

WHERE'S THE MANAGEMENT IN COLLECTIONS MANAGEMENT?

Planning for Improved Care, Greater Use, and Growth of Collections

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RESUMEN

¿DONDE ESTA LA GESTION EN LA ADMINISTRACION DE LAS COLECCIONES? La necesidad urgente de documentar y proteger la diversidad biótica, en un momento en el que los hábitats se encuentran cada vez más amenazados, es lo que se entiende generalmente por Crisis de la Biodiversidad. A menudo se pasa por alto la *segunda* crisis de la biodiversidad: es decir, el impacto asociado que produce la primera en los museos de Historia Natural. Estos museos se están saturando de ejemplares procedentes de prospecciones bióticas, al mismo tiempo que la mayoría de sus presupuestos están siendo recortados. Para una mejor utilización de los recursos limitados, los museos tendrán que mejorar la gestión de las actividades relacionadas con las colecciones. Se debe poner un mayor énfasis en la planificación de mejoras en el cuidado, aumento del uso y desarrollo de las colecciones. El Departamento de Entomología del National Museum of Natural History (Estados Unidos) y agencias afiliadas están desarrollando una serie de enfoques innovadores acerca de la gestión de colecciones, que se presentan en este trabajo, e incluyen: 1) desarrollo de modelos de gestión y de un sistema asociado de perfiles de colecciones; 2) establecimiento de un índice de salud de la colección; 3) creación de un Programa Externo para Desarrollo de las Colecciones; 4) desarrollo de un nuevo método de medir la calidad de las colecciones; y 5) uso de los informes de impacto de colecciones. Se discuten también el reparto de recursos, prioridades de investigación y actividades de gestión de colecciones.

ABSTRACT

The urgent need to document and protect biotic diversity in an era when habitats are increasingly threatened, is what is generally understood to be the Biodiversity Crisis. Often overlooked is the *second* biodiversity crisis: the associated impact on natural history museums. These museums are being inundated with specimens from biotic surveys at the same time that most museum budgets are being cut. In order to make the best use of their limited resources, museums will have to demonstrate improved management in their collection activities. Emphasis should be on planning for improved care, greater use, and growth of collections. The Department of Entomology at the National Museum of Natural History (United States), and affiliated agencies are developing a number of innovative approaches to collection

management that are presented in this contribution. They include: 1) development of curation standards and an associated collection profiling system; 2) establishment of a collection health index (CHI); 3) creation of an off-site Collection Enhancement Program; 4) development of a new way to measure collection quality, and 5) use of collection impact statements. Resource allocation priorities for research and collection management activities are also discussed.

INTRODUCTION

Collections management can be defined narrowly ". . . to mean the organization, documentation and tracking of collection materials, and by improved techniques for handling and preserving specimens" (Danks, 1991) or more broadly to include acquisition, disposal and collections policy development (Waddington, 1989). The primary concern of this paper is not so much the scope of activities included under this term, but rather the rigor in which the word *management* is applied. Webster's Third (1971) International Dictionary defines management as "the more or less skilled handling of something." In an era of dwindling museum budgets and ever increasing demands on collections, the "more or less" is critical and dependent upon sound management at all levels of the museum organization. Sound management means: 1) clarification of goals and priorities, 2) associated strategic planning, 3) development of necessary monitoring systems, and 4) leadership.

Most museum workers are highly trained individuals who are skilled at handling materials in their immediate areas of interest - such collections tend to be well-cared for. Beyond this localized level of individual expertise (that is, departments and museums), collections management too often breaks down to a system of "collections ad-hocing," that is, dealing with problems and opportunities as they become apparent and seem important at the time. A fundamental reason for this is, as Griffin (1987) points out, few museum workers see themselves as being part of an organization. Accordingly, in such an environment, it is rare to see collections management systems developed that allow for meaningful overview of collection problems at the departmental and/or museum levels. Collection status summaries usually emphasize quantitative aspects such as size of collections, number of specimens accessioned, and so forth. Qualitative aspects (collection health) tend to be summarized by non-numerical, anecdotal reviews. However, numbers in management are important, as Sloma (1981) emphasizes: "Basically, the need for numbers stems from the need for measurement. With numerical goals, you can not only measure the degree of achievement, but also keep track of interim progress." The lack of numerical qualitative systems for collection assessment is a fundamental flaw in most collections management programs.

The Collections Committee of the Department of Entomology at the National Museum of Natural History (NMNH), United States, is composed of representatives from the Smithsonian Institution, Systematic Entomology

Laboratory (SEL)/United States Department Agriculture (USDA) and the Army's Walter Reed Biological Unit. In 1985, at the suggestion of F. Christian Thompson (SEL/USDA), the Committee initiated the development of curation standards that are described herein. From this starting point, the group coordinated the development of other policies and practices that will hopefully lead to: 1) improved care of the NMNH Entomology Collection, 2) its greater use, as well as 3) better planning for its growth. Below are summarized some of these activities that should be of interest to the broader natural history community.

IMPROVED COLLECTIONS CARE

Curation standards

How healthy is a particular collection? What are the problems, how do we describe them, and how do they compare to other collections? How do we set collection improvement priorities and wisely allocate limited resources (that is, money and people)? These are the concerns behind the development of what is commonly referred to in the entomological community as the Smithsonian Curation Standards and Profiling System. This is nothing more than a numerical coding system that identifies the curation status of the individual storage units commonly used in insect collections: insect drawers, alcohol jars, and slide boxes. The standards are concerned with those issues common to all natural history collections: materials conservation (LEVEL 1); specimen accessibility (LEVELS 2-4); physical organization (LEVELS 5-6); data capture (LEVELS 7-9); and scientific voucher material (LEVEL 10). These levels are defined as follows: (Department of Entomology Collections Management Policy, revised May 18, 1992):

LEVEL 1. CONSERVATION PROBLEM (Fig. 1):

Specimens deteriorating, potentially cullable, or unprepared. Collection unit in need of immediate attention: museum pests, rusting pins, crystallizing slide media, unringed Hoyer's media, evaporated alcohol, fading labels, broken cover slip or slide, etc. Primary types mixed in general collection. LEVEL 1 storage units (drawers, slide boxes, alcoholic jars) shall be conspicuously marked when first discovered. This marking also will be done by the curator-in-charge 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: In some groups, long series of unprepared specimens are placed in the collection adjacent to pinned specimens. When it is obvious that 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. [Horie, 1987, proposed a qualitative coding system to document the conservation status of

mounted vertebrate specimens; Fitzgerald (1988) presented documentation guidelines for the preparation and paleontological and geological conservation of specimens, and Garrett (1989) did the same for biological specimens].

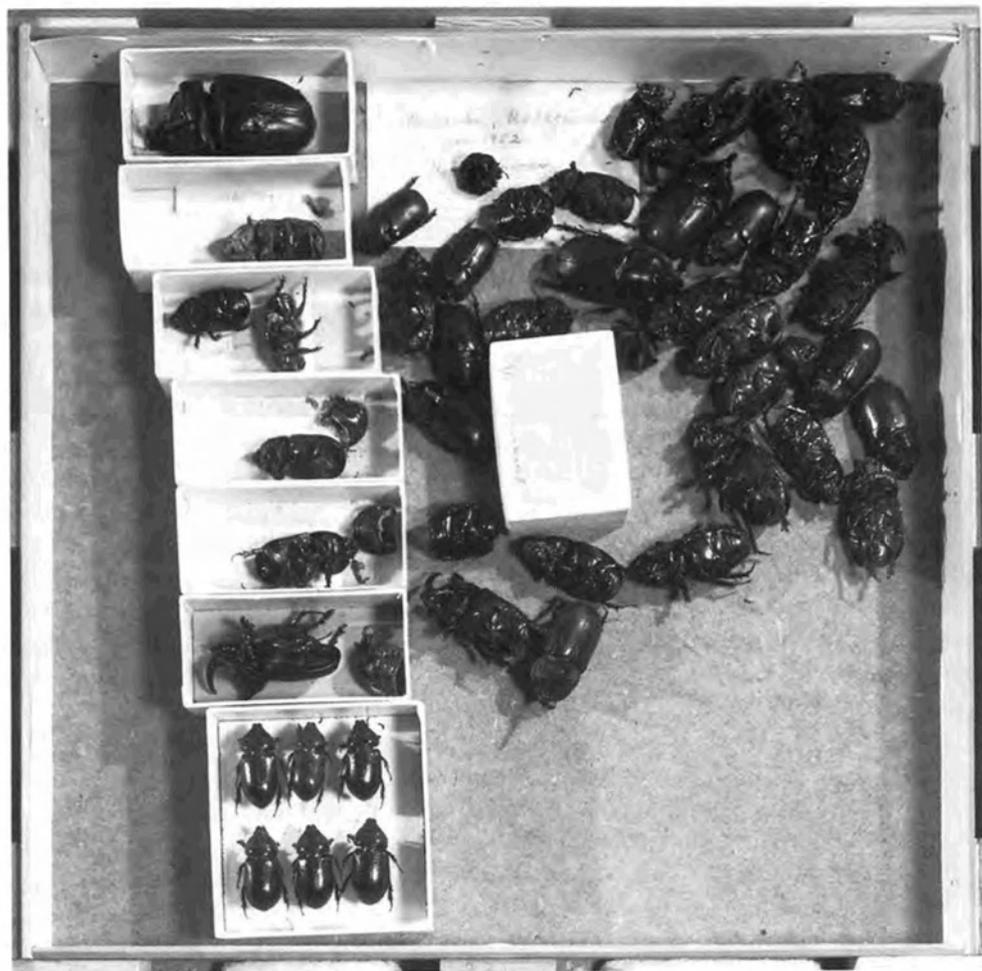


Figure 1. Curation LEVEL 1: conservation problem. Loose, unprepared scarabaeid beetles from Madagascar represent an obvious materials conservation problem.

LEVEL 2. SPECIMENS UNIDENTIFIED, INACCESSIBLE (Fig. 2):

Material properly prepared but not sorted or only rough-sorted; not readily available to specialists.

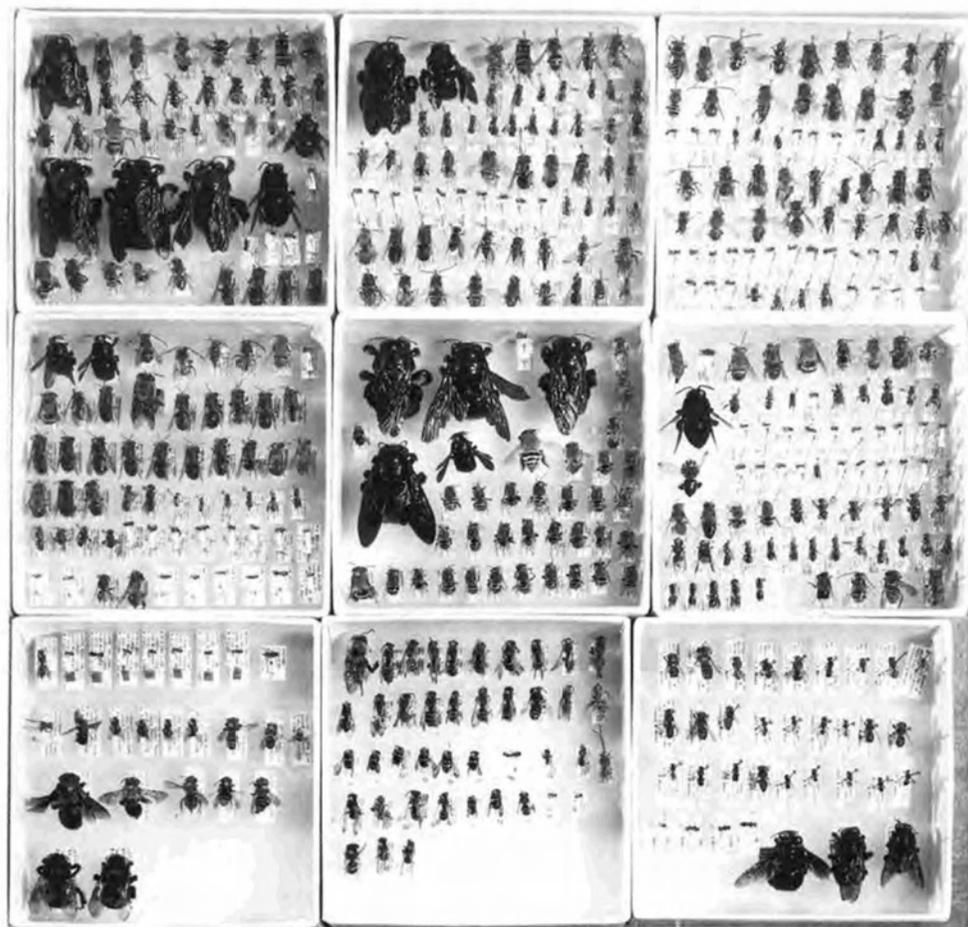


Figure 2. Curation LEVEL 2: inaccessible specimens. Miscellaneous, unsorted bees.

LEVEL 3. SPECIMENS UNIDENTIFIED, ACCESSIBLE (Fig. 3):

Specimens sorted to a level necessary to be efficiently accessible to research specialists for study. All specimens in soft-bottom trays, shell vials in jars, or slide boxes, with appropriate labels denoting pertinent taxonomic information. Taxonomic category may vary among different taxa.

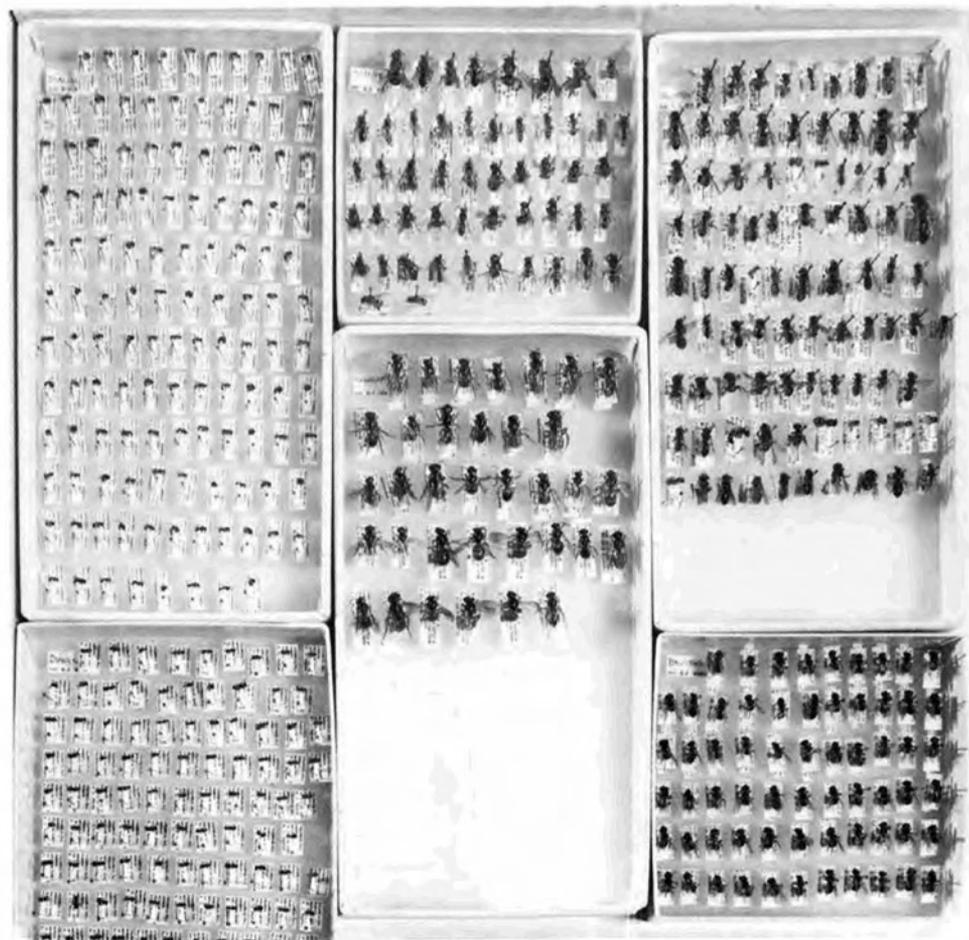


Figure 3. Curation LEVEL 3: rough-sorted material. Halictid bees identified to genera.

LEVEL 4. SPECIMENS IDENTIFIED BUT NOT INTEGRATED INTO COLLECTION (Fig. 4): Valuable material that has been identified to the species level but not yet put away - effectively inaccessible.

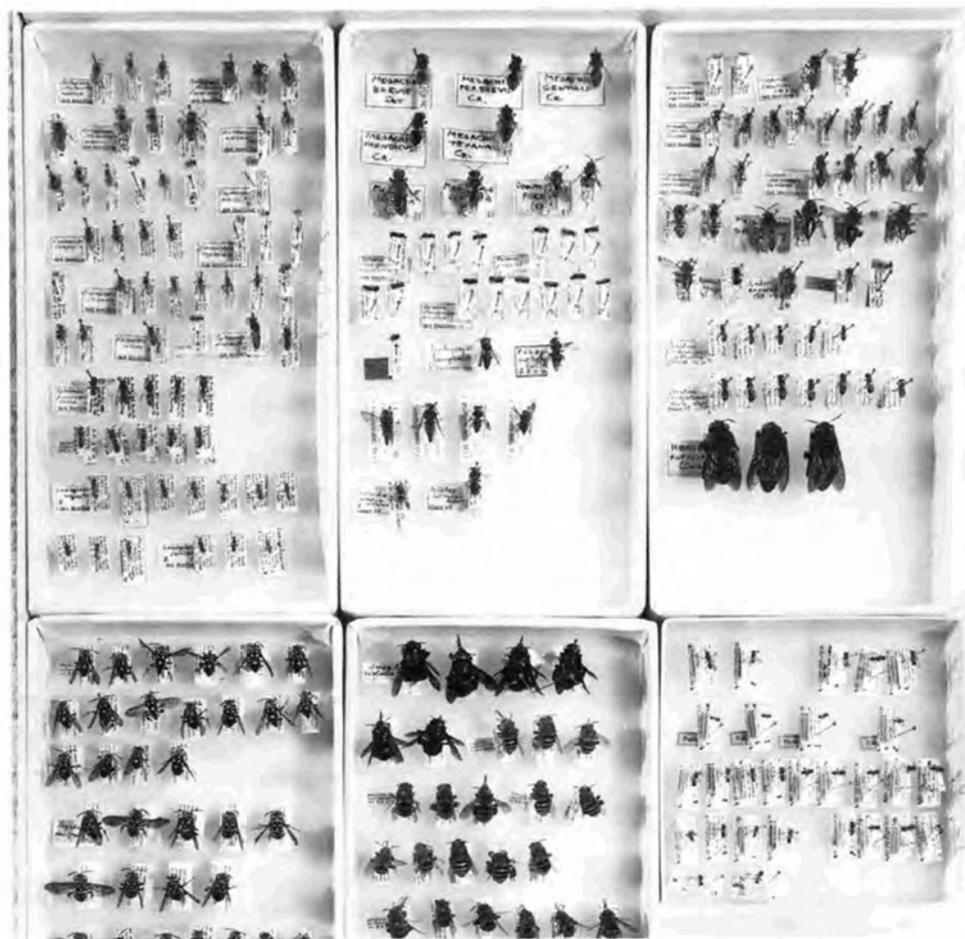


Figure 4. Curation LEVEL 4: identified material, not integrated into general collection. Miscellaneous bees identified to species.

