaining the professional goals of our society. I invite you to take a moment to review the various committee reports submitted in this Newsletter, see if there is an activity that you would like to participate in, and then contact the appropriate Chairperson(s). We need your input to continue to foster new ideas and to learn from one another.

Membership in SPNHC has somewhat stabilized over the past four to five years although we continue to lose members due to retirement, downsizing and closing of various institutions and academic departments. If you know of a past member who is no longer participating in SPNHC, please invite them to reconsider joining us as we celebrate our 20th anniversary. Our membership fees have changed very little over these many years and you do get good value, receiving the SPNHC Newsletter twice a year as well as Collections Forum. Also long-standing members should remember that if they enjoy the privilege of being mentors they should encourage their staff also to join SPNHC.

I am truly looking forward to seeing many new and old familiar faces at next year's meeting at The Natural History Museum in London, UK, June 12-18, 2005 as together we celebrate the 20th anniversary of the SPNHC family.



The **Society for the Preservation of Natural History Collections** was formed in 1985 and is recognized as a non-profit organization [501(c)(3)] in the United States. SPNHC members receive *Collection Forum*, a biannual journal of reviewed technical information, and two issues of the *SPNHC Newsletter* each year. The Society for the Preservation of Natural History Collections (SPNHC) is a multidisciplinary organization composed of individuals who are interested in development and preservation of natural history collections. Natural history collections include specimens and supporting documentation, such as audio-visual materials, labels, library materials, field data, and similar archives. The Society actively encourages the participation of individuals involved with all aspects of natural history collections.

The **SPNHC Newsletter** (ISSN 1071-2887) is published twice a year, March and September, by the Society for the Preservation of Natural History Collections, c/o Division of Ichthyology, Natural History Museum & Biodiversity Research Center, University of Kansas, Dyche Hall, 1345 Jayhawk Boulevard, Lawrence, KS 66045-7561, USA.

Changes of address should be directed to Lisa Palmer, Treasurer, PO Box 797, Washington, DC 20044-0797; palmer.lisa@nmnh.si.edu.

Submissions are welcome. Please forward announcements, articles and notes to the Newsletter Editors by mail or email.

Deadline for the next Newsletter is February 1, 2005.

COMMITTEE REPORTS

Treasurer's Report

In 2003, the Society's total net assets increased to \$165,429 from a total of \$154,206 the previous year. Liabilities and net assets for 2003 totaled \$171,698. Operating income was generated from three sources: membership dues, publication sales, and *Collection Forum* page charges. Approximately \$17,870 in membership dues was received. Sales of our four publications brought in approximately \$7,408. A special annual meeting (Lubbock, TX) discount of 20% was given to promote sales of *MuseumWise*. Forty-three copies, the equivalent of \$783, were sold during this promotion. Another discount offer of 25% was given to bulk purchasers, netting the Society approximately \$683. Page charges garnered \$7,204, \$6,224 of which came from the NCPTT grant. Other income totaling \$926 was derived from reprint charges, mailing list sales and bank interest. It was a good year for donations. Restricted and unrestricted donations totaled \$3,685 including \$3,262 from the 2002 Montreal, PQ Local Committee.

One hundred and eight library subscribers, and 432 individuals and associates renewed their membership in calendar year 2003. Of the 555 SPNHC members, 62 joined SPNHC for the first time.

Major expenses for the Society in 2003 were \$10,952 for *Collection Forum* 18(1&2), and \$4,680 for two issues of *SPNHC Newsletter*. Election expenses including printing and mailing of the ballots came to \$612. Other Committee expenses totaled \$925. Additional Society expenses include: \$1060 for postage, supplies, legal fees, post office box rental for the Treasurer's Office, \$3,361 for insurance, \$535 in bank and merchant fees, \$3,375 for the 2002 financial review, tax preparation and filing, and \$25 for www domain registration. A \$3,000 loan was made to the 2004 AMNH local committee.

Long-term investment funds were consistent with the market; SPNHC investments gained approximately \$12,834 value and our money market funds earned \$835 in dividends. The Schwab account was federally taxed approximately \$160 which will be refunded to the Society. The SPNHC grant bank account was closed, and the balance transferred to the operating account. Our CD earned approximately \$77 in interest. For additional information concerning the 2003 finances, please contact the SPNHC Treasurer.

The first part of 2004 has seen solid income activity. Thus far, approximately \$14,952 has been received from membership renewals, including approximately 101 library subscriptions, and 404 individual and associate members. Thus far, of the 523 members, 58 are new. Life memberships increased from 15 to 19 members. SPNHC currently has two individual mem-

bers in the process of converting to life memberships. Ninety-six members paying in 2003 have yet to renew in 2004. Please help SPNHC save time and money by paying your dues today.

Midway into 2004, sales of all our publications total \$5,070, a 63% increase over last year at this time. Our 10% members discount on all four of our publications yielded \$93.

Once again, our donors promise to make 2004 a healthy and financially stable year. In addition to \$120 from several members, a substantial donation of \$3,533 was received from the Texas Tech Local Committee, hosts of the 2003 SPNHC Annual Meeting. Thank you!

Expenses thus incurred in FY 2004 include \$988 for office supplies, postage and contractual support; \$100 for the P.O. Box, \$200 in merchant card fees, and \$589 in Election Committee expenses. The financial review of the 2003 SPNHC financial records has been performed. The Society anticipates expenses related to a new, fourth publication towards the end of 2004. Please contact the SPNHC Treasurer for further details.

For their help throughout the year, I would like to extend thanks to Andy Bentley (University of Kansas), James Bryant (Riverside Municipal Museum), Jon Greggs (University of Calgary), Cathy Hawks (Independent Conservator), Sue McLaren (Carnegie Museum of Natural History), Chris Norris (American Museum of Natural History), Rich Rabeler (University of Michigan), Janet Waddington (Royal Ontario Museum), Rob Waller (Canadian Museum of Nature), Tim White (Yale University) and Steve Williams (Baylor University). The Smithsonian Institution Division of Fishes provides general office support for the Treasurer.

Respectfully submitted,

Lisa Palmer, Treasurer

Conservation Committee Report

Fourteen SPNHC members attended the 2004 Conservation Committee meeting in New York. The chairs of the four active subcommittees gave their reports, and we also heard from the coordinator of the Natural History Working Group of the International Council of Museums – Conservation Committee (ICOM-CC).

Citations Subcommittee

The Conservation Committee would like to thank Paula Work for her six dedicated years of service chairing this subcommit-

tee, which is responsible for the valuable "Publications of Interest" pages in the SPNHC Newsletter. Although many of us now regularly access electronic bibliographic databases, these are often discipline specific and do not provide the breadth of citations on the care, management, or documentation of collections that these pages make available to us. Paula has stepped down as the head of this subcommittee, but will continue to be active in other SPNHC committees and initiatives.

And so at this time we welcome Marcia Revelez, from the Sam Noble Oklahoma Museum of Natural History, University of Oklahoma, who volunteered at the meeting in New York to continue Paula's work as the new chair of the Citations Subcommittee. We thank Marcy for her willingness to become involved in SPNHC and, with Paula, acknowledge the reviewers whose continuing efforts have made the citations pages possible. Contact Marcy at mrevelez@ou.edu if you are interested in contributing citations or have noticed gaps in coverage.

Resources Subcommittee

During the Conservation Committee meeting there was much lively discussion regarding the present and future of the Resources Display Units, which are housed, maintained, and shipped to borrowing institutions by Cindy Ramotnik (American RDU) and Janet Waddington (Canadian RDU). These display units were assembled by members of the Conservation Committee and contain samples of packing and storage materials that are considered safe to use in proximity to collections. Although there was consensus at the meeting on the value of the units themselves, questions were raised about reasons for the lack of recent requests and about whether more convenient presentations of the information (electronic images or a poster rather than actual samples) might be more appealing to some organizations. These issues will be discussed further throughout the year and at the next annual meeting. In the meantime, please contact Cindy at ramotnik@unm.edu or Janet at janetw@rom.on.ca if you have any opinions in this area, have suggestions for new products, or if you are interested in taking over as an RDU caretaker. Check out the RDUs by going to the Conservation Committee page of the SPNHC website.

Research Subcommittee

Chair David von Endt reviewed the research in progress at the Smithsonian Center for Materials Research and Education, including the cleaning of skeletal material and fluid collection issues. Fernando Marte continues his valuable work at SCMRE, while Tom Gluick has signed on as the new molecular biologist.

Adhesives Workshop Subcommittee

Chair Gretchen Anderson provided a progress report on her investigations into the format, curriculum and funding of an adhesives workshop at a future SPNHC annual meeting. While in New York she met with members of the Education Committee to discuss prospects for a two-day workshop in 2006. Contact Gretchen at

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Membership

Membership applications for individuals (US\$25), Libraries (US\$30) or Associates/Corporate (US\$50) may be submitted to:

Lisa F. Palmer, SPNHC Treasurer
P.O. Box 797
Washington, DC 20044-0797
USA

Be sure to include the following information:

Name, Discipline Specialty, Institution
Address (Street, City, State/Province, Country, Zip/Postal Code)
Voice telephone, Fax Telephone, E-mail address

Payment may be made by cheque, money order, Visa or Mastercard.

Membership application/renewal form by portable document (Adobe Acrobat Reader required): <http://www.spnhc.org/renew.pdf>

Membership application/renewal form by Word file: <http://www.spnhc.org/renewal.doc>

Life Membership

The SPNHC Life Membership is a special membership category for those interested in the long-term financial stability of our organization. Life membership monies are invested towards the future goals of the Society. SPNHC life memberships are available for \$625. The fee is 25 times the Individual Membership rate, currently \$25. Life Memberships may be paid in one of three ways:

- (1) one-time payment of \$625;
- (2) two-year installments of \$350/1st year and \$275/2nd year;
- (3) three-year installments of \$300/1st year, \$200/2nd year and \$125/3rd year.

Please contact the Treasurer should you require further information about life memberships.

Lisa F. Palmer, Treasurer
National Museum of Natural History

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gretcha@smm.org if you would like to assist with the work of this subcommittee.

2004-2005 Conservation Committee Work Plan

The Conservation Committee work plan was completed in July and submitted to SPNHC President Iris Hardy. It contains a list of activities that coincide with the SPNHC Five Year Goals and Objectives as well as due dates for actions. Contact Jude Southward at jsouthward@dmns.org or Barbara Hamann at hamannb@carnegiemnh.org for a copy of the plan. The committee will address the goal of improving professional expertise in collections management and care by planning the Adhesives Workshop, maintaining the Resources Display Units, continuing to provide citations to the SPNHC Newsletter, drafting an expanded Conservation Committee web page, and compiling an annotated list of funding agencies for possible posting on the SPNHC website. The goal of increasing knowledge on the management and care of collections will be addressed by the Research Subcommittee, while the Committee will help meet the goal of increasing collaboration with other organizations by providing a liaison to the annual meeting of the American Institute for Conservation.

ICOM-CC Natural History Collections Working Group

Dries van Dam, coordinator of the Natural History Collections Working Group of ICOM-CC, described the group's 2002-2005 program, which has included discussions of a web-based "conservation expertise network" and a "mobile conservation skills lab" in order to foster the sharing of conservation knowledge. Contact Dries at a.j.van_dam@lumn.nl if you would like more information on this important international group dedicated to the preservation of natural science collections. Go to <http://icom-cc.icom.museum/WG/NaturalHistoryCollections/> to see the Working Group's program and its most recent newsletter. The next triennial meeting of ICOM-CC will take place in September 2005 at The Hague in the Netherlands.

Respectfully Submitted,

Barbara Hamann
Jude Southward, Co-Chairs

Membership Committee Report

The annual meeting of the Committee was held on Tuesday, May 11, 2004 in the Mammalogy department of the American Museum of Natural History, New York, NY. Members in attendance included Lisa Palmer, Elena Benamy, and Cindy Ramotnik, as well as Ex Officio members Ann Pinzl and Iris Hardy.

Discussion included a review of items from the Membership action plan that was assembled after last year's annual meeting. Tasks accomplished since that time included the revision and utilization of a series of form letters for mail and e-mail membership renewal notices and acknowledgements, and sale of SPNHC publications through the AAM Bookstore. Issues discussed included continuing efforts to expand membership solicitations (e.g. through NHCOLL-L and other museum list serves, museum studies programs, and through collections supplies vendors).

Subsequent to this meeting, James Bryant and Lisa Palmer discussed access to natural history client lists with John Dunphy of University Products. Recently, John sent Lisa the names and addresses of customers who purchased a SPNHC book over the past year. He is investigating further the possibility of sharing with SPNHC lists of customers for other natural history products. During this same time, Ann Pinzl contacted Herbarium Supply Company to see if similar information sharing would be possible.

During the early part of 2004, several other approaches to expanded membership were explored. Shirley Harpham (Department of Anthropology - University of Alberta) investigated the level of interest in a possible "student membership rate". According to Shirley, "opinions were varied but many students admitted that they didn't really want to commit to anything unless they could be sure they would benefit from membership. This would leave only very interested students - probably a good thing. It was also pointed out that an organization would probably never lose from having a reduced rate for students."

With the help of Lisa and committee member Kelly Goulette, SPNHC membership brochures have been widely circulated. At the International Registrar's Symposium in New Orleans, Vicki Gambill (Natural History Museum of Los Angeles County) distributed about 100 brochures, made an announcement about SPNHC, gave the SPNHC website address and announced the scheduling of next year's SPNHC meeting in London. "Since there were attendees from Europe as well as Australia, Canada and Israel, in addition to the U.S., this was the best place to talk about SPNHC." Making the rounds of Spring conferences, Vicki attended the AAM annual meeting (also in New Orleans). "I left brochures with the Registrar's Committee, with David at K-Emu (he was happy to have them) and with University Products."

In July, Ann Pinzl drafted a SPNHC 20th anniversary notice for inclusion in upcoming printings of the University Products catalog. This material – along with a copy of the SPNHC 20th Anniversary logo – was submitted to John Dunphy.

Respectfully submitted,

James M. Bryant, Chair

Documentation Committee Report

Seven people attended the Documentation Committee meeting in New York. Tim White, SPNHC President-elect, stepped down as Committee Co-Chair after many years of dedicated leadership. Richard Monk was introduced as the new Committee Co-Chair. Discussion included updates, content for the SPNHC website, and goals for the future.

The transition to limit posts to the NHCOLL-L listserv to subscribers went smoothly and has successfully limited SPAM and associated issues. NHCOLL-L is now managed by Gregory Watkins-Colwell (Yale Peabody Museum of Natural History).

Going forward, the Documentation Committee will be exploring ways it can contribute to the SPNHC conference on standards to be held next year in London.

Members will work actively toward building bridges with GBIF and other organizations with regards to standards development and implementation as well as datasharing initiatives. Richard Monk will be attending the annual meeting of the Taxonomic Databases Working Group (TDWG) this fall to further this goal.

The Committee has identified the need for a concise resource for registration practices specific to natural history collections among registrars, non-registrars, and students alike. Members will be identifying and prioritizing existing needs and determining how these needs might be most effectively met. Topics may include procedures for depositing specimens, permits, health and safety issues, transportation, appraisals, and insurance among others.

Chris Chandler (Putnam Museum, Davenport, IA) continues to collate meetings, workshops, short courses, and important deadlines for the Calendar section of the SPNHC Newsletter. Please contact Chris at chandler@putnam.org with any important announcements.

Respectfully submitted,

Kelly Goulette
Richard Monk, Co-Chairs

Education & Training Committee Report

The Education and Training Committee is concentrating its efforts on SPNHC objectives related to providing training opportunities, developing workshops, and improving membership services. Committee goals for the upcoming year include coordinating with the newsletter editor on a new "How To" ar-

title series, providing updates for the society web site, assisting with workshop activities as needed by the 2005 Host and Workshop committees, and identifying future workshop topics.

The excellent workshop entitled "Don't Panic: Emergency Response and Salvage" was planned by Barbara Moore and the Host Committee and was held May 16, 2004 at the American Museum of Natural History. Barbara Moore, M. J. Davis, and Monona Rossol presented the workshop, which included a mock disaster exercise and discussion; an overview of salvage techniques; a contingency planning video; presentations on recovery operations; demonstrations of salvage techniques; tabletop disaster scenarios; and hands-on opportunities for participants to practice salvaging damaged items.

For the 2005 meeting in London, workshops on "Collection Management Standards", "Integrated Pest Management", and "Risk" are being planned by conference organizers Paul Davis, Adrian Doyle and Chris Collins, respectively. A future workshop on "Adhesives and Consolidants", possibly for 2006 or 2007 is under development by the Conservation Committee, with Gretchen Anderson as the lead contact.

The Education and Training Committee will continue work on 1) improving membership development and services; 2) improving professional expertise in managing and caring for collections by communicating the importance of participation in professional development activities, providing training opportunities, developing workshops, and providing for the active exchange of information; and 3) ideas for increasing collaboration with other organizations.

Respectfully submitted,

Laura Abraczinskas
Lori Benson, Co-Chairs

Publications Committee Report

The annual meeting of the Publications Committee took place at the American Museum of Natural History on May 11.

Steve Williams gave a brief update on the progress of the book *Museum Studies: Perspectives and Innovations (A Volume in Honor of Carolyn L. Rose)*, edited by Stephen L. Williams and Catharine A. Hawks. He hopes to have all papers revised and in hand by the end of the summer. This book will be published by an outside publisher.

Cathy Hawks reported on the status of the book *Health and Safety for Museum Professionals*. She has commitment for

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all but part of one technical chapter. Draft manuscripts are expected by the end of September, with printing targeted for the end of 2005. This book will be published by SPNHC. Prepublication publicity/marketing will be important as the book will have a very broad appeal.

SPNHC Newsletter. The last issue was late mainly because of lack of material. We discussed strategies for getting material to Andy in a timely manner. Watch for a new regular column of "how-to" articles aimed at non professionals. These are being developed as a form of outreach to non-professionals, but it was noted that they would be useful for non-specialist professionals as well. A greater effort will be made to get back issues of the Newsletter onto the web.

Collection Forum. The perennial problem exists of not having enough manuscripts to publish the next issue. We need to redouble our efforts to attract manuscripts and to get them reviewed in a timely manner, to try and regain author confidence. There are plans for a special 20th Anniversary volume for next year, which may help get us back on track. Please remember that *Collection Forum* is *your* journal. Papers may include original contributions to the literature or significant review articles dealing with the development and preservation of natural history collections. Contributions may include, but are not restricted to, reports of research and methodologies for the collection, preparation, conservation, storage, and documentation of specimens, and discussion of some philosophical, theoretical, and historical aspects of natural history collection management. Case studies that serve to document or augment a philosophy, methodology, or research activity will be considered, but general descriptions of a specific collection or institution are not accepted. Short technical papers describing a "good idea" will be considered (think *Storage of Natural History Collections: Ideas and Practical Solution*) and will undergo the same review process as longer articles.

Respectfully submitted,

Janet Waddington, Chair

Finance Committee Report

The Finance Committee worked on several matters over the last year. The first was to obtain a DUNS Number for the Society. As of October 2003, United States federal grant applicants are required to provide a Dun & Bradstreet Data Universal Numbering System number (DUNS) as part of the application. As described at the DUNS Number website, "*The D&B DUNS Number is a unique nine-digit identification sequence, which provides unique identifiers of single business entities, while linking corporate family structures together. D&B links*

the D&B DUNS Numbers of parents, subsidiaries, headquarters and branches on more than 64 million corporate family members around the world. Used by the world's most influential standards-setting organizations, it is recognized, recommended and/or required by more than 50 global, industry and trade associations, including the United Nations, the U.S. Federal Government, the Australian Government and the European Commission. In today's global economy, the D&B DUNS Number has become the standard for keeping track of the world's businesses."

A second issue was to work with our bank, Wachovia, to reduce monthly bank fees. We are happy to report that Wachovia dropped the monthly bank fee for the SPNHC operating account. The Finance Committee was also able to negotiate a reduction in the monthly merchant fees, related to credit card processing, from \$40/month to \$35/month with additional reductions to the item rate charges. We hope to save at least \$100 in fees this year.

The Finance Committee worked with the Publications Managing Editor, Janet Waddington, to increase publication sales. SPNHC offered a 20% meeting discount on our book, *MuseumWise*; a 10% members discount on all SPNHC books; and a 25% discount on bulk purchases of 10 or more books of a single title with all sales final. To date, the meeting discount has been most effective.

Lastly, the Finance Committee explored our options to obtain a SPNHC business credit card for use by the Treasurer's Office. In addition to the application form, credit card vendors require proof of approval from a nonprofit's Board of Directors. The Committee will seek Council's approval to proceed.

Respectfully submitted,

Lisa Palmer
Rob Waller, Co-Chairs.

Web Committee Report

The SPNHC Web Committee has prepared the following report for Council upon request. The committee members were all in agreement that the site needs to be invigorated. The process of organizing a website upgrade has three main components: administration, design and content. All three of these categories will take major time commitments to improve and will likely involve more than a volunteer effort to accomplish. For this reason the committee would like to suggest investigating funding sources to allow SPNHC to redesign and upgrade our site in the short term, and to consider providing longer term funding for a webmaster, and the production of novel content. Several ideas were raised including writing a

grant, getting corporate sponsorship, using advertising to generate revenue, or seeking donations.

The Web Committee could oversee the redesign, filter the content, and work with the webmaster to insure that future upgrades are done efficiently. The following three scenarios for upgrading our site are proposed based on a monetary scale:

Scenario 1: Most costly -

An external webmaster is hired to redesign the site and to continue the maintenance and upgrades necessary on a day-to-day basis.

Scenario 2: Mid-range cost -

An external person is hired to redesign the site. The future maintenance and upgrades would be done by an internal paid/volunteer webmaster.*

Scenario 3: Lowest Cost -

The site is redesigned by an internal volunteer person (or persons). The future maintenance and upgrades would be done by a paid/volunteer webmaster.*

* It is also possible to split up the hosting of the site to different institutions with many webmasters responsible for a portion of the site. This was done for the SPNHC 2004 conference information for example.

All members agreed that the site should be kept simple and content/information rich (KISS theory!). The content is the component that will need all the member support we can muster. There is a strong consensus that we need to provide quality, up-to-date content for our members and the greater community. There are many difficulties with paying for content generation but this may be feasible through grants specifically sought to generate content or enhance current content. After a discussion by council, it was decided to follow 'scenario 2' and seek an external web design company to enhance the core web pages on the SPNHC website. If you have any suggestions as to how to enhance the current website please feel free to contact James Macklin (macklin@acnatsci.org) or any other member of the Web Committee.

Respectfully submitted,

James Macklin, Chair

Visit SPNHC on-line at:



www.spnhc.org

20th Anniversary Committee Report

The Society for the Preservation of Natural History Collections is about to celebrate its 20th Anniversary - it's a milestone for us that we plan to observe in several ways. We'll be looking into our past, and looking toward our future all year.

First, you'll see that we have a special logo for this occasion - and you will be seeing it more frequently as the year progresses. For our next issue of *Collection Forum*, we hope to have a few relevant articles to note the passage of time.



At next year's annual meeting in London, we expect to feature our long-standing members, particularly the founding members, as well as our newer ones. So be prepared for an extra special meeting, in a new location for us: Europe!

Respectfully submitted,

Ann Pinzl, Chair

Call for Nominations

The Election Committee of the Society for the Preservation of Natural History Collections announces that nominations for the 2005 election will be received by the Chair from now until 31 October 2004.

Members participating in this election will be selecting two Members-at-Large to take office in June 2005. The Members-at-Large serve three year terms on Council and will work closely with both other Council members and the Committee Chairs to continue the implementation of "Five Year Goals and Objectives". The two Members-At-Large whose terms end this year can also be nominated to serve an additional term.

I encourage all Active and Honorary members to consider their colleagues who are active in SPNHC and propose them for

..... Continued on page 10

..... Continued from page 9

nomination. Our society depends on both the dedication of our Council members and the involvement of our membership in choosing people who will serve the Society.

To submit a nomination or for more information on the election process please contact the committee chair, Richard K. Rabeler, via:

email: rabeler@umich.edu

Telephone: (734) 615-6200

Facsimile: (734) 647-5719

Mailing address:

University of Michigan Herbarium
3600 Varsity Drive
Ann Arbor, MI 48108-2287, USA

Revisions of the Accreditation Self-Study and Characteristics of an Accreditable Museum

The American Association of Museums' Accreditation Program is substantially revising the Characteristics of an Accreditable Museum and the Accreditation Self-Study Questionnaire for the first time in ten years. AAM is soliciting broad input from the field to ensure that the Accreditation Program accurately reflects emerging standards, and accommodates museums of all types and sizes. As the "Good Housekeeping Seal of Approval" for the museum community, AAM Accreditation is a way for museums to demonstrate that they are operating at the highest standards, managing their resources responsibly, and serving the public interest. Currently 750 museums nationwide have earned this mark of distinction, including 68 natural history museums.

You can download a copy of the draft revised Accreditation Characteristics from www.aam-us.org/accred. The Accreditation Commission and program staff will be collecting feedback throughout the summer and the revised material is scheduled for release in early 2005. Reviewers for the revised self-study questionnaire include staff from the Natural History Museum, University of Kansas; Idaho Museum of Natural History; University of Nebraska State Museum; and the Milwaukee Public Museum, among others.

Some key changes reflected in the new drafts are:

- Increased focus on how museums fulfill their public service role through public accountability and by making their intellectual and physical resources accessible.
- More emphasis on museums measuring their own success—engaging in formal, ongoing evaluation of their

operations and programs, and making meaningful use of evaluation results.

- Clarification of standards and best practices in museum interpretation and collections planning.
- Incorporation of principles regarding community engagement and diversity.
- Simplification of the questionnaire through use of fewer narrative and more checkbox questions, and more reliance on appending pre-existing museum documentation.

In the coming year the Commission will also revise the documents that explain its expectations regarding institutional planning and codes of ethics, adding more detail and answering frequently asked questions, and develop new documents on interpretation, evaluation, and governance.

AAM invites you to contact the Accreditation Program staff about this initiative at accfeedback@aam-us.org.

Elizabeth E. Merritt
Registrars Committee - AAM

HELP! for the Small Natural History Museum

What do the Shoshone Museum, the Wyoming Village Hall and the Pember Museum of Natural History have in common? They are all small US museums (with operating budgets under \$350,000 per year) that nevertheless hold important natural history collections. And there are hundreds more nationwide.

In an effort to improve the technical resources for small museums (and encourage greater professional participation from this category of institutions), the American Association of Museums has recently formed a National Coalition for Small Museums. At present, the Coalition is composed of 18 organizations (such as the Institute for Museum and Library Services and the Texas Association of Museums) which provide funding and services directly to small museums.

In addition to other initiatives, the Coalition intends to "compile a list of existing resources" and then apply for a IMLS "National Leadership Grant" to fund implementation of a plan to connect small museums to these resources.

SPNHC, its publications, membership and programs certainly constitute one of these resources, and there may be others that target practical solutions and strategies applicable to small museums. If you have information to share in this regard, please contact the Coalition at smallmuseumcoalition@aam-us.org.

James Bryant



SPNHC goes to London!

June 12-19th 2005

The 20th Annual meeting is to be hosted by the Natural History Museum, London.

Celebrating 20 years of the Society for the Preservation of Natural History Collections the theme for this first meeting outside North America will be current standards in the care and management of natural history collections. Workshops will review the assessment and implementation of current standards, benchmarking of collection condition, risk assessment and implementation of integrated pest management programmes. The conference will also focus on the capacity building and strengthening of international networks around the world.

Organised in association with:

The Natural Sciences Collections Association (NatSCA)
The Geological Curators Group (GCG)
ICOM Natural Sciences Conservation Working group



Put the date in your diary now and we look forward to seeing you in London.

For more information contact : SPNHC@fsmail.net

Geology/Paleontology Department Reestablished at the Museum of Northern Arizona

The Museum of Northern Arizona, Flagstaff, AZ, restored the Geology /Paleontology Department following its termination in May 2003. The program will once again become a vital part of the museum's research and educational programs. David D. Gillette, Colbert Curator of Paleontology, is joined in the department by Michael O. Woodburne, Honorary Curator of Geology, and William J. Breed, Emeritus Curator. The Colbert Endowment, named in honor of the late Dr. Edwin H. Colbert, has been restored and will partially fund departmental projects.

Lynn Whitmore

Merger of the Herbarium of the University of Iowa with the Ada Hayden Herbarium, Iowa State University

In April 2004 the University of Iowa Herbarium (IA) was transferred to Iowa State University's Ada Hayden Herbarium (ISC). The holdings of IA, numbering ca. 230,000 vascular plants and bryophytes, represent significant collections from Iowa, especially the eastern part of the state. IA includes collections made by Thomas Macbride, Bohumil Shimek, Robert Thorne, Diana Horton, and many others. Henry Conard's specimens provide the core of the extensive IA bryophyte collection. These holdings join the more than 400,000 specimens of ISC, with significant collections by C.C. Parry, Louis Pammel, Ada Hayden, Richard Pohl, Duane Isely, and others, and with strengths in Iowa and Midwestern collections, grasses (including bamboos), U.S. legumes, and fungi.

As a prelude to the merger, the J.P. Anderson Alaskan Collection was transferred on permanent loan to the University of Alaska — Fairbanks (ALA). This collection includes more than

This space could be yours.....

SPNHC Newsletter is looking for articles, news items, etc., for the next edition. Articles of 1000 words or less considered. Contact Andy Bentley (ABentley@ku.edu) for information.

30,000 specimens of boreal plants and fungi, especially from Alaska.

Remodeling of the herbarium space at ISC to accommodate the combined herbaria is completed, and the collections are now accessible. Please contact Deb Lewis, ISC Curator, to arrange for a visit or loan. Vascular plant and bryophyte specimens from IA should continue to be cited with that acronym in publication.

Deborah Q. Lewis, Curator
Ada Hayden Herbarium (ISC), Department of EEOB
Iowa State University, Ames, IA 50011-1020
E-mail: dlewis@iastate.edu
Phone: (515) 294-9499; Fax: (515) 294-1337

Polar Rock Repository Opens

The United States Polar Rock Repository, an addition to the Byrd Polar Research Center, opened at Ohio State University last fall. This new national facility houses rocks collected in Antarctica and the Arctic, along with associated materials such as field notes, 35 mm slides, air photos, maps, raw analytical data, paleomagnetic cores, and petrographic thin sections.

Some remote sites have been visited only once by researchers, and the costs of making expeditions to the polar regions make the rocks quite valuable. Many collections currently are not in permanent storage and are at risk of being lost. The repository has already received several large collections of rocks and expects the delivery of more collections in the coming months. The rocks stored in the repository are available for study by visiting scientists, and relevant sample data is included in the ever-growing online database (<http://www-bprc.mps.ohio-state.edu/rr/samples/>).

The repository can store an estimated 70,000 rock samples on its current 12-foot-high movable shelving. The repository has a rock preparation room, work and office areas, computers, and a petrographic microscope available to visitors. A large steel sculpture depicting a partial map of Antarctica is visible behind a glass wall, and other windows show scenes of Antarctica. A glass case in the lobby displays some of the repository's more interesting rocks. When children come to the repository for tours, they can try on clothing that researchers wear in Antarctica and climb into a Scott tent.

The curator, Anne Grunow, has been establishing the organizational structure and policies of the repository, while Sue Rose, the assistant curator, is involved in the day-to-day work of the repository. The construction of the repository was funded primarily by the National Science Foundation's Office of Polar Programs, with matching funds from various State of Ohio and Ohio State University sources, and NSF supports the continuing operation of the repository.

Sue Rose
 Assistant Curator
 United States Polar Rock Repository
 rose.842@osu.edu

Canadian Association of Conservation Conference

CAC 2005 CONFERENCE - CALL FOR PAPERS

The Alberta Regional Group, your host for the 2005 conference and workshop, invites you to magnificent Jasper National Park in the heart of the Canadian Rocky Mountains.

The 31st Annual Conference of the Canadian Association for Conservation of Cultural Property takes stock of accomplishments, and looks confidently to the future. Papers are invited on all aspects of conservation and conservation science of artifacts, archival material and works of art. Posters and video presentations are also welcome.

This year we would like to invite papers for two specialized sessions: Education and Training, and Moving Collections. The session on education and training would introduce student projects and highlight conservation programs and the teaching labs that support young graduates with internships. For the session on moving collections, we will invite speakers who have experience in the planning and preparation for construction or expansion of museums, galleries and archives.

Abstract submissions should include the following: the title of the presentation; the names of all contributors; mailing address, telephone, fax number and e-mail of the contact person; the name of the presenting author. Abstracts should be between 300 and 500 words and will be published as part of the conference proceedings. The deadline for abstracts is December 31, 2004.

Contact: Lee Churchill and Heather Dumka,
 Program Co-chairs
 phone: (403) 268-4183/4185
 fax: (403) 265-9769
 leec@glenbow.org
 hdumka@glenbow.org

2005 PRE-CONFERENCE WORKSHOP CALL FOR PAPERS

Fur Trade Legacy:
 The State of Preservation of Organic Material

In 2005, Alberta will celebrate one hundred years as a province. Alberta's earliest success was intimately linked to the Canadian Fur Trade, and the Workshop explores the specialized area of organic materials conservation. What is the state of preservation of collections that were once the foundation of nation-building? Where are the products of the fur trade that once brought wildlife to the brink of extinction: the beaver hats, the swan skin powder puffs, the ermine trims, the buffalo coats and bear rugs, the plumes of the Belle Epoque, the mink capes?

The Workshop aims to answer questions such as: What advances have been made in conservation treatment of historic furs and feathers? What are the ideal environmental conditions for fur storage? What are the chemical and structural properties of mammal hairs and bird feathers, including their pigmentation, that impact display decisions? What goes wrong with leather?

Case studies on cleaning, stabilization and moth control, hands-on identification of fur and feather specimens, planning and maintaining cold storage, and research into the light-fastness of organic pigments will be presented for a comprehensive overview of the state of preservation of organic materials in history collections. Presenters are invited to share curatorial, scientific, technical and conservation expertise with workshop participants. The hands-on components include cleaning techniques and the preparation of reference slides and identification kits.

Submissions will be published in English and French as Preprints of the Jasper 2005 Conference Workshop. The deadline for abstracts is December 31, 2004. The deadline for final papers is January 31, 2005.

Contact:

Margot Brunn, Workshop Program
 Tel: (780) 453-9167; Fax: (780) 454-6629
 Margot.Brunn@gov.ab.ca

Wanted: Applicants for IMLS Conservation Project Support Grants

Funding is available for collection surveys, structures, museum libraries, training, and more.

Yes, museum professionals, there is a fairy godmother! The Institute of Museum and Library Services (IMLS) is gearing up for its new October 1, 2004, Conservation Project Support (CPS) deadline. IMLS wants to be sure that museums take full advantage of this source of funding to care for collections. You are eligible to compete for about \$2.3 million that can be used as follows:

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- to conduct general, environmental, and detailed conditions surveys of your collections;
- to improve environmental conditions; and
- to treat collections, conduct research, or train your staff in conservation techniques.

All applicants to the CPS grant program may apply for as much as \$150,000; however, if you have a project with far-reaching benefits to the field, you could be eligible to apply for funding in the "exceptional" grant category, which provides up to \$250,000. A one-to-one match is required, but the match can include a combination of sources, such as cash, materials and supplies, staff salaries, and indirect costs. Applicants can use CPS funds to cover the cost of consultants, travel, materials, supplies, equipment, and services.

Grant applications are evaluated by field and panel reviewers who judge criteria such as project design, methodology, budget, schedule, and personnel, as well as how the project fits within the institution's ongoing conservation activities.

The important thing to remember is that conservation and collections care require a systematic, step-by-step approach that begins with the identification of collection needs through a general survey, followed by implementation based on survey recommendations. After you determine priorities, you can begin to improve the care of your collections from an institution-wide perspective.

Institutions that need to survey small collections should consider applying initially for the Conservation Assessment Program (CAP) grant, which covers surveys that can be completed in two days or less. Learn more about the CAP grant at: http://www.ims.gov/grants/museum/mus_cap.asp

Funding for Related Educational Projects

Conservation Project Support applicants may also apply for up to an additional \$10,000 to develop and implement educational activities that relate directly to the proposed conservation project. Educational activities may include developing educational materials (audio or visual); hiring temporary staff/consultants for the project; designing a project-related exhibit; or conducting lectures, workshops, symposia, and special tours.

CPS Grant Application Statistics

The statistics in the following table offer an overview of the level of participation from museums in the IMLS CPS grant program.

Year	Total Applied	Total Funded	Total Funding %
2004	186	66	35.5
2003	234	86	27.2
2002	219	67	32.7
2001	169	73	43.2
2000	203	69	34.0

Grant-Winning Museum Projects

In 2004, IMLS awarded, among others, grant funds to the following arboreta and botanical gardens to conduct some interesting and beneficial projects:

Denver Museum of Nature and Science, CO (\$49,189) - To re-house 480 Southeast Asian costumes, accessories, and associated decorative arts in new storage cabinets and to purchase conservation supplies. This collection represents peoples primarily from the mountainous regions of Thailand, Laos, and Burma.

Michigan State University Museum, MI (\$41,722) - To re-house 7,786 fluid-preserved specimens and 435 vertebrate fossils in new storage cabinets and supplies.

Science Museum of Minnesota, MN (\$44,573) - To improve environmental conditions by installing ultraviolet (UV) film on the windows of the museum's collections gallery, installing mechanical shades on these windows to filter out damaging sunlight, installing fiber optic lighting to three exhibition cases to display light-sensitive collections, and purchasing a UV meter and installing data loggers to monitor light levels.

Milwaukee Public Museum, WI (\$22,491) - To conduct a detailed condition survey of the museum's institutional photographic collections.

Application Information

The deadline for the next IMLS Conservation Project Support grant is **October 1, 2004**. We encourage you to take advantage of this great federal resource to care for your collections. To receive an application, you may call IMLS at (202) 606-8539 or download the application guidelines from the IMLS Web site at http://www.ims.gov/grants/museum/mus_cps.asp.

For specific information about a particular project, please contact Steven Schwartzman at (202) 606-4641 or by e-mail at sschwartzman@ims.gov; or Karen Whitehair at (202) 606-8549 or by e-mail at kwhitehair@ims.gov.

Visit SPNHC on-line at:



www.spnhc.org

JAR SEALING TAPE FOR USE WITH FLUID-PRESERVED COLLECTIONS: A SUMMARY OF RECOMMENDATIONS AND SOURCES

Janet Whitmore Gillette

Collections Department, Museum of Northern Arizona, 3101 North Fort Valley Road, Flagstaff, AZ 86001;
jgillette@mna.mus.az.us

What follows is a summary of a NHCOLL-L list discussion regarding the use of jar sealing tape with fluid preserved collections. Steigerwald & Laframboise (1996) recommended applying polypropylene sealing tape with acrylic adhesive (3M Product #5086) to jar lids to reduce evaporation in fluid-preserved collections. An April 2004 query was posted to the NHCOLL-L list in an attempt to locate sources for this product. Three products were recommended by individuals responding to the post: SpecTape, Inc. #ST-408C, 3M #8086, and Parafilm. This is a brief summary of responses.

Staff at the Canadian Museum of Nature, the same institution that initially recommended 3M Product #5086, confirmed that 3M no longer produces the sealing tape. They now use SpecTape (# ST-408C), a polypropylene tape with acrylic adhesive that is essentially identical to the original product. SpecTape #ST-408C is considerably less expensive than the original (between US\$3.50 and \$2.64 per roll depending on size of order), is available in clear (ST-408) as well as eight colors (ST-408C), and has proven as effective in reducing evaporation as the 3M product.

A number of people cited the use of Contractor's or Builder's sealing tape (3M Product #8086). This is the tape personnel at the Sam Noble Oklahoma Museum of Natural History used to seal polycarbonate food storage pails containing wet collections (Estep, 2004). Unfortunately 3M recently discontinued this product and did not recommend a replacement. However, EFI (Energy Federation, Inc.), a company that distributed the 3M tape, now stocks a replacement product made by Venture Tape. Venture Tape (Product #1585) is a polypropylene sheathing tape coated with an acrylic adhesive. The tape is available in red and white and sells for approximately US\$12.40 per roll.

Other replies documented the use of Parafilm, a clear, self sealing thermoplastic. Parafilm is available through most laboratory supply companies and can be purchased in a variety of tape widths. Costs vary between about US\$15.00 and \$30.00 per roll. Parafilm has been applied to jar threads prior to securing the lid, over the entire jar mouth and threads, as well as outside the jar at the jar-lid junction. While some respondents were content with the performance of Parafilm, others were less satisfied; in fact some observed greater evaporation rates for jars sealed with Parafilm than those without.

SpecTape #ST-408C, partnered with the use of polypropylene

lids with F217 foam or Teflon liners, appears to be the best sealing tape alternative based on performance reports, cost, and color selections. However, as the above information is simply a summary of comments, users should make their own decisions based on the information provided and personal experience.

Thanks to everyone who responded to the NHCOLL-L post with assistance, advice, and contact information.

Literature Cited

Estep, A. 2004. Use of polycarbonate food storage pails in wet collections. SPNHC Newsletter, 18(1): 1-2.

Steigerwald, M., and S. Laframboise. 1996. Tape application: a jar sealing method for reducing ethanol evaporation in fluid-preserved collections. Collection Forum, 12(2): 45-54.

SUPPLIERS:

EFI (Energy Federation Incorporated)

Consumer Division
40 Washington Street
Westborough, MA 01581-1013
USA: (800) 379-4121
International: 011-508-870-2277 ext. 2
<http://www.efi.org>

Parafilm

Available from most laboratory supply companies

SpecTape, Inc.

2771 Circleport Drive
Erlanger, KY 41018
USA: (859) 283-2044
Fax: (859) 283-2068
<http://www.spectape.com/>

Venture Tape

30 Commerce Road
P.O. Box 384
Rockland, MA 02370-0384
USA: (781) 331-5900
Fax: (781) 871-0065
Canada: (800) 544-1024 or (800) 343-1076
<http://www.venturetape.com/>

Arctos: Toward a higher standard of collection documentation

Gordon Jarrell

University of Alaska Museum, Fairbanks, Alaska USA 99775-6960;
tel: (907) 474-6946; fax: (907)474-5469; email: fnghj@uaf.edu; <http://arctos.database.museum>

The University of Alaska *Museum of the North* has a new name, a new building, and a new database. The \$31M building is still under construction, and a good database is never finished.

“Arctos” (<http://arctos.database.museum/>) was born in September 2000 when John Wieczorek of UC Berkeley’s Museum of Vertebrate Zoology moved our Mammal Collection into that institution’s comprehensive data model (“The MVZ Model”). In the past year, there have been breakthroughs: We began using MacroMedia’s ColdFusion to build Web interfaces to Oracle, and AlasConnect (a local fiber networking company and data center) offered to host our server, freeing us from basic system administration and allowing us to concentrate on interface development and importation of data from more collections. Now, 93,000 mammals, 55,000 plants, 7000 birds, and a scattering of insects and herps comprise about 155,000 online records. There are another 50,000 digital records in various stages of reformatting.

All users of Arctos, public and museum workers alike, are using one database. Thus, changes and additions are reflected on the Web instantly. Almost all data manipulation is through the Web. Museum workers need only a reasonably good Internet connection, a reasonably modern browser, and a password.

Public users don’t need a password but can create an account in order to customize the interface. We’ve tried to keep the default interface simple but still allow users as much access to the power of the system as possible. Creating an account lets you retain selected preferences for the duration of a session, or recall settings for return sessions.

Some features of Arctos include:

Projects are defined as endeavors that use specimens, contribute specimens, or both. Accessions (a group of specimens all from a single source at a single time) and loans (including records of in-house usage) are linked to a project, and of course they are also linked to the appropriate specimens. Queries trace this loop to find out things like: What projects have been supported by specimens from “my” project? What specimens were generated by a project? What specimens were used by a project? And, what publications resulted from a project?

This sounds like a lot of data to maintain, but with accessions and loans integrated into the system, it is not. Users who request specimens must describe what they want to use them for. We ask that this description be lucid enough to include in

a public forum, then we include it in Arctos. A curator approves the loan based on the description, and other criteria, and a loan preparator simply links the loan to the project. In any case, the work is worth it. Credit to contributors is automated. Writing annual reports is simplified. The scientific significance of specimens becomes self-evident.

Multiple determinations of taxonomic identity and geographic coordinates. These data are assertions, not facts. Who made the determination, when, and on what basis? We’re not just annotating labels anymore, and you can see who said what on the Web.

Individual Attributes. Arctos is taxonomically agnostic. Even though it may look that way in a data-entry application, there is no specific field for tragus length, none for weight, none for sex. These are all attribute types. A typical attribute record (or row) would be `attribute_type`, `attribute_value`, `attribute_units`. (Also, as above, who made the determination, when, etc.)

Citations. We have generalized the concept of “type status” to include all manner of specimen citations in refereed literature. If a specimen has been cited and we know it, you will see this in the individual specimen record from where you can link to the full literature citation. You can also search for specimens by publication.

Encumbrances record restrictions on specimen usage. They also flag records for screening actions, e.g., display collector as anonymous, don’t display specific locality or geographic coordinates, etc.

Linking Out. Biodiversity data should be not just on the Internet, but tied into the Internet. In late 2002, Arctos became the first institutional archive to engage GenBank with record-to-record connections. Queries from Arctos can be mapped on either of two map servers, one at Berkeley’s Digital Library Project, and one at the Canadian Biological Information Facility. And of course, Arctos data are available through the Global Biodiversity Information Facility, or any other DiGIR portal.

At this point the system is better than the data. As embarrassing as this can be, errors and lapses get seen and fixed and supplemental information come in from past collectors. Arctos can keep track of much that was, at best, informally recorded even in our Museum’s short history. Thus you will see lots of legacy default values, and there is a lot of catching up that can be done. In addition to being a tool for collection management and information dissemination, Arctos is an improved standard of collection documentation.

Continued from page 2:
Thermal transfer printers

observed these samples I have not detected any changes in label media or solution. The labels have remained the same color (no yellowing of the polyester media), the printing has not faded or released from the media in any way and the alcohol and formaldehyde solutions appear to be unaffected.

Alpha Systems (Alpha Systems Inc., 13509 East Boundary Road, Midlothian, Virginia 23112; Tel: (804) 744-9870; <http://www.alphasystemsva.com> (look for the "museum tags" information tab on the left); email: alphasys@erols.com) sells printers, polyester media and ribbons to the public under the banner of "Museum Tag Solutions".

The printer they are now selling with this package is the Datamax DMX-I-4206 which retails for about \$1300.00

The white polyester label media comes in rolls of 600 feet and either 3" or 4" wide. Prices are in the range of \$200-300 depending on how many rolls are purchased. The SDR ribbon comes in 4" width only and is 1200 feet long, enough to do two rolls of media. Price is \$72.00. (Figure 3)

This works out to between 41 and 72 cents per foot of media (depending on how many rolls are purchased, including the ribbon but not including the initial outlay for the printer), 1.5 to 3 cents per inch of label.

Thermal transfer printers, due to the print head configuration, are sensitive to dust and particulate matter adhering to the media and causing inferior printing, i.e. lines of no printing due to dust particles sticking on the head. Alpha Systems has begun installing brushes anterior to the print head to remove particles from the media and ribbon to deal with dusty environments. They will do this free of charge (or a nominal labor charge) if installation is done at time of order. They have also started vacuum-sealing the preservation tag to protect from dust and dirt during transport and storage.

Another good source for printers is Label Match (110 W. Streetsboro St., Unit 1-C, Hudson, OH 44236; (800) 726-7334; <http://www.labelmatch.com>).



Figure 1: Datamax Prodigy Max 300dpi thermal transfer printer showing front mounted optional cutter.



Figure 2: Datamax Prodigy Max 300 printer opened, showing internal components and loaded media and ribbon.



Figure 3: Rolls of 4 inch spun bound polyester media and SDR ribbon as obtained from Alpha Systems. Both are shrink wrapped to prevent dust and dirt accumulation.

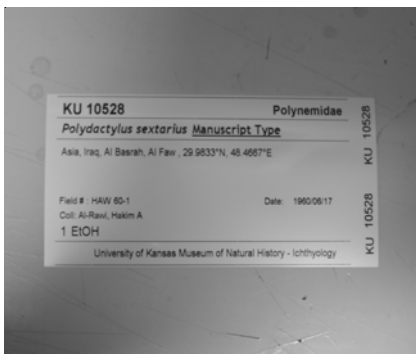


Figure 4: KUNHM Ichthyology wet collection label (4 inches wide X 2 inches high.)



Figure 5: KUNHM Ichthyology tissue labels printed in four rows, cut, hole-punched and threaded for attachment to voucher specimens.



Figure 6: KUNHM Ichthyology peel-and-present labels (various sizes) used for applying to tissue cryogenic vials.

Continued from page 17:
.....Thermal transfer Printers

The Prodigy Max printer functions much the same as a normal printer, i.e. you can print directly to the printer from any Windows application including most database programs. If you are working from a database that generates labels it is not necessary to purchase the software that sells optionally with the printer. We print labels directly from Specify (www.specifysoftware.org) to the printer. The printer can also be used over a network using a print server (additional purchase).

The ichthyology and herpetology divisions of the University of Kansas Natural History Museum are using this system to print all labels for alcohol specimens (Figure 4). The botany division and the entomology division are also testing this application in their collections for herbarium sheets and insect pin labels. We have found that the printer will print as small as 4 point font without any visible degradation of resolution.

In the ichthyology collection I am also using this system for printing tissue voucher tags (Figure 5 and 6). These are printed in batches, four columns wide on the 4" media, after which they are hole-punched, strung and cut for use in tagging vouchers of tissues and also tank specimens.

For further information or samples of preservation tag or labels please contact the author.

Publications of Interest

Change of duties. — Paula T. Work has relinquished her responsibilities as the chair of the Citations Subcommittee. I would like take this time to thank Paula for all of her hard work and a job well done. This section is from the Conservation Committee and is now chaired by Marcia A. Revelez of the Citations Subcommittee. Citations were provided by Ann Pinzl, Diana Dicus, and Marcia Revelez. Contributions, suggestions, and comments may be submitted to Marcia A. Revelez, Sam Noble Oklahoma Museum of Natural History, 2401 Chautauqua, Norman, OK 73072; (405) 325-7988 (voice); (405) 325-7699 (fax); mrevelez@ou.edu (e-mail).

Anderson, G. 2004. *Reinventing the museum: historical and contemporary perspectives on the paradigm shift*. AltaMira Press, Walnut Creek, CA. 432 pp.

Burger, W.C. 2004. Another opinion: Up with alphabetically arranged herbaria (and floristic listings too for that matter.) *Pl. Sci. Bul.* 50(1): 7-9.

Butler, C. 2004. The conservation of a fossil marine reptile. *ICOM Natural History Collections Working Group Newsletter* No. 13: 5-6.

Carbonell, B.M. (editor). 2004. *Museum Studies: An Anthology of Contexts*. Blackwell Publishing, Malden, MA. xxxiii + 640 pages.

[A compilation of 53 articles and essays spanning more than 100 years, including a section of 11 contributions on "States of 'Nature' in the museum: natural history, anthropology, and ethnology."]

Carter, J. 2004. Improving molecular preservation in fluid preserved collections. *ICOM Natural History Collections Working Group Newsletter* No. 13: 8-13.

Chew, R. 2004. Taking action! Advocates? Or curators of advocacy? *Museum News* 83(2): 38-43.

Christenhusz, M.J.M. 2004. The hortus siccus (1655) of Petrus Cadé: a description of the oldest known collection of dried plants made in the Low Countries. *Archives of Natural History* 31(1): 30-43.

Clavir, M. 2002. *Preserving what is valued: museums, conservation, and First Nations*. University of Washington Press, 320 pp. ISBN 0774808618.

Collar, N. J. 2000. Collecting and conservation: Cause and effect. *Bird Conservation International* 10: 1-15.

Cornish, L. 2004. Cleaning natural history material with lasers. *NatSCA News Issue* 2: 28-29.

Cunningham, M. K. 2004. *The interpreters training manual for museums*. American Association of Museums.

Druzik, J. 2004. Illuminating alternatives: research in museum lighting. *The Getty Conservation Institute Newsletter* 19(1): 17-19.

Dutton, L. S. (ed.) 1999. *Anthropological Resources: A guide to archival, library, and museum collections*. Garland Publishing, Inc. New York, NY. ISBN 0815311885.

Gardner, J. B. and E. E. Merritt. 2004. *The AAM Guide to Collections Planning*. AAM Professional Education Series. American Association of Museums, 93 pp.

Green, P. 2004. A method for undertaking a full conservation audit of special collections of books and manuscripts. *Collection Management* 28(4): 23-42.

- Hitchcock, A. 2004. Lessons in the fog: war and heritage preservation. *Museum News* 83(3): 47-55.
- Horton, D. 2004. The Iowa issue: organismal and environmental biology. *NatSCA News Issue 2*: 17-18.
- Laurianne, R. and D. Thickett. 2003. A new methodology for accelerated corrosion testing. *Studies in Conservation* 48: 263-268.
- Macfarlan, S. J., and E. Johnson. 2004. Education collections as museum collections. *Curator* 47(1): 101-113.
- Maekawa, S. and V. Beltran. 2004. Climate controls for historic buildings: a new strategy. *The Getty Conservation Institute Newsletter* 19(1): 21-24.
- Miller, Z. 2004. The conservation of Sir Hans Sloane's Collection of Vegetables and Vegetable Substances. *NatSCA News Issue 2*: 25-27.
- Morris, M. 2004. Expansionism: successes and failures. *Museum News* 83(4): 30-35.
- Nash, S. 2003. *Curators, collections, and contexts: Anthropology at the Field Museum, 1893-2002*. Fieldiana, volume 36, publication 1525. 336 pp.
- Natural Hazards Observer*. July 2004. Volume XXVIII Number 6. ISSN 0737-5425. The *Observer* is free to subscribers within the U.S. Subscriptions outside the U.S. cost \$24.00 per year. Printed in the USA, published bimonthly. Natural Hazards Research and Applications Information Center. University of Colorado at Boulder. 482 UCB, Boulder, Colorado 80309-0482. Copies of the *Observer* and the Center's electronic newsletter, *Disaster Research*, are available from the Center's web site: <http://www.colorado.edu/hazards/>.
- Padfield, T. and P.K. Larsen. 2004. How to design museums with a naturally stable environment. *Studies in Conservation* 49: 131-137.
- Prather, A. 2004. Maintaining support for herbaria in the 21st century. *NatSCA News Issue 2*: 20-23.
- Prather, A. and L. G. Clark. 2003. Summary: Maintaining support for herbaria in the 21st century. *ASPT Newsletter* 17(2): 3-5.
- Prather, L.A., O. Alvarez-Fuentes, M.H. Mayfield, and C.J. Ferguson. 2004. The decline of plant collecting in the United States: A threat to the infrastructure of biodiversity studies. *Syst. Bot.* 29(1): 15-28.
- Prather, L.A., O. Alvarez-Fuentes, M.H. Mayfield, and C.J. Ferguson. 2004. Implications of the decline in plant collecting for systematics and floristic research. *Syst. Bot.* 29(1): 216-220.
- Purewal, V. 2004. Report written for the Natural History Collections Working Group at the 13th Triennial ICOM-CC meeting in Rio de Janeiro, 22nd-28th September 2002. *ICOM Natural History Collections Working Group Newsletter* No. 13: 3.
- Purewal, V. 2004. Botanical conservation within the National Museums and Galleries of Wales. *ICOM Natural History Collections Working Group Newsletter* No. 13: 13-15.
- Reilly, J. 2004. Environmental Monitoring and Preservation Management Research at the Image Permanence Institute. *The Abbey Newsletter* 27(2): 9-10.
- Schaeffer, T. T. 2001. *Effects of light on materials in collections: data on photoflash and related sources*. Getty Conservation Institute, 211 pp. ISBN 0892366451.
- Simmons, J.E. 2004. Managing things: crafting a collections policy. *Museum News* 83(1): 28-31; 47-48.
- Smith, D. K. 2004. Threat to the Department of Botany at the University of Tennessee, Knoxville. *NatSCA News Issue 2*: 19-20.
- Smith, T. B., P. P. Marra, M. S. Webster, I. Lovette, H. L. Gibbs, R. T. Holmes, K. A. Hobson, and S. Rohwer. 2003. A call for feather sampling. *The Auk* 120(1): 218-221.
- Staniforth, S., R. Kerschner, and J. Ashley-Smith. 2004. Sustainable access: a discussion about implementing preventive conservation. *The Getty Conservation Institute Newsletter* 19(1): 10-16.
- Trinkley, M. 2004. Monitoring for gaseous pollutants, made simple? *The Abbey Newsletter* 27(2): 15-16.
- Tumosa, C.S., D. Erhardt, D. von Endt, and A.S.M. El Easely. 2004. Irradiation of mail: effects on archival museum materials. *American Chemical Society Symposium Series* Number 875: 314-325.
- van Dam, A.J. 2004. DMDH-Hydantoin: the promising result of a search for an alternative in fluid preservation of biological

Continued from page 19:

cal specimens. *ICOM Natural History Collections Working Group Newsletter* No. 13: 7.

Waller, R. and S. Michalski. 2004. Effective preservation: from reaction to prediction. *The Getty Conservation Institute Newsletter* 19(1): 4-9.

Webb, M. 2000. Lacquer: technology and conservation. Butterworth-Heinemann, Linacre House, Oxford. 200 pp.

Position Announcements

If you would like to submit job descriptions, please send postings to the Newsletter Editor. See the SPNHC web site, www.spnhc.org, for current postings

Museum Collection Workers (PT), Pratt Museum, Amherst MA

USA: The Pratt Museum at Amherst College has several part-time openings for packers and exhibit de-installers to assist with the storing of collections while a new facility is being built. Job duties include: packing of collections specimens for storage, collection mounts, and other items using sound conservation methods and techniques; de-installation and packing of display case specimens, display mounts, graphics and other items; moving of materials to storage; maintaining tracking system records of specimens packed/moved; maintaining inventory of packing supplies and other duties as assigned.

Qualifications: basic knowledge of conservation principles and methods, and the ability to safely secure specimens in storage containers; experience and proficiency in using packing products and tools; computer proficiency and database experience; ability to read and interpret color-coded diagrams; basic sketching skills desirable; and excellent communication and organizational skills essential. Candidate must be able to lift up to 35 lbs.

Positions are scheduled to begin in early-mid September and will continue until January, 2006. (tentative date). Work schedules are available for Monday-Friday, 9:00 a.m. – 4:00 p.m. (minimum 18 hours – maximum 30 hours/week). No benefits. Interested candidates may submit resumes or apply to: Office of Human Resources, 201 Converse Hall, Amherst College, Amherst, MA 01002-5000.

Applications/resumes accepted until positions filled.

Amherst College is an Equal Opportunity/Affirmative Action employer and encourages women, minorities and persons with disabilities to apply.

Paleo Technician, Triebold Paleontology, Inc., Woodland Park, Colorado

The position is full-time permanent. Hiree will work typically 5-6 days a week, not necessarily M-F or M-Sat, as we have staff working in the lab every day. The position is with Triebold Paleontology, Inc. (TPI) and the individual will live in or near Woodland Park, CO and work at the Rocky Mountain Dinosaur Resource Center (RMDRC) facility. We prefer to hire someone with experience, to begin working immediately. Salary commensurate with experience and qualifications. **Relevant Skills Desired:** Preparation, Field work, Giving tours and assisting the public (within the RMDRC facility), Molding, Casting, Mounting skeletons, Carpentry, Welding/ironwork, Operating heavy equipment (Bobcat), Mechanical skills (repairing Bobcat), Graphics and design skills/interest. **Benefits:** Health insurance allowance up to 7% of paycheck if you have it. Maximum \$1320 annually. Paid vacation time of 1 week after first year, 2 weeks after third year, 3 weeks after fifth year. 7 paid holidays per year (Thanksgiving, Christmas, etc) Self-directed retirement fund. We contribute matching fund up to 3% of wage. Called SIMPLE IRA. **Field work:** March/April/May/September/October could include short trips to Kansas chalk, usually not more than 4-6 days at a time. June/July/August/September could include trips to Judith River/Two Medicine/Hell Creek deposits in the Dakotas and Montana. Each northern expedition is usually 10-12 days in the field fol-

lowed by 3-4 days off back in CO. We usually camp for a few days followed by an overnight stay in a motel to clean up & restock, then back to the site. We occasionally also travel to and work at other, specific localities. The balance of the year, and sporadically during the field season, the preparator would work in the lab. **Lab work:** We use microblasters, air scribes, and a variety of hand tools. We are firm believers in the benefits of properly applied cyanoacrylate glues and vinac or acryloid coatings. The specimens we work on are varied. Depending upon his or her assignments, the hiree could be working on any or all of these. **Additional travel:** The hiree may also, depending upon the candidate selected, travel for set up and deinstallation of our traveling exhibits, travel to museums for installation of permanent exhibits, which may include overseas destinations, and to the extent of hiree's skill set, be involved in mounting of both original and cast skeletons in the lab. Each employee of TPI is involved in a variety of tasks. Although there are certain responsibilities attended-to on a daily basis, the hiree may be asked to help build a cabinet or crate, assist in the mounting of a skeleton, or help design and build a new exhibit. As an independent firm, our jobs are not as clearly defined as at most institutions, and there is considerable opportunity for cross-over into experiences beyond the basic preparation of original fossil material. **About RMDRC / TPI:** Our Mission is to discover, preserve and place significant vertebrate fossils from leased private lands into permanent repositories. RMDRC, through its affiliation with TPI, is probably one of the first ever intentionally temporary fossil repositories. We have also collaborated with museums to prepare, restore, mold and cast selected specimens of their own. To apply, contact Dave Ehler, RMDRC Director. d 719-686-1820 x109. This job posted by MERC from August 16 through December 6.

Calendar of Events

The Calendar of Events is maintained by Christine Chandler of the Documentation Committee. Application deadlines, conferences and symposia relevant to collection management, computerization and conservation of natural history collections are listed. Notices may be submitted to Christine at Putnam Museum of History and Natural Science, 1717 West 12th Street, Davenport, IA 52804; (563) 324-1054 ext. 226; email chandler@putnam.org or dinoceras@juno.com.

July 2004

July 31 - August 5, 2004. **Botany 2004**, joint meeting for ASPT, the Botanical Society of America, the American Bryological & Lichenological Society and the American Fern Society, Snowbird, Utah, USA. For more information, see <http://www.botany2004.org>.

August 2004

August 2 - 3, 2004. **The Care and Preservation of Book and Archival Materials: Storage Enclosures**, presented by the UMCA, Karl E. Mundt Library and Archives, Madison, Wisconsin, USA. For further information, contact: Melinda Markell, Field Services Coordinator at umca@qwest.net or (612) 870-3128 (phone).

August 3 - 7, 2004. **Visitors Studies Association (VSA) Conference**, Albuquerque, New Mexico, USA. For details, visit: <http://www.visitorstudies.org>.

August 5 - 6, 2004. **The Care and Preservation of Book and Archival Materials: Storage Enclosures**, presented by the UMCA, Iowa State University, Ames, Iowa, USA. For further information, contact: Melinda Markell, Field Services Coordinator at umca@qwest.net or (612) 870-3128 (phone).

August 12 - 13, 2004. **The Care and Preservation of Book and Archival Materials: Storage Enclosures**, presented by the

UMCA, State Historical Society of North Dakota Archives, Bismarck, North Dakota, USA. For further information, contact: Melinda Markell, Field Services Coordinator at umca@qwest.net or (612) 870-3128 (phone).

August 13, 2004. **NSF Informal Science Education Grants deadline.** National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230 USA; (703) 292-8616 (phone).

August 16 - 21, 2004. **122nd Stated Meeting of the American Ornithologists' Union**, Université Laval, Québec City, QC, Canada.

August 27 - 29, 2004. 3 Day Course in **Document Imaging and Document Management**, Los Angeles, California, USA. For course details, see <http://www.archivebuilders.com/abcourses.html>.

September 2004

September 6 - 11, 2004. **The Annual Symposium of Vertebrate Palaeontology and Comparative Anatomy (SVPCA 2004)**, co-hosted by the New Walk Museum & Leicester University.

September 7 - 11, 2004. **2004 Mountain-Plains Museums Association (MPMA) Annual Conference**, Casper, Wyoming, USA.

September 9 - 11, 2004. **Current Issues and Best Practices in Museum Management**, AAM professional education seminar, Chicago, Illinois, USA. For more information, visit <http://www.aam-us.org>.

September 16, 2004. **NEH Consultation Grants for Libraries, Museums, or Special Projects and Planning Grants for Libraries, Museums, or Special Projects deadline.** National Endowment for the Humanities, 1100 Pennsylvania Ave. NW., Rm. 402, Washington, DC 20506 USA; (202) 606-8400 (phone); www.neh.gov.

September 19 - 20, 2004. **The Care and Preservation of Book and Archival Materials: Storage Enclosures**, presented by the UMCA, James J. Hill Library, St. Paul, Minnesota, USA. For further information, contact: Melinda Markell, Field Services Coordinator at umca@qwest.net or (612) 870-3128 (phone).

September 19 - 22, 2004. **Association of Science-Technology Centers (ASTC) Annual Conference**, San Jose, California, USA, hosted by the Tech Museum of Innovation. Check out <http://www.astc.org> for more information.

September 27 - October 1, 2004. **Collections Management in Storage**, Campbell Center for Historic Preservation Studies course, Mt. Carroll, Illinois, USA. Registration deadline: 15 August. For details, visit <http://www.campbellcenter.org>.

September 27 - October 1, 2004. **Pigment Identification Techniques for Art/Architecture Conservators**, Campbell Center for Historic Preservation Studies course, Mt. Carroll, Illinois, USA. Registration deadline: 15 August. For details, visit <http://www.campbellcenter.org>.

October 2004

October 2 - 3, 2004. **Strategies for Collaboration Workshop**, Montshire Museum of Science, Norwich, Vermont, USA. For more information, visit: www.montshire.org/teams.

October 4 - 6, 2004. **East meets West: Influence, Interchange and Interoperability**, organized by the International Documentation Committee of ICOM (CIDOC), Seoul, Korea.

October 4 - 6, 2004. **Computer Software for Collections Management**, Campbell Center for Historic Preservation Studies course, Mt. Carroll, Illinois, USA. Registration deadline: 1 September. For details, visit <http://www.campbellcenter.org>.

October 8, 2004. **Disaster Mitigation for Cultural Collections:**

Risk Assessment and Crisis Communication, a Conservation Center for Art and Historical Artifacts (CCAHA) workshop, Portland, Oregon, USA. For more information, see <http://www.ccaha.org> or email ccaaha@ssaha.org.

October 8 - 10, 2004. **Latin American Biogeography—Causes and Effects, 51st Annual Systematics Symposium**, Missouri Botanical Garden, St. Louis, Missouri, USA. For more information, see <http://www.mobot.org/MOBOT/research/symposium/welcome.shtml>, write Systematics Symposium, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299 USA, contact P. Mick Richardson at mick.richardson@mobot.org or phone (314) 577-5176.

October 12 - 16, 2004. **Spot Testing for Materials Characterization**, Campbell Center for Historic Preservation Studies course, Mt. Carroll, Illinois, USA. Registration deadline: 1 September. For details, visit <http://www.campbellcenter.org>.

October 13 - 16, 2004. **Mycology for Conservators: Fungal Problems in Heritage Collections**, Campbell Center for Historic Preservation Studies course, Mt. Carroll, Illinois, USA. Registration deadline: 1 September. For details, visit <http://www.campbellcenter.org>.

October 27 - 29, 2004. **The Museum, the Baby, and the Bathwater: Authenticity in the Information Age**, New England Museum Association (NEMA) Annual Conference, Burlington, Vermont, USA. For more information, check out <http://www.nemanet.org>.

November 2004

November 3 - 6, 2004. **64th Annual Meeting of the Society of Vertebrate Paleontology**, Denver, Colorado, USA. **Learning from the Fossil Record: A Teachers' Workshop**, 6 November. Check out the SVP web site at <http://www.vertpaleo.org> for updates.

November 5, 2004. **The Latest Trends in Museum Storage**, Midwest Regional Conservation Guild (MRCG) pre-conference symposium, Cleveland Museum of Art, Cleveland, Ohio, USA. For more information, contact: Laurie Booth, Midwest Conservation Services at mwestcons@aol.com or (440) 543-2202 (phone).

November 5, 2004. **Writing for Conservation Publication**, AIC workshop, in partnership with Solinet. See <http://aic.stanford.edu/education/workshops/index.html> for details.

November 7 - 8, 2004. **In Principle, In Practice: A Learning Innovation Initiative**, Annapolis, Maryland, USA, organized by the Institute for Learning Innovation. More information is available at <http://www.ilinet.org>.

November 7 - 10, 2004. **Geoscience in a Changing World, Annual Meeting of the Geological Society of America**, Denver, Colorado USA. For details, see <http://www.geosociety.org/meetings/>.

November 8 - 9, 2004. **The Virtual Reference Desk (VRD) 6th Annual Reference Conference: Creating a Reference Future**, Cincinnati, Ohio, USA. For more information, check out <http://www.vrd2004.org> or contact Jo Ann Cortez at vrdconf@vrd.org or (800) 464-9107 (phone).

November 10 - 13, 2004. **Great Technology for Collections, Confluence, and Community - 2004 Museum Computer Network Conference**, Minneapolis, Minnesota, USA. For more information, contact Susan Rawlyk at (403) 288-9393 (phone); rawlyks@igs.net, or visit <http://www.mcn.edu>.

November 14 - 17, 2004. **Entomological Society of America Annual Meeting**, Salt Lake City, Utah, USA. For details, see <http://www.entsoc.org>; (301) 731-4535 (phone); (301) 731-4538 (fax); esa@entsoc.org.

November 15 - 16, 2004. **International Provenance Research Colloquium**, AAM professional education seminar, Washington,

DC, USA. For more information, visit <http://www.aam-us.org>.

December 2004

December 10 - 11, 2004. **Best Practices in Collections Stewardship: Collections Planning**, AAM professional education seminar, Washington, DC, USA. For more information, visit <http://www.aam-us.org>.

December 17 - 20, 2004. **48th Annual Meeting of the Palaeontological Association**, Lille, France.

2005

January 2005

January 18 - 25, 2005. **The 5th Annual Jekyll Island Management Institute (JIMI '05)**, Jekyll Island, Georgia, USA, sponsored by SEMC, Jekyll Island Museum and Historic Preservation, NC State Historic Sites and LaPaglia & Associates, Inc. For more information, contact the Southeastern Museums Conference at (404) 378-3153 (phone) or www.semcdirect.net.

January 28 - 29, 2005. **Secrets of Accreditation**, AAM professional education seminar, Los Angeles, California, USA. For more information, visit <http://www.aam-us.org>.

February 2005

February 9, 2005. **The 2005 Geological Society of London Lyell Meeting**, Burlington House, London, England, sponsored by the Joint Committee of Palaeontology and organized by the Micropalaeontology Society.

February 27 - March 1, 2005. **The Small Museum Association (SMA) 21st Annual Winter Conference, Partnerships: Working Together for the Future**, Ocean City, Maryland, USA. For more information, contact: Kim Samilo, Pennsylvania Federation of Museums and Historical Organizations, 130 Locust St., Lower Level, Harrisburg, PA 17101-1467 USA; (717) 909-3395 (phone); ksamilo@pamuseums.org.

March 2005

March 30 - April 1, 2005. **Legal Problems of Museum Administration**, AAM professional education seminar, San Francisco, California, USA. For more information, visit <http://www.aam-us.org>.

April 2005

April 6 - 9, 2005. **Annual Meeting of the American Association of Physical Anthropologists**, Milwaukee, Wisconsin, USA.

May 2005

May 1 - 5, 2005. **AAM Annual Meeting & MuseumExpo™, A Defining Moment: Museums at the Crossroads**, Indianapolis, Indiana, USA.

May 9 - 13, 2005. **Salvage of Wet Materials Following a Disaster**, AIC workshop, in partnership with the National Park Service, Shephardstown, West Virginia, USA. Check out <http://ais.stanford.edu/education/workshops/index.html> for details.

May 16 - 20, 2005. **Adhesives for Conservation**, AIC workshop, in partnership with the Gerald R. Ford Conservation Center, Omaha, Nebraska, USA. Check out <http://ais.stanford.edu/education/workshops/index.html> for details.

May 28 - June 2, 2005. **46th Annual Meeting of the Society for Economic Botany (SEB)**, hosted by the Botanical Research Institute of Texas, Fort Worth, Texas, USA.

June 2005

June 12 - 19, 2005. **20th Annual Meeting of the Society for the Preservation of Natural History Collections**, London, United Kingdom.

June 15 - 19, 2005. **85th Annual Meeting of the American Society of Mammalogists**, Southwest Missouri State University, Springfield, Missouri, USA.

June 19 - 25, 2005. **North American Paleontological Convention**, Halifax, Nova Scotia, Canada. Visit <http://meguma.earthsciences.dal.ca/napc/napc.htm> for details.

June 20 - 24, 2005. **5th World Congress of Herpetology**, Stellenbosch, South Africa. For more information, see <http://www.wits.ac.za/haa/>.

July 2005

July 6 - 11, 2005. **Joint Meeting of the American Elasmobranch Society, the American Society of Ichthyologists and Herpetologists, the Herpetologists League & the Society for the Study of Amphibians and Reptiles**, hosted by the University of South Florida, Tampa, Florida, USA.

July 18 - 23, 2005. **XVII International Botanical Congress**, Vienna, Austria; Nomenclature Section, 13 - 16 July. For information, see <http://www.IBC2005.ac.at/>.

August 2005

August 2005. **123rd Stated Meeting of the American Ornithologists' Union**, University of California, Santa Barbara, California, USA.

August 10 - 12, 2005. **II Latin American Congress of Vertebrate Paleontology**, hosted by Museu Nacional, Rio de Janeiro.

August 12 - 17, 2005. **Botany 2005**, Austin, Texas, USA.

September 2005

September 10 - 16, 2005. **ICOM-CC 14th Triennial Meeting**, The Hague, The Netherlands. For information, go to <http://www.icom-cc.icom.museum> or secretariat@icom-cc.org.

October 2005

October 15 - 18, 2005. **Association of Science-Technology Centers (ASTC) Annual Conference**, Richmond, Virginia, USA, hosted by the Science Museum of Virginia. Check out <http://www.astc.org> for more information.

October 16- 19 2005. **Annual Meeting of the Geological Society of America**, Salt Lake City, Utah, USA.

November 2005

November 16 - 18, 2005. **New England Museum Association (NEMA) Annual Conference**, Burlington, Massachusetts, USA. For more information, check out <http://www.nemanet.org>.

2006

April 2006

April 27 - 30, 2006. **AAM Annual Meeting & MuseumExpo™ (AAM Centennial)**, Boston, Massachusetts, USA.

August 2006

August 13 - 19, 2006. **24th International Ornithological Congress**, Hamburg, Federal Republic of Germany.

October 2006

October 22 - 25, 2006. **Annual Meeting of the Geological Society of America**, Philadelphia, Pennsylvania, USA.

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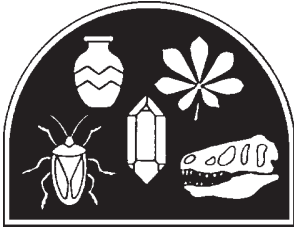
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MuseumWise: Workplace Words Defined

An SPNHC publication
Compiled and edited by Paisley S. Cato,
Julia Golden and Suzanne B. McLaren

A glossary of terms encountered in the management and preservation of collections. A project of the Documentation Committee of the Society for the Preservation of Natural History Collections, it includes terms derived from 48 bibliographic references as well as numerous additions from the editors.

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