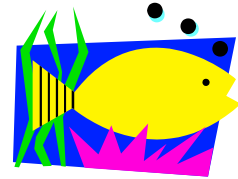




Summer Workshop for College, University
and High School Faculty on

*Creating a GIS Field Project to
Address Marine and Coastal Issues*

July 8-14, 2006
Monterey, California



Currently the greatest advances in our understanding of marine and coastal ecosystems are due in large part to advances in technology such as remote sensing and precision positioning (including GPS). Geographic Information Systems (GIS) has become the universal tool to pull together, manage, and visualize large volumes of geospatial data and is transforming how we make decisions about our environment and our communities. As GIS becomes more widespread and easier to use, it is providing an excellent venue to help convey complex issues to the public at large.

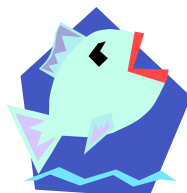
The Marine Advanced Technology Education (MATE) Center will host a faculty workshop in Monterey, California, July 8-14, 2006, on creating a GIS field project to examine marine and coastal issues.

The GIS Summer Institute will walk educators through each step of creating their own GIS project. Participants will gather data from a variety of sources, including using GPS, and create a marine and coastal map that communicates one or more marine issues. Each participant will also create a lesson plan to use with their interactive map. These projects can be exported to ArcReader so that no sophisticated software will be required in order to share the project with students.

During the GIS institute, participants will:

- Learn the basics of GIS and cartography.
- Increase their knowledge of data sources, data types, and data management.
- Learn how to collect GPS data and incorporate it into a GIS project.
- Increase their understanding of a variety of marine and coastal issues such as marine protected areas, coastal development, invasive species, water quality, ocean observing systems, marine fisheries and ocean governance.

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By the end of the workshop, participants will have designed and created a GIS field project using ArcGIS and will leave with the skills and software necessary to repeat this process at their home institution.

The workshop will include field trips around the Monterey Bay area that provide opportunities to meet with professionals who work in marine resource management, including fisheries, water quality, aquaculture, invasive species and coastal development. Participants will also visit the Monterey Bay Aquarium.

Workshop participants should be:

- A current faculty member at a college, university, or high school. (If you do not fall into one of these categories you will need to add a compelling statement to your application as to why you should attend.)
- Familiar with ArcGIS. For example, be able to 1) create a project; 2) add new vector and raster data to the project; 3) add tabular data and join to an existing table in ArcView; 4) conduct a query and make a new layer based upon the query; 5) label features; 6) create a layout; and 7) add a legend. ***If you do not have these skills, arrangements can be made to send you a tutorial book and software if you are able to commit to 40 hours of prep time prior to the institute.***
- Willing to return to your institution and integrate GIS into your marine-related courses or integrate marine-related themes into your GIS courses.
- Willing to share what you have learned with other faculty.
- Willing to share with the MATE Center what you have accomplished as a result of the workshop. This could be adapting lessons from the workshop to your region, adding additional tasks/skills to the lessons, or developing new courses and new programs.

Costs: Hotel accommodations, lunches and three dinners will be provided by the MATE Center. If you live less than 50 miles from Monterey, hotel accommodations will not be provided. Participants will be required to provide their own transportation to and from Monterey, California.

If you have any GIS or workshop content questions please contact Deidre Sullivan, MATE's Curriculum and Industry Manager, at deidres@marinetech.org or (831) 646-3081.

For logistical information and the application process, please contact Lani Clough, MATE's Faculty Development Coordinator, at lclough@marinetech.org or (831) 646-4011.

For more information on our summer institutes and to find applications forms please visit our web site: <http://www.marinetech.org/education/workshops.php>

To see what faculty produced during last year's institute, visit, http://www.mpcfaculty.net/tami_lunsford/SI_05_Institute/GIS/SI_05_GIS_Curriculum_Products.htm and click on "2005 Curriculum Products."