Northern Area GIS User Group Meeting
Thursday, June 20, 2019
Northern Great Lakes Visitor Center (Theater)
29270 County Highway G, Ashland, WI
9:00 AM – 4:30 PM

Agenda

9:00 – 9:15: **Registration**

9:15 – 10:30: **Introductions and Program Updates**
Share updates on your work/projects with the group, and ask questions for discussion.

10:30 – 10:45: **Break**

10:45 – 11:15: **Geographic Information System (GIS) Based Analysis of Sustainable Domestic Aquaculture Development in Wisconsin**

- Emma Wiermaa, Aquaculture Outreach Specialist, UWSP Northern Aquaculture Demonstration Facility

Aquaculture is currently the fastest growing sector of food production systems, globally. Unfortunately, the U.S. imports over 90% of its seafood creating over $13 billion trade deficit in 2015. Sustainable, land based aquaculture advancement in the U.S. is a way to provide a local, safe and healthy food source without increasing pressure on wild fish populations and harvests. Wisconsin has a historical aquaculture industry having presence since 1856, experiencing many startups but almost as many failures. Proper selection of species, location and culture practices are crucial aspects of the success rate for new aquaculture ventures. Through the University of Wisconsin-Stevens Point, a Geographic Information System-based analysis was completed to develop a predictive farm model using location characteristics across Wisconsin to assist new farmers in determining suitable locations for an aquaculture site. GIS-based decision support models can facilitate the prioritizing of state research, development, and extension strategies and targeting of development assistance for aquaculture because they can provide information to stakeholders as to where and under what conditions certain aquaculture technologies would be feasible. UW-Stevens Point student, staff and faculty involved in this project includes Christine Koeller, Keith Rice, Allen Brandt, and Chris Hartleb for the development of this project and aquaculture models.

11:15 – 12:00: **Open Source Tools (Details TBD)**

- Henry Rodman, Forest Biometrician, SilviaTerra

12:00 – 1:00: **Lunch (provided) in the Multipurpose Room**

1:00 – 2:00: The National Ecological Observatory Network: Providing Data and Infrastructure to Understand Changing Ecosystems

- Peter Weishampel, Field Science Manager, Great Lakes Domain, NEON

This talk provides an overview of the National Ecological Observatory Network (NEON), which collects open-access data to quantify long-term ecological change. The observatory, which is sponsored by the National Science Foundation and Operated by Battelle, divides the country into 20 ecoclimatic domains that collectively contain 47 terrestrial and 34 freshwater aquatic field sites. (NEON's Great Lakes Domain includes 3 forested terrestrial field sites and two lake sites in northern, WI). Using field-based observation and sample collection, in situ environmental sensors, and airborne remote sensing, NEON provides a framework for multi-scaled analysis of the response of ecological properties and processes, e.g., biodiversity, pathogen spread, biogeochemistry, and hydrology, to environmental changes, such as climate, land-use, and species invasions. In addition to providing open access data via an on-line data portal, NEON is designed to encourage collaborative ecological research by providing researchers with access to NEON infrastructure, including mobile sensor arrays, airborne remote sensing surveys, and NEON field sites.

2:00 – 2:15: Break

2:15 – 3:15: Transitioning to ArcGIS Pro

- Zach Vavra, GIS Specialist, Geospatial Analysis Center, University of Minnesota Duluth

ArcGIS Pro - Esri's newest Desktop application. You've heard of it, and maybe even used it a few times, but are you reluctant on transitioning from ArcMap and beginning to use Pro as your main GIS software? Through a series of short demonstrations we will look at some of the major changes between ArcMap and ArcGIS Pro, along with the Pros (pun intended) and cons of these changes, in hopes of making your transition to ArcGIS Pro a little easier.

3:15 – 3:30: Break

3:30 – 4:30: 10 Minute Presentations

- Erin Schlager, Zoning/GIS Manager and Gabrielle VanBergen, Project Coordinator, Red Cliff Band Treaty Natural Resources Division
- Suzi Smith, GIS Specialist and Lacey Hill Kastern, Wildlife/GIS Specialist, Bad River Natural Resources Department
- Deb Veen, GIS Specialist, US Forest Service
- Randy Jones, GIS Technician, Douglas County
- Scott Galetka, Land Records Administrator, Bayfield County Land Records Department
- Brandon Tourtelotte, Business Development Manager, Pro West and Associates

Looking for things to do in the area? Check out the Bayfield County Play, Eat, and Stay map: https://arcg.is/1jvu1H