



EAP GUIDELINES FOR COLLECTION RESEARCH USE

The Environmental Archaeology Program (EAP) laboratory and collections are supervised by the curator, **Dr. Kitty Emery** (273-1919, kemery@floridamuseum.ufl.edu) and collection manager, **Nicole Fuller** (273-1926, fullern@floridamuseum.ufl.edu). This document provides detailed information to facilitate your research. Please contact us with any specific questions and please let us know if we can do anything to make your work more efficient and productive.

I. General information and responsibilities of lab and collection users

1. The laboratory is open between 9 a.m. and 5 p.m., Monday through Friday. The lab is closed after hours, on weekends, and on university holidays. Work during these times is discouraged and requires written approval of the curator.
2. Permission to use the lab's facilities and collections, including supplies and equipment, is arranged with the curator. Lab space and work time should be scheduled in advance. Even if you have permission for work in another area of the Museum, please do not work in the EA collections without permission of the EA curator and an orientation meeting.
3. We usually do not issue keys/fobs except to Emery's graduate students and long-term employees. All key/fobs must be approved by Emery and the Natural History Department chair.
4. All personnel using the collections must wear a Florida Museum identification badge at all times. Temporary visitor badges are provided at the main reception desk. Permanent badges will be issued to Emery's graduate students, employees, affiliates, and interns/volunteers with curator approval.
5. While working in the EAP laboratory, please keep work areas clear and organized (they are shared). Be aware of safety and make sure that sharps and chemicals are stored and used correctly. Closed toe shoes must be worn while in the lab. Do not use computers if you are not authorized to do so. Do not have food or drink (except water in covered containers) in the range or computer rooms. When you leave, make sure the lights are off and doors are locked.

More detailed information is available in the EAP General Lab Guidelines document.

II. Incoming Material

All Incoming material that will be housed in the EAP Laboratory for more than a single working day, regardless of material type, or whether it is archaeological or modern, will be processed as with any other incoming material. Any material that will remain in the EAP for longer than one week will be considered as a part of the formal collections under legal responsibility of the EAP.

1. Any incoming collection material (archaeological or modern) must have been previously fumigated at the UF Pest Control facility. With curator permission, small collections may be put into the EA freezer with a label. The material should be logged in and out on the freezer clipboard. It should stay in the freezer for 7 days to insure that all life stages of potential insect pests are killed.
2. All incoming material must be logged into the "EA Receipt of Incoming Materials Log" by EAP staff on first entry into the lab. Any materials that will become part of the EAP collections (temporary/permanent) collections must also be recorded in the EA Comparative Collection or EA Archaeological Collection logs. Copies of any accompanying permits or paperwork must be provided to the EAP for our files and will be stored as part of our permanent archives.
3. Following pest-control, all materials destined to become modern comparative specimens are catalogued and pre-prepped by the EAP staff to skeletonization at the off-site FLMNH Prep Lab. We appreciate assistance with preliminary preparation so let us know if you would like to be involved. Following skeletonization, modern comparative specimens are labeled and curated for integration to our comparative collections. We appreciate assistance with all stages of specimen curation so please let us know if you would like to be involved under supervision by our EAP staff members.
4. Following pest-control, all archaeological materials to be housed in the collections (except wet archaeobotanical specimens) must be air dried either prior to entry into the Museum or immediately after entry on clearly labeled drying racks in the wet lab area of the range, before being stored. EAP



staff will assist with locating racks to avoid confusion between samples. Please request advice from our staff if your collection needs washing because our facilities are not able to handle soils.

III. Zoological Comparative Collection Use

Comparative specimens and associated data are essential for our research and are therefore a priceless resource that must be treated with greatest respect. The comparative collection is a valuable resource only if it is in correct systematic order and if the species identifications are correct and the specimens unmixed. Please follow the simple guidelines below when using comparative materials.

1. Always obtain permission from the curator or collection manager before using the comparative collections. ALL specimens must be selected off shelves by the collection manager or curator. Ideally, please provide a list of species you will want to look at, preferably in taxonomic order, so that these can be pulled before you arrive (two weeks minimum is required).
2. List all specimens taken to your work space by both taxa and catalog number (give one copy of the list to the collection manager and retain a copy for yourself, update these regularly).
3. Please notify the collection manager or curator of any mixed, broken, un-numbered, or apparently mis-identified specimens. The collection manager is responsible for maintenance of the collections. With permission and supervision, we encourage you to assist in the preparation and curation maintenance of these collections.
4. For easier access to individual bones, comparative specimens may be spread out in a flat cardboard or plastic tray, but not directly on the table top without a container. Specimens should be kept separate (i.e. do not mix elements from multiple specimens by laying them out on a single tray/box).
5. Make sure all elements, sub-boxes and vials are returned to the specimen box after use.
6. During your stay, please store your comparative materials in the area designated by the collection manager or curator after every use, preferably in taxonomic order.
7. For specimens stored on shelving units in the range - never stack more than two comparative specimens on top of each other, and never stack a larger box on top of a smaller box (as it can make the stacks unstable).
8. Some of the comparative specimens are sided. If so, the left element is marked with a small red dot.
9. If you are interested in photographing or measuring specimens, we ask that you make this request in advance and provide the EA Program with a copy of images and data. We will curate these with other data collected about the specimen(s).
10. When you are finished with the specimen, give it to the collection manager, do NOT return it to the collection yourself. ALL specimens must be checked and returned to the shelves by the collection manager.

In addition to standard zoological specimens, the EA lab has other resources you may want to consult (ask the collection manager how to access these resources):

- Modern human skeleton
- Synoptic fish otolith and atlas collections
- Photographic atlases of select fish elements, domestic species, Mesoamerican fauna, and Central American Unionid clams
- Labeled and/or articulated skeletons

For your information, the comparative collection is arranged systematically within class (Mammals, Birds, Reptiles, Amphibians, Actinopterygii, Chondrichthyes) according to Simpson's classification. The brown folder hanging at the front of the collection room is a useful resource for systematic collection access:

- A. Within class, orders are systematic
- B. Within orders, families are systematic
- C. Within families, genera are alphabetic
- D. Within genera, species are alphabetic
- E. All undetermined species are found at the beginning of each genus
- F. All undetermined genera are found at the end of the family



IV. Botanical Comparative Collection Use

1. The comparative seed collection is organized by an Englerian family arrangement with Dalla Torre and Harms family numbering. This system is outlined in Dalla Torre and Harms (1908). The specimens are arranged by genus and species within each family.

Dalla Torre, C. G. de et H. Harms. Register zu de Dalla Torre et Harms: Genera Siphonogamarum ad Systema Englerianum Conscripta. W. Engelmann, Leipzig [Germany]. 1908. Facsimile reprint by Verlag von H. R. Engelmann (J. Cramer), Weinheim [Germany]. 1958. 568 pp. 28 cm.
2. All new seed collection users are required to complete a collection use orientation from the EAPs collection manager or curator. The goal of this orientation is to familiarize the user with the collection arrangement and procedures for handling the specimens.
3. Seed collection users should complete a collection use log and/or report collection-related project titles to the collection manager.
4. During your stay, please store your samples in the area designated by the collection manager and put them away in taxonomic order after every use.
5. You may either select a few vials or pull one drawer at a time to work with. When transporting individual vials to your work area please place them in a small box. If you select a drawer, remove only one at a time for your research. The collection manager will assist you in the initial selection of specimens.
6. DO NOT OPEN VIALS unless you have permission from the collection manager.
7. If permission is approved to open vials, only open one at a time to prevent any confusion and accidental mixing of identified samples.
8. If you are interested in photographing or measuring specimens, an EAP Research and Publication Request must be submitted in advance. These data will be curated with other data collected about the specimen(s).
9. Place any seeds removed for identification, morphometric, photographic, or other purposes into a petri dish, fragment packet or the like and identify with a small temporary tag as necessary (genus, species, collector, collection date or other unique identifier).
10. Immediately replace any seeds removed for identification, morphometric, photographic, or other purposes upon completion of their use.
11. If any seeds require destruction or will be altered in any way, you are required to complete a destructive analysis agreement form and receive written permission from the collection manager and curator. Requests are evaluated on a case-by-case basis.
12. To insure that the specimens are returned to their proper location, please ask the collection manager to assist you.



V Archaeological Collections

Temporary Storage:

1. Once retrieved from Pest Control or removed from the freezer, the collection manager/curator will advise you regarding where you should store your temporary archaeological samples.
2. Temporary archaeological samples are stored in bulk (in well-packed boxes) on the compactor, or trayed-out and stored in the work area of the range or in the compactor in the appropriate area (organized by geographic area and accession number).
3. Collections should always be labeled with the site name and project/accession number (assigned by the collection manager/curator). A printed label should be put on the box or cabinet door/shelving unit, as well as on each individual drawer/tray inside the cabinet/on the shelves.

Permanent Collections:

1. Permanent archaeological collections of the EAP are also available for research purposes. However, these are a unique and irreplaceable collection so they can only be accessed after permission has been granted by the EAP curator and collection manager via a formal proposal submission. Access to these collections is usually only with assistance of EAP staff. Please ask for help and instruction if you wish to view or do research on these collections.
2. Special instructions are required for handling of any USDA permitted archaeological soils (those from outside Florida and the United States). Soils may not be handled without prior authorization from the curator or EAP staff and after pre-instruction following the guidelines of the EAP Standard Operating Procedures (SOP) for Soils document.

For your interest, FLMNH EA Program protocols for the curation and analysis of EAP archaeological materials are briefly outlined below.

- As with all incoming collections, any archaeological materials are first recorded in the Incoming Materials binder. For any archaeological collection to be housed for more than a week, on loan for research, or being acquired permanently for the EAP, an accession/project number is assigned by the curator or collection manager and the "Archaeological Material Accession Form" is filled out by the collection manager. For collections housed only temporarily (for less than a week during the term of a visiting researcher's studies), the collection is only recorded in the Incoming Materials binder, but its maintenance is then the full responsibility of the visiting researcher. The EAP takes no responsibility for materials that are not provided with an EAP project/accession number.
- All documentation (permits, correspondence, etc.) associated with a collection is stored in archival quality folders filed (in accession number order) in designated file cabinets or shelves in the lab. To access this information, please ask for assistance from the collection manager.
- All accession/project, provenience, and identification data are entered into the EAP Database System by the collection manager. For definitions of data categories and protocols for data collection to integrate with the EAP Database, please consult the collection manager. Copies of reports/publications generated from the data are added to the accession files as they are completed.
- After identification, specimens are catalogued as "lots" of identified material (at the taxon, element, or more specific level depending on the material type and research questions). Each lot is stored in a 4mil zip-top bag with an internal acid free tag with appropriate information written in permanent black ink. All lots from one provenience are stored together in polyethylene bags and/or acid free boxes. All original data labels are stored with the curated specimens.
- Curated dry archaeobotanical and zooarchaeological collections are housed in steel drawers/trays in numbered cabinets in compacted storage according to geographic region and accession number. The name of the site and its accession or project number are recorded on the printed label on the cabinet door of the storage unit (or other storage location) and usually on each drawer/tray. Wet archaeobotanical collections are stored on open shelving in the wet lab. Archaeopedological collections are stored on shelving (domestic) and locked cabinets (international).
- Specimens/lots are catalogued after identification with eight-digit catalog numbers. The first four digits reflect the accession/project number and the second four digits are sequential catalog numbers (e.g. 0631.0001). Catalog numbers for all material types (faunal, plant, and soils) are assigned by the collection manager. Each EAP researcher has a separate means of recording identification data depending on material type being analyzed and research contexts.