

Maine GIS Users Group Fall Meeting and Educator's Conference
September 23rd, 2016
Hutchinson Center
Belfast, ME

8:15 – 8:45 – Registration

8:45 – 9:00 – MEGUG Chair Address

9:00 - 10:15 – Morning Workshops

Track 1 – GIS:

GIS for Utilities, Tips and Tricks

Justin Richardson, Kennebunkport and Wells Water District and Jeff Normandin, Wright-Pierce

This session will provide a variety of GIS case study workflows with insight on the challenges and successes of working with GIS for assessing, managing, and developing Utility operations in Maine. Specifically how their field applications have evolved and the pitfalls of using GPS. Details will cover using a Trimble R2 RTK Bluetooth GPS and Collector on an iPhone and iPad to collect information on water, sewer, and wastewater GIS experts will give demonstrations and share details on how they do their work in this exciting and expanding area.

Track 2 – Education

Crowdsourcing local field data in ArcGIS Online with Geoforms

Margaret Chernosky, Maine Geographic Alliance

Would you like your students to crowdsource local field data into a single map? You can do this easily with ArcGIS Online and the onboard geoform app! Margaret will show you how to create a geoform within ArcGIS Online; which will allow your students to add geolocated field data with a smartphone. This is a hands-on workshop that offers practice and inspiration using ArcGIS Online. You will receive a step-by-step guide for practice at home. This activity supports your school's efforts at citizen science, place-based, inquiry projects using your local data as well as satisfying the Common Core and National Geographic Geography for Life 2 standards. Please bring your laptop or tablet and smartphone. At least a week prior to the workshop, please request a free ArcGIS Online Organization account for your school if you do not have one. <http://www.esri.com/connected> If you miss getting your organization account, please come anyway!

10:15 – 10:30 – Morning Networking Break

10:30 - 11:45 – Mid-Morning Workshops

Track 1 – GIS:

The New Geospatial Lab, University of Maine,

Tony Guay, University of Maine

This session will provide an overview of the Barbara Wheatland Geospatial Programs, highlighting the Geospatial Analysis Lab as a training facility. There will be an introduction to the new Barbara Wheatland Seminar Series, and a review of meetings and workshops planned

for the fall semester. There will also be an introduction to a workshop providing specific training for utilizing mobile geospatial tools for forest harvesting operations.

Track 2 – Education – *Note: This session will be split into 35 minute long talks*

Talk 1: Administering an ArcGIS Online for Organizations

Tora Johnson, University of Maine at Machias

Esri now provides an ArcGIS Online for Organizations account with each site license for schools, colleges and universities. This workshop will take the mystery out administering your AGOL for Orgs. Participants will learn the nuts and bolts of setting up an account, managing roles and permissions, creating and administering user accounts, and organizing and securing content. We'll cover capabilities, pros and cons, and common pitfalls.

Talk 2: Practical GIS Activities for the Classroom

Erin Towns, Edward Little High School

This workshop will cater to K12 educators interested in bringing GIS into the classroom in practical ways. It will introduce teachers to a myriad of lesson ideas and activities that incorporate the use of GIS technology. These lessons or ideas can be modified to meet the needs of any grade level and any audience. Examples of GIS assessments to meet state and local standards will be provided. Every teacher will leave with activities and lessons ready to implement into their own classrooms.

This workshop will not introduce teachers how to use the online GIS technology, but teachers will be provided with concrete examples of workshops and online material that will assist them in learning how to use online GIS programs.

11:45 – 12:00 – Visit with Vendors

12:00 – 1:00 - Lunch

1:00 – 1:30 – MEGUG Business Meeting and Board Election Announcements

1:30 - 2:45 – Early Afternoon Workshops

Track 1 – GIS

Tips for Creating Useful Online Maps and Apps (Without Burning Through Credits or Driving Yourself Mad in the Process)

Rosemary Mosher, City of Auburn

What you should do to prepare data for Online publishing, how to recycle app templates, create re-useable layers and more. What are the best ways to organize and find data? This talk will provide tips for labeling and symbolizing layers. The speaker will also provide insight as to when it's better to create tile packages along with the best ways to create them.

Track 2 – Education

GIS and Spatial Analysis with R

Manny Gimond, Colby College

The workshop will introduce attendees to the R programming environment and its application to GIS and spatial analysis. Attendees will learn to read shapefiles and raster files into R, generate maps, perform data manipulation operations such as subsetting by attribute values

and clipping by features, and implement various map algebra operations on raster datasets. The workshop will also cover coordinate systems and transformations. Attendees will also be introduced to point pattern analysis and, time permitting, to spatial statistics (including hypothesis testing).

3:00 - 4:00 – Late Afternoon Workshops

Track 1 – GIS

ArcGIS Platform Update

Mark Scott, Solutions Engineer, Local Government Team

The ArcGIS Platform is an ever-growing ecosystem of Desktop, Server, Mobile, and Online apps and solutions. Mark will put it all into the context of a modern Web GIS. Through discussions and demonstrations, attendees will learn how to use ArcGIS for Desktop, ArcGIS Pro, ArcGIS for Server, ArcGIS apps, and ArcGIS Online together to help solve problems with GIS.

Track 2 – Education

The Road Ahead: Emerging Technologies in GIS Education

Tora Johnson, University of Maine at Machias – Moderator
Panel Discussion

What cool new tools and techniques are on the horizon for GIS in education? In this panel, educators in K12 and higher education will discuss technologies they are focusing on for the future to engage students, support geospatial education, and prepare students for the workforce of tomorrow. Topics may include unmanned aerial vehicles (AKA "drones"), Google Map Engine, crowd sourced maps, application development for all ages, and more.