



INVESTIGATOR'S ANNUAL REPORT

United States Department of the Interior
National Park Service

OMB # (1024-0236)
Exp. Date (11/30/2010)
Form No. (10-226)

All or some of the information you provide may become available to the public.

Reporting Year: 2008	Park: Glacier NP	Select the type of permit this report addresses: Scientific Study	
Name of principal investigator or responsible official: Loren Bahls		Office Phone: 4064432196	
Mailing address: 1032 12th Avenue Helena, MT 59601 USA		Office FAX Office Email hannaea@montana.com	
Additional investigators or key field assistants (first name, last name, office phone, office email) Name: E. William Schweiger Phone: 970-267-2147 Email: Billy_Schweiger@nps.gov			
Project Title (maximum 300 characters): A SURVEY OF DIATOM BIODIVERSITY IN GLACIER NATIONAL PARK			
Park-assigned Study or Activity #: GLAC-00097	Park-assigned Permit #: GLAC-2007-SCI-0009	Permit Start Date: Feb 01, 2007	Permit Expiration Date: Dec 31, 2009
Scientific Study Starting Date: Feb 01, 2007		Estimated Scientific Study Ending Date: Dec 31, 2009	
For either a Scientific Study or a Science Education Activity, the status is: Continuing		For a Scientific Study that is completed, please check each of the following that applies: <input type="checkbox"/> A final report has been provided to the park or will be provided to the park within the next two years <input type="checkbox"/> Copies of field notes, data files, photos, or other study records, as agreed, have been provided to the park <input type="checkbox"/> All collected and retained specimens have been cataloged into the NPS catalog system and NPS has processed loan agreements as needed	
Activity Type: Inventory			
Subject/Discipline: Paleontology			

Purpose of Scientific Study or Science Education Activity during the reporting year (maximum 4000 characters): Prepare an ecologically supported and photographically documented diatom flora of Glacier National Park
Findings and status of Scientific Study or accomplishments of Science Education Activity during the reporting year (maximum 4000 characters): Twenty-nine (29) samples were collected in 2008, 7 from flowing waters and 22 from standing waters, for a total of 96 samples collected to date. For each sample a permanent slide was prepared that contains a subsample of the diatom assemblage that existed at the time of collection. Slides were scanned to determine the presence of the potential nuisance diatom <i>Didymosphenia geminata</i> (aka "didymo", aka "rock snot") and the rare alpine and glacial relict species <i>Distirionella incognita</i> . <i>Didymosphenia geminata</i> was found in 3 of 29 samples collected in 2008: Kintla Creek, Ford Creek, and a seep near Camas Creek. It was not found in any of the 22 standing waters that were sampled. <i>Distirionella incognita</i> was found in Kintla Lake (benthos only) near the lake outlet and in Kintla Creek below Kintla Lake. It was not found in a net plankton sample collected near the outlet of Kintla Lake, confirming that <i>Distirionella incognita</i> is a benthic species, not a planktonic species, of large lakes in the Park.

For Scientific Studies (not Science Education Activities), were any specimens collected and removed from the park but not destroyed during analysis?

Yes

If "Yes", identify where the specimens currently are stored:

Slides representing each of the 29 samples collected in 2008 (96 total) are currently stored at the principal investigator's residence: 1032 12th Avenue, Helena, MT 59601. At the close of the study they will be deposited in the Montana Diatom Collection at the University of Montana Herbarium (MONTU) on the Missoula campus.

Funding specifically used in this park this reporting year that was provided by NPS (enter dollar amount):

\$4430

Funding specifically used in this park this reporting year that was provided by all other sources (enter dollar amount):

\$5850

List any other U.S. Government Agencies supporting this study or activity and the funding each provided this reporting year:

Paperwork Reduction Act Statement: A federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. Public reporting for this collection of information is estimated to average 1.625 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms. Direct comments regarding this burden estimate or any aspect of this form to Dr. John G. Dennis, Natural Resources (3127 MIB), National Park Service, 1849 C Street, N.W., Washington, DC 20240.