

PROJECT ABSTRACT

Colorado Plateau Cooperative Ecosystem Studies Unit (Cooperative Agreement H1200-004-0002)

Park: *Grand Canyon National Park*

Project Title: *Database Development and Application Programming for the Grand Canyon National Park, Research Permit Database and Application*

Funding Amount: \$22,430

CPCESU Partner Institution: *Department of Computer Science, Northern Arizona University*

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Start Date: *June 15, 2009*

End Date: *September 30, 2010*

Abstract:

The PI, with assistance from a student intern, will provide the GRCA with assistance in converting its existing NatureBib databases from MS Access 2003 to multi-user SQL Server 2008, and develop a new Intranet Web application to facilitate data entry and reporting of information related to the Research Permitting program at GRCA. The PI and student intern will work closely with the GRCA database administrator, who will develop any necessary database tables and relationships within the existing GRCA SQL Server database.

NatureBib is a Park Service-wide database system used to construct an electronic bibliography of documents and reports relevant to an administrative unit within the NPS. GRCA has the responsibility to maintain documents within such Service-wide systems that are relevant to Grand Canyon. There are currently 4,757 such GRCA related citations within the system, though no effort has been made to upload actual document content to date. Access to the system is limited to NPS personnel, is administered centrally, and is independent of the Active Directory System that is used for network and email security within the NPS; individual user logins must be requested from the system administrator. At this point, the general public is restricted from access. In addition, the Park Service-wide database system does not have full text search capability

This task shall seek to implement a local network version of the NatureBib database, as well as a Web based application that can be used to store citation data relevant to GRCA. These will be modeled after the existing NatureBib system, and must be fully compliant with the existing system, so that GRCA may upload its local version to the national database when necessary. It will also have full text search capability.

Keywords:

Protocols/Reference Materials, Tabular Data Sets, Information Management, Systems Development, Species-specific Information Databases