

# DEVELOPING STAFF RESOURCES FOR MANAGING COLLECTIONS

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The Canadian Museum of Nature  
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where, must be contracted to provide the knowledge and skills required to supplement the novice. A moderate level of knowledge and skills indicates that the individual (or organization) has the ability to deliver independently products and services that are commonly requested. An expert level means that the individual (or organization) has the knowledge and skills to deliver products and services in the most difficult, complex, and unusual situations. "Expert" individuals (or organizations) are likely to be involved, on a regular basis, in a consulting capacity with other institutions. Certainly for individuals, and often for organizations,

achievement of an expert level requires specialization coupled with extensive experience. The field of collection management is already sufficiently complex that no single person can be considered expert in all of its aspects.

All institutions responsible for collections require a minimum level of competency for all the kinds of knowledge and skills identified in Table 6. The determination of which kinds of knowledge and skills should be available at a higher level of expertise within the collection management system is dependent on the priorities identified by the specific institution.

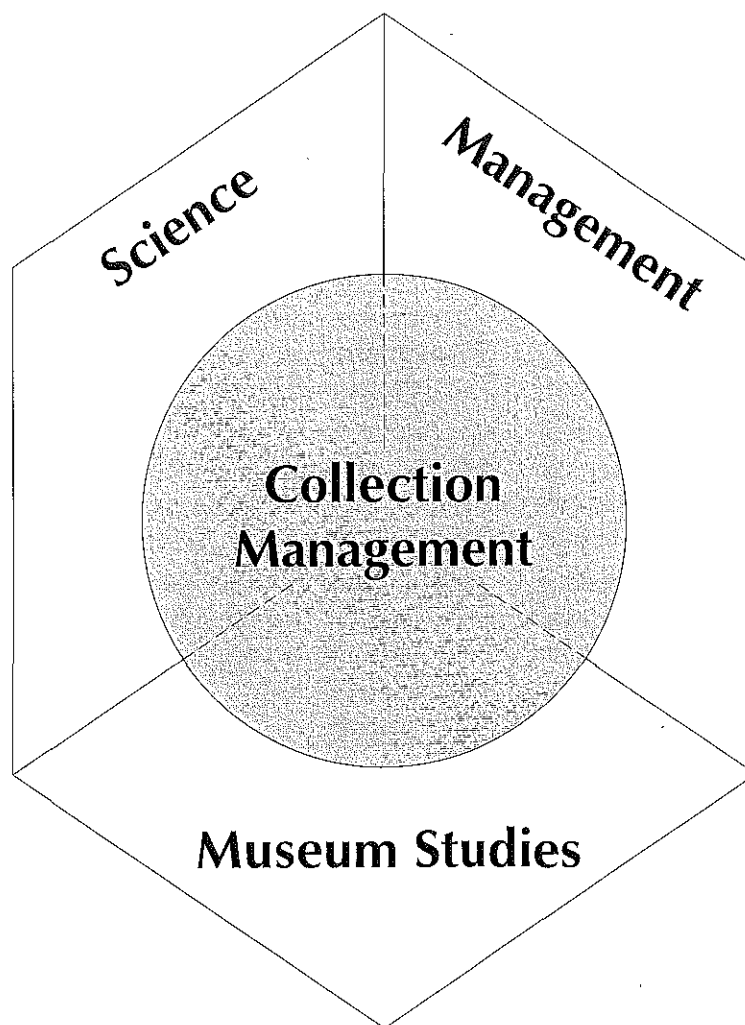


FIGURE 2. Collection management requires an integration of knowledge and skills.

TABLE 6. Knowledge and skills required for collection management system (continued on next page).

### **SCIENCE-BASED**

*Basic Scientific Knowledge.*—Knowledge and skills pertaining to scientific theory and research methodology are important not only with respect to the use and value of collections but to the analysis and testing of management and conservation techniques.

*Natural History Discipline Specific Knowledge and Skills.*—This knowledge base includes those subjects directly relating to the theory and practice of scientific fields encompassed by 'natural history', for example, taxonomy, systematics, ecology, zoology, botany, geology, etc.

### **MUSEUM STUDIES-BASED**

*Philosophy and Practice of Museums.*—Collections management occurs within the unique context of a museum-like environment, even if the collection is held in some other kind of institution. More defined activities of collections management must reflect an understanding of the philosophy, history, and practices of this environment, including the responsibility of handling a public (or private) trust, how collections relate to other museum functions, and various legal and ethical considerations of the museum.

*Professional Practice of Collection Management.*—This refers to the theory and practices specific to collections management, including aspects of registration, cataloging, storage, archiving, pest and risk management, etc. While there are elements specific to the practices of each natural history discipline, an overall knowledge of professional standards in collections management is an important foundation.

*Conservation.*—The theory and principles of conservation are basic to the purpose of effective collection management. Because of the vast numbers of specimens involved, the emphasis in natural history collections management is on preventive conservation.

*Information Science.*—Knowledge of theories concerning information and methods for enhancing, capturing and disseminating information (whether manually or electronically) are essential for effective collection management. Quality and content standards as well as computerization skills represent major training needs.

*Legal Issues.*—This specialized knowledge area encompasses legal issues relating both to museums in general and, more specifically, to those impacting collections directly, such as wildlife law. With increasing pressure for improving accountability as well as increasing numbers of laws and regulations affecting museums and collections, all collections management staff require at least a minimal level of knowledge of legal issues.

TABLE 6. (continued).

### MANAGEMENT-BASED

*Systems Analysis and Design.*—The ability to streamline and facilitate handling of specimens and associated data and documentation is essential for an effective collections management system. Knowledge of systems, methods for analysing existing systems and skill at designing new ones provides a foundation for problem solving and creative management techniques.

*Project Management.*—This field is concerned with the effective orchestration and planning of the interplay of resources to meet objectives. It should be considered a basic component of an effective collection management system. Project management can be applied to clearly defined tasks, such as fulfilling a loan request, as well as to more ambiguous, less clearly defined activities, such as 'create more public support for collections'. A sound knowledge of project management skills permit staff to develop a method to complete objectives assigned.

*Human Resource Management.*—Even a small collection with one staff member benefits from knowledge and skills in managing people. In the case of the small institution, the issue becomes one of developing and managing volunteers, and many of the issues related to managing paid employees are directly transferable to volunteers. Areas of consideration include developing expectations for staff, methods for developing skills and knowledge, evaluation methods and so on.

*Financial Management.*—Managing finances ranges from a staff member's ability to develop and manage a budget for a small project, to budget proposal and implementation for annual operating expenses, for grants, or for institutional capital campaigns. Knowledge of methods for developing cost reports or projecting resource needs over several years is valuable.

*Facility Management.*—A facility impacts directly on the long-term survival of the collection, and affects a staff's ability to effectively work with a collection. Thus, knowledge of issues for managing the physical environment and associated resource issues provides a foundation for sound decision-making.

*Communication.*—Good communication awareness is essential for any productive work environment. It is particularly important in a client-oriented service industry. Collection managers, as with many professional groups, need to become increasingly skillful in communication in order to convey information in the most effective manner possible.

## APPENDIX C: Glossary

[\* indicates new definitions for this report; others were taken directly from: Society for the Preservation of Natural History Collections. 1994. Guidelines for the care of natural history specimens. *Collection Forum* 10(1): 32-40]

*Accessioning*—Formal process used to accept legally and to record a specimen or artifact as a collection item (Malaro, 1979); involves the creation of an immediate, brief, and permanent record utilizing a control number or unique identifier for objects added to the collection from the same source at the same time, and for which the institution accepts custody, right, or title.

*Archives*—Non-current records of an organization or institution preserved because of their continuing value.

*Cataloging*—Creation of a full record of information about a specimen or artifact, cross referenced to other records and files; includes the process of identifying and documenting these objects in detail.

*\*Client*—A person or agency using the products of an institution.

*Collecting*—The process of sampling the natural and cultural world using a variety of techniques that are dependent on (1) the organism or material being obtained, and (2) the intended use for the sample, or the research methods likely to be applied.

*Collection*—(1) a group of specimens or artifacts with like characteristics or a common base of association (e.g., geographic, donor, cultural); (2) an organizational unit within a larger institutional structure (e.g., a collection within a university biology department).

*Collection Care*—The responsibility and function of an institution with collections that involves developing and implementing policies and procedures to protect the long-term integrity of specimens and artifacts, as well as their associated data and documentation, for use in research, education, and exhibits.

*Collection Management*—The responsibility and function of an institution that fosters the preservation, accessibility, and utility of their collections and associated data. The management process involves responsibilities for recommending and implementing policy with respect to: specimen acquisition, collection growth, and deaccessioning; planning and establishing collection priorities; obtaining, allocating, and managing resources; and coordinating collection processes with the needs of curation, preservation, and specimen use. These responsibilities may be shared by collection managers, subject specialists, curators, and other institutional administrators.

*Conservation*—The application of science to the examination and treatment of museum objects and to the study of the environments in which they are placed (Duckworth et al., 1993). This involves activities such as preventive conservation, examination, documentation, treatment, research, and education (American Institute for Conservation, 1993 draft).

*Curation*—The process whereby specimens or artifacts are identified and organized according to discipline-specific recommendations using the most recently available scientific literature and expertise; a primary objective of this process is to verify or add to the existing documentation for these objects, and to add to knowledge.

*Deaccession*—The formal process used to remove a specimen permanently from the collection, with appropriate transfer of title (Malaro, 1979).

*Deterioration*—Change in an object's physical or chemical state. "Damage, on the other hand, is the consequent loss of attributes or value: aesthetic, scientific, historic, symbolic, monetary, etc." (Michalski, 1992).

*Documentation*—Supporting evidence, recorded in a permanent manner using a variety of media (paper, photographic, etc.), of the

identification, condition, history, or scientific value of a specimen, artifact, or collection. This encompasses information that is inherent to the individual specimen and its association in its natural environment as well as that which reflects processes and transactions affecting the specimen (e.g., accessioning, cataloging, loaning, sampling, analysis, treatment, etc.). Documentation is an integral aspect of the use, management, and preservation of a specimen, artifact, or collection.

*\*Experience*—Knowledge gained from direct events in an individual's life.

*\*Expert*—A person who demonstrates great skill or knowledge based on experience or training.

*\*Expertise*—A specialized knowledge or skill.

*\*Knowledge*—Familiarity or comprehension gained through experience, association, or training; the accumulation and synthesis or experience into a retrievable framework; a body of information.

*Maintenance*—Routine actions that support the goals of preservation of and access to the collection such as monitoring, general housekeeping, providing appropriate storage and exhibition conditions, and organizing a collection.

*Object*—A material, tangible item of any kind; an inclusive, non-specific term for specimen, artifact, etc.

*Preparation*—The procedures used in the field or in the institution to enhance the utility of an organism, object, or inorganic material for a specified use. The resulting specimen may represent only a portion of the original organism or material or may be otherwise altered from its original state. Procedures should be compatible with intended uses and conservation objectives, and should be documented.

*Preservation*—Those aspects of conservation that involve preventive measures, such as maintenance procedures and correcting adverse environmental conditions; in natur-

al science conservation, preservation also includes treatments carried out initially to prepare specimens.

*Preventive conservation*—Actions taken to minimize or slow the rate of deterioration and to prevent damage to collections; includes activities such as risk assessment, development and implementation of guidelines for continuing use and care, appropriate environmental conditions for storage and exhibition, and proper procedures for handling, packing, transport, and use. These responsibilities may be shared by collection managers, conservators, subject specialists, curators, and other institutional administrators.

*Product*—Something which is produced.

*Registration*—(1) The process of assigning an immediate and permanent means of identifying a specimen or artifact for which the institution has permanently or temporarily assumed responsibility; one facet of documentation; (2) As an institutional function, includes the logical organization of documentation and maintaining access to that information.

*Repository*—A collection administered by a non-profit public or private institution, that adheres to professional standards for collection management and care (e.g., Alberta Museums Association, 1990; Lee et al., 1982; American Society of Mammalogists, 1974) to ensure that specimens acquired will be professionally maintained and remain accessible for future use.

*\*Resource*—Something used to produce a product.

*\*Responsibility*—Accountability, reliability.

*Sampling*—Selecting a portion as a representative of the whole; in natural science collections, sampling refers more specifically to the process of removing a portion of a specimen or artifact for analysis. The analysis may be destructive to the sample.

*\*Skill*—Proficiency or ability in a technique; a developed ability.

*\*Skill Set*—A group of skills related to the performance of a particular task.

*Specimen*—An organism, part of an organism, or naturally occurring material that has been collected, that may or may not have undergone some preparation treatment. It may exist in its original state, in an altered form, or some combination of the two. A specimen may be comprised of one piece or many related pieces. It may be composed of one physical or chemical component or represent a composite of materials.

*Stabilization*—Treatment of an object or its environment in a manner intended to reduce the probability or rate of deterioration and probability of damage.

*\*Task*—A particular work responsibility requiring identifiable skills.

*Treatment*—Actions taken, physically or chemically, to stabilize or make accessible a specimen or artifact; includes, for example, techniques such as preparation, cleaning, mending, supporting, pest eradication, and consolidation.

*Voucher*—A specimen and its associated data that physically document the existence of that organism or object at a given place and time. This definition is more broadly based than that put forth by Lee et al. (1982) in recognition of the potential for specimens held in a collection for use as substantiating evidence.

