BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e25931
doi: 10.3897/biss.2.25931

OPEN ACCESS

Conference Abstract

Bringing Sternberg Museum Fossils into the 21st Century

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Received: 17 Apr 2018 | Published: 13 Jun 2018

Citation: Byrd C (2018) Bringing Sternberg Museum Fossils into the 21st Century. Biodiversity Information Science and Standards 2: e25931. https://doi.org/10.3897/biss.2.25931

Abstract

The Sternberg Museum of Natural History (FHSM) has a rich paleontology history extending back to the late 1800s and early 1900s. From the 1902 to 1992, the museum was housed on the Fort Hays State University campus. FHSM outgrew the campus capacity and moved to a new location that afforded the museum significant space for collections and exhibits. Just as the museum had to change locations with its growing collections, so too must the means of care for the collections change and be updated. In order to improve the state of the paleontology collections and make them more accessible, the FHSM's Chief Curator pursued grants to achieve these goals. Two grants later, FHSM is well on its way to a digitized paleontology collection.

One National Science Foundation (NSF) grant focuses on basic collections improvement: transcription of hand-written records, cataloging the specimen backlog, and imaging specimens. One of the most important updates is the addition of the relational database, CollectiveAccess. This database enables FHSM to have a public-facing, searchable database that can show not only specimen data but also images and 3D scans of fossils. The second grant is an NSF funded Integrated Digitized Biocollection (iDigBio) collaborative research project. This grant focuses on fossils collected from the Late Cretaceous Western Interior Seaway fossils. The digitization goals of the collections improvement grant work synergistically with the iDigBio grant. When preparing to start work on these two projects, workflows and how-to guides were developed to fit the needs of both grants. This synergy increased efficiency for training student workers and aided quality

control. In regards to the new relational database, many considerations had to be made: what is the nature of the data, with whom are we sharing data, what are the data standards, what controls need to be in place to increase ease of use. Digitization of the collection started with transcription of hand-written records into a spreadsheet. The data from those record books and ledgers was cross referenced with the specimen cards to check for accuracy. Between the two grants, FHSM has two photography stations, four undergraduate students, and two graduate students. This small army of students, along with the Collections Manager, have succeeded in digitizing the invertebrate paleontology collection and have made significant progress on the vertebrate collection. Once the database is finalized, the images produced by these students will be uploaded and shared with aggregators such as iDigBio and accessible via the FHSM website.

Keywords

digitization, relational database, photography, collections management, invertebrates, verterates, paleontology

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