

NPS Natural History Collections

U. S. Department of the Interior
National Park Service
Curatorial Services Division



The natural history collections of the National Park Service excite, educate, and inform millions of people every year. Approximately 250,000 natural history specimens—part of the total NPS museum collection—are housed in parks across the country.

Some of these collections were started at the turn of the century, when specimen displays were used to enlighten visitors. These collections evolved into museums of professional quality in the 1920's when, with the assistance of the American Association of Museums, carefully planned exhibit facilities were built in Yosemite, Yellowstone, and

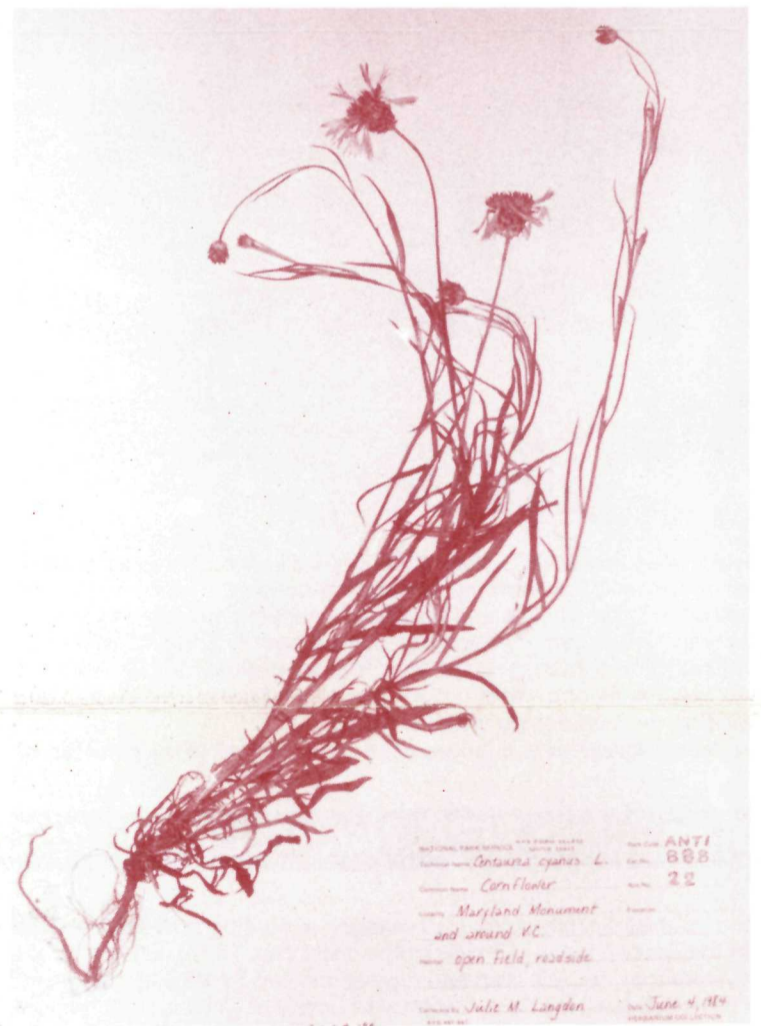


Grand Canyon National Parks. Today, museum collections are found in virtually all parks. Natural history collections are growing rapidly, as research expands to meet management needs or to answer the questions of independent scientists.

As natural history collections grow, their value increases, as do the risks of loss or damage from deterioration, theft, accident, or neglect. Sound documentation, preservation, and protection practices are essential to safeguard these valuable resources of knowledge about park resources.

Types of Natural History Collections

The three major natural history disciplines—biology, geology, and paleontology—contribute to our understanding of the planet. Biology reveals how living organisms function and interact, geology records past environments, and paleontology shows how life has evolved. Natural history specimens and associated field data are a fundamental part of the information from these disciplines. Specimens vary widely: mammal skins, pinned insects, microscopic algae, quartz crystals, biological samples in cryogenic specimen banks, soil samples, sediment cores, chromosomal mounts, even 100-foot dinosaur skeletons. Data associated with specimens are integral to the collection. Proper care and storage of field notes, maps, photographs, sound recordings, and reports is critical. A specimen without collection data is virtually useless to scientific research.



Sources of NPS Natural History Collections

NPS collections result from a wide range of studies. The most common type is the general collection used to help park staff learn the plants, animals, and geology of an area. Such collections often include only the most common, abundant, or most often observed species. Systematic surveys of park resources produce large amounts of data and many specimens. Special studies and research projects are more limited. Conducted by park staff or outside researchers, they focus on a particular management problem.

Institutions may collect specimens from within parks for specific research purposes. To obtain a collection permit, researchers should contact the park superintendent. Permittees should know that: (1) advance time is required for processing collection permit requests; (2) 36 CFR 2.5g (Revised 1984), requires that specimens retained in collections bear official NPS labels and be recorded in the NPS National Catalog, even if the specimens are housed in a non-NPS repository; (3) the permittee may be asked to take responsibility for cataloging; (4) collections may be placed on loan to other institutions, thus benefiting those institutions' research and educational programs.



Who Benefits From Natural History Collections?

VISITORS: Natural history collections on exhibit bring the park into the museum and give visitors a view of the park's natural resources, much of which they might not otherwise see. Natural history displays can go beyond simple identification to explain scientific concepts and point out threats to park resources.

Collections also serve the visitor by familiarizing staff with park resources; the staff uses this information to answer visitor questions. Collections are important in interpretive training and in preparing and presenting formal programs. Through interpretation, natural history collections help build public support for resource protection and other management objectives.



PARK MANAGEMENT: Natural history collections serve as a basic reference tool. For example, specimens collected during biotic and paleontological surveys and vegetation mapping provide information on which management decisions can be based. This information is critical to such management concerns as evaluating the effects of wildfire, monitoring water quality, documenting the spread of exotic species, and assessing visitor impacts.

Because ecosystems change, each collection provides a record of

resources at the time the collection was made. Collections made 20 years ago supply data with which present conditions can be compared. Collections made today will provide information upon which future managers will base their actions.

Well-documented collections can protect resources in the field. A researcher may find that existing specimens are adequate for research purposes, thereby making further collecting unnecessary.



RESEARCHERS: Park management asks many questions of researchers. Natural history collections help them provide answers. Specimen collections help scientists identify unknown plants, animals, rocks, minerals, and fossils. Voucher specimens documenting earlier work allow verification of initial identifications. Specimen series show variations within park species. Specimens in older collections provide the researcher information that may be otherwise unobtainable.

FUTURE GENERATIONS: Future researchers and managers will use natural history specimens and their data to evaluate the health and protection of parks. As natural areas in the world decrease, the protection of National Parks becomes more important. Parks will play an ever-growing role in the assessment of human impacts on the world. Several NPS areas have been designated Biosphere Reserves under UNESCO's Man and the Biosphere Program. Among the objectives of this program are the conservation of genetic diversity and long-term environmental monitoring. Supported by natural history collections, ecological monitoring will document environmental changes over time.

Managing NPS Natural History Collections

Natural history collections are managed according to procedures set by the Service for all of its museum collections. These collections are governed by Federal laws and regulations and by NPS Management Policies. Each park has an approved Scope of Collection Statement defining what a park will collect. The NPS *Museum Handbook* provides guidance on managing museum collections. A Collection Management Plan can be produced for each park. This plan assesses collection problems and makes recommendations for correcting them.

The NPS offers training and publications in museum collection management. The *Conserv-O-Gram* series provides state-of-the-art technical information. Questions and requests for curatorial supplies and equipment should be addressed to the Regional Curator or through the Regional Curator to the Curatorial Services Division, National Park Service, P.O. Box 37127, Washington, D.C. 20013-7127, (304) 535-6371, or FTS 925-6371.

This brochure was produced by the NPS Natural History Collections Committee, which serves as a standing committee of Servicewide natural science specialists and curators to advise the Chief Curator on policy issues and the planning, management, and use of natural

resources collections. For additional information on NPS natural history collections and the Committee, contact the Curatorial Services Division at (202) 343-8141 or FTS 343-8141.