

# Montana State Digital Library

February and March 2008

Prepared for April 12, 2008 Commission meeting by Jennie Stapp, Digital Library Division Administrator. This report represents accomplishments of:

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

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

- NHP staff added several thousand new animal species observation records, now available through our web TRACKER. Additionally, NHP staff added 200 new plant Species Occurrence records and updated another 400.
- NHP staff acquired the US Forest Service's LANDFIRE vegetation plot and photo database, which represents a consolidation of this type of information from all available MT data sources. This dataset will be available for analysis and responding to requests, and will be made available in the future via the web.
- NHP staff completed wetland mapping for the Bitterroot Valley, an area of roughly 1.4 million acres. Analysis of the results found an 80% decrease in beaver ponds (only about 5 acres remaining) and a 75% increase in human-created ponds since the early 1980's. A summary report is available on the NHP website: [http://mtnhp.org/reports/Bitterroot\\_Change.pdf](http://mtnhp.org/reports/Bitterroot_Change.pdf).
- NHP staff collected and analyzed data on aquatic habitats at 15 sites in the Clarks' Fork of the Yellowstone drainage, on BLM lands (project-related). The findings are summarized in an NHP report. The data were added to an extensive NHP aquatic species/habitats database that is currently being formatted for addition to the TRACKER.
- As part of project work on grassland birds and terrestrial mollusks, NHP staff zoologists are developing predicted species distribution maps using GIS data models. These maps will initially be included in project reports and used to identify areas to focus future surveys. Later this year, we hope to develop predicted distribution models & maps for many more species and make them available via the TRACKER website.
- NRIS completed the acquisition of statewide Relative Effective Annual Precipitation data from the Natural Resources Conservation Service (NRCS) and posted it on the GIS Clearinghouse: <http://nr.is.mt.gov/gis/>.
- NRIS acquired a new version of the soil survey for Dawson County from the NRCS and posted it on the GIS Clearinghouse.
- NRIS continued to do its periodic updates of the Montana Cadastral Database, the Montana Water Rights database, and the DEQ Remediation Division's Underground Storage Tank database.

- NRIS continued to provide monthly updates of the Montana drought status map for the Governor's Drought Committee and the Snowpack, Streamflow Prospects, and Surface Water Supply maps for the NRCS.
- NRIS put a new version of the BLM Field Office Regions data on the GIS Clearinghouse.
- LIS participated in OCLC web harvesting teleconference.
- LIS created a means to manage natural resource and professional library development information in the Montana Memory Project. This creates future means to better manage these digital collections as they develop in support of the MSL Strategic Plan.
- LIS completed the Interest For Bid (IFB) process for our planned scanning project. The Open Content Alliance was selected through the open bid process. \$66,000 was encumbered for FY08/FY09 for this process.
- LIS completed its report on the LOCKSS (Lots of Copies Keep Stuff Safe) system which provides distributed archival preservation of digital content.

**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.

- NHP staff released a beta version of TRACKER with significant enhancements. It adds distribution data for Plants (Species of Concern), base maps for easements and special designations, and new statewide Range Maps for all 600+ vertebrates in the state, displaying year-round, summer, winter and migration ranges.
- The new TRACKER version also provides agency biologists with maps showing where standardized surveys have been conducted for birds and selected other species. This enables biologists to quickly assess whether an apparent "gap" in species' distribution may be due simply to lack of survey in that area.
- NHP staff responded to 171 mediated requests between February 1 and March 25.
- NRIS responded to 105 mediated requests for maps, GIS data, GIS technical assistance, or general information about geography. These consisted of 46 requests from State agencies, 3 requests from federal agencies, 6 requests from local government agencies, 13 requests from educational institutions or students, and 37 requests from private agencies or citizens.
- NRIS brought in a technician from the GIS Portal software vendor to repair problems with the Portal.
- Staff provided a first look at model GIS Portals to the Montana Land Information Advisory Council at their March meeting.
- NRIS provided information about the location of Montana's geographic center to a reporter from Signature Montana Magazine. This information will be included in the magazine's premier issue in May.

- LIS provided new employee orientation about MSDL services and resources on March 20<sup>th</sup> 2008.
- LIS collaborated with the Communications/Marketing director to update LIS and Archive Montana brochures, to create a press release for Archive Montana, and to create decals for depository libraries.
- LIS created a new digital depository library option. New contracts were issued to all depository libraries with the option to become digital-only or to remain print/digital depository libraries. This option will be promoted to libraries at MLA with the hope that more libraries will join the depository program.

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

- NHP Senior Zoologist Bryce Maxell served as Program Co-chair for this year's meeting of the Montana Chapter of the Wildlife Society. NHP staff also made several presentations.
- NHP received a grant from the US Geological Survey for outreach and training on use of the national vegetation classification standard, to standardize data collection for land cover in Montana.
- NHP Aquatic Ecologist Dave Stagliano gave a presentation at the American Fisheries Society – Montana Chapter meeting, focusing on changes in aquatic invertebrate and fish populations as a result of drought and declining mountain glaciers. Dave was extensively quoted, along with Nobel-laureate global-warming researcher Steve Running, in the Jan/Feb 2008 issue of Northwest Fly Fishing.
- NHP staff trained Dept. of Transportation environmental staff in using the GIS map service we developed to meet their NHP data needs.
- NHP staff consulted with over 30 prospective users of Montana Land Cover data in a needs study designed to inform development of data and web services that will provide land use/land cover data for Montana. The study was conducted in partnership with the Dept. of Administration, and served as the basis for a funding proposal to support NHP coordination & development of land cover data for the state.
- The Department of Natural Resources and Conservation asked the State Library to take over responsibility for staffing the Montana Geographic Names Advisor position. The position is responsible for making the State's recommendation on name changes and proposed new names that are before the U.S. Board of Geographic Names. This is of particular interest because of the current requirement to rename everything that has the word "squaw" in its name. The Library assigned Gerry Daumiller to fill this position.
- NRIS reviewed and proposed changes to the Montana Department of Environmental Quality's proposed standards for the reporting of latitude and longitude coordinates. These standards will apply to data submitted to DEQ by contractors and regulated facilities.

- LIS held a teleconference with the archivist and cataloguer from the Southwestern Writers archive. Staff answered their questions about implementing CONTENTdm, the software used by the Montana Memory Project. Staff also spoke briefly about our LOCKSS plans and search for potential partners.
- LIS hosted monthly Best Practices Exchange planning meetings for the May 2008 conference.
- LIS staff gave a presentation to the Network Advisory Council on new digital library resources and services.

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

- NHP Botanist Scott Mincemoyer participated in the Montana Plant Conservation Conference and a meeting of the Northwest Lichenologist working group.
- NHP Ecologist Linda Vance attended a meeting of the EPA National Wetland Monitoring & Assessment work group.
- NRIS continued to update the Montana portion of the National Hydrography Dataset, the nation's official inventory of surface water features such as streams, lakes and ponds.
- NRIS provided a series of maps on Montana's junior colleges and the retention of Montana high school graduates in the Montana University System to the Governor's Office.
- NRIS provided a series of 4 maps to Fish, Wildlife, and Parks showing properties in areas where they are trying to create new fishing access sites.
- NRIS opened its topographic map image database to the DEQ so that they may download maps for use by field crews on mobile computers.
- Staff maintained the web site for the 2008 Intermountain GIS Conference, was responsible for arranging the schedule of the conference's presentations, and was responsible for finding moderators for all of the conference sessions.
- Sibyl Govan presented the status of the Montana GIS Portal to the Montana Land Information Advisory Council.
- Duane Lund attended the Montana Wetlands Council meeting and a teleconference with the Drought Mitigation Center.
- NRIS staff attended meetings regarding the State's new Enterprise License Agreement with ESRI, the vendor that provides GIS software to 20 state agencies. They are working on various committees that will determine how participating agencies will share the resources provided by the agreement.

- LIS completed LOCKSS test report with recommendations and timeline. It is our hope to develop partnerships with libraries around to state and the region to develop a private LOCKSS network. LIS staff held a LOCKSS teleconference with LOCKSS staff at Stanford University to discuss formation of private LOCKSS network.
- LIS worked with Statewide Library Resources to develop the new “patron portal.”
- LIS met with Montana Bureau of Mines and Geology (MBMG) personnel to discuss copyright and access issues related to MBMG publications.
- LIS staff participated in OCLC Western members meeting.
- LIS staff attended the state’s Public Information Officers meeting, March 27, 2008.
- LIS participated in Montana Memory Project usability group meeting.
- LIS staff serve on the Planning Committee for the Montana Historical Society County History Initiative.

**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.

- LIS updated Client Services and Technical Services assistant position descriptions to reflect digital library transition.
- Sibyl Govan resigned from the Montana State Library on March 14, 2007 to take a position at Blue Cross/Blue Shield. Jennie Stapp was hired as administrator of the Digital Library Division on March 17, 2008.
- Gerry Daumiller was hired as NRIS Manager on March 17, 2008.
- NRIS hired Jeff Dobb to be the web applications developer. He starts on April 14.

**Evidences of MSDL successes:**

OCLC Digital Archive Access Summary  
 FEB-08  
 Institution MZB

Accessing Inst	Inst Name	Location	Access Requests	Objects Accessed
MZB	MONTANA STATE LIBR	Montana	36	36
IOZ	STATE LIBR OF IOWA	Iowa	15	15
GIS	US GEOL SURVEY, NAT CTR	Virginia	11	11
MZF	MONTANA STATE UNIV, MSU LIBR	Montana	7	7
YNX	MILES COMMUN COL LIBR	Montana	7	7
MTG	UNIV OF MONTANA, MANSFIELD LIBR	Montana	5	5
NIU	UNIV OF NORTHERN IOWA	Iowa	4	4
TXA	TEXAS A&M UNIV	Texas	4	4
OCL	OCLC INC	Ohio	3	3
YWR	MONTANA STATE UNIV, NORTHERN	Montana	2	2
Y38	MISSOULA PUB LIBR	Montana	2	2

AFH	US ARMYCOPRS OF ENG	New Hampshire	1	1
AFU	UNIV OF ARKANSAS, FAYETTEVILLE	Arkansas	1	1
CAX	CALIFORNIA STATE LIBR	California	1	1
CUH	UNIV OF CALIFORNIA, HASTINGS COL	California	1	1
DRB	DARTMOUTH COL	New Hampshire	1	1
EM2	MONTANA STATE UNIV, BILLINGS	Montana	1	1
FHM	UNIV OF S FLORIDA	Florida	1	1
HKY	SKYVIEW HIGH SCH LIBR	Montana	1	1
HUA	UNIV OF HONG KONG LIBR	HONG KONG	1	1
ISL	INDIANA STATE LIBR	Indiana	1	1
NPRKS	NATIONAL PARK SERVICE	California	1	1
NRZ	NATIONAL ACAD, GEORGE E BROWN JR	Distr. of Columbia	1	1
RIC	BRIGHAM YOUNG UNIV, IDAHO	Idaho	1	1
Y72	FLATHEAD VAL COMMUN COL LIBR	Montana	1	1
Y73	KALISPELL REG MED CTR LIBR	Montana	1	1
Public	N/A		846	846

### MSDL Web Stats (daily averages exclude robots and spiders)

- **NHP Web Statistics:** nhp.nris.mt.gov averaged **1075 visitor sessions per day in February** and **1141 visitor sessions per day in March.**

The five most requested pages in March are:

1. Montana Natural Heritage Program <http://nhp.nris.mt.gov/> - 2615
2. Species Information <http://nhp.nris.mt.gov/animal/asppinfo.asp> - 2154
3. Tracker <http://nhp.nris.mt.gov/tracker> - 1110
4. Community Field Guide Report [http://nhp.nris.mt.gov/community/guide\\_report.asp](http://nhp.nris.mt.gov/community/guide_report.asp) - 1080
5. Publications [http://nhp.nris.mt.gov/Reports\\_List.asp](http://nhp.nris.mt.gov/Reports_List.asp) - 607

The five most downloaded files in March are:

1. [http://nhp.nris.mt.gov/reports/Bitterroot\\_Change.pdf](http://nhp.nris.mt.gov/reports/Bitterroot_Change.pdf) - 1208
2. [http://nhp.nris.mt.gov/community/community\\_list\\_2002.pdf](http://nhp.nris.mt.gov/community/community_list_2002.pdf) - 970
3. [http://nhp.nris.mt.gov/reports/AqInvert\\_SOC\\_R1.pdf](http://nhp.nris.mt.gov/reports/AqInvert_SOC_R1.pdf) - 610
4. [http://nhp.nris.mt.gov/Reports/Crosswalk\\_NWI.pdf](http://nhp.nris.mt.gov/Reports/Crosswalk_NWI.pdf) - 414
5. [http://nhp.nris.mt.gov/plants/reports/1999\\_beverhead\\_report.pdf](http://nhp.nris.mt.gov/plants/reports/1999_beverhead_report.pdf) - 397

- **NRIS Web Statistics:** nris.mt.gov averaged **2388 visitor sessions per day in February** and **2292 visitor sessions per day in March.**

The five most requested pages in March are:

1. Montana Maps <http://nris.mt.gov/gis/gisdata/lib/mtmaps.aspx> - 5403
2. Montana Geographic Information Clearinghouse <http://nris.mt.gov/gis/> - 4916
3. NRIS Home <http://nris.mt.gov> - 4896
4. Montana Maps <http://nris.mt.gov/gis/mtmaps.html> - 3992
5. DNRC Water Right Query System <http://nris.mt.gov/dnrc/waterrights> - 2349

The five most downloaded files in March are:

1. <http://nris.mt.gov/gis/gisdata/lib/downloads/hwymap.mdt.pdf> - 2962
2. <http://nris.mt.gov/gis/gisdata/lib/downloads/leg2004.pdf> - 416
3. <http://nris.mt.gov/gis/gisdata/lib/downloads/mtrange.pdf> - 367
4. [http://nris.mt.gov/gis/gisdata/lib/downloads/2007\\_2008\\_mt\\_highway\\_map.pdf](http://nris.mt.gov/gis/gisdata/lib/downloads/2007_2008_mt_highway_map.pdf) - 313
5. <http://nris.mt.gov/nsdi/nris/leg2004b.pdf> - 265

**LIS Web Statistics:** (msl.mt.gov/For\_the\_Public and msl.mt.gov/For\_State\_Employees) averaged 71 visitor sessions per day in March.

The five most requested pages in March are:

For the Public [http://msl.mt.gov/For\\_the\\_Public](http://msl.mt.gov/For_the_Public) - 521  
For State Employees [http://msl.mt.gov/for\\_state\\_employees](http://msl.mt.gov/for_state_employees) - 506  
Find Databases [http://msl.mt.gov/For\\_State\\_Employees/Find\\_Databases](http://msl.mt.gov/For_State_Employees/Find_Databases) - 196  
State Publications [http://msl.mt.gov/For\\_the\\_Public/State\\_Publications](http://msl.mt.gov/For_the_Public/State_Publications) - 141  
Archive Montana [http://msl.mt.gov/For\\_State\\_Employees/Archive\\_Montana](http://msl.mt.gov/For_State_Employees/Archive_Montana) - 138