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Oregon Explorer ™: A Natural Resources Digital Library

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Oregon ExplorerTM:

A Natural Resources Digital Library

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Bonnie E. Avery Natural Resources Librarian, Oregon State University Libraries For the past four years, OSU Libraries in collaboration with the OSU Institute for Natural Resources (INR) has taken on several digital library initiatives with the ultimate goal of creating a Natural Resources Digital Library for Oregonians. This Web resource will be known as the "Oregon Explorer," a name that is intended to convey a sense of the ongoing need to find and/or make available information in a form that is useful to the people of Oregon. Predictably, much of this information is based in government documents and government funded research.

Citizens, policy makers, landowners, and planners want better access to natural resources information to help them make informed decisions. Yet public data gathered by one agency often cannot be used by another agency because it is in the wrong format or scale, or has not been archived and cannot be recreated. Worse yet, users may not know that the information existed in the first place. Oregon's last State of the Environment Report notes that essential data, maps, and information on natural resources are largely inaccessible, unusable or non-existent (Oregon Progress Board, 2000).

Our goal is that Oregon Explorer: a natural resources digital library empowers communities to actively engage in creating and sharing knowledge and taking action. Through the Oregon Explorer, Oregonians will have a single Web access point to learn about Oregon's natural resources and environment. Natural resource decision-makers and practitioners, researchers and scientists, educators and students will be able to use and share integrated information and tools to analyze and solve problems.

Informing Ourselves: Assessing the Needs of Users

In 2001, a needs assessment was commissioned by OSU Libraries as the first step to determining whether a natural resources digital library was needed. The information

gained from the assessment was critical in documenting the need for a digital library and better defining its recommended content, accessibility, geographic scope, utility, and range of services (Salwasser and Murray Rust, 2002).

Interviews with 35 citizens, policy makers, and scientists showed that potential users wanted to quickly locate, retrieve, integrate, and synthesize well-organized and geo-referenced information in a wide variety of formats. Users wanted more than a digital collection; they wanted an environment that enables:

information integration and synthesis; evaluation of information quality; and consideration of the human dimension—people to people networking.

Almost all of the users interviewed expressed a need to know what information exists for a particular place, particularly when addressing natural resource issues. "Place" is important and geo-referencing of information is a key goal. From a librarian's point of view, this came as a defining concept that made real how the Web environment could add value to archived material by locating it in space.

Another common need is access to available expertise. Most users rely on their contacts with knowledgeable people to get the information they need. An accessible database of people, keywords, research projects, and perhaps research needs would be welcome.

When asked if OSU Libraries should move forward with a Natural Resources Digital Library, the response was a resounding YES! Most of them felt that there was no effort that was fully addressing their natural resource information needs. All of the users interviewed wanted OSU Libraries to move forward with a natural resources digital library.

Building Partnerships

The assessment highlights the need for a digital library that integrates a wide range of information resources, technologies, and services. We have actively sought partnerships to help us develop the digital library environment described by the users. Our immediate goal is to provide access to natural resource information at basin, ecoregion, county, and statewide levels. Eventually, we would like the Oregon Explorer to be a gateway to natural resources information that exists for the entire Northwest, in partnership with other institutions. We feel that working towards a distributed digital library is the most realistic means of achieving this goal. OSU Libraries recognize we cannot realize this vision alone.

We are jointly managing the Oregon Explorer with the OSU INR. The mission of the INR is to provide Oregon leaders with ready access to current, science-based information and methods for better understanding natural resource management challenges and developing solutions. The role of the INR has been to identify and integrate available information about Oregon's natural resources and environment to support effective decision-making at local, state, and regional levels. In short, they identify the needed content and uses, and we focus on making the information accessible in meaningful ways. It has been a rewarding partnership with shared ownership in the success of the Oregon Explorer.

Because of our land grant and sea grant status at Oregon State University, another important partnership will be with our Extension Service program. The statewide network of Extension Service agents provides a trusted outreach and delivery mechanism for getting information and useful tools to landowners and citizens so that they can be better stewards of Oregon's environment.

Additional partnerships have formed and continue to develop in each of four digital library areas: development, content, funding and usability. The result is an expanding expertise base:

to help develop the digital library infrastructure;

to identify the depth and breadth of content needed;

to explore cost sharing and fundraising opportunities; and

to engage with our users and assure that the solutions we create work for them.

Creating Prototypes

We have completed two prototypes at the basin scale: the Willamette Basin Explorer and the North Coast Explorer. With each prototype we have learned the benefits of partnerships, incorporated a diversity of available digital content, and developed an expanding set of digital library technologies.

Willamette Basin Explorer

In 2003, as a first step in developing the Oregon Explorer, OSU Libraries and INR (along with other key partners) joined forces to develop a prototype. Funded by the Meyer Memorial Trust, the Oregon Watershed Enhancement Board, and OSU Libraries, the Willamette Basin Explorer was developed as the first prototype of the Oregon Explorer (www.willametteexplorer.info). The Willamette Basin Explorer provides information access to help local landowners and policy makers make better decisions about land and water resources in the Willamette Basin, taking advantage of data and content from a \$10 million research investment by the US Environmental Protection Agency made available to the public initially only in a hard copy atlas (Pacific Northwest Ecosystem Research Consortium, 2002). What users have liked the most in the Willamette Basin Explorer have been the "feature story" on the Willamette Basin and the mapping tools.



North Coast Explorer

In 2004, INR and OSU Libraries again partnered to create the second Oregon Explorer prototype, the North Coast Explorer (www.northcoastexplorer.info). Developed with funding from Oregon Watershed Enhancement Board and with a different set of public agency and local community partners, the North Coast Explorer is intended to support decision-making associated with the Oregon Plan for Salmon and Watersheds by informing the creation of a statewide natural resources information system. The focus of this Web site is the provision of information to and by local watershed councils, decision-makers and natural resource practitioners. It was built using the Willamette Basin Explorer prototype, adding new features to facilitate sharing of data from different sources, generate statistical reports, and enable discussion among interested users.

Moving Forward with the Oregon Explorer

A home page for the Oregon Explorer™ http://www.oregonexplorer.info has recently been developed to serve as blueprint for a fully functional natural resources digital library. Fifteen domain names have

been registered for each of the existing and potential "Basin Explorers" in the Explorer Series (i.e. Willamette Basin Explorer, North Coast Explorer, and most recently, the Umpqua Basin Explorer). Meanwhile we anticipate the need to create a federation of "Explorers" sites, both place-based portals (e.g., Pacific Northwest Explorer) and other topic portals (e.g., Wildlife Explorer) as specific needs surface and funds are made available. The Oregon Explorer will serve as the home page for all of the portals in the Explorer Series.

Access to content related to the Explorer sites is supported by a "Meta Search" tool being developed by members of the OSU Libraries and Open Source Lab. We hope this will enhance the usability of the Oregon Explorer and allow users to define their information need while at the same time offer a timely and informative context as well. Initially the Meta Search tool will search across the content of the library catalog, our DSpace based, ScholarsArchive@OSU, and some state agency resources. Our goal also is to get away from search results that display as a long list, but instead display as an array

of format or content types that are more usable and self-explanatory.



Sustaining the Oregon Explorer

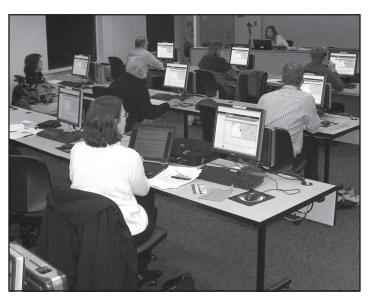
To address the fiscal aspects of sustainability we are working with the INR to develop a business plan for the Oregon Explorer. This will be used as a fund raising tool with potential private and public entities. Sustainability also means developing "explorer" content locally by more actively seeking out content that may be hidden in our collection (or elsewhere). By keeping in mind that "place" matters to our users as we add material to our digital collections, we hope to make them more findable. We will likely continue to tweak the Oregon Explorer concept as we find new opportunities to partner with information providers. What remains a constant is the belief that when research is funded with public money a high value should be placed on making those research findings available and understandable to the public. If the Oregon Explorer contributes to that end, it will be a success.

References

Oregon Progress Board, 2000. Oregon *State of the Environment Fort 2000*. Online: http://www.econ.state.or.us/opb/soer2000/index.htm.

Pacific Northwest Ecosystem Restoration Consortium, 2002. Willamette River Basin Planning Atlas: Trajectories of Environmental and Ecological Change. OSU Press.

Salwasser, J. and C. Murray-Rust, 2002. Assessing the need for a natural resources digital library. *Issues in Science and Technology Librarianship 2002* (Winter). Online: http://www.istl.org/02-winter/article2.html.



Willamette Basin Explorer training class for the Corvallis Open Space Commission, held at OSU's Valley Library.