

COLLECTION PROFILING STANDARDS

Department of Entomology

National Museum of Natural History, Smithsonian Institution

The following standards apply to all methods of specimen preservation: pinned specimens, specimens in alcohol, envelopes or on slides and all methods of storage: drawers, jars and jar racks, vial racks, slide boxes, envelope boxes and misc. containers for bulk storage.

SPECIMENS IN URGENT NEED OF CONSERVATION

LEVEL 1: SPECIMENS AT RISK, in need of immediate attention: museum pests, rusting pins, evaporating alcohol levels, crystallizing slide media, unringed Hoyer's media, broken cover slips, unprepared "loose" specimens, fading or loose labels, unprepared and/or unlabeled specimens,* etc.

LEVEL 1 storage units shall be conspicuously marked when first discovered. This marking shall be done after each collection inventory and will be used as an "identifier" so that LEVEL 1 units may be easily found and corrected on a priority basis.

* **NOTE:** Long series of unprepared specimens may be placed in the collection, so long as they are easily accessible. When an appropriate number of specimens in the series have been prepared and the unprepared specimens are in suitable containers for their protection, the storage unit may be scored at an appropriate higher level (for example, see NOTES for LEVELS 3 and 6).

SPECIMENS NOT IDENTIFIED TO SPECIES OR MORPHOSPECIES

LEVEL 2: SPECIMENS UNAVAILABLE - not sorted to taxonomic level sufficient to be efficiently accessible to researchers.

LEVEL 3: SPECIMENS AVAILABLE - sorted to a taxonomic level sufficient to be accessible to research specialists for study. This level will vary among different taxa and is defined by the Contact Person for a collection/profile unit.

NOTE: Unprepared specimens sorted to an accessible taxonomic level may be scored at LEVEL 3, if the storage units in which they are housed are clearly labeled and easily accessible.

EXAMPLE: Misc. *Pieris* butterflies in glassine envelopes stored in accessible bulk storage containers.

SPECIMENS IDENTIFIED TO SPECIES OR MORPHOSPECIES

- LEVEL 4:** SPECIMENS IDENTIFIED BUT NOT INTEGRATED INTO GENERAL COLLECTION.
- LEVEL 5:** SPECIMENS IDENTIFIED, INTEGRATED BUT CURATION INCOMPLETE. Collection in need of upgrading, i.e., not meeting departmental standards for physical curation as defined for LEVEL 6.
- LEVEL 6:** SPECIMENS IDENTIFIED, INTEGRATED AND CURATED IN ACCORDANCE WITH DEPARTMENTAL COLLECTION STANDARDS. All specimens identified and properly integrated; all storage units and cabinets labeled, and where possible, space left for expansion. All collections arranged alphabetically; if not, an accessible index to the collection shall be prepared. Pinned specimens in soft-bottom unit trays; all unit trays with header labels. Alcohol-stored material in vials within jars; housing of LEVEL 6 collections in patent lip vials/vial racks must be approved by the Collections Committee.

When a collection reaches an average of LEVEL 6, the name(s) of who did the curation, date of curation, and authority on which the names are based should be entered in the departmental Collection History File database (see Optional Recommendations section at the end of this appendix).

NOTE: Duplicate specimens may be stored in bulk containers (suitable according to taxon), if an appropriate series is properly prepared and labeled. This could apply to duplicate specimens of the same species, with identical label data (date, locality, etc.) OR to duplicate specimens of a very common species with non-identical label data.

DATA CAPTURE*: SPECIMENS IDENTIFIED TO SPECIES, CURATED TO LEVEL 6, AND INVENTORIED WITH DATA ENTERED IN CENTRAL DEPARTMENTAL FILES

- LEVEL 7:** SPECIES-LEVEL INVENTORY COMPLETE
At a minimum, LEVEL 7 data capture includes the valid binomen and

author(s) name. Enhancements might include data fields for distribution (biotic region, country, state, etc., following the data standards defined in the Entomology Catalog and Inventory User Instructions), exact or estimated number of specimens, nomenclature (original genus, year, etc.), remarks, etc.

LEVEL 8: SPECIMEN-LEVEL INVENTORY COMPLETE
Species name and label data recorded.

NOTE: LEVELS 9 and 10 defined in previous policy documents are no longer recognized. The original concerns relating to the recognition of these profile levels, i.e., vouchering systematic and non-systematic material, are better addressed through the use of optional "green" (rather than lilac) restriction labels (see **Appendix E**).

***GENERAL DATA CAPTURE ISSUES.**--To help in goal-setting and associated fund-raising activities, the Department needs to know which portions of its holdings have been data captured, irrespective of the taxonomic category to which specimens are identified and/or its physical condition. The Profiling System as defined above represents an accumulative measure of idealized collection management progression, i.e., material that is "species inventoried" (LEVEL 7) is also associated with material that meets the departmental standards for physical curation (LEVEL 6). Obviously, species names can, and have been captured for material still housed in substandard, hard-bottomed trays (LEVEL 5), just as names can and should be captured for supra specific categories (e.g., LEVELS 2 or 3).