

Montana State Digital Library

October to November 2010

Prepared for the December 1, 2010 Commission meeting

by Jennie Stapp, Digital Library Division Administrator.

This report represents accomplishments of:

Library Information Services (LIS),
Montana Natural Heritage Program (MTNHP),
Natural Resource Information System (NRIS).

Goal One, Content: MSL acquires and manages relevant quality content that meets the needs of Montana library partners and patrons.

Through the coordination of the Department of Natural Resources (DNRC) Montana Water Resources Division, with funding from local governments and grants, the upper Flathead Valley and Flathead Lake have a new set of aerial photos and elevation maps, collected in 2009, which provide up to four times the detail than what was ever available before. The elevation data will provide for highly accurate flood modeling and floodplain delineation, and the aerial photographs will be useful to anyone who needs to make a map or to see conditions on the land. In order to ensure public access to this data the Water Resources Division contracted with NRIS to manage and make this data available on-line. Through this contract NRIS has created the following products:

- an on-line viewer that allows anyone to view the air photos and visualize the land surface depicted by the elevation data
- a service that allows users of Google Earth and users of professional computer mapping software to view the air photos.
- a repackaged version of the data that are easier to use and download. Users of computer mapping software may use the air photos and elevation data, and anyone may download and view the air photos.

These products will be available starting November 16 at a new web site, http://nris.mt.gov/Flathead_2009. Gerry Daumiller is also participating in public meetings in Flathead and Lake Counties hosted by DNRC during November where this data will be highlighted.

LIS processed and sent the first shipment of 5 boxes (284 state publications) to be digitized for the fiscal year (FY) 2011 contract with the Internet Archive. The digitization progress chart for FY 2010 has been updated at <http://msl.mt.gov/digitization/default.asp>. We will soon reach a major milestone in our efforts to digitize our legacy print state publications project, 1 million digitized pages.

MTNHP Botanist, Scott Mincemoyer and MTNHP Data Assistant, Martin Miller, have completed a major update to the Occurrence Database for Plant Species of Concern that is frequently used by patrons in environmental reviews; there are now more than 10,000 plant Species Occurrences in this statewide database. In addition, Scott Mincemoyer, has added short habitat descriptions to the Montana Plant Species of Concern Report <http://mtnhp.org/SpeciesOfConcern/?AorP=p> in order to allow non-specialists to more easily understand which species are likely to be relevant to particular management issues or for environmental reviews.

MTNHP Project Support Biologist, Coburn Currier, has added 8,837 bird observation records to the Montana Bird Distribution Database resulting from bird point count surveys the MTNHP Zoology Program conducted for the Helena National Forest, the Glasgow and Havre Field Stations of the Bureau of Land Management, and Montana Fish, Wildlife & Parks (FWP), as well as some other surveys commissioned by FWP in the Upper Clark Fork watershed. The MTNHP, in cooperation with Montana Audubon, the Montana Bird Records Committee, and FWP, have now added more than 737,000 bird observation records to this database.

MTNHP Biological Data Systems Coordinator, Karen Walker, and Interim Director and Senior Zoologist, Bryce Maxell, continue to coordinate with several data assistants that have been temporarily hired to add literature citations relevant to the flora, fauna, and biological communities of Montana to a newly designed MTNHP reference database. There are now over 42,000 references in this database and the data assistants have reviewed approximately three quarters of these references for OCLC numbers so that we may cross-reference and link to records for these citations in WorldCat making access to these references citations more readily available.

Goal Two, Access: MSL provides libraries, agencies, and its partners and patrons with convenient, high quality, and cost-effective access to library content and services.

LIS completed a 15 month process to upload to the Internet Archive copies of datasets previously housed in the Montana Memory Project (MMP). The decision was made a year ago to move this content from the MMP due to the inability to adequately index this text-based information using the MMP software, CONTENTdm. This was a particularly labor intensive project for LIS staff because of the variety of content and descriptive metadata available. Some files were removed as duplicates. Other files were combined to provide better usability. A total of 3070 files were uploaded and 1386 permanent uniform resource locators (PURLs) were created to link to this online content. The final step yet to be completed is to work with the Montana Shared Catalog (MSC) administrative staff to add these PURLs to the corresponding MARC records in the MSC. Because this last step will require the system to be briefly halted we will wait to do so until an appropriate time can be found when the least number of users will be impacted.

MTNHP Web Projects Manager, Dave Ratz, is finalizing updates to the newly released Natural Heritage Map Viewer <http://mtnhp.org/ecology/mapviewer/> that will allow patrons to view land stewardship across Montana in conjunction with a variety of other map layers, including aerial photos, topographic maps, and digital elevation models. This new tool is compatible with the recently released land cover tool and allows patrons to quickly create summaries of the percentage makeup of various stewardship types within a variety of administrative boundaries including latitude-longitude boundaries, counties, watersheds of various sizes, and townships. This new tool should be a valuable asset to a variety of natural resource management agencies, consulting firms, and non-government organizations.

Goal Three, Consultation and Leadership: MSL provides consultation and leadership to enable its patrons and partners to reach their goals.

MTNHP Ecology Program Manager, Linda Vance, and Ecologists Karen Newlon, Cat McIntyre, Dave Stagliano, and Meghan Burns, gave several presentations and displayed posters on the MTNHP's wetland mapping and assessment programs at the Environmental Protection Agency Region 8 Wetland Program Capacity Building Workshop in Bozeman, September 21-24, at the Montana Section meeting of the American Water Resources Association in Helena, October 14-15, and at the Montana Wetland Council Meeting on November 5th. Numerous partners at all three venues noted that the MTNHP is a regional leader in wetland mapping and assessment and that this wetland mapping and assessment information greatly assists them in their daily resource planning tasks.

MTNHP Interim Director and Senior Zoologist, Bryce Maxell, gave an invited presentation to fisheries and high mountain lakes resource managers across the western United States on management tools developed from assessments of lentic breeding amphibians that MTNHP has conducted across Montana over the past 10 years. This presentation was part of the U.S. Fish and Wildlife Service National Conservation Training Center's Webinar on High Mountain Lake Management and Research, October 27-28. Bryce also gave a presentation at the Montana Wetland Council Meeting on November 5th on the wetland red flagging tool that MTNHP built in the Natural Heritage Tracker application to highlight wetlands that might need management attention.

Several NRIS and NHP staff presented at the October Montana Association of Geographic Information Professionals (MAGIP) Technical Session in Helena, October 27-28. Two sessions were given on the Montana GIS Portal. During one session Gerry Daumiller trained attendees on how to publish GIS metadata in the Portal. During the other session, Diane Papineau demonstrated how to search for and use data found in the Portal. Additionally updates were presented on the Hydrography, Geographic Names, Imagery, Land Stewardship, Wetlands and Land Cover framework layers as part of a half-day session on the status of the Montana Spatial Data Infrastructure (MSDI).

In October MSL was officially named the MSDI Geographic Names Steward. Gerry Daumiller will serve as the theme lead for this framework layer. Initial work to be done includes moving the Montana geographic names database from the University of Montana to MSL, determining how this data will be updated in the future in collaboration with the data maintained by the US Geographic Names Information System and building a web service for this data. It is highly likely that MSL will apply for a Montana Land Information Act grant in February to help fund this effort.

Additionally, Gerry represented Montana at the October annual meeting of the Council of Geographic Names Authorities in Missouri where he was invited to present about a web page that he maintains that is used to document and inform Montanans about changes to geographic names in the state. This web page is available at <http://msl.mt.gov/geonames/>.

LIS Cataloging and Metadata Specialist, Jess Tobin, provided training to one of the new MSC members, the school librarian from Simms High School. The librarian was trained in copy cataloging using the MSC cataloging module and implementation of the MSC cataloging guidelines.

Goal Four, Collaboration: MSL promotes partnerships and encourages collaboration amongst its partners and patrons so that their information needs can be met.

LIS staff attended the Academic and Special Libraries Division/Public Libraries Division fall retreat at Chico Hot Springs. LIS Cataloging and Metadata Specialist, Jess Tobin, served on a cataloging panel that fielded questions from attendees. The presentation by Robert Maxwell, cataloging author, on what the new standard Resource Description and Access (RDA) means for libraries as a replacement for AACR2 was also extremely practical.

LIS staff also attended the "Connecting to Collections" workshop in Bozeman, MT October 20, 2010 to get further training on preservation and disaster recovery. This workshop was one of several offered in Montana by Lyris as part of the Connecting to Collections grant that is awarded to MSL and the Montana Historical Society.

MTNHP and NRIS staff continues to collaborate with FWP to create a web service for the 2009 Montana Land Cover layer that can be used in a variety map based web applications. We hope to have a map service available for consumption by a variety of partners by the end of 2010.

MTNHP Interim Director and Senior Zoologist, Bryce Maxell, attended a three day meeting, October 26-28, to collaborate with numerous state and federal agencies on the future of bird inventoring and monitoring across Montana and the western United

States. A subcommittee of Montana partners will have a follow-up meeting in early December.

MTNHP Botanist, Scott Mincemoyer, coordinated a meeting on designating Important Plant Areas in Montana at the State Library on November 11 that was attended by representatives from DNRC, the US Forest Service, Yellowstone National Park, and The Nature Conservancy.

In NRIS's role as MSDI stewards for Geographic Names and Hydrography MSDI framework layers as well as co-steward for Imagery and the lead metadata steward for the state, NRIS staff hosted four work group meetings related to these topics prior to the October MAGIP Technical Session. These meetings were well attended by persons who use or contribute data to these datasets. The outcome of these meetings provides the basis for on-going planning for data development and dissemination.

Goal Five, Sustainable Success: MSL is a well-run organization and a sought-after employer; it is efficient and effective (measured against partner and patron outcomes), and successfully engaged in its ongoing mission.

During the week of November 15th staff of the Base Map Service Center moved to MSL. This required a considerable amount of work to coordinate and involved moving a total 21 people along with the downstairs digitization processing area. All of these changes do not happen without some degree of disruption. We appreciate the support and encouragement we received from the Montana GIS Community regarding this move as well as the positive attitudes of staff that were impacted by the changes. We all believe that we will see a significant increase in the level of collaboration and output from the staff of NRIS, NHP, FWP and the BMSC which will undoubtedly benefit patrons around the state.

2010 marks the 25th anniversary of the creation of NRIS and MTNHP which was founded in statute in 1983 and launched in 1985. Current and past MTNHP and NRIS staff and partners will celebrate our 25th anniversary on the evening of December 13th at Benny's Bistro in Helena.

LIS screened and interviewed more than fifty applicants for the digital services technician position. Allison Badger of Missoula accepted the job offer and begins in her new position November 22nd.

The NRIS Web Developer position was advertised during this period and closed on November 5. Applications are currently being screened with interviews pending.

The University of Montana posted the announcement for the MTNHP Director's position and a search committee was named that is comprised of MTNHP staff, University Staff, the State Librarian, and representatives from MTNHP partner agencies. Applications for

the position are due by December 31, 2010 and the position is expected to be filled by late winter or early spring. The announcement is available online at:

<http://www.higheredjobs.com/search/details.cfm?Jobcode=175475456&aID=1920&print=yes>

The MTNHP recently hired a new Photo-interpreter / Ecologist, Gary Carnefix, to assist with the MTNHP's Wetland and Riparian Mapping Center's statewide wetland mapping efforts. Gary is a great addition to our staff. He has worked as a fisheries biologist and consultant at the Pacific River's Council in Montana since graduating from the University of Montana with a M.S. in Biology.