

University of Michigan Museum of Zoology

General Policy on Specimen Loans

The Museum of Zoology (UMMZ) provides loans of preserved specimens and related materials from its collections for scientific research. Each Division has its own special policies as they apply to the unique nature of the various groups of animals and how they are studied. Please refer to the appropriate divisional web page for specific policies.

Loans are made only to faculty, curators, and permanent research staff at recognized institutions with facilities to properly house and care for specimens. Our general policy is that individuals who are not affiliated with an institution may request a loan of material only if they have made prior arrangements with an appropriate person at a recognized institution for housing of specimens. Any exceptions to the general policy will be reviewed on a case-by-case basis by the appropriate Curators. All requests (1) must be made in writing, (2) should include a brief statement about the proposed use of the material, and (3) must be approved by an UMMZ Curator or Collections Manager. Loans for use by graduate students or post-docs must be co-signed through the individual's major advisor.

Invasive procedures are not permitted without expressed written permission. If permission is granted to remove specimen parts, e.g., reproductive organs or stomach contents, those parts must be labeled with the UMMZ catalogue number by the researcher and returned with the specimens. Any slide preparations, e.g., SEM stubs, histological, karyological, are to be returned properly labeled. Removal of hair or skin samples, insect legs, or other tissues for molecular analyses are considered invasive procedures and written permission must be obtained in advance (see policy relating to tissue/DNA loans)

The borrower must sign and return a copy of the loan invoice to acknowledge safe receipt of specimens. Specimen damage that occurs during transit should be reported immediately. The borrower is liable for damage that occurs during handling of specimens.

Loans are generally made for a period of 6 to 12 months. Requests for loan extensions, and for permission to transfer specimens from one institution to another, must be made in writing. When specimens are returned to the UMMZ, they should be shipped in a secure container, and if insured, for the same value as they were originally sent.

Unless otherwise requested, domestic loans will be shipped via US Postal Service, or via commercial carrier. For foreign loans, the borrower also is responsible for providing copies of all relevant import and export permits. If permits are not necessary, that should be stated in writing at the time of the request.

In the case of re-identification of specimens, the new designations should be provided to UMMZ curatorial staff when specimens are returned to the Museum. These data can be provided on a copy of the original loan invoice, or in a separate list that contains the UMMZ catalog numbers and respective new identifications (either in text or spreadsheet format).

The Museum of Zoology should be acknowledged in any publications that result from the use of its specimens. Two reprints of each publication should be sent to the Museum c/o Collections Manager.

Policy on Grants of Tissues

The Museum of Zoology (UMMZ) houses a collection of tissue, blood, and protein extracts preserved from insects, mollusks, fish, amphibians, reptiles, birds, and mammals. The majority of samples are associated with vouchers in the UMMZ specimen collections. Although most tissues are frozen, the UMMZ also maintains a growing collection of ethanol or buffer-preserved tissues.

Unlike traditional specimens, tissue samples are eventually depleted with use. Thus, the UMMZ Curators have formulated the following guidelines to ensure that destructive sampling does not exhaust these limited resources. These guidelines also apply to destructive sampling of traditional museum specimens (e.g., skin and skeletal material) for biochemical, isotope, or other kinds of analyses. In developing such guidelines, consideration was given to policies instituted by other major tissue collections. The overall goal of the UMMZ policy is to preserve the value of its collections for present and future use.

General Philosophy:

The UMMZ will provide limited grants of tissue from its collections to qualified researchers. Such grants are intended to supplement material from wild or captive organisms obtained independently by users of the collections. Implicit in its use of the term "grant" is the understanding that users will abide by certain requirements. In turn, the UMMZ will absorb the high cost of obtaining, housing, cataloguing, and maintaining these samples.

Researchers also may request samples of skin, hair, feathers, toe pads, or bone from traditional specimens for DNA or other analyses. Such requests should follow the same guidelines as those for tissues, although the researcher must provide compelling reasons why the project cannot be completed without destructive sampling of UMMZ specimens. Requests for destructive sampling of skin or skeletal material will be evaluated more stringently than other requests.

Requests for destructive sampling of UMMZ tissues or specimens is an explicit acknowledgment that the researcher supports legitimate scientific collecting, and that he/she values the time and effort that goes into collecting, preparing, and maintaining

museum collections. In exchange for granting these samples for scientific study, we may occasionally ask researchers to provide verbal or written support of scientific collecting and our collections.

Requests for Grants

All requests for grants of genetic material must be in writing. Letters should be submitted on institutional letterhead to the appropriate Curator; those from students must be co-signed by the faculty advisor.

Requests for grants should contain:

- a) A brief summary of the research, including other sources of material and a justification for why samples are needed from the UMMZ collections. This statement should specifically address the following: objectives of the project and its potential scientific value; feasibility and time frame of the study; availability of material from wild populations or captive sources; method(s) of analysis; qualifications of the investigator(s) to perform the laboratory work; and availability of funding to complete the project.
- b) Information on the nature of material needed, including taxon, number of samples or specific UMMZ catalog numbers, geographic location if relevant, and desired method of transport (e.g., frozen, 95% ethanol). Tissues will be sent in ethanol if method of transport is not specified.
- c) A Federal Express recharge number if the material is to be shipped on dry ice.

Requests for tissues must be accompanied by copies of all requisite permits. For foreign researchers, this includes a copy of any import permit required by the foreign government. If no permit is needed, the researcher must state such in writing at the time that the tissue request is submitted. Requests from foreign researchers for tissue of species regulated by the U.S. Fish and Wildlife Service (e.g., CITES-species, endangered species, marine mammals, migratory birds) will not be processed without the proper U.S. export permits; species listed only under CITES may be exported under a Certificate of Scientific Exchange if the receiving institution possesses such a certificate. Requests from U.S. researchers for tissue of species regulated by the U.S. Department of Agriculture must be accompanied by a copy of a USDA transport permit, issued to the recipient or his/her institution.

Requests will be reviewed on a case-by-case basis according to the following criteria:

- a) The kind and extent of request, including whether it duplicates previous efforts.
- b) Availability of material from wild or captive sources, and efforts by the investigator(s) to obtain such material.
- c) Amount of material in the UMMZ collections.

- d) Rarity and replaceability of the samples (i.e., distribution and abundance of the taxon relative to the location of the user).
- e) Demonstrated ability of the investigator(s) to perform the work and complete the project.
- f) Financial support for the project.

Tissues received from the UMMZ collections, or DNA extracted from these samples, cannot be transferred to a third party without express written permission by an UMMZ Curator.

Return of Material and other Information:

Individual Curators may request tissues in exchange for those received from the UMMZ collections. These may include vouchered samples for permanent disposition in the UMMZ, or exchanges of loans of tissues from other institutions. Tissues deposited in UMMZ should be well-labeled and contain complete data. In addition, voucher specimen information (including institution acronym and catalog number) must be provided, along with copies of relevant collecting permits or other documentation.

Any unused portion of tissue must be returned to UMMZ upon completion of the study.

Sequences obtained from UMMZ tissues or traditional specimens should be entered into GenBank (<http://www.ncbi.nlm.nih.gov/>) so that they are accessible to other researchers. These sequences must be referenced to the UMMZ specimen catalog number.

Two reprints of any publications resulting from the study should be sent to the Division from which the material was granted.