COASTAL LETTERS

Newsletter of the coastal and marine geography specialty group of the association of American geographers

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Membership Renewal Reminder

Don't forget to renew your membership in the Coastal and Marine Geography Specialty Group. Also, when you renew your membership with the AAG, update your E-mail address – and remind your colleagues! Dues have not changed from 2006-2007. Membership dues for the Specialty Group are currently $1 for students and $5 for regular and associate members.

Editor's Comments

1) Welcome to all of you who have recently joined the Coastal and Marine Geography Specialty Group (CoMa).
2) Have you been getting CoMa E-mail? If not, please send an E-mail to Jeff Ueland to be added to our list. Also, if you would like to be removed from the mailing list please let me know as well. Additionally please forward this newsletter to anyone who you think might be interested.
3) If you have announcements or other items to be distributed via the e-mail list please forward them to the editor. Items can be sent at any time. Time sensitive items such as job opportunities can be distributed immediately, upon request. Other items will be included in the next issue of the newsletter.

Jeff Ueland, Editor (ueland@ohio.edu)

Musings from the Chair – Steve Namikas

Dear CoMa members,

As we approach the San Francisco AAG, CoMa continues to maintain the high level of participation that has characterized recent years. CoMa-sponsored activities at the annual meeting this year include a total of 12 paper sessions as sponsor or co-sponsor. We averted a near-disaster in scheduling thanks to some timely help from Oscar Larson at the AAG. The initial program had most of our sessions on Wednesday (18th), resulting in three double-overlaps and one triple-overlap. Four sessions initially scheduled for that day (Student award competition I & II, Coastal Geomorphology, and Coastal Environments) have now been shifted to Thursday (18th). We have one overlap remaining on Wednesday afternoon that we were unable to resolve - still not ideal, but consider the plight of Urban Geography which has as many as six concurrent sessions in some slots! Given the number of changes to the preliminary schedule, please double-check the schedule for your presentation date/time. And don't forget the CoMa Business meeting on Friday (20th, 7:30pm), refreshments will be provided. Finally, CoMa will once again be co-sponsoring the Physical Geography reception organized by Fritz Nelson. The date/time have not yet been set for this event - watch the program for details.

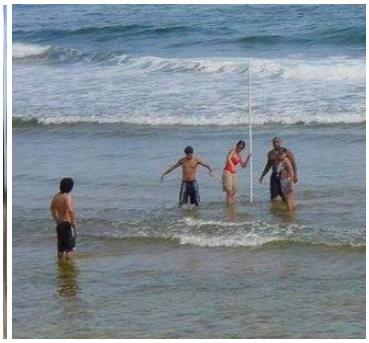
One of the bits of information the AAG provides to specialty group chairs is a membership list. This list has been a source of happy news for CoMa in recent years, as our growth rate has consistently outperformed both the DOW and the S&P500. As of March 1, 2007 we had 274 members, about evenly split between the student and non-student categories. This represents a roughly 50% increase from our 2003-2004 membership roll. One can't help noting that while students represent about half of our membership, only nine are presenting the N.P. Psuty Student Paper Competition. I appreciate that some students present in our regular sessions for various reasons, and that some students (and other members) feel stronger ties to other specialty groups and focus their efforts accordingly, but I still think that these numbers could be improved. It is up to each of us to encourage our students (and in some cases, those of our colleagues) to present in the competition. Along the same lines, the vice-chair has not received a single nomination for the R.J. Russell Award. Surely we have one or two deserving colleagues out there? Give it some thought and bring your suggestions to the business meeting. Along with encouraging increased participation from our expanding membership, we also need to consider possible uses for what appear to be (slightly) expanding funds. We currently have a fairly large surplus built up, and our annual revenue is larger than expenditures, so please bring some ideas about how we could use it to the business meeting. See you in San Francisco.

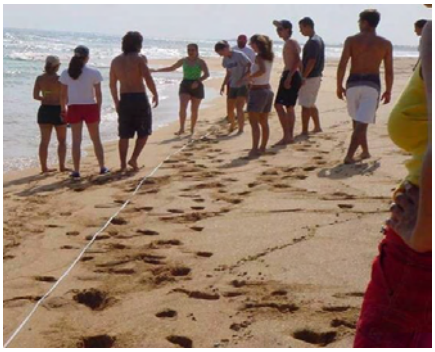
Steve Namikas, Chair

News and Views from Members

Will Heyman is a new member of the AAG and the Coastal and Marine Specialty Group. He has a background in tropical marine conservation and has worked for The Nature Conservancy and lived 10 years in southern Belize. He is now an associate professor of Geography at Texas A&M University and has ongoing research in Belize, focusing on the physical and biological determinants for reef fish spawning aggregations, their geographic variation, and the oceanic connections between these spawning sites and nursery grounds. He use a multi-methods approach which includes interviews with fishermen, bathymetric mapping, remote sensing, underwater video as part of an applied, multi-disciplinary approach to conservation science. Will provided a photo of a whale shark among spawning snappers in Belize. You can see more about Will's research lab at http://marinegeog.tamu.edu/. If you want more details, please contact him directly and/or look for him at the AAG meeting next month in San Francisco.

Maritza Barreto is also a new member of the Coastal and Marine Specialty Group. Dr. Barreto is a geological Oceanographer and a full Professor from Geography Department at University of Puerto Rico, Rio Piedras Campus. Major research interest include Beach process in tropical Island System, coastal erosion, remote sensing as a tool for coastal studies, changes in coastal types and ecosystems due to storm events and man-made activities. Below are some photos Dr. Barreto working with students in a beach studies field session.





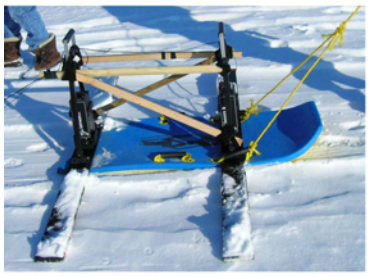
University of Wisconsin-Eau Claire (UWEC) has been involved in efforts to restore the Half Moon Lake (Eau Claire, WI) for recreational purposes but the entropic state hasn't been addressed until recently. Large amounts of phosphorus in the lake bed promote excess plant growth in turn reducing the oxygen content of the water. UWEC's study hopes to image layers of industrial waste in the lake as well as logs that may have sunk during the debarking process. The ultimate goal of the research is to determine the thickness of the industrial waste and how it will continue to affect Half Moon Lake.

To accurately locate the sediment thickness (both waste and lake) both ground penetrating radar (GPR) and global positioning systems (GPS) are utilized to identify and locate the industrial waste. High resolution cross-sectional images of the stratigraphy of the lake bed are obtained using GPR. The GPR utilizes high frequency electromagnetic waves to record the how subsurface sediments reflect the waves. Course grained and organic

sediments tend to have a low electrical conductivity producing visible striations in the profiles collected. GPR is a fairly non-invasive method of collecting data for Half Moon Lake. With different antennae the GPR can effectively "see" several meters through materials deposited on the lake bottom. For the project the pulseEKKO™ 100 and 1000 GPR system manufactured by Sensors and Software Inc., will be used. Different antennae of different frequencies can "reveal" different layering and reflectivity of underlying materials.

By using GPR in the winter, one can set an exact course across the lake for GPR investigation (Fig. 1). One the line has been marked by flags on the ice the course is then recorded using the GPS for later reference. The GPR is then attached to a toboggan using shipping Velcro to secure the GPR (Fig. 2). When collecting data the GPR is slowly dragged along the given path at a constant speed. The data from the GPR is recorded onto a small laptop computer in the field. - Harry Jol

Figure 1 - depicts the GPS data collected in January, 2007 during initial test runs to determine the effectiveness of GPR through the Ice.



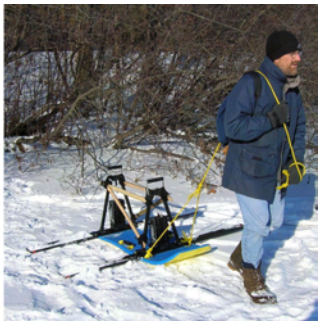


Figure 2- Photo of GPR data collection.

John Dennis has been conducting his doctoral research in Yellowstone National Park along the shorezone of Yellowstone Lake since 2005. Along with Dr. Stephen K. Boss, director of the Environmental Dynamics Program at the University of Arkansas, they have been monitoring and studying the geomorphic differences between engineered and non-engineered shore segments of Yellowstone Lake. In Yellowstone National Park, the ecotone represented by the Yellowstone Lake shore represents one of the most dramatic and dynamic environmental transitions within the Greater Yellowstone Ecosystem. Here, a major highway occupies this unique ecological transition zone, illustrating the complex nature of environment-human interactions within the park and the challenges of maintaining the park as a natural area while also providing a "pleasuring ground for the enjoyment of the people." In several areas along the north and northeast lake shore, shore armor (rip-rip or a seawall) protects the road from lakeshore erosional processes.

On-going research in this area will help to elucidate the impacts of roadway engineering on the evolution of lakeshore morphology through comparisons of non-engineered and engineered segments of the Yellowstone Lake shore. Reconnaissance photographs coupled with precision laser surveys of Yellowstone Lake have shown that these engineered shore segments are morphologically different from adjacent non-engineered shore segments. Similar geomorphic differences have been observed and are consistent with documented impacts of shore protection structures on beaches in other marine and Great lakes coastal environments. However, a critical unanswered question related to these studies is: "*What was the shore morphology prior to construction of shore protection structures?*"

This question pervades virtually all coastal studies and is rarely answerable due to an absence of data regarding shore morphologies prior to installation of shore protection structures. At Yellowstone National Park, there is an opportunity to evaluate this question quantitatively because the National Park Service requires detailed surveys in advance of all infrastructure improvement projects in an effort to determine the overall impacts of these projects on park environments relative to their benefits to park visitors. As such, research on shore modification at Yellowstone Lake provides a unique opportunity to evaluate before/after impacts of shoreline armor.

Fig. 1: These images are from the beach compartment just north of the Potts Springs Thermal Basin. A) Non-engineered shore segment. Note the wide, gently sloping beach and its proximity to the road. B) Engineered segment. Notice the rip-rap along the length of the shoreface and the complete lack of a dry beach.

Please send announcements, updates, reports from the field, job listings, or anything else that might be of interest to the Editor (ueland@ohio.edu). No need to wait, I'll file things for the August 2007 issue.

CoMa Guide to the San Francisco AAG Meeting

CoMa Sponsored Sessions

Tuesday

1344 Aeolian Geomorphology I
Tuesday, 4/17/07, from 12:00 PM - 1:40 PM
Room: Union Square 21, SF Hilton
Organizer(s): **Jean Taylor Ellis** , **Paul A. Gares**
Chair(s): **Paul A. Gares**

1444 Aeolian Geomorphology II
Tuesday, 4/17/07, from 2:00 PM - 3:40 PM
Room: Union Square 21, SF Hilton
Organizer(s): **Jean Taylor Ellis**, **Paul A. Gares**
C***hair(s):*** **Steven Namikas**

1544 Aeolian Geomorphology III
Tuesday, 4/17/07, from 4:00 PM - 5:40 PM
Room: Union Square 21, SF Hilton
Organizer(s):**Jean Taylor Ellis**, **Paul A. Gares**
Chair(s): **Jean Taylor Ellis**

Wednesday

2237 Remote Sensing and GIS for Coastal and Watershed Studies (1)
Wednesday, 4/18/07, from 10:00 AM - 11:40 AM
Room: Union Square 14, SF Hilton
Organizer(s): **Xiaojun Yang**, **Luoheng Han**
Chair(s): **Luoheng Han**

2437 Remote Sensing and GIS for Coastal and Watershed Studies (2)
Wednesday, 4/18/07, from 1:00 PM - 2:40 PM
Room: Union Square 14, SF Hilton
Organizer(s): **Xiaojun Yang**, **Luoheng Han**
Chair(s): **Thomas Richard Allen**

2537 Remote Sensing and GIS for Coastal and Watershed Studies (3)
Wednesday, 4/18/07, from 3:00 PM - 4:40 PM
Room: Union Square 14, SF Hilton
Organizer(s): **Xiaojun Yang**, **Luoheng Han**
Chair(s): **Xiaojun Yang**

2426 Environmental Degradation, Resource Use, and Socio Economic Implications in the Niger Delta
Wednesday, 4/18/07, from 1:00 PM - 2:40 PM
Room: Union Square 3, SF Hilton
Organizer(s): **Jimmy Adegoke**, **Sylvester Osagie**
Chair(s): **Michael Watts**

Thursday

3164 Coastal and Marine Geography: Norbert P. Psuty Student Paper Competition I
Thursday, 4/19/07, from 8:00 AM - 9:40 AM
Room: Plaza B, SF Hilton
Organizer(s): **Steven Namikas**
Chair(s): **Steven Namikas**

3264 Coastal and Marine Geography: Norbert P. Psuty Student Paper Competition II
Thursday, 4/19/07, from 10:00 AM - 11:40 AM
Room: Plaza B, SF Hilton
Organizer(s): **Steven Namikas**
Chair(s): **Steven Namikas**

3464 Coastal and Marine Environments: Monitoring, Modeling, and Management
Thursday, 4/19/07, from 1:00 PM - 2:40 PM
Room: Plaza B, SF Hilton
Organizer(s): **Steven Namikas**
Chair(s): **Alan F. Arbogast**

3564 Coastal Geomorphology
Thursday, 4/19/07, from 3:00 PM - 4:40 PM
Room: Plaza B, SF Hilton
Organizer(s): **Steven Namikas**
Chair(s): **Jean Taylor Ellis**

Friday

4307 Hurricanes III: Geomorphic Impacts
Friday, 4/20/07, from 12:00 PM - 1:40 PM
Room: Continental Ballroom 7, SF Hilton
Organizer(s): **Harry Williams**
Chair(s): **Harry Williams**

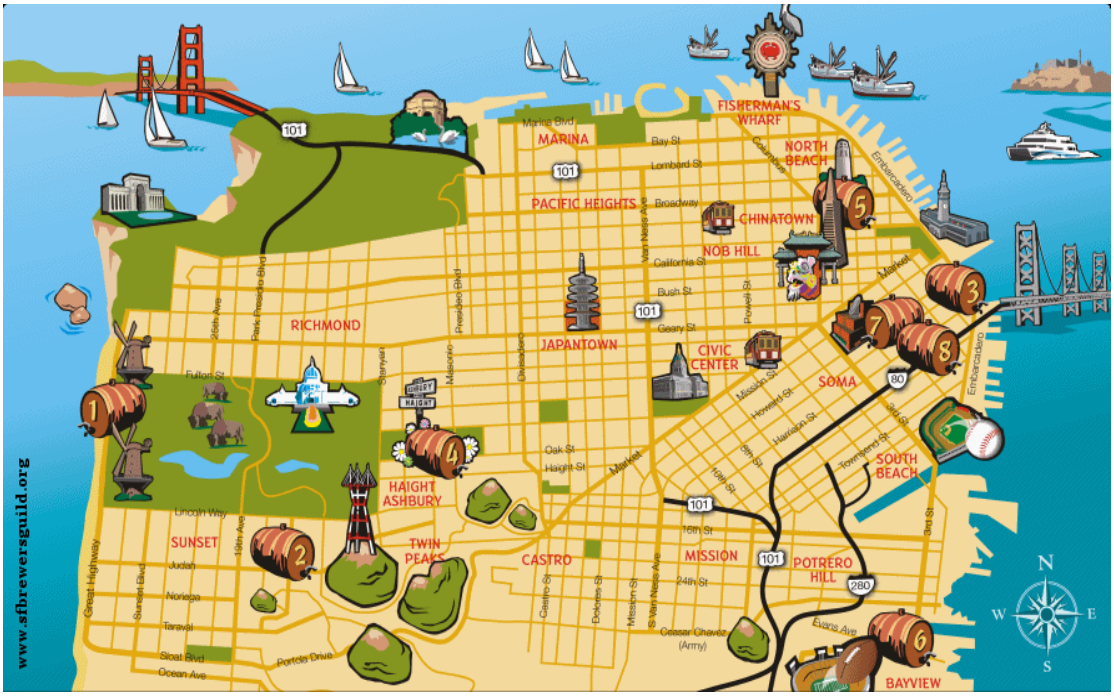
CoMa Specialty Group Meeting

4738 Coastal and Marine Specialty Group Business Meeting
Friday, 4/20/07, from 7:30 PM - 8:30 PM *Room:* Union Square 15, SF Hilton

Breweries of San Francisco

The City by the Bay is known for its fog and nearby wine country, but it has a fair selection of brew pubs and breweries to offer. The breweries of San Francisco are part of a rich culture of artisan food and beverages that has sprung up in the region over the last several decades. Many of these are located within one mile of Union Square and the conference hotel.

One small brewery can be found in walking distance from the conference hotel. The Thirstybear is near Howard and 3rd Street (south of Market) by the W Hotel.Three other breweries are located a short subway ride away near The Embarcadero. The quickest way to reach these from the conference would be to take the subway from the Powell Street BART-MUNI Station heading east and disembark at Embarcadero Station near the Ferry Terminal. The Gordon Biersch Brewery & Restaurant is on Embarcadero & Harrison and the 21st Amendment Brewery Café can be found at 2nd and Taber Place. Both of these breweries are located four to five block south of the subway station and are near to I-80. The San Francisco Brewing Company can be found about the same distance northeast near Columbia & Pacific Avenue. Further north on Columbia you will find Rogue Ales Public House (of Oregon fame) next to Washington Square. For those planning on checking out Strawberry Hill in Golden Gate Park, you may want to check out the Beach Chalet Brewery & Restaurant near Fulton and Great Highway or Eldo's Grill near Lincoln Way on 9th. - Rich Daniels



Addresses of some of the other breweries that may be of interest during your nightly urban geography walks.

(8) 21st Amendment Brewery Cafe 563 2nd St, San Francisco, CA (415) 369-0900	Pizza Orgasmica & Brewing Co 823 Clement St, San Francisco, CA (415) 386-6000
(4) Magnolia Pub & Brewery 1398 Haight Street, San francisco, CA (415) 864-7468	(2) Eldo's Grill & Microbrewery 1326 9th Ave, San Francisco, CA (415) 564-0425
(3) Gordon Biersch Brewing Rstrnt 2 Harrison St, San Francisco, CA (415) 243-8246	O'Neill's Irish Pub 747 3rd St, San Francisco, CA (415) 777-1177
(1) Beach Chalet Brewery & Rstrnt 1000 Great Hwy, San Francisco, CA (415) 386-8439	(7) Thirstybear Brewing Co 661 Howard St, San Francisco, CA (415) 974-5624
Anchor Brewing Co 1705 Mariposa St, San Francisco, CA (415) 863-8350	Great Northern Brewing Co SF 1160 Battery St, San Francisco, CA (415) 732-1000
(5) San Francisco Brewing Co 155 Columbus Ave, San Francisco, CA (415) 434-3344	Full Sail Brewing 70 Dorman Ave, San Francisco, CA (415) 643-7245
Rogue Ales Public House 673 Union St, San Francisco, CA (415) 362-7880	(6) Speakeasy 1195-A Evans Avenue, San Francisco, CA (415) 642-3371

For more information, visit the S.F. Brewers Guild web site at http://www.sfbrewersguild.org/.

New Books, Chapters and Articles

Barreto, M., 1998. Remote sensing as a tool to describe sediment bottom facies in coastal environments. Fifth International Conference on Remote Sensing for Marine and Coastal Environments

Buynevich, I.V. and Jol, H.M., 2006. Lithological anomalies in coastal dunes: GPR signal response and paleoenvironmental significance. Eos Trans. AGU, 87(52). Fall Meeting Suppl., Abstract NS24A-06.

Fisher, T.G., Loope, W.L., Pierce, W., and Jol, H.M., 2007. Big lake records in a little lake's sediment: an example from Silver Lake, Michigan, USA. Journal of Paleolimnology, 37: 365 – 382. (DOI 10.1007/s10933-0053-2)

Johnson, H.J., Jol, H.M., Peterson, C.D., Bode, J. and Fischer, M., 2006. GPR Imaging of the Subsurface in 3D: Exampls fro a coastal sites (USA) and an archaeological site (Israel). Geological Society of America Annual Meeting, Philadelphia, PA, October 22-25, Abstracts with Programs, 38(7): 60.

Jol, H.M., Faulkner, D., Albrecht, A., Sternberg, C., and Trombly, N. 2006. Bottom and sub-bottom GPR imaging within shallow Wisconsin lakes: benefits and problems. Geological Society of America Annual Meeting, Philadelphia, PA, October 22-25, Abstracts with Programs, 38(7): 14.

Loope, W.L., Jol, H.M., Goble, R.J. and Fisher, T.G., 2006. Geomorphic, sedimentological and mineralogical signatures of early Holocene outbursts of Glacial Lake Agassize in easetern Upper Michigan. Geological Society of America North-Central Section, 40th Annual Meeting, April 20-21, Abstract with Program v. 38(4): 58.

Morelock, J., Capella, J., Garcia, J.R. and Barreto, M. 2000. Puerto Rico - Seas at the Millennium. In: Sheppard, C.R.C. (ed.) Seas at the Millennium. Oxford Press, London.

Morelock, J. and Barreto, M., 2003, An update of coastal erosion in Purto Rico: Shore and Beach, v.71 n.1, p 7-12.

CoMa Media CD, 2nd Edition

In response to the discussion at the specialty group meeting in Chicago, CoMa is putting together a second edition of the slide and photo compilation CD Rom. Much of the details of implementation and roll out have yet to be decided, but we are read to take submissions via an FTP site set up by Dr. Harry Jol (instructions are listed below). In discussing this, it was hoped that this edition will allow for a wider variety of material including short video clips, slides, photos, schematics, and other relevant, digital material.

If you have something you want included in the CD follow the directions below.

1. Take all the content you want to include and put it into a folder on your machine.
2. Include a text or word document that identifies, describes, and provides a source for each item in the folder.
3. Type the following ftp url into your web browser: ftp.uwec.edu
4. You will be prompted for a username and password. Enter the following (these are case sensitive):
   username: JOLHM
   password: !harry8*$$
5. One you have pasted your entry, email Dr. Jol to let him know: jolhm@uwec.edu

Thanks to Dr. Jol and the University of Wisconsin – Eau Claire for supplying the ftp site.

Call for Award Nominations: The R. J. Russell Award

Nominations for the 2008 R.J. Russell Award should be directed to the Vice-Chair (Harry Jol). This specialty group award is presented in recognition of an individual's major contributions to the field of coastal or marine geography. These contributions may be in research, teaching, public service, and/or to the specialty group. Previous awardees include Jess Walker (1991), Fillmore Earney (1992), Norbert Psuty (1993), Karl Nordstrom (1996), Doug Sherman (1997), Bernard Bauer (1999), Robin Davidson-Arnott (2000), Patrick Hesp (2001), Andrew Short (2003), Alan Trenhaile (2005) and Raymond Smith (2006). The R.J. Russell Award is named in honor of Richard Joel Russell (1895-1971). He founded the Department of Geography and Anthropology at Louisiana State University in 1928, acted as its first Chair, and served as Dean of the Graduate School 12 years. Dr. Russell was an organizer of the Coastal Studies Institute (1954), president of both the Association of American Geographers (1948) and Geological Society of America (1957), and was named to the National Academy of Sciences (1959).

Nominations for the 2008 award should be made April 11, 2007. Nominations are only accepted from CoMa members, but nominees do not have to be members of either the specialty group or the AAG. Two letters of nomination are required for consideration for the Award. At least one of these must include one paragraph describing contributions to the field of coastal or marine geography and/or to the special interest group, and a list of the nominee's relevant publications.

Employment Opportunities

LOUISIANA, NEW ORLEANS. University of New Orleans, Department of Earth and Environmental Science. Tenure-Track Faculty Vacancy. **Coastal Plant Ecologist.** The Department of Earth and Environmental Sciences (EES) at the University of New Orleans invites applicants to fill a tenure-track position as an **Assistant Professor** in the field of Coastal Plant Ecology starting in the 2007 calendar year. EES is particularly interested in an individual whose work focuses on coastal wetland and barrier island vegetation and plant response to changes in salinity, inundation and/or fertility. Applicants with research interest at the landscape scale of the Mississippi River delta plain are highly desirable. Scientists with experience in working with multidisciplinary teams using remote imaging and geospatial tools are also highly desirable. Other desirable talents and expertise include: Coastal plant communities response to changes in physical environment, climate, sea level and wildlife; Coastal restoration ecology; Environmental controls on plant recruitment and succession; Wildlife habitat use, and seabird habitat and

population dynamics. This position is well-supported with start-up funds commensurate with the successful candidates experience, publication record and funding record. Research facilities will be available for the successful candidate in the UNO Geology Building and/or UNO Research and Technology Park. This position will hold a joint position with the Pontchartrain Institute foe Environmental Sciences. EES is well endowed with research facilities for fieldwork in coastal plant communities as well as laboratory investigations. We seek an individual committed to research, teaching and graduate training. A PhD is required. Interested applicants should send their resume', selected publications and three letters of reference to: Dr. Shea Penland, Chair, Department of Earth and Environmental Sciences, University of New Orleans, 2000 Lakeshore Dr., New Orleans, LA 70148. 504.280.6325. spenland@uno.edu.

Program Information

The University of South Florida Department of Geography is offering Coastal & Marine Geography (GEO 4930) for the first time this semester (Spring 2007). Twenty student have enrolled in the course.
Topics include:

Unit 1: origin of the world's ocean basins; macro-scale geologic processes; ocean basin geomorphologic features; origins and distributions of ocean sediments

Unit 2: coasts; surface waves; surface currents; tides; thermohaline circulation

Unit 3: thermodynamic exchanges; gas exchanges; climate controls; paleoclimates and climate proxies from the geologic record

Unit 4: ocean food webs; benthic, pelagic, and neritic environments; human impact on ocean environments

Emphases in each unit are on the human-environment interactions which are impacted by the various geological, biological, physical, and chemical processes being investigated. A significant part of the course consists of applied GIS exercises for each unit, which utilize ArcGIS software as a tool to promote critical thinking about topics such as: why are the ocean basins so geologically young?; what happens to climate if the oceanic conveyor belt were to stop?; what are the local impacts of El Niño/La Niña events?; what are the the causes of marine "dead zones"?

Inquiry based learning is also being promoted through field work, utilizing the natural classrooms of the Tampa Bay region: barrier islands and coastal wetlands. The students are being challenged to put these local environments into larger spatial contexts, as well as to investigate the impacts that our heavily populated and rapidly growing Tampa Bay region have on the natural environments we visit. The content of this course was determined in large part by suggestions from COMA members over the past year or so. So I'm very grateful to all the COMA members who gave me their input when I asked!

The Geography Department of University of Puerto Rico, Rio Piedras Campus is the unique academic and research unit that offer undergraduate preparation as a part of the major of Geography in Coastal Process subject and Coastal geology in Puerto Rico. Some of courses offers in the department that ties with marine geography are: Marine Geography, Coastal Processes, Environmental Geology and special topics in coastal studies using remote sensing tools. Also, the Geography department provides opportunities to undergraduate student to conduct research in myriad coastal issues. Students training and research works were have been supported by NOAA, Sea Grant Program and Caribbean Fisheries Council (NOAA), among others. Research results have been used as guidelines for help to develop management plan and help local communities to protect their coastal areas (outreach activities. Actually our main interest in research is related with coastal erosion in Tropical Island System and its relation with land use changes and sea level rise.