

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Development of an On-line Workbench Tool for Consistent and Correct Identification of Freshwater Diatoms in the US

Type of Project: Technical Assistance

Project Discipline: Natural

Funding Agency: USGS

Other Partners/Cooperators: University of Colorado at Boulder

Effective Dates: 4/30/2010 - 11/30/2011

Funding Amount: \$99,994

Investigators and Agency Representative:

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Project Abstract:

The objective of this project is to address issues of taxonomic consistency and correctness across broad geographic space and taxonomic diversity. The development of a tool/workbench product available over the web that is updateable and dynamic is a crucial step in this research. This tool will have several key components, and these components are the major objectives of the proposed work:

- Create multichotomous keys to the major groups of freshwater diatoms. This key is already completed (Wehr & Sheath 2003), though is expected to make minor refinements.
- Create multichotomous keys to genera, with descriptions of the genera, interactive illustrated glossaries and nomenclatural information. The keys and descriptions have been completed (see Wehr and Sheath 2003), images taken, and nomenclatural information compiled (Fourtanier & Kociolek 1999, 2003).
- Create each genus page to have images of all taxa within the genus. In larger genera, this would be further divided by species groups or subgenera. Selecting a taxon image will lead to the specific taxon page.
- Create keys that users can enter at the level they require, or by-pass them altogether and address the individual taxon pages.

Outcomes with completion dates: The final report shall be submitted within 90 days of the end of the project period.

Keywords: online tool, Freshwater Diatoms, identification, USGS, University of Colorado at Boulder