

INSTRUCTIONS FOR CATALOGING MAMMALS

- A. Study skins should have Tom Ridge Environmental Center skin tags tied to the right hind leg. Specimens without our tags must have tags re-tied to include the Tom Ridge Environmental Center skin tag.
- B. Identify all specimens of an accession to the generic, specific, and subspecific level, if possible. If complete identification is not possible because of uncleaned skeletal material, identify the specimen to the lowest taxonomic category and proceed with the cataloging process. Identifications are placed on the printed side of the skin tag in pencil ONLY at this time.
- C. For any incoming accession, the mammal specimens of that accession normally will be arranged without regard to nature of specimen in the following manner for cataloging purposes:
 - 1) Specimens are arranged systematically to subfamily following Simpson (1945).
 - 2) Genera of a subfamily are arranged in alphabetical order.
 - 3) Species of a genus are arranged in alphabetical order.
 - 4) When more than one locality refers to the same reference point, localities are arranged from north to south; if two or more localities are from the same latitude, the localities are arranged from west to east.
 - 5) Specimens from the same locality are arranged alphabetically according to names of preparators (last name, first name, middle name).
 - 6) Specimens of each preparatory are arranged sequentially by preparation number.

The main advantage in having a detailed and definite cataloging procedure is that

- 1) such procedures promote maximum efficiency of processing repetitive data, thus simplifying cataloging and computerization processes and minimizing discrepancies in data entry; and
 - 2) such procedures during cataloging (as well as once installed in the collection) place any common group of specimens in collection, thus providing easier installation, removal, replacement, and utilization of specimens.
- D. Before actual cataloging is performed consult the Standards for Documentation for instructions on writing entries in the catalog.

- E. Cataloging includes writing catalog numbers on both sides of skin tags, one side of each skull tag, and the preparation of new tags to be tied to fluid-preserved specimens (see special section on cataloging of fluid-preserved specimens). The catalog numbers should be preceded by the TREC acronym everywhere but on the printed side of the Tom Ridge Environmental Center skin tag. The preferred black ink for documentary purposes is Pigma Micron Archival acid-free pens.
- F. After cataloging is completed, the cataloger and another individual will verify the accuracy and legibility of catalog numbers on all tags. This procedure is intended to expose mis-matched parts, number duplications, unnumbered specimens, illegible writing or other problems.
- G. Following data verification, handwritten data are entered onto the computer file.

CATALOGING FLUID-PRESERVED SPECIMENS

- A. The cataloging of fluid-preserved specimens requires special handling. Shortly after returning from the field, fluid preserved specimens should be removed from formalin, soaked and rinsed in water, and then transferred to 70% ethyl alcohol.
- B. Prior to cataloging, specimens must be identified and separated into jars of appropriate size. Jars should be large enough to prevent specimen damage balanced by consideration for space and alcohol utilization.
- C. Catalog numbers are placed on clean skull tags as cataloging proceeds. Cataloged skull tags may be kept in order by threading tags onto a piece of wire. The hand cataloging can go to completion while an orderly stack of alcoholic tags is accumulated for later attachment to the specimens. These new tags are tied with a square knot to the right hind leg of each specimen.
- D. When all specimens are properly tagged, typewritten alcoholic labels are prepared and placed in each jar.
- E. The entire accession should next be verified by someone other than the cataloger. Following verification, alcohol level and quality should be adjusted if necessary before placement in permanent storage.

PROCEDURES FOR ACCESSIONING

When preparing the Accession Form, you should remember that this is the only permanent, legal record kept by the TREC describing the circumstances under which the material was obtained. These records should be as clear to someone fifty years from now as they are today. Make the records as complete as possible.

Before accessioning material, you should carefully consider its value to the TREC, now and in the future. Unless there is a compelling reason to the contrary, only material that is to become part of the permanent collections of the TREC should be accessioned.

Getting the name and address of the person giving material is important because this may be the only record by which they can be subsequently contacted.

The accession number and date will be added by the Registrar.

PROCEDURES FOR DEACCESSIONING

All items permanently leaving the Tom Ridge Environmental Center, which have been accessioned into the TREC's permanent collections, must go through a deaccessioning process. This process should be completed before the items leave the control of the TREC. The following information refers to Record of Deaccession Form.

Accession Number

Enter the number under which the items were originally accessioned.

Item Deaccessioned

Give the Tom Ridge Environmental Center catalogue numbers, field numbers, and/or brief description. If the commercial value of the individual item exceeds \$100 to \$250, the description should be sufficient to identify the item.

Reasons

There will be a wide variety of reasons for wanting to dispose of items, but be certain that you fully and clearly explain your reasons so that the Director and Trustees may take action on your request.

Reasons could include:

Poor condition of items: The condition of the items may have deteriorated or been damaged to a point that they are no longer of sufficient worth to the TREC to warrant keeping them.

Insufficient data: Data accompanying the specimens may be so incomplete that the specimen is of little or no scientific value.

Damage by pests or during preparation: Certain items may suffer sudden damage from pests or during the preparation process and, thereby, no longer be of value to the Tom Ridge Environmental Center.

Exchange: Accessioned items that are being sent to other institutions in exchange for material from their collections must be deaccessioned. Give an idea of what we expect to receive in exchange for our material.

Disposition of Material

Describe what will happen to the material. If it is to be destroyed, indicate who will do it. If material is to be given to another institution, nature center, or school, list why they were chosen to receive the material. Give the address where the specimens will be deposited. If the specimens are to be sent on exchange, give the name and address of the institution with whom the exchange is being made.

Request for Deaccessioning

The beginning of the deaccessioning process should be requested by a curator-level staff member. The signature also indicates that the information is complete and correct.

Authorization for Deaccessioning

When deaccessioning has been approved by the Trustees, the Director, or someone designated by him, they will sign the Record of Deaccession. At this point, the Section may complete the deaccession process and dispose of the material.

INSTRUCTIONS FOR CURATING

- A. When working in the main collection match skins with skeletal material. It may not be advantageous to match other types of preservations but by using the information provided in a computer print-out, verify the existence of all known parts of each specimen.
- B. Examine and take appropriate measures to insure that each specimen has the following:
 1. The Tom Ridge Environmental Center skin tag with study skins.
 2. Section of Mammals catalog number on both sides of the skin tag, on one side of the skull tag, and on the typed skeletal label. In the case of fluid-preserved specimens, verify that
 - a) a second skull tag bearing the collection catalog number has been affixed to the right hind leg of each specimen and
 - b) collection catalog numbers and collecting localities of the specimens contained in each jar have been typed onto the jar label.
 3. Skeletal material is properly cleaned.
 4. Catalog number WITH TREC PREFIX on all bones large enough to hold a number. (See illustration).
 5. Typed or computer-generated skeletal label.
 6. Skeletal material stored in appropriate-sized container.
 7. Skin tag tied securely on the right hind foot with a square knot. The tag should be affixed using the appropriate string at the correct distance. (See illustration).
 8. Those specimens requiring conservation care should be removed and properly stabilized. Loose teeth are not to be glued back into place because this detracts from the research value of the specimen and may cause irreversible, long-term damage.

9. Remove all strings from skeletal boxes and vials. Any copper, lead, or aluminum tags should be removed, filed, and replaced by a new paper tag because of the potential for physical and chemical damage as well as ion interaction. All historical paper tags should remain with skeletal material or affixed along with current TREC skin tags to study skins unless damage to the specimen would result. If the potential for specimen damage exists, the extra tag(s) should be transferred to the tag file.
- C. Check catalog with available material and do the following:
1. Using a pencil note, initial, and date the catalog; also note on the computer file any change of availability of specimens. (See Availability Status Codes).
 2. If material is stored as skin only (according to the catalog) print in permanent black ink "skin only" in the lower right hand corner of the printed side of the skin tag (side with identification).
 3. If skin has skeletal material (according to the catalog and data file) which is missing, note material that is missing, initial, and date the skin tag with a pencil. Use the lower right hand corner of the printed side of the skin tag to indicate such conditions. Notation of missing parts should be made under "comments" on the computer file. Asterisks should be placed under Availability Status and Nature of Specimen categories to facilitate future efforts to locate parts, resolve mix-ups, and accurately report availability to researchers.
 4. Compare data on specimens with data on print-outs and make updated changes on the computer file and in pencil in the catalog. Skeletal labels should also reflect changes. When catalog and skin tag do not agree, original field notes should be consulted whenever possible to determine the correct data. No data changes are complete until skin tag, computer file, AND catalog is in agreement.
- D. Identify each specimen to the lowest possible taxon. The genus, species, and subspecies are to be written out completely, in pencil on the printed side of the skin tag and updated in the computer file and collection catalog.
- E. If questions regarding a collection catalog number arise after the catalog checking processes have been completed, the original number is never to be modified. If a correction is necessary, it should be done elsewhere in pencil so that changes made after the original cataloging process will be evident. A correction is made by lightly marking a single pencil line through the incorrect number and writing the correct number elsewhere on the tag. If tags have faded or washed-out labeling, the original marks are not to be written over. Instead, any new labeling should be done (in pencil) where it does not interfere with original label markings.

- F. Arrangement of specimens in the permanent collection will follow the same arrangement used in Instructions for Cataloging Specimens with the same reference point in a county (state, province, or department, if county is not used) are arranged sequentially by collection catalog number.

The specimens represented as “skeletal material only” will be stored separately at the end of the genus, family, or order depending on the number of specimens in the taxa. Arrangement of “skeletal material only” follows numerical order within each subspecies. Skulls removed from alcoholic specimens are stored separately after the “skeletal material only” specimens and arranged in numerical order within each subspecies.

- G. Within a drawer, specimens are placed with heads to the left so that skin tags can be read. Skeletal material is placed as closely as possible to the study skin. However, placement is always made with consideration to the potential for specimen damage. Uniformity of placement must always give way to minimizing damage and unnecessary handling of specimens.

Using new specimen trays, arrangement within the drawer begins at the left front corner of the drawer and progresses to the back of the drawer along the left-hand side. If space permits, a center row of specimens is placed next, beginning at the front of the drawer. Finally, a third row of trays may be placed along the right side of the drawer. In each drawer, the first specimen in the series will be at the left front and the last specimen will be at the right rear.

If the size of the mammal requires the use of the larger, older specimen trays, specimens will be placed from left front to right rear within each tray before progressing to another tray. This arrangement is used to minimize the number of trays that must be removed at one time, when a series of specimens is examined. In this scheme, the front tray is the first of the series and arrangement progresses toward the back of the drawer.

- H. Label drawers with contained genera, species, and subspecies and, if appropriate, geographic description. Label cases with enclosed genera and species and, if appropriate, geographic description. Labeling is intended to minimize the opening of doors and drawers, and handling of specimens.

- I. In updating computer files several special rules should be followed:
1. Eliminate all apostrophes that appear on the print-out. They cause confusion in programming that uses quotation marks.
 2. Eliminate any periods that have been used on the computer files. This is especially a problem with preparators' and collectors' names.
 3. Be sure that all names are entered under the collector and preparatory categories as: Last Name followed by a comma, followed by a space, followed by the First Initial, followed by a space and by the Middle Initial,

if known (eg. Doutt, J K). Uniform spacing is very important to our search feature.

INSTRUCTIONS FOR LABELING SKELETAL MATERIAL

All bones must have the Tom Ridge Environmental Center acronym (TREC) followed by the collection catalog number. Permanent black ink should always be used for labeling unless instructed otherwise.

The cranium should also have the sex indicated (♀, ♂, ?) under the catalog number. Label all skulls as indicated in the example, with labeling placed on the left side of the braincase and readable from the left side. Both sides of the lower jaw should also be numbered with exactly the same orientation as shown below.

Label every bone that is large enough to hold the acronym and catalog number.

If previous or incorrect labeling is to be removed, use a piece of tissue soaked in 70% ETOH. If unsuccessful, the bone can be CAREFULLY scraped with a razor blade.

INSTRUCTIONS FOR TYING SKIN TAGS

Tie label onto skin above the right heel (Fig. 1) using a square knot (Fig. 3). Thread should be tied tightly so that it will not slip off after the diameter of the foot has decreased by drying.

Bat skins should be pinned (Fig. 2) so that length of individual bones can be measured when dry. There are two methods for label attachment shown at left. E. R. Hall's method is similar to that for other mammals. We prefer Jones' method which relocates the label closer to the body (Point A on Fig. 2). Jones' method required that the membrane be punctured for proper attachment. Using needle and thread, attach skin tag to proximal end of right tibia as shown at point "A". This will insure the security of the tag and permit an undistorted view of the calcar. As with other specimens, use a square knot only, as shown in Fig. 3.

When tying a square knot, put left string over and under right string. Pull tight. Next, wrap the string that is now in the right hand (originally was left string) over and under left string. Pull tight.

GUIDELINES FOR PREP ROOM OPERATIONS

1. Screens should be used in all sinks at all times.
2. Research collection vials, boxes, and trays should not be used in bug room, prep room storage, or for drying. These materials should be used only when skeletal material is ready for labeling and placement in the collection. Catalog numbers

may be written lightly in #2 or softer pencil in the upper right-hand corner of the brown collection boxes.

3. Skull tags should never be allowed to soak with the skull or skeleton. Tags may be placed on the outside of the soaking container under a rubber band or attached to the handle of larger containers. Care should be exercised to keep tags with skeletal material at all times during specimen processing.
4. Remove (by cutting) all string from tags before placing tags and skull/skeleton in final collection box. Strings often catch on teeth and small processes resulting in damage to delicate parts of the specimen.
5. Skeletal materials should be placed in final collection containers as soon as possible after specimens are completely dry. Transferring of material should be done close to the drying site in order to minimize accidents with uncontained specimens.
6. Skins should be unpinned as soon as possible after drying. Skins should be properly treated to eliminate collection pests and then brought upstairs for storage where they will be initially placed in freezer. In order to minimize possible exposure to insects, skins should not be stored in prep room cases.
7. Specimens placed in the freezer MUST be accompanied by appropriate data. (See Page 26 for copy of freezer data form). Specimens should be placed in airtight plastic wrapping to minimize desiccation while frozen. The preparator should be advised of the addition of new material and the location of placement in the freezer.

FREEZER DEPOSITORY SLIP

Please PRINT with permanent ink and include with each species.

Species _____ Number of Specimens _____

Locality _____
State County Specific Locale

Date Collected _____ Date Died _____

Collector(s) _____

Are these specimens reserved? () Yes () No

If so, by whom? _____

Remarks _____

Signature of Depositor _____

Date _____

INSTRUCTIONS FOR USERS OF THE DERMESTID FACILITY

Normally, all mammal specimens placed in the dermestid colony should be cataloged specimens. All specimens should be properly and securely tagged with standard 100% rag skull tags. If original preparator used substandard materials for tagging, one of our skull tags should be added to the specimen to avoid the possibility of bug damage to the catalog number identifying the specimen. However, original tags must remain with specimens.

All items removed from the environmental chamber must be properly treated to eliminate collection pests, except for skeletal material that will be soaked and cleaned immediately.

Any person other than the preparator needing to clean specimens must make arrangements with the preparator of the Section of Mammals.