



## SPRING PROGRAM - SEERS and GERS

April 11-13, 1991 Gulf Breeze, Florida

## General Program

<b>Thursday - April 11</b>	1700	Tap Keg and Free Drinks (See below)
	1700-2100	Registration and Information
	1900-2200	Poster Session and Social
	2100	SEERS and GERS Board Meetings
<b>Friday - April 12</b>	0730-0930	Registration and Information
	0800-1215	Paper Session I
	1215-1330	Fish Fry Luncheon and Keg beer (poolside)
	1330-1710	Paper Session II
	1710-1730	Joint Business Meeting and Awards
	1730-1800	Individual society meetings (SEERS election)
<b>Saturday - April 13</b>	0810-1140	Paper Session III
	1230-1400	US EPA Lab Tour

## Meeting Announcements

\* The spring meeting of GERS and SEERS will be held jointly on April 11-13 in Gulf Breeze, Florida. Registration and poster and paper sessions will be held at the Holiday Inn Bay Beach Hotel in Gulf Breeze. You should have made room reservations already, but if you have not, reservations can be made by calling 904-932-2214. When making your reservation, inform the hotel you are participating in the SEERS/GERS (coastal scientists) meeting.

\* The Holiday Inn Hospitality Room is open for free drinks to all GERS/SEERS participants when you show your room key. This is available only on Thursday, April 11th from 5-7 pm.

\* If you plan to attend the spring meeting and have not preregistered, please do so at this time. It would be most helpful in determining how much food, beer, etc. to order for the meeting.

\* **Registration:** All attendees will be required to register. A registration fee of \$20 (\$15 for students) will include the socials, coffee breaks, meeting expenses, and the poolside luncheon on Friday. Tickets which cover both the luncheon and socials will be available for spouses at \$11. Packets will be available at the Registration Desk which will provide information for visitors (e.g. Naval Air Museum, Zoo, Olde Town Pensacola-Seville Quarter, "night spots", and restaurants)

\* **Note:** All oral papers will be limited to 15 minutes with 5 minutes for questions. Please prepare your talk so that you will not run over this allotted time. There will be a one minute warning at 14 minutes, so you will know to wrap it up.

\* Titles and abstracts for Posters will be accepted until registration on Thursday evening, but please don't wait until the meeting. Call titles to Ginger Ogburn (SEERS program chairperson) (803-546-6219) by April 5th, so that an updated list can be distributed at registration. Bring your own pins and materials to hang posters.

\* A bulletin board will be available to post items of interest. If you have job announcements, special photographs, new publications or brochures that you would like to share, bring them to the registration desk.

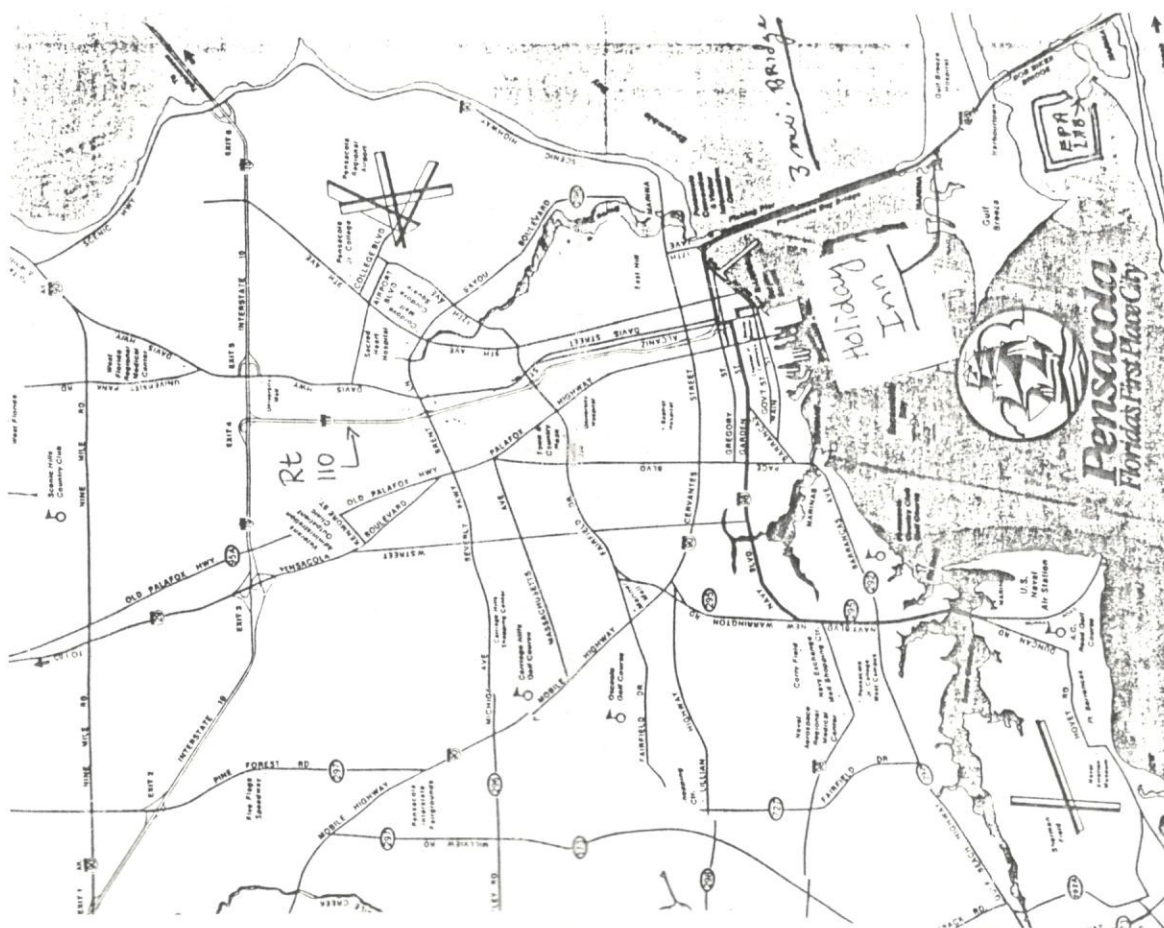
\* We gratefully acknowledge Hydrolab, AScl, Inc., Freeport-McMoran, Inc., and Mississippi-Alabama Sea Grant for their monetary contribution to this meeting. Meeting participants should stop by the Hydrolab exhibit to examine their latest equipment.

\* We also gratefully acknowledge our host institution, EPA's Environmental Research Laboratory in Gulf Breeze, and local arrangements chairperson, Dr. David Flemer of the EPA Lab, for their contributions and hard work organizing this meeting.

\* The Estuarine Research Federation (ERF) will hold its Biennial International meeting in San Francisco from November 10-14. Abstracts must be submitted by April 26. Information and abstract forms can be obtained by writing ERF, PO Box 544, Crownsville, MD 21032. We hope that as two of the five regional affiliate societies, SEERS and GERS will be well-represented at the national level. Although all SEERS and GERS members receive the ERF newsletter, only about half are members. Among the benefits of membership to ERF is the eligibility of graduate student members for a \$400 travel grant for the fall meeting. Ten grants will be made by lottery, so your chances of getting one are fairly good. Join ERF and subscribe to *Estuaries* as soon as possible!

### How to get to the Holiday Inn Bay Beach Hotel

- From Interstate 10: Proceed south on City Rt. 110. Follow signs to Gulf Breeze and US 98 EAST. Look for Holiday Inn on right about 250 meters after leaving 3-mi bridge
- From Airport: Take 12th Ave South to City Rt 110. Go south on Rt 110 and proceed as above.
- From US Rt 29: Take Tallahassee Exit to city Rt 110. Go south on Rt 110 and proceed as above.





POSTER SESSION

Thursday Night (1900-2200) - April 11

**Physicochemical and biological factors affecting the distribution of molting blue crabs in Pantego Creek, a canalized subestuary of Pamlico Sound, North Carolina**

M.A. Shirley\*, and T.G. Wolcott. Rookery Bay National Estuarine Research Reserve, Naples, Florida and North Carolina State University, Raleigh, North Carolina

**The Environmental Monitoring and Assessment Program (EMAP): Plans for monitoring in the Gulf of Mexico in 1991**

J. Kevin Summers\*. U.S. EPA Environmental Research Laboratory, Sabine Island, Gulf Breeze, Florida

**Results of a one-year study of fish, penaeid shrimp, and blue crab distributions in portions of Perdido Bay, Florida/Alabama**

Larry R. Goodman, Roman S. Stanley, and James M. Patrick, Jr. U.S. EPA Environmental Research Laboratory, Sabine Island, Gulf Breeze, Florida

**Spatial and temporal variability in primary productivity measured in Perdido Bay, a northern Gulf of Mexico estuary**

J.M. Macauley, J.R. Clark, and Virginia A. Engle<sup>1</sup>. U.S. EPA Environmental Research Laboratory and <sup>1</sup>Technical Resources, Inc., Sabine Island, Gulf Breeze, Florida

**Ingress of brachyuran crabs through a tidal inlet near Wilmington, NC**

David Mense and Martin Posey<sup>1</sup>. Marine Science Department, NC State University, Raleigh, NC and <sup>1</sup>Department of Biological Sciences, UNC-Wilmington, Wilmington, NC

**FRIDAY MORNING - PAPER SESSION I**

Session Chair: Bob Van Dolah (SEERS)

*Animals and Their Habitat*

0800 Welcome and Announcements

0815 **Antifouling adaptations of *Mysidopsis bahia* (Crustacea: Mysidacea)**

Charles A. Acosta\*\* and Michael A. Poirrier. Univ. of New Orleans, New Orleans, LA

0835 **Zonation of estuarine benthic macroinvertebrates in selected West Florida rivers**

M.R. Milligan\* and J.K. Culter. Mote Marine Laboratory, Sarasota, FL

0855 **A comparison of recruitment and retention mechanisms between offshore and estuarine spawned larval fish**

Richard C. Raynie\*\* and Richard F. Shaw. Coastal Fisheries Institute, Louisiana State University, Baton Rouge, LA

0915 **Seaward change and zonation of the sandy-shore macrofauna at Perdido Key, Florida, USA**

Chet Rakocinski\*, Richard W. Heard, Sara E. LeCroy, Jerry A. McLelland, and Ted Simons. Gulf Coast Research Laboratory and Gulf Islands National Seashore, Ocean Springs, MS

\* Speaker / \*\* Student

- 0935 **Attraction of postlarval brown shrimp *Penaeus aztecus* to estuarine olfactants**  
Mark C. Benfield\*\* and David V. Aldrich. Marine Biology, Texas A&M University at  
Galveston, Galveston, TX

0955 - 1015 **COFFEE BREAK**

**Session Chair: Will Davis (GERS)**  
*Animals and Their Habitat (Continued)*

- 1015 **Influence of freshwater inflow on mangrove fish assemblages in northeastern Florida Bay**  
Janet A. Ley\*\* and Clay L. Montague. Univ. of Florida, Gainesville, FL
- 1035 **Microhabitat use by marsh-edge fishes in a Louisiana estuary**  
Donald M. Baltz<sup>1,2\*</sup>, Chet Rakocinski<sup>2,4</sup>, and John W. Fleeger<sup>3</sup>. Coastal Fisheries Institute<sup>1</sup>, Department of Oceanography and Coastal Sciences<sup>2</sup>, and Department of Zoology and Physiology<sup>3</sup>, Louisiana State University, Baton Rouge, LA; <sup>4</sup>Gulf Coast Research Laboratory, Ocean Springs, MS
- 1055 **Habitat selection and abundance of juvenile blue crabs and lesser blue crabs in a Louisiana estuary**  
Walter E. Gibson\*\*, Charles A. Wilson, and Donald M. Baltz. Coastal Fisheries Institute and Department of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA  
*CLAY MONTAGUE INFLUENCE OF LIGHT ON SEDIMENT ERODABILITY*
- 1115 **Temporal dynamics of macro-zooplankton: stability vs. disturbance in an eight year time series**  
Dennis M. Allen\*, M. Virginia Ogburn, and Scott Chapal. Baruch Marine Laboratory, University of South Carolina, Georgetown, SC
- 1135 **Can mariculture harm the goose that lays golden eggs?**  
William H. Herke\*. Louisiana Cooperative Fish and Wildlife Research Unit, Louisiana State University, Baton Rouge, LA
- 1155 **Effects of marina proximity on the recruitment of oyster spat to experimental substrata**  
Robert F. Van Dolah\* and Martin V. Levisen. South Carolina Marine Resources Research Institute, Charleston, SC
- 1215 - 1330 **BARBEQUE LUNCHEON (POOLSIDE)**

**FRIDAY AFTERNOON - PAPER SESSION II**

**Session Chair: Richard Moore (SEERS)**  
*Modelling & Physical, Chemical Processes*

- 1330 **Effects of a marsh management plan on fisheries organisms**  
Donna R. Rogers\*, Barton D. Rogers, and William H. Herke. School of Forestry, Wildlife, and Fisheries, Louisiana State University, Baton Rouge, LA



- 1350 ~~The Wetland Evaluation Technique: Its effectiveness on estuarine marshes, and ability to assess the influence of urbanization~~  
Donna L. Lanzendorf\*\*. University of South Carolina, Columbia, SC

- 1410 A Monte Carlo-Based virtual population model for assessing fish stock spawning biomass: with an example for the spotted seatrout (*Cynoscion nebulosus*) population  
Thomas E. Helser\*\*. Department of Oceanography and Coastal Sciences, Coastal Fisheries Institute, Louisiana State University, Baton Rouge, LA

- 1430 Examining subsystem interactions in a salt marsh estuary using a dynamic budget model  
Daniel L. Childers and Fred H. Sklar. Baruch Marine Laboratory, University of South Carolina, Georgetown, SC

- 1450 ~~Tidal bores in a macrotidal estuary~~ MARSH RESTORATION IN THE PRESENCE OF INTENSE HERBIVORY: THE ROLE OF *JUSTICIA*  
Björn Kjerfve\* and Hélder Ferreira. University of South Carolina, Columbia, SC and Universidade Federal Fluminense, Niterói, RJ, Brazil

1510-1530 SODA BREAK

Session Chair: John Wakeman (GERS)  
Modelling & Physical, Chemical Processes (Continued)

- 1530 Marsh restoration in the presence of intense herbivory: the role of *Justicia ovata* (water willow)  
Daniel W. Llewellyn\*\* and Gary P. Shaffer. Department of Biological Sciences, Southeastern Louisiana University, Hammond, LA
- 1550 Metallothioneins - What do they really do?  
David W. Engel\*. National Marine Fisheries Service, Beaufort Laboratory, Beaufort, NC
- 1610 Assessment of sediment mutagenicity with the combined Ames Thin-Layer Chromatography Assay  
Francis J. Reilly, Jr.<sup>1</sup>, Joseph N. O'Conner<sup>2</sup>, Victor A. McFarland<sup>3</sup>, and A. Susan Jarvis<sup>3</sup>\*. <sup>1</sup>ASCI Corporation, <sup>2</sup>Aquatic Habitat Institute, <sup>3</sup>US Army Engineer Waterways Experiment Station, Environmental Laboratory, Vicksburg, MS
- 1630 Evaluation of sampling strategies to characterize dissolved oxygen conditions in northern Gulf of Mexico estuaries  
J. Kevin Summers\* and Virginia A. Engle<sup>1</sup>. US EPA Environmental Research Laboratory and <sup>1</sup>Technical Resources, Inc., Sabine Island, Gulf Breeze, FL
- 1650 Continuous monitoring of dissolved oxygen in a northern Gulf estuary experiencing periodic hypoxia  
J. Kevin Summers\*, J.M. Macauley, and J.R. Clark. US EPA Environmental Research Laboratory, Sabine Island, Gulf Breeze, FL
- 1710 Announcements and awards - SEERS and GERS
- 1730 Short Business Meeting (independent sessions) SEERS elections

## SATURDAY MORNING - PAPER SESSION III

Session Chair: Dan Childers (SEERS)  
*Larval Fishes*

- 0810 Announcements
- 0820 **Annual, seasonal, latitudinal and diel effects on distribution, abundance, and length-frequency of *Scomberomorus cavalla* and *S. maculatus* in the South Atlantic Bight**  
Randall H. Beatty\*, Jeanne Boylan, and R. Pearse Webster. South Carolina Marine Resources Research Institute, Charleston, SC
- 0840 **Abundance and distribution of snapper larvae in coastal and shelf waters of the northcentral Gulf of Mexico in late summer**  
Joanne Lyczkowski-Shultz\*. Gulf Coast Research Laboratory. Ocean Springs, MS
- 0900 **Hydrodynamic aspects of larval transport in estuaries**  
Ned P. Smith\*. Harbor Branch Oceanographic Institution, Fort Pierce, FL
- 0920 **Short-term net transport within a coastal lagoon: applications for spotted seatrout, *Cynoscion nebulosus***  
Patrick A. Pitts\*. Harbor Branch Oceanographic Institution, Fort Pierce, FL
- 0940-1000 COFFEE BREAK

Session Chair: Ed Chesney (GERS)

- 1000 **Coastal Ocean Boundary Interactions and Assessment (COBIA): A concept for collaborative coastal ocean research**  
M. Richard DeVoe\*. South Carolina Sea Grant Consortium, Charleston, SC
- 1020 **Red drum and spotted sea trout research in South Carolina**  
Mark R. Collins\*, Charles A. Wenner, and William A. Roumillat. South Carolina Marine Resources Research Institute, Charleston, SC  
*STP, TRIMM, FISHING, BARN*
- 1040 **Community effects of seagrass die-off in western Florida Bay**  
Peter F. Sheridan\* and Gordon W. Thayer. National Marine Fisheries Service, Galveston, TX and NMFS, Beaufort, NC  
*( COASTAL OCEAN (FLORES) )*
- 1100 **Infection of *Callinectes sapidus* by *Loxothylacus texanus* (a parasitic barnacle) in Galveston Bay**  
Andrew Tirpak\* and William Wardle. Texas A&M University at Galveston, Galveston, TX
- 1120 **Comparative value of edge and interior marshes as habitat for fish and decapod crustaceans in a Louisiana tidal marsh**  
Gary W. Peterson\*. Coastal Ecology Institute, Center for Wetland Resources, Louisiana State University, Baton Rouge, LA
- 1140 Closing Remarks
- 1230 Tour of US EPA Lab - Gulf Breeze



## SEERS ANNOUNCEMENTS

\* There will be a short business meeting following the last paper on Friday afternoon. The position of Secretary-Treasurer is up for a vote before the membership. The nominees are Mary Moser and Robert Van Dolah. A short biography about each candidate has been included for the membership.

### CANDIDATES FOR SECRETARY-TREASURER

**Mary Moser** is a research associate with N.C. State University and is currently studying migration behavior and energetics of anadromous fishes of the Cape Fear River drainage. She received her Ph.D. from the N.C. State University Zoology Department in 1987. Her dissertation research focused on the effects of salinity fluctuations on juvenile estuarine fish behavior and physiology. Following her Ph.D. work, Mary conducted a two-year study in Gray's Harbor estuary, Washington, on migration behavior and energetics of coho salmon smolts. She has been a SEERS member since 1983 and served as Student Representative from 1984-86. She is also a member of ERF, the American Society of Ichthyologists and Herpetologists, the Animal Behavior Society and the Association of Southeastern Biologists.

**Dr. Robert Van Dolah** is a Senior Marine Scientist and the Assistant Director of the Marine Resources Research Institute, which forms a major section of the South Carolina Marine Resources Division. He is also an Adjunct Associate Professor of Marine Biology at the college of Charleston. Bob received his degree in Biology from Marietta College in 1971 and continued his education at the University of Maryland, where he received his M.S. degree in 1975 and Ph.D. in 1977. His research at Maryland involved studying factors affecting the abundance and distribution of amphipod populations in salt marsh habitats. Since moving to south Carolina, his research has focused on a variety of environmental concerns in estuarine, coastal and offshore habitats, including studies on the effects of dredging and disposal operations, beach nourishment, jetty construction, redirection of water flow into the Charleston harbor estuary and other habitat perturbations. He has also been involved in several studies evaluating pollution concentrations in estuarine and nearshore habitats. This research has resulted in more than 3.8 million dollars of funding for the Institute from a variety of granting sources. Bob has also authored more the 35 publications or reports which describe these studies. In addition to his research and general administrative responsibilities, he coordinates the Institute's Environmental Research Program, is Chairman of the south Atlantic SEAMAP Bottom Mapping Committee, and he is a member of ERF, and Ecological Society of America.

\* In an attempt to learn more about the interests and needs of our student members, a questionnaire was handed out during registration at the Fall meeting. Another questionnaire will be available for those students who missed the last meeting. All students are requested to fill it one out, so the information can be included with previous results. STUDENTS introduce yourself to Dave Mense, student representative to the SEERS Board.

\* For the first time the most current membership list will be available to members at the Spring meeting in Gulf Breeze! This is our first step in developing a working directory.

\* We are still accepting preregistration forms! If you have not preregistered and plan to attend the Spring meeting in Gulf Breeze, please mail filled out forms to Ginger Ogburn. Forms and address on following page.

**SEERS PREREGISTRATION FORM**

**SPRING MEETING - GULF BREEZE, FL**

**APRIL 11-13, 1991**

*Name and office phone number:* \_\_\_\_\_

*Institution and address:* \_\_\_\_\_

*Reserving Single or Double room?*

*Enrolled as a student? Yes No*

*Arriving for Thursday night social (7 pm)?*

*Staying for Saturday session? Yes No*

**SEERS Officers 1991**

**PRESIDENT:** Dennis M. Allen, Baruch Marine Laboratory, USC, P.O. Box 1630, Georgetown, SC 29442. (803)546-3623.

**PRESIDENT-ELECT:** Clay Montague, Department of Environmental Engineering Science, Black Hall, Gainesville, FL 32611. (904)392-0836.

**SECRETARY-TREASURER:** Ned P. Smith, Harbor Branch Oceanographic Institution, Inc., 5600 Old Dixie Highway, Fort Pierce, FL 34946. (407)465-2400.

**PROGRAM CHAIRPERSON:** Ginger Ogburn, Baruch Marine Laboratory, USC, P.O. Box 1630, Georgetown, SC 29442. (803)546-3623.

**MEMBER-AT-LARGE:** Keith Walters, University of Georgia Marine Institute, Sapelo Island, GA 31327. (912)485-2289.

**STUDENT MEMBER:** David Mense, Marine Science Department, NC State University, Raleigh, NC 27695-7616. (919) 256-5133 (Wilmington office) 737-3583 (NC State).

**PAST PRESIDENT:** David W. Engel, NMFS, Beaufort Laboratory, Beaufort, NC 28516. (919)728-8714.