

# SPNHHC

## The Society for the Preservation of Natural History Collections

### Collection Forum

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#### PAPERS

##### THE EFFECTS OF FREEZING ON FORMALIN PRESERVATION OF SPECIMENS OF FROGS AND SNAKES

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Abstract - Fresh specimens of the wandering garter snake and northern leopard frog were killed and divided into three groups. One group was kept frozen and one kept under refrigeration for five days before preservation in 10% formalin. The remaining group was preserved shortly after killing. After four months of storage in preservative, there were observable differences in the quality of the specimen condition.

##### DOCUMENTATION GUIDELINES FOR THE PREPARATION AND CONSERVATION OF BIOLOGICAL SPECIMENS

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Abstract - The importance of complete and accurate documentation of preparation and conservation treatments was stressed by Fitzgerald (1988) for the earth sciences, and is reiterated here for the life sciences. The guidelines presented herein represent an effort by the Conservation Committee of the Society for the Preservation of Natural History Collections to promote and standardize the documentation of specimen preservation methodologies, conditions, and treatments within natural science collections.

##### INTEGRATED PEST MANAGEMENT AT THE DENVER MUSEUM OF NATURAL HISTORY

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Abstract - The Denver Museum of Natural History recently suspended regular use of toxic fumigants in the zoology research collections and substituted an integrated pest management program consisting of specimen monitoring and localized fumigation of infested cabinets. A bird conservation survey provided baseline information on the physical condition of specimens in the collection, evidence of dermestid beetles, and targeted specimens in need of conservation. The museum also expanded protection of exhibited zoological specimens by instituting

systematic conservation audits, basic cleaning, and pest management, involving regular monitoring and use of low-toxicity insecticides and insect traps in dioramas.

#### COLLECTION AUTOMATION: TAILORING DATABASE AND COLLECTION MANAGEMENT TO SUIT A NATURAL HISTORY COLLECTION

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Abstract - Automating natural history collection data can have far-reaching effects on collection management. It is vital that the planning of a system include appraisal of present and possible future uses of the data (on-line and as output). The software's limitations also need to be considered. A number of important issues to consider include database management requirements such as: (1) standardization of terminology, (2) updating data, (3) use of catch-all fields and unique fields, (4) conventions and use of term characteristics to produce desirable hardcopy products, and (5) data quality requirements (including precision, accuracy, use, and coding of data). Collection management issues involve organization of the collection and how it can be improved by implementing user-based hierarchies. Finally, documentation, along with gathering of data, and training of personnel are briefly discussed.

#### A CODING SYSTEM FOR NATURE OF SPECIMEN FOR RECENT MAMMAL COLLECTIONS: MIXING DOCUMENTATION NEEDS, TRADITION, AND COMPUTERS

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Abstract - A coding system to describe the nature of Recent mammalian specimens is presented. It addresses human and computer restrictions while remaining flexible and expandable. A single term is comprised of two parts, a primary descriptor and a secondary descriptor, that are separated by a hyphen. The primary descriptor of this code indicates the parts of a specimen that have been prepared. The secondary descriptor of the code indicates the preparation methods used. Several terms may be required to adequately describe a specimen. Standardized terminology used to describe the condition of a specimen for collection management purposes is also presented. Useful, unique, and consistent strings are the optimal goal from a perspective of computer compatibility.

#### Reviews

- Materials for conservation, by C. V. Horie
- Conservation of natural history specimens: Spirit collections, by C. V. Horie, ed
- Women anthropologists: A biographical dictionary, by U. Gacs, ed.