## Mississippi Entomological Museum Collection Policy

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Collection use. The Mississippi Entomological Museum (MEM) collection's main purpose is to support scientific research. Scientists can study MEM specimens either through research loans (see *loan policy*) or on-site visits. Scientists wishing to visit the collection must contact the MEM director or curator in advance in order to make arrangements. The museum's research collection is not open to the general public except for occasional guided tours of small groups for educational purposes. Museum specimens are used on occasion for demonstration in taxonomy classes, but in such cases specimens remain in unit trays and drawers and are not handled by students. No fees are charged for scientific use of the collection.

Data use. Specimen data from the MEM that has been databased are accessible through the internet and are freely accessible to the public. Data from non-databased specimens are also freely available. This data can be accessed through an on-site visit or through a request for data made to the MEM director or curator. Such requests are fulfilled if possible, but if the request for data is unusually large, an on-site visit by the requestor may be necessary.

Acquisitions - collecting. The MEM actively seeks to enhance its collection through the addition of specimens with high quality data. Collections made by MEM staff are a significant portion of the total insects added to the museum holdings each year. These collecting efforts are concentrated in significant and unique natural habitats in the southeastern United States and focus on taxa in the museum staff's areas of expertise, which currently include Lepidoptera, Formicidae, wood boring Coleoptera, and Orthoptera. However, all taxa of insects are collected in order to enhance the overall collection. All collections are made in accordance with the laws and regulations of the United States, foreign governments, individual states, and local and private entities. Copies of all collecting permits are kept on file in the MEM.

Acquisitions - donations. Donations significantly add to the museum's holdings and usually enrich the collection with specimens from localities not readily visited by museum staff. Donations to the MEM are generally accepted with the understanding that specimens of poor quality, those with poor quality data, or some specimens from very large series might not be retained. Collecting permits for donated material, if applicable, are kept on file in the MEM. If requested by the donor, donations are evaluated for tax purposes by the museum director.

Acquisitions - voucher specimens and others. Specimens are also added to the collection through museum activities not directly related to collections made by MEM staff. For

example, many specimens are obtained through the museum's APHIS screening center for exotic insects. The museum also serves as a repository for voucher specimens for entomological research, mainly from faculty and student researchers at Mississippi State University, but also from other researchers in Mississippi. Scientists depositing vouchers are required to prepare and label specimens in an acceptable manner for the taxa in question. Each voucher specimen is affixed with a label indicating its status as a voucher along with an assigned number corresponding to the scientist's research project and publications. New acquisitions of all types are frozen before curation into the collection in order to kill any potential museum pests.

Deaccessions. Specimens that are badly damaged, those that lack data or have poor data, and some specimens from very large series are sometimes deaccessioned. Specimens that fall in these categories most often occur in specimens newly acquired through donation, but are sometimes encountered during routine curation of the collection. All such specimens are evaluated by the director or curator to be certain that they have no scientific value or historical significance. Deassessioned specimens that are not damaged are usually placed in a teaching collection. Museum specimens are never sold.

Loan requests. Specimen loans are made to scientists for research purposes and to obtain authoritative identifications from taxonomic specialists. Requests for specimen loans are normally made through the MEM curator, although some loans are initiated through the MEM director or other MEM research staff, if the requested taxa fall under the purview of their taxonomic specialty.

Acknowledgement of receipt of specimens. Two copies of the MEM loan form will be sent to the borrower. Upon receipt of specimens, the borrower must sign and return one copy of the loan form, noting the condition in which the specimens were received.

Care of specimens. Borrowed specimens should be kept in trays or drawers that clearly indicate that they are property of the MEM collection. If in the course of research MEM specimens are mixed with specimens from other collections, each specimen should be individually labeled to indicate that it is the property of the MEM collection. The borrower is fully responsible for the care of the specimens, which should be protected from breakage, dust, mold, and museum pests.

Duration of loans. Loans are normally made for a period of three years, with renewal of a loan usually granted upon written request.

*Student loans*. Loans initiated by graduate students are normally made to their major professor, who agrees to be responsible for the care and safe return of the specimens at the completion of the student's degree program.

*Third parties*. Loans may not be transferred to a third party without written permission of the director or curator. If permission to is granted, a new loan will be made to the third party.

Dissection and other destructive sampling of specimens. The borrower must obtain written permission for any dissection or other treatment that will permanently alter specimens, including destructive sampling for DNA extraction. If permission is granted, specimens should be part of a series, and if dissected, parts must be stored or mounted in a generally accepted way for the taxon in question. Dissection of types, rare specimens, or unique specimens requires specific written permission of the director or curator.

*Microscope slides*. Slides prepared by the borrower must be labeled so as to be easily associated with the other parts of the specimen pinned or in alcohol. Slides must be returned at the same time as other specimen parts, but separated from them in order to avoid breakage

*Databases*. Preexisting database labels, if present, should not be removed from specimens and should be preferentially used in any database. Borrowers wishing to add new database labels to specimens should consult with the MEM director.

Return arrangement of specimens. Specimens should be arranged so that their identification is unambiguous, with species clearly separated from each other. Determination labels should be placed on each specimen.

Type specimens. The MEM does not house holotypes. Holotypes designated from MEM material should be deposited in the Smithsonian Institution (USNM). Deposition of holotypes in other institutions is sometimes allowed if that institution houses major holdings of the taxonomic group in question, but in such cases written permission from the MEM director is required. If paratypes are designated based on MEM specimens, at least one male and one female paratype should be returned to the MEM. Publications designating a holotype from an MEM specimen should include the following or similar statement: "Holotype from MEM deposited in USNM."

Retention of specimens. Retention of specimens identified by the borrower, which have duplicate label data and which represent not more than 1/4 of each species in the loan, is permitted subject to the approval of the director or curator. Unique specimens, representatives of polymorphic forms, and examples from diverse localities must be returned. Borrowers must supply a list of any species retained along with a copy of the complete label data for each specimen retained.

Publication of results. The borrower should acknowledge the Mississippi Entomological Museum in any paper based on the study of the loaned material. The acronym or codon for the Mississippi Entomological Museum is "MEM." Hard or electronic copies of all publications based on MEM specimens should be sent to the curator. If reprints are not available, the curator should be notified of the publication citation.

*Loan renewal*. At the end of each loan period, a request for a loan extension should be made to the curator. If a loan is terminated or extension denied, specimens must be immediately returned.

Return of specimens. Specimens should be returned in a similar fashion to which they were sent, using the original or comparable pinning boxes and shipping boxes. All packages must be adequately packed so as to avoid damage to the specimens. Vials, microscope slides, and other heavy objects should be separated from pinned material. Large specimens and genitalia vials should be supported by brace pins. Pinning boxes should be separated from each wall of the shipping box by at least two inches of packing material.

Damaged or valueless specimens. Specimens judged by the borrower to be hopelessly damaged or otherwise scientifically useless should be segregated for subsequent discard, but returned with the rest of the loan.

*Shipping costs*. Initial shipping costs are paid by the MEM and return postage is paid by the borrower.

*Change of status*. The borrower should notify the curator of any change in status of the loan or borrower, including change of address.

*Visits*. We encourage borrowers to visit the Mississippi Entomological Museum, conduct research in the collection, and hand-carry borrowed specimens.