



Using GIS in Natural Resource Management

A Wisconsin Land Information Association Workshop and Regional Seminar

June 24 & 25, 2004

Lake of The Torches – Lac du Flambeau, WI

Thursday June 24, 2004

8:30 am – 9:30 am

Status and Overview of Initial Mapping: NW10 and SSURGO Digitizing

Kent Pena – GIS Coordinator -USDA-NRCS

This session will give the status and overview of the mapping in the Northwest 10 Counties as well as the SSURGO digitizing. There will also be a demonstration of “Soilview”, a free, distributable product that contains soils data (spatial and tabular), ortho imagery and DRG, and runtime Arcview software in order to view and interact with the data. This product is intended for a non-GIS professional. A second product will be demonstrated that is called “Soil Data Viewer”. This is an extension that runs on top of full blown Arcview. It provides a windows interface to run reports, query the soils and produce maps. In addition, there will be an overview of the NRCS Soil Data Mart, the primary source for online soils data.

9:30 am – 10:20 am

Soils and their ability to Attenuate Contaminants

Fred Madison – Professor/Soil Scientist – UW-Madison, Carl Wacker - Assistant State Soil Scientist – US Dept. of Agriculture, and Mike Czechanski – Senior Cartographer - Wisconsin Geological and Natural History Survey

Soil mapping has been a part of our geospatial information for decades. In the past, soils maps were used to construct various derivative products. WGNHS produced several of these derivative products using published county soils reports. The maps are titled: “Soils of ... (county) ... and their Ability to Attenuate Contaminants” and published at the county scale of 1:100,000. These maps were compiled on the 1:15,840 or 1:20,000 photo base soils sheets. Production time from start to finish usually took a year or more; including ranking schemes, decision making, compilation, cartographic production and printing. With the advent of the digital SSURGO soils maps and soils attribute data sets, this time frame can be greatly reduced. Wisconsin’s soils are the first line of defense against possible contamination to the groundwater supply and a good understanding of the soils characteristics is necessary to be able to incorporate this data into a useful groundwater protection effort. This presentation will discuss the process for making such a “map” – past, present and future.

10:20 am – 10:35 am

Break

10:35 am – 12:00 pm

Basic Geologic information for land-use planning and resource management: The Evolution and Application of Geospatial Information at the Wisconsin Geological and Natural History Survey

Bruce Brown and Mike Czechanski – Wisconsin Geological and Natural History Survey

The bedrock formations of Wisconsin, along with the overlying glacial, alluvial, and residual materials are the foundation for our buildings and highways, they are the source of aggregate to build this infrastructure, they provide our groundwater, store our waste, and are the parent materials for our agricultural soils. We often overlook the importance of these materials in their influence on other aspects of the environment such as plant and animal communities, and their significant role in limiting development if we want to maintain environmental quality. This presentation will provide an overview of the various types of available geologic and water resource data, and the presentation formats and analysis techniques that have evolved at the Wisconsin Geological and Natural History over its 100 years of existence. Modern GIS technology will be discussed as well as how this information is gathered, interpreted, and disseminated. Emphasis will be given to the importance of using and understanding geologic information in the comprehensive planning process.

12:00 pm – 1:30 pm

Lunch On Your Own

1:30 pm – 2:15 pm

GIS/GPS in the Wisconsin Gypsy Moth Program

Nick Clemens - DATCP

Technology is used in many phases of the program, survey data collection, modeling, planning, mapping evaluation and air applicator guidance and logging. The Gypsy Moth Program is a multi-agency program, which includes cooperators from many government agencies, including Counties, State and Federal. The DATCP is responsible for managing the statewide survey and treatments, which vary from 30,000 – 50,000 traps set and 400,000 acres treated annually. This session will summarize the program and it's uses of the technology.

2:15 am – 2:30 pm

Break

2:30 pm – 4:00 pm

GIS/GPS in the Wisconsin Elk Program

Laine Stowell – Elk Biologist, Matt McKay – Assistant Elk Biologist - WDNR

Elk we released in upper Wisconsin in 1995 and since then the WDNR has been using GPS equipment to gather information of the elk. The gathered information is used in a GIS program to aid in studies to track elk movement and home range of an entire herd or a single el. Data retrieved concerning wolf or potential prey is also used as an overlay to determine any correlation. This session will focus on the aspects of the program and the utilization of GIS.

4:15 pm – 6:15 pm

WLIA Board of Directors Meeting

6:15 pm – 7:30 pm

Lac du Flambeau Barbecue

Enjoy food and Drinks with your fellow members at the WLIA Barbecue and Social Hour.

7:30 pm – 8:30 pm

Map Seminar – Free Session – Bring your own Maps!

Ted Koch – State Cartographer, Robert Gurda – Assistant State Cartographer

It's essential to show the work we do and the techniques we use with maps. This session will offer suggestions and techniques for creating quality maps for the purposes of decision making. Input and ideas also welcome.

7:30 pm – 8:30 pm

Legislative Update/Discussion – **ADDED!**

Alissa Bails – WLIA President

This hour long discussion is to bring the membership up to speed on the on-going discussions with the Department of Administration. Please bring your suggestions for continuing and enhancing the WLIP to the best it can be. (Also, please refer to the Proposal emailed and mailed to the membership during the week of June 7th or find at www.wlia.org)

Friday June 25, 2004

7:30 - 8:15 am **Task Force Meetings/ Committee Meetings**

8:15 - 8:30 am **Welcome and Update on WLIA Activities**
Alissa Bails, WLIA President

8:30 - 9:00 am **Report on Legislative Matters**
Alissa Bails, WLIA President

9:00 - 9:45 am **Development of Lakes Classification Map and Its Use In the Zoning Office**
Dan Miller – Zoning Administrator, Dan Bowers – Zoning Specialist, Scott Galetka – GIS Project Coordinator/LIO – Lincoln County

Staff from Lincoln County will talk about the Lakes Protection grant we received to complete parcel mapping in the Town of Harrison (heavily peppered with pothole lakes). As we are creating our Parcel data we are getting more accurate Hydrology data and "finding" hydraulic features to update our Lakes Classification Map.

9:45 am – 10:30 am **Estimated Effects of the Vilas County Lake Classification**
Bill Provencher – Associate Professor - UW-Madison, Mike Papenfus – Student – UW-Madison

We will talk about the estimated effects of the Vilas County Lake Classification System on lakeshore property values in the County will be discussed. The land information we use in our modeling will be discussed, along with comments on the GIS Data necessary to improve the model.

10:30 - 10:45 am **Break**

10:45 am - 12:00 Noon **City of Antigo - Actual Flood levels with GPS and GIS**
*Thomas Tym – Technology Services Department Head - Ruckert-Mielke
Dale Soumis – City Administrator – City of Antigo*

In March 2004 , the City of Antigo experienced a 100 year flood, resulting from 8 inches of heavy snow, followed by rain, and unusually warm weather. To add to the problem the ground was frozen and farming practices in the area were designed to speed run-off. Being a low-lying area, flooding is a re-occurring issue for the Community. This session will examine what the City did to substantiate flood claims and to maximize the amount of financial aide. Their efforts involved the use of recently developed GIS data layers – deployed in an ArcIMS web application – and use of GPS equipment to determine actual flood levels and limits.

Noon - 1:00 pm **Lunch and Business Meeting**

1:00 pm **Adjourn**

WLIA Workshop and Regional Seminar

June 24 & 25, 2004

Lake of the Torches, Lac du Flambeau, WI

Workshop and Regional Meeting Registration Form

To Register: Please email Ann Barrett at: abarrett@uniontel.net or fax: 715-366-4501 or call: 800/344-0421 to register for the June 24-25th in Lac du Flambeau, WI. Please indicate what you plan to attend below*.

Directions to the Lake of the Torches Resort: Take Highway 51 north through Minocqua to Highway 47, turn left on Highway 47 and continue 11 miles to Lac du Flambeau. Or take Highway 70 west out of Minocqua to County Truck D and then 4 miles north on D to Lac du Flambeau.

Lodging Reservations: WLIA has a block of rooms at the Lake of the Torches Resort 512 Old Abe Rd, Lac du Flambeau, WI 54538 on Wednesday and Thursday, June 23rd & 24th at rates of \$62.00 for single and & 75.00 for double. Room rate includes food & drink coupons. The cut-off date for reservations is June 16th. After that they will honor the WLIA group rate as long as they have rooms available. Please call the resort directly for reservations at 715/588-9200. Their web site is: www.lakeofthetorches.com.

Cost: Make check payable to WLIA and mail to: WLIA, P.O. Box 389, Wild Rose, WI 54984. Check must arrive prior to June 21st or you may pay by MasterCard or Visa below. **Thursday Workshop AM:** \$25.00 member/ \$35.00 non-member or **Thursday Workshop PM:** \$25.00 member/ \$35.00 non-member or **Thursday Workshop ALL DAY:** \$40 member/\$50 non-member (does not include lunch). **Thursday evening Barbeque:** \$15.00. **Friday Session:** \$30.00 member/\$40.00 non-member (includes lunch).

Cancellations: You may cancel by Friday noon, June 18th, 2004 for a full refund. After June 18th, 2004 - no refunds.

Name(s) _____
Title _____
Organization _____
Address _____
City/State/Zip _____
PHONE/FAX _____
Email address _____

***Check Attendance Below:**

Thursday Workshop AM: \$25.00 member/\$35.00 non-member: ____

Thursday Workshop PM: \$25.00 member/\$35.00 non-member: ____

Thursday Workshop ALL DAY: \$40.00 member/\$50.00 non-member: ____

Thursday evening Barbeque: \$15.00 per person ____

Friday Meeting: \$30.00 member/\$40.00 non-member: ____

Pay by MasterCard or Visa or make check payable to WLIA:

Card Number (MasterCard or Visa only)

Exp. Date

Signature

Amount \$ _____



Join us for a Special WLIA Session

We will be having a summit for all WLIA members to discuss the proposed changes to the WLIP. An outline of these changes can be found on the WLIA web site (www.wlia.org) Please bring your thoughts, ideas, suggestions and solutions for taking the program to the next level.

Date/Time: July 23, 2004 9:00 am - Noon - Session with coffee & muffins

Location: Olympia Resort in Oconomowoc

Directions: From I-94 take the 282 exit or Hwy 67 and go north 1.5 miles. Olympia will be on your left.

Lodging: If you would like to come the evening before, WLIA has a block of rooms for \$80 single or double.

Cost: There is no cost to this event. We want your input, ideas and opinions - so come one and all!

Please RSVP to Ann Barrett at abarrett@uniontel.net or 800/344-0421 or fax to: 715-366-4501 if you plan to attend.

Name _____

Organization _____

Email _____

Hope to see you there!

Wisconsin Land Information Association

PO Box 389

Wild Rose, WI 54984

800/344-0421

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