



# Addressing Usability Issues of Web-based, Interactive Cartography: The Lakeshore Nature Preserve Interactive Map

<http://www.lakeshorepreserve.wisc.edu/>

Robert Roth, William Cronon, Mark Harrower, Joel Przybylowski, Andrew Woodruff

reroth@wisc.edu | wcronon@wisc.edu | maharrower@wisc.edu | jprzybylowsk@wisc.edu | awoodruff@wisc.edu

## I. BACKGROUND

\*intended audience has three levels of motivation

(1) **The Newbie:** a user that has no knowledge about The Preserve

\*purpose: publicity and awareness

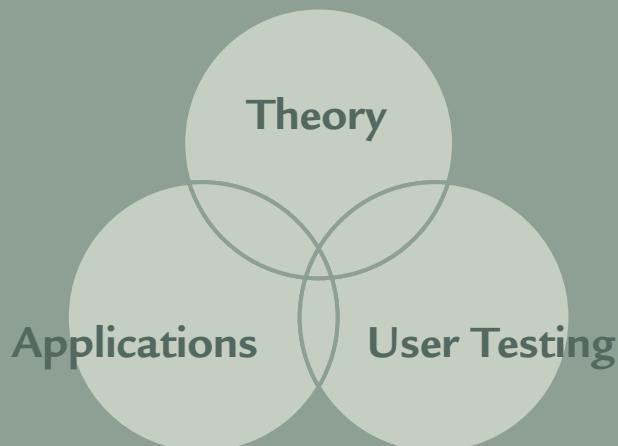
(2) **The Regular:** a user that regularly visits The Preserve

\*purpose: education and entertainment

(3) **The Researcher:** a user who studies the Preserve

\*purpose: hypothesis generation and analysis

## II. MAP DEMONSTRATION



## III. INSIGHT FROM THE LITERATURE

**Web 2.0** (O'Reilly 2005): a conceptual (not technical) shift from 'Internet as file-sharing' to 'Internet as platform'

**The 'Lorem Ipsum' Map** (after Krug 2000): design the interface for the data you are mapping, don't only map the data that matches your interface

**Cascading Interface Density** - providing multiple levels of user interface (e.g. novice versus expert mode) to match the varying level of user motivation

## IV. INSIGHT FROM USER TESTING

**Usability Testing versus Cognitive Testing** (Haug et al. 2003)

Preliminary findings on **Panning and Zooming** functionality (following Harrower and Sheesley 2005)

\*Users do not get it! (so be flexible in design)

**The Tufte-Critique** - while Tufte's principles of minimal data ink work excellently with data graphics, they do not work well for interface design:

Ware (2004, p153): "adding marks to highlight something is generally better than taking them away"