COMMENT: This version of the newsletter was created by scanning the original copy and then editing as needed. Apologies for any scanning errors that have not been corrected. Karsten E. Hartel, MCZ January 1994. hartel@mcz.harvard.edu

CURATION NEWSLETTER No. 1 June 1980 American Society of Ichthyologists and Herpetologists

ABOUT THIS NEWSLETTER - This is the first issue of an ASIH Curation Newsletter which is aimed at dispersing material related to the curation of ichthyological, and hopefully, herpetological collections. The Newsletter will be compiled and released irregularly by members of the ASIH Subcommittee on Curatorial Supplies and Practices. It is the function of the subcommittee to update, emend, and release new information on curation as suggested in the "Report on Current Supplies and Practices Used in the Curation of Ichthyological Collections" produced-by this subcommittee in 1979.

We will supply information on equipment procedures, and methods based on the combined knowledge of the subcommittee and, most importantly, on material contributed by members of the Society. In addition, comments, questions, and points of view will be solicited and published. We think that this compilation can contribute significantly to the welfare of the resources under our care. We also hope that we will be able to generate answers to some questions by stimulating comments and rebuttal on certain topics or by pointing out areas where curation research should be directed.

However, for this effort to succeed there must be feedback from all interested members. This, therefore, is a plea for cooperation in order to make this newsletter of value to everyone. If you have something to say regarding curation I encourage you to send your remarks to the subcommittee. Karsten E. Hartel, Chairman, ASIH Subcommittee on Curatorial Supplies and Practices.

ASIH 1979 CURATION REPORT - The sixty-three page "Report on Current Supplies and Practices Used in Curation of Ichthyological Collections" prepared by the Ichthyological Subcommittee on Curatorial Supplies and Practices has been reproduced and is available free of charge from L. W. Knapp, Smithsonian Oceanographic Sorting Center, Washington, D. C. 20560

NOTES ON BYRON WESTON LINEN LEDGER - Institutions using or planning to use Byron Weston Linen Record Resistall Ledger for wet label use should carefully examine and test in alcohol and formalin a sample of the batch they receive. It may not be of the same quality as a former order or test sample.

A recent Smithsonian Institution order of Byron Weston 36# Linen Resistall Ledger was found to be unsatisfactory when immersed in ethanol and formalin, and was not of the same high quality as samples received and tested over a span of years. After only a day in alcohol it was apparent that the surface of the paper could easily be abraded with rubbing, resulting in removal of the ink, and could easily be torn. There appeared to be little or no "Resistall" quality to the paper.

A sales representative forwarded samples from the above order to the company for testing, along with a sample of the supposed same grade of paper purchased in 1973. The following conclusions were reached: 1) Byron Weston has made no changes in the grade of the paper from 1973 to present. 2) Laboratory tests made by Byron Weston showed there was less absorption of the "Resistall" chemicals in the recent shipment than in

the 1973 batch. It was said that this decrease in the absorption would not be evident in their normal testing as their specifications for this grade do not normally take in the usage of this paper immersed in alcohol and formal dehyde.

As a result of this problem the Byron Weston Company has said that they are now including a requirement for immersion in alcohol and formal dehyde in the testing of Resistall treated paper. They are also anticipating including an additional additive in subsequent productions that will materially add to the improbability of any similar problems in the future.

LE-PARFAIT FRENCH-STORAGE JARS - The Le Parfait line is now distributed by Grant-Howard Associates, P. O. Box 639, 465 Canal Street, Stanford, Connecticut 06904, (203) 359-4781. Bottles ranging up to 3.0 liter capacity are available FOB Morgantown, West Virginia with a 10% discount on orders of \$100.00 or more. This company will also arrange direct import of 20' long containers, duty paid, to the east coast of the U.S. including brokerage and clearance fees. It takes 7,452 1.5 liter bottles to fill a container but savings might be realized if several museums joined together, providing the shipping costs from pier to destination were not prohibitive.

EPDM REPLACES BUNA-N - In this committee's 1979 Report on Current Supplies and Practices, gaskets made of Buna-N were recommended for use on bailtop jars and tanks. Buna-N is a synthetic rubber that we considered a more stable, long-term material than rubber or neoprene. While it is relatively alcohol resistant, some cracking has been reported from recently manufactured gaskets.

EPDM is also a synthetic manufactured by Dupont under the brand name Nordel. Tests performed by the American Society for Testing and Materials (ASTM) reveal it to be craze resistant (crack resistant) to weather and sunlight, temperature resistant from -70øz to 300øF and completely water resistant. Similarly, tests indicate resistance to both ethyl and isopropyl alcohols and ozone attack.

Bill Saul, at the Academy of Natural Sciences in Philadelphia, has found recently ordered EPDM gaskets to be quite flexible and form a much better seal than the old rubber gaskets. At present, it appears EPDM is more suitable than Buna-N. Hopefully, EPDM will prove to be satisfactory in long-term storage.

MAMMAL COLLECTION CURATION - Williams, S.L., R. Laubach and H.z. Genoways. 1977. A Guide to Management of Recent Mammal Collections. Spec. Publ. No. 4., Carnegie Mus. Nat. Hist. 105 pp. \$8.50. Although this is a review of mammal curation, many of the ideas in the first half of the publication might be of value in the management of ichthyological or herpetological material. The last half of the paper is of less value since it is a systematic list of mammals to the generic level for use in collection arrangement.

ALCOHOL HYDROMETER READINGS - At the Division of Fishes, National Museum of Natural History we were concerned about the concentration of the ethyl alcohol in our large storage tanks. We questioned what, if any, effect the presence of dissolved salts and oils would have on the hydrometer readings that were used to determine the alcohol concentration. The Conservation and Analytical Laboratory (CAL), a division of the Smithsonian Institution was asked to determine if the hydrometer readings

were accurate and what strength alcohol should be added to zhe tanks to maintain the desired alcohol-concentration. Two samples were taken from tanks with alcohol darkly colored by dissolved impurities. The CAL reported that analysis of one sample showed dissolved material to be 0.9% of the total by weight and that this amount should have no effect on density measurements obtained by a hydrometer. The CAL also analyzed the water content of the sample using copper sulfate and phosphorous pentoxide methods. The two procedures yielded water contents of 53.3% and 52.7% respectively, which would correspond closely to a hydrometer value for 46% ethyl alcohol. Their conclusions state that "the determined water content (53%) and determined dissolved materials content (1%) imply an alcohol content of 46%. The same percentage was obtained by a hydrometer reading. The amount of dissolved materials is evidently too small to interfere." In this situation, their recommendation for maintaining a 75% alcohol concentration was to add at least 87-88% alcohol. This presumes that the tank is at equilibrium, all fish tissues are in 75% alcohol, and that no fish specimens are added that would contain water. G. Van Dyke, USNM

ABISCO 8-LITER JARS - Jack Randall and Arnold Sllzumoto (B. P. Bishop Museum) have sent us a sample 8 liter jar made in Japan. These jars are well made and come with a very sturdy plastic top and a polypropylene insert that fits into the mouth of the bottle to prevent evaporation. Carrying handles are supplied as an additional price. Based on January 1980 prices, they are available for 11,200 Yen/6 pack without handle or 11,800 Yen/6 pack; with handle (\$42.00 and \$44.25 respectively). A large pre-paid minimum order is required with all terms FOB Japan (note that brokerage fees can be very high). Contact Abico Scientific Manufacturing Co., P.O. Box 12, Kashiwa 277, Japan for information on a pro forma invoice.

COMPACTORS TWO YEARS PLUS - Compactor storage systems have been in use for several years but only recently has their practicality been extended to ichthyological collections. Briefly, compactors are moveable shelving units that utilize the wasted space formerly taken up by aisles.

The compactor system in the Academy of Natural Sciences of Philadelphia fish collections has been in use some two years now. The manufacturer is Lundia, Myers Industries, Inc. of Jacksonville, Illinois. Units are manually driven and are 18 feet long x 3 feet wide and will accommodate up to 20,000 pounds-per unit. Up to three units can be moved with a minimum of effort. At the time of installation (Dec. 1977), the cost of compactorizing two floors of the Academy's new research wing was less than half the cost of the addition of another floor. Where units have been installed, we have expanded that area by over 70 percent.

Before making any decisions regarding compactors, I would suggest the following: 1) If purchasing wooden shelves, be sure they don't sag when completely loaded. In general, a three foot shelf would be the maximum length. 2) Allow for the additional cost of covering the compactor deck either with alcohol resistant tile or urethane coating. -3) Consider the load-bearing capacity of the floor. 4) Look into several companies and let them decide the feasibility of compactor installation within the desired area. Generally, there is much less expansion realized when interruptions such as beams and pipes are present.

We have been very pleased thus far with our units at ANSP. In addition to increasing our storage capacity, we also notice a reduction in the amount of dust accumulating on jars and shelves. More importantly, due to the nature of the units, light is blocked out except in sections where there is activity.

At the time of this issue only two U.S. fish collections are housed in compactors: The Florida State Museum collection and the Academy of Natural Sciences of Philadelphia collection. For more details, contact either Bill Saul (ANSP) or George Burgess (FM). - Bill Saul, ANSP

AVAILABILITY OF WHEATON "CANNING JARS" - The 1979 ASIH Curation report states that the 12 oz. old fashioned canning jar had been discontinued. The bottle is back in production and is available along with a popular 8 oz. size. The jars are marketed under two different names, but according to the Wheaton Company, both jars are identical. The "specimen bottle" is distributed through the Scientific Division of Wheaton, whereas the "old fashioned canning jar" is distributed through the consumer Products Division. There appears to be a significant price difference between the two divisions, the former being more costly, so comparative pricing is recommended before making any purchase.

Cat. No.	Approx. Volume	Name of Jar	Per Case
226237	8 oz. (200 ml.)	Specimen bottle	24
226238	12 oz. (300 ml.)	Specimen bottle	12
15140	8 oz.	0l d Fashi oned	
		Canni ng Jar	24
15143-	12 oz.	0l d Fashi oned	
		Canni ng Jar	12

As also mentioned in the 1979 Report, a word of warning is advisable on the above bottles: The National Museum of Natural History has experienced problems with very tight bails making it difficult to fully clamp down the glass lids. This in turn has caused a significant number of jars to chip at the points on the neck where the bail is seated, thereby rendering the jars useless. We are in the process of determining whether Wheaton will replace jars that break. In this manner and our findings will be made public in a future newsletter. In addition to this problem the USNM has had trouble with irregularities in the rims of the glass lids which cause the jars to leak, and with shearing off of the entire neck of the jar at the lower margin of the neck.

WHEATON PRODUCTS - Herb Boschung advises us that Wheaton products including Triomphe and "old fashioned candy jars" are available in the south east from Joel Grossbart and associates, Suite 11C3, Merchandise Mart, Atlanta, Georgia 30303, (404) 522-8111 or toll free (800) 241-4647, or Suite 1AA96, Merchandise Mart, Miami, Florida 33126, (305) 266-5041. Full catalogue and price list are available. For other distributors see the 1979 Report.

Except where noted this newsletter is written and compiled by the ASIH Ichthyological Subcommittee on Curatorial Supplies and Practices and is intended for the use of our membership. Comments on supplies, procedures or products should not be construed as an endorsement by the ASIH. Any correspondence, questions, or notes expressing points of view should be addressed to: Karsten Hartel, Subcommittee Chairman, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138; Janet Gomon, Susan Karnella, or Leslie Knapp, U.S. National Museum, Washington, D.C. 20560; William Saul, Academy of Natural Sciences of Philadelphia, 19th and the Parkway, Philadelphia, Pennsylvania 19103; or Edward Wiley, Museum of Natural History, Lawrence, Kansas 66045.