

A Rocking Revamp: How an IMLS Grant Brought a Fresh Look to the Sternberg Museum Geology Collection

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HARVARD UNIVERSITY



FOR PAYS STATE UNIVERSITY'S
STERNBERG MUSEUM
OF NATURAL HISTORY



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Introduction

The Sternberg Museum of Natural History's Geology Collection has historically been underutilized despite the tremendous potential it holds for research and public education. The collection is the smallest at the museum and includes minerals, rocks, drill cores, tektites, and meteorites from various depositional environments around Kansas and around the world. Recently, the donation of a large mineral collection from a private donor prompted the museum to find a way to expand its current storage capacity and upgrade the storage condition.

Historic Storage

The geology collection was stored in wood cabinets for decades, occasionally opened for a few educational programs and the source of the museum's geology exhibit. Consequently, many specimens were poorly documented, unorganized, and not properly housed for long-term storage. As a result, information about the geology collection was not regularly shared with the public. After a move in 1999 to the current building, several specimens were not unpacked and it was unclear when the last inventory was and if everything in the collection was fully curated.



The critical needs of the collection included:

- Full inventory of specimens.
- Create digital data archive.
- Incorporate archive into a relational database (CollectiveAccess).
- Curate backlog.
- House unpacked specimens and rehouse poorly stored specimens.
- Implement clear organization system - data classification, rock type.
- Implement best-practice conservation techniques.



In order to address these needs, we applied for and were awarded an Institute of Museum and Library Services Museums for America grant to improve the collection conditions of the geology area. An **essential key** to success for this project is **specialized staff**. Along with the Collections Manager, we hired a part-time student with a strong background in geology.

Accessible database: sternbergca.fhsu.edu

Let's Get Started

The first step was to order the new cabinets, shelving, and archival supplies for housing the specimens.

- 4 Delta cabinets with full width drawers
- Stainless-steel shelving for oversize specimens
- Archival-quality curation supplies: ethafoam, specimen trays, plastic boxes, plastic bags (4 mil), and desiccant



Next, we hired the specialized staff - a senior geology student, well versed in mineralogy and petrology - Alexa Franks. Franks was responsible for the day-to-day progress, including packing/unpacking of the geology collection, cataloging, housing specimens, digitizing accession cards and the paper catalog ledger, and beginning the integration of the geology data to our relational database.



Transformation

While waiting for the new storage and supplies, we began preparing the specimens for their new home. Cataloged specimens were packed first. Uncataloged specimens were cataloged and labeled before being packed. Each box was organized based on mineral/rock type and given an inventory list. Ultimately, the number of cataloged specimens grew from 358 to 1,103.

Once the wood cabinets were empty, we removed and repurposed them to hold archival supplies, such as ethafoam and specimen trays. Of the new Delta cabinets, two of the cabinets store mineralogy, one cabinet for petrology and meteoritics, and one for teaching collection specimens. Since the drawers are secured with screws, we estimated the future growth of the collection and spaced the drawers accordingly. The oversize shelving was installed with various shelf heights to accommodate a variety of specimen heights.



Learning and Thinking Ahead

Timing

Anticipate delays. The cabinets did not arrive on their expected date due to backorder. Despite this delay, we finished packing, organizing boxes, cataloging, digitizing all the associated documentation, and printing new specimen labels by the delivery date. Also, we developed a game plan for labeling the cabinet doors and drawers, a workflow for unpacking, and implementing an organization system. Thanks to this twist, when the cabinets arrived, our added organization and labeling made unpacking efficient.



Conservation

Our mission was to insure that no deterioration of our specimens would occur. The Sternberg Museum has a significant collection of meteorites from Kansas. Due to the iron content present in meteorites, they are prone to oxidation (rusting). If improperly stored, meteorites will deteriorate, develop cracks, and crumble. To prevent this, we:

- Researched conservation methods used by other institutions
- Compared methods, financial investment, and sustainability

Due to limitations in finances and environmental controls, we needed to create microenvironments. Therefore, we used plastic storage that restricted air flow to the specimens and reusable silica gel packets to reduce moisture in each container. By controlling for moisture and oxygen, we can reduce the effects of oxidation.

Digitization

With digitization of the specimen data complete, the foundation is laid for uploading the geology records into CollectiveAccess and imaging the collection. When the grant project finished, some volunteers continued to help by adding records to the database. During the unpacking process, some specimens were chosen and imaged for an enhancement of the geology page on the museum website. These specimens were shot two ways: 1) artistically for the website, 2) with a scale bar for the database. Therefore, we have the start of a fully digitized and accessible geology collection.

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