

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Vascular Plant Species List Project: Herbaria Review and Technical Report Preparation for Northern Colorado Plateau Network parks.

Discipline: Natural

Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: University of Wyoming

Effective Dates: 9/15/2005 - 12/31/2007

Funding Amount: \$71,813

Investigators and Agency Representative:

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Project Abstract:

In 1999, through the Natural Resource Challenge, the National Park Service (NPS) launched an ambitious natural resource inventory and monitoring effort to serve parks across the country. As part of this work, focused inventories of vascular plants and vertebrate fauna have been undertaken by inventory and monitoring networks. The NPS Washington Office Inventory and Monitoring Program developed a suite of databases to assist with cataloging species and related information. These databases include NPSpecies that houses species specific information for each park, including voucher information; and NatureBib for bibliographic information.

In 2004, the Northern Colorado Plateau Inventory and Monitoring Network (NCPN) initiated an effort to develop verifiable vascular plant species lists for each of 16 network parks largely through review of park-based herbaria and to a limited degree with on-site field work. The goal of this original work was to review and correct herbarium label information, verify/determine identifications and update this information for NPS managed databases (ANCS+ and NPSpecies). Through this voucher verification process, NCPN has been able to document the presence of plant taxa in the 16 parks. In addition, cooperators reviewed the scientific literature available for each park unit together with local flora and distribution information to identify vascular plant species which are likely to occur in each park, but have yet to be documented with a voucher specimen. Information generated from this two-pronged effort is being entered into the NPSpecies database for each park.

In 2006 the NCPN added another task and additional funds to allow University of Wyoming cooperators to collect specimens for vascular plant taxa that are currently unvouchered in the NPS Northern Colorado Plateau Network park herbaria. NCPN, with cooperator assistance has recently completed an assessment of herbarium collections for the following parks in Wyoming and Utah: Fossil Butte, Zion, Cedar Breaks, Bryce Canyon, Capitol Reef, Timpanogos Cave, Golden Spike, Canyonlands, Arches, National Bridges, Hovenweep and Dinosaur NP. Herbarium voucher data now reside in the NPSpecies database (as well as ANCS+), allowing clear identification of taxa for which vouchers are lacking. The fall flora and wetland habitats in most of these parks are undersampled. Roadside weeds in some parks have not been vouchered. A couple of parks have issues with many historical reports of species that have not been relocated. Common species as well as cryptic species are poorly represented in other parks.

Outcomes with Completion Dates:

Task 1. Sixteen individual technical reports document the vascular plant checklist project and results for each park unit in NCPN. These will be delivered in MSWord electronic format.

Task 2. Completed NPSpecies databases for CEER and DINO, complying with direction in the NCPN Vascular Plant NPSpecies Guide.

Task 3. NCPN park species voucher information from BYU and USU entered into relevant park NPSpecies databases.

Task 4. List of key references for each park. Cross-referenced NPSpecies data in specific park databases.

Keywords: herbaria review, Northern Colorado Plateau Network, Inventory and Monitoring, vascular plants, University of Wyoming

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: