



SOUTHEASTERN ESTUARINE RESEARCH SOCIETY

SPRING MEETING OF SOUTHEASTERN ESTUARINE RESEARCH SOCIETY

APRIL 5-7, 1990 The Town House
Columbia, South Carolina

GENERAL PROGRAM

Thursday, April 5

6:00 - 9:00 p.m. Registration and Information
7:00 - 10:00 p.m. Poster Session and Social
8:00 Executive Committee Meeting

Friday, April 6

8:00 - 10:00 a.m. Registration and Information
8:30 - 11:50 a.m. Slide Session I
11:50 - 1:30 Lunch
1:30 - 5:00 p.m. Slide Session II
5:00 Business Meeting and Elections
6:30 Social and BBQ Dinner at the home of
 Drs. John and Winnona Vernberg

Saturday April 7

8:45 - 11:45 a.m. Slide Session III

IMPORTANT ANNOUNCEMENTS

- **SEERS** will meet April 5-7, 1990 in Columbia, South Carolina. Registration, posters, and paper sessions will be held at the Town House, downtown Columbia. Single and double rooms will be \$48.00 per night. You should make your reservations as soon as possible, certainly before March 29.

The Town House
1615 Gervais Street
Columbia, SC 29201
803-771-8711

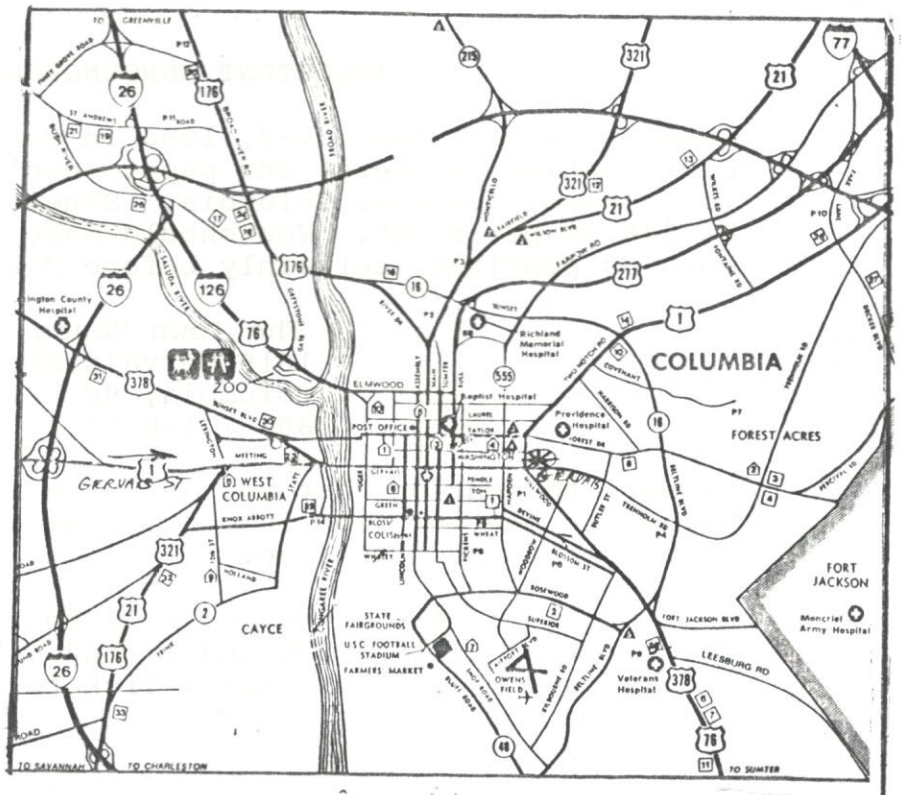
Be sure to mention that you are with SEERS, since the cost of using the meeting room is contingent on the number of rooms meeting attendees reserve.

- **Registration:** All attendees will be required to register. Registration will be \$25 and includes the BBQ, socials, coffee breaks, and meeting expenses. Tickets for the BBQ will be available for spouses at \$10.

- The BBO dinner at the Vernberg's home will feature an all-you-can-eat pork, ribs, chicken and fix-ins buffet with kegs of beer and open bar all evening. Directions will be available at the registration table.
- Titles for Posters will be accepted up until the Poster Session. If you will call the titles to Linda Clements (919-728-8737 or 919-728-3595) by April 2, we will add it to an updated list of posters to be distributed at registration.
- An important business meeting will be held immediately following the Friday afternoon paper session. We will elect a President-Elect (candidates Clay Montague and Quinton White) and Program Chairman (Richard Moore and Ginger Ogburn). Information on the candidates will be available at registration. A report will be made by the committee looking into the issue of frequency of meetings and when the meeting(s) will be held (see attached summary report). We hope to put this issue to ballot soon. An open discussion will be held and all attendees are encouraged to participate and express their views on this important issue.
- The University of South Carolina campus is within walking distance. Numerous places of interest including a McKissick Museum and the Baruch Institute facilities can be visited on Friday.
- The Riverbanks Zoo (with new aquarium exhibits) and the new SC State Museum are only a few minutes drive away. More details will be available at the registration table.
- Students if you have suggestions, complaints, etc., please get in touch with your representative, Lynn Barker.

HOW TO GET THERE

The Town House is located on one of the major roads running east-west through downtown Columbia. It is on the north side of Gervais Street, east of the state capitol building. Gervais Street is Route 1.



ATTENTION SEERS MEMBERS!

Here are some facts, observations, and opinions regarding the frequency and timing of future SEERS meetings. These are offered to stimulate thought and discussion before the Business Meeting on April 6. We expect to revise this summary based on discussion at the Spring 1990 Meeting and mail it with a ballot to all members this summer.

The issues:

1. whether to have one or two meetings per year
2. when the meeting(s) should be held

Why the issues have been raised:

1. The number of meetings of interest to SE estuarine scientists has increased in recent years; "There are too many meetings."
2. Several other research organizations meet between March and May each year; "Given the choice between a regional and national meeting at the same time, most scientists would prefer to attend the bigger meeting."
3. The cost of travel has increased and the availability of travel funds for many organizations has decreased; "I can only afford to attend a total of one or two meetings per year."

Some advantages to keeping two meetings per year:

1. There are more opportunities to attend and give papers.
2. The frequency of a meeting being within reasonable driving distance of any member is higher.
3. Since other ERF affiliate societies meet twice a year, it may be more difficult to schedule joint meetings if we only met once a year.

Some advantages to having one meeting per year:

1. Attendance and number of papers are likely to increase; a larger meeting may attract more senior scientists.
2. More flexibility in the timing of the meeting is possible, so conflicts with other society meetings can be avoided (although the ERF meeting is every other Fall).
3. There would be less work for local arrangement committees, program chairmen, and other officers.

Some problems that may result from changing to one meeting per year:

1. The potential for income necessary for the Society to operate would decrease through fewer total meeting registrations per year (although membership dues could be increased to compensate).
2. The constitutional by-laws would have to be changed and terms of office may have to be reconsidered.
3. If a single annual meeting attracts significantly more than the typical 70-100 attendees, the "informal" nature of the meetings may change. Also, concurrent sessions may have to be scheduled.
4. Larger meetings reduce the number of available meeting places, especially in smaller cities, due to the size of the meeting room required. Registration fees and room costs would probably increase accordingly.

Dennis Allen
Committee Chairman

OFFICERS 1989-90

PRESIDENT: David W. Engel, NMFS, Beaufort Laboratory, Beaufort, NC 28516.
919/728-8741.

PRESIDENT-ELECT: Dennis M. Allen, Baruch Marine Laboratory, P.O. Box 1630,
Georgetown, SC 29442. 803/546-3623.

SECRETARY-TREASURER: Ned P. Smith, Harbor Branch Oceanographic Institute,
5600 Old Dixie Highway, Fort Pierce, FL 34946. 407/465-2400.

PROGRAM CHAIRMAN: Linda C. Clements, NMFS, Beaufort Laboratory, Beaufort, NC
28516. 919/728-8737.

STUDENT MEMBER: Lynn Barker, Box 7617, Dept. of Zoology, NCSU, Raleigh, NC
27695-7616. 919/737-3583.

MEMBER AT LARGE: A. Quinton White, Dept. of Biology, Jacksonville University,
Jacksonville, FL 32211. 904/744-3950.

PAST PRESIDENT: Vic G. Burrell, Jr. SCMRRI, P.O. Box 12559, Charleston, SC
29412. 803/795-6350.

POSTER SESSION

Thursday Night - April 5, 1990

HYDROGRAPHIC CONDITIONS IN THE CHARLESTON HARBOR ESTUARY FOLLOWING HURRICANE HUGO AND THE SUBSEQUENT IMPACT ON THE BENTHIC FAUNA AT SELECTED STATIONS.

G.A. Anderson, R.M. Matore, P.H. Wendt, R.T. Van Dolah, S.C. Marine Resources Research Institute, Charleston, SC

CAPPRELLID AMPHIPODS: FAST FOOD FOR THE REPRODUCTIVELY ACTIVE.

Ed Caine, USC Beaufort, Beaufort, SC

SPATIAL AND TEMPORAL PATTERNS OF NUTRIENT DISTRIBUTION IN THE COOPER RIVER ESTUARY.

K. Connelly, E. Blood, H. McKellar, and T. Sicherman. Department of Environmental Health Sciences, University of South Carolina, Columbia, SC

COMMUNITY RESPIRATION IN SALT-MARSH TIDAL CREEKS, NORTH INLET, SC.

Sharon E. Warfel, University of South Carolina, Coastal Carolina College, Conway, SC

PAPER SESSION

Friday Morning - April 6, 1990

Session Chair - Clay Montague

- 8:30 Welcome - David W. Engel, President
- 8:40 SHORT-TERM VARIABILITY IN RATES OF BENTHIC MICROALGAL PRODUCTION: THE EFFECTS OF TIDAL STAGE AND TIME OF DAY.
Jay Pinckney, Department of Biological Sciences, University of South Carolina, Columbia, SC
- 9:00 POSITIVE FEEDBACK BETWEEN INTERTIDAL FILTER FEEDERS AND ESTUARINE PLANKTON.
R. Dame and S. Libes*. Belle W. Baruch Institute for Marine Biology and Coastal Research, Georgetown, SC
- 9:20 THE DISTRIBUTION AND EFFECTS OF AN ECTOCOMMENSAL GILL BARNACLE (Octolasmis muelleri) ON THE BLUE CRABS OF THE CEDAR KEY AREA.
Andrew T. Gannon*, and Michele Wheatly, Department of Zoology, University of Florida, Gainesville, FL

* Indicates Speaker

9:40 BURROWING ACTIVITY OF THE BRITTLESTAR Microphiophois gracillima.
Andrew H. Barnard, Stephen E. Stancyk, and William E. Dobson. University of South Carolina, Baruch Institute, Columbia, SC

10:00-10:30 Coffee Break

Session Chair - Richard Moore

10:30 COMPARISON OF LONG-TERM DEVELOPMENT OF FOULING COMMUNITIES BETWEEN STABILIZED OIL-ASH REEFS AND CONCRETE REEFS.
Tonya E. Neth, Florida Institute of Technology, Oceanography/Ocean Engineering Department, Melbourne, FL

10:50 TAGGING REEF FISH OFF SOUTH CAROLINA.
Mark R. Collins*, Scott B. Van Sant, and David J. Schmidt. S.C. Marine Resources Research Institute, Charleston, SC

11:10 AGE AND GROWTH OF LARVAL AND JUVENILE SPANISH MACKEREL, Scomberomorus maculatus, FROM THE SOUTH CAROLINA COAST.
John S. Peters. College of Charleston, Charleston, SC

11:30 BURROW STRUCTURE OF SAND FIDDLER CRABS, Uca pugilator, AND MUD FIDDLER CRABS, Uca pugnax, AT THE NORTH INLET ESTUARY, SOUTH CAROLINA.
Melissa Frix. Winthrop College, Department of Biology, Rock Hill, SC

11:50-1:30 Lunch

Friday Afternoon - April 6, 1990
Session Chair - Quinton White

1:30 EFFECTS OF REDIVERSION ON HYDROGRAPHIC CONDITIONS IN THE CHARLESTON HARBOR ESTUARY.
R.F. Van Dolah, K.B. Davis, and G.S. Anderson. South Carolina Marine Resources Research Institute, Charleston, SC

1:50 A FOUR-YEAR STUDY OF BENTHIC MACROFAUNAL COMMUNITIES IN THE CHARLESTON HARBOR ESTUARY: SPATIAL AND TEMPORAL PATTERNS RELATED TO RIVER REDIVERSION.
P.H. Wendt*, R.M. Martore and G.S. Anderson, South Carolina Marine Resources Research Institute, Charleston, SC

- 2:10 IMPACT OF RIVER REDIVERSION AND HURRICANE HUGO ON FISH AND DECAPOD ASSEMBLAGES IN THE CHARLESTON HARBOR ESTUARY.
R.M. Martore*, B.W. Stender,, and R.F. Van Dolah.
South Carolina Marine Resources Institute, Charleston, SC
- 2:30 CHANGES IN VEGETATION CHARACTERISTICS OF A FRESHWATER TIDAL MARSH RESULTING FROM THE REDIVERSION OF THE COOPER RIVER.
B.J. Kelley*, R.D. Porcher and Yvonne Michel.
Department of Biology, The Citadel, Charleston, SC
- 2:50 BALD CYPRESS GROWTH IN WINYAH BAY, SOUTH CAROLINA AS A FUNCTION OF DROUGHT INDUCED SALT INTRUSIONS:
S.E. Hutchinson* and F.H. Sklar. University of South Carolina, Baruch Marine Laboratory, Georgetown, SC
- 3:10-3:40 Coffee Break

Session Chair - Ginger Ogburn

- 3:40 A SIMPLE, FOUR-SPECIES, COMPUTER SIMULATION OF POSSIBLE SALINITY FLUCTUATION EFFECTS ON SUBMERGED VEGETATION IN ESTUARIES.
Clay L. Montague. Department of Environmental Engineering Sciences, University of Florida, Gainesville, FL
- 4:00 MAPPING SUBMERGED AQUATIC VEGETATION IN NORTH CAROLINA.
R.L. Ferguson* and L.L. Wood. NMFS, Beaufort, NC
- 4:20 MANATEE GRAZING IMPACTS ON SEAGRASSES IN A COASTAL FLORIDA LAGOON.
L.W. Lefebvre¹, J.A. Powell², W.J. Kenworthy³, and D.P. Domning⁴. ¹ U.S. Fish and Wildlife Service, Gainesville, FL; ² NY Zoological Society, Bronx, NY; ³ NMFS, Beaufort, NC; and ⁴ Howard University, Washington, DC
- 4:40 AGRICULTURAL NON-POINT SOURCE POLLUTION IN NORTH CAROLINA.
Thomas Jones* and Jim Cummings. N.C. Dept. of Environment, Health and Natural Resources, Raleigh, NC
- 5:00 Business Meeting

Saturday Morning - April 7, 1990

- 8:45 A MODEL OF A Spartina alterniflora SALT MARSH: OUTPUTS FROM A LONG-TERM SIMULATION.
L. Milton Asmus* and Henry N. McKellar, Jr. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina, Columbia, SC
- 9:05 THE INFLUENCE OF MUSSEL BEDS ON NUTRIENTS IN THE WESTERN WADDEN SEA AND EASTERN SCHELDT ESTUARIES.
R. Dame¹, N. Dankers², T. Prins², H. Jongsma², and A. Smaal², ¹Coastal Community College of USC, Conway, SC, and ²Institute for Nature Management, Texel, The Netherlands
- 9:25 DISTRIBUTION OF ABUNDANCE AND MATURITY FOR THREE COMMERCIALY IMPORTANT PENAEID SHRIMP IN THE SOUTH ATLANTIC BIGHT.
R. Pearse Webster*, H.R. Beatty, and E.L. Wenner. South Carolina Marine Resources Research Institute, Charleston, SC
- 9:45-10:10 Coffee Break
- 10:10 HURRICANE HUGO: EFFECTS ON THE FISHES AND DECAPOD CRUSTACEANS OF THE MARSH CREEK HABITAT.
D.M. Knott*, E.L. Wenner, J. Boylan, and J.A. Archambault, South Carolina Wildlife and Marine Resources Department, Charleston, SC
- 10:30 EFFECTS OF HURRICANE HUGO AND OTHER CLIMATIC EVENTS ON INTERTIDAL NEKTON OF NORTH INLET, SC
Ginger Ogburn*, Susan Service and Dennis Allen, University of South Carolina, Baruch Marine Laboratory, Georgetown, SC
- 10:50 ENDANGERED SHORTNOSE STURGEON IN THE CAPE FEAR RIVER ESTUARY: PRELIMINARY OBSERVATIONS OF DISTRIBUTION.
Mary L. Moser* and Steve W. Ross, Zoology Department, N.C. State University, Raleigh, NC
- 11:10 HEMOCYANIN CONCENTRATIONS IN THE HEMOLYMPH OF BLUE CRABS, Callinectes sapidus, FROM EASTERN N.C. AND LOBSTERS, Homarus americanus, FROM MASSACHUSETTS.
D.W. Engel*, National Marine Fisheries Service, Beaufort Laboratory and M. Brouwer, Duke Marine Laboratory, Biomedical Center, Beaufort, NC
- 11:30 TIDAL AND WIND-DRIVEN INTER-LAGOON EXCHANGE MECHANISMS.
Ned P. Smith, Harbor Branch Oceanographic Institution, Ft. Pierce, FL
- 11:50 Adjourn