

**Establishing a Program and Office in the Department of Commerce  
To Advance Digital Information and Internet Access  
for Cultural and Natural Science Collections:  
A Concept Paper in Support of Draft Legislation**

**Background**

Our nation's cultural and natural science collections include governmental, academic, and private museums of anthropology, natural science, aquariums, arboreta, botanical gardens, children's museums, historic sites, nature centers, science and technology centers, and zoos. Museums take care of more than 750 million objects, including living specimens and supporting documentation, library materials, and other archival information.

These collections are a central element of our nation's cultural patrimony. The specimens and objects are the raw material of the natural sciences and the cultural legacy of past cultures and peoples. Collected over more than two centuries, they offer insights into current issues such as the eruption of human-wildlife and wildlife diseases (e.g., West Nile, Avian Influenza), spread of invasive species, large scale ecological responses to climate change, and science-based land use management and natural resource conservation. They also help capture the legacy of native cultures that are being lost to future generations. In the interest of streamlining the flow of international commercial goods, web-searchable collections data can be also used by inspectors at ports of entry to identify and prevent illegal trade in historical artifacts and wildlife trafficking and the introduction of invasive species and diseases and to clear clean shipments more quickly.

Many institutions are working to digitize their collections to provide greater access and a back-up for preservation. However, most collections are little digitized and they are not accessible to members of the public, researchers, decision makers, natural resource managers, or native peoples unless they physically travel to the museum. In addition, many of our nation's collections need immediate action to prevent their deterioration and loss, and digitizing, while not a substitute for conservation, is a cheaper and immediate way to preserve the information they convey. It is far cheaper to extract existing museum records (\$5 or less each to digitize) than acquire new information in the field (\$100 each to collect, assuming that new specimens exist).

It is long past time that these resources be digitally formatted, cataloged and integrated with advanced technologies and made accessible for use by all. However, the storage and preservation costs for these collections are high, and the entities that maintain them are often unable to afford the cost of digitizing these data. Therefore, it is suggested that legislation be enacted creating an Office of Digital Collections in the Department of the Commerce to spearhead efforts to make the nation's cultural and natural science collections digitally available over the World Wide web, thereby making this information accessible the greater user community. The Commerce Department is suggested, because the United States needs an agency to lead the nation's engagement and advancement in use of the Web. That enterprise is fundamentally a matter of global commerce. Furthermore, with the exception of NOAA, the Commerce Department remains an agency in search of definition, and this could help to define it.

**Office Mission and Objectives**

The mission of the Office of Digital Collections (“Office”) would be to advance the electronic storage, retrieval and use of cultural and biological information held in museum, university, and other collections that offer public access. This would include:

- Promoting and conducting the systematic digitization of physical collections,
- Advancing research and development towards the efficient and cost effective use of contemporary information technologies for collection data digitizing (e.g., imaging and scanning), archiving, synthesis, mining, on-line access, and interchange capabilities across all sectors,
- Promoting and assisting in the development of metadata and taxonomic standards for legacy collections (to assure data compatibility - nationally, globally, and among disciplines),
- Facilitating the digital integration of data from collections with geospatial information, through mean including geographic information systems and satellite imagery, thereby adding value and advancing research and new applications,
- Creating partnerships between the collection and technology communities, both public and private, to advance scientific discoveries and applications of these digital data within and across institutions, and
- Developing and conducting training programs for native peoples, naturalists, and the greater user community to use digital collections data in their decision making processes.

**Cooperation with the Office**

The heads of the departments and agencies of the United States would be directed to cooperate with the Office in advancing the purpose of the legislation. They would also be directed, as feasible, to conduct independent programs to advance the digitization of collections and use of these data. Such agencies and departments would also be directed, to the extent permitted by law, to integrate means to advance digitization in the work of other public and private entities that they fund or whose work they authorize. In carrying out its work, the Office would be directed to coordinate with the collections community, associations and societies, and leading national and international cultural and biological informatics and taxonomic initiatives.

**Authorization of Appropriations/Funding**

The legislation would authorize appropriations of \$50 million for FY 2008 and such sums as necessary thereafter to carry out its provisions.