



SPRING MEETING PROGRAM
March 10-12, 1994 Jekyll Island, Georgia

General Program

Thursday - March 10	1800-2200	Registration
	1900-2200	Poster Session and Social
	2000	SEERS Board Meeting
Friday - March 11	0800-0930	Registration and Information
	0745-0800	Welcome and Announcements
	0800-0940	Paper Session I
	1000-1140	Paper Session II
	1140-1300	Lunch
	1300-1500	Paper Session III
	1520-1700	Paper Session IV
	1700	Business Meeting, Awards and Elections
1800	Social	
1900	Low Country Boil Dinner	
Saturday - March 12	0800-0940	Paper Session I
	1000-1140	Paper Session II
	1140	Closing Comments

Meeting Announcements

2/14 CONFIRMATION #
645-72871
VISA FOR 1

The 1994 SEERS spring meeting will be held at the Holiday Inn on beautiful Jekyll Island, Georgia. Registration, poster session, paper sessions and the business meeting will be at the Holiday Inn. The Low Country Boil will be held Friday evening in the picnic area adjacent to the Inn. Call 1-800-7Jekyll or 1-912-635-3311 for room reservations (\$59.00/night + 10% tax). Rooms are guaranteed through February 10.

Registration fee is \$30 (\$25 for students). This includes socials, coffee breaks and dinner. Paper and poster abstracts will be available at the registration table.

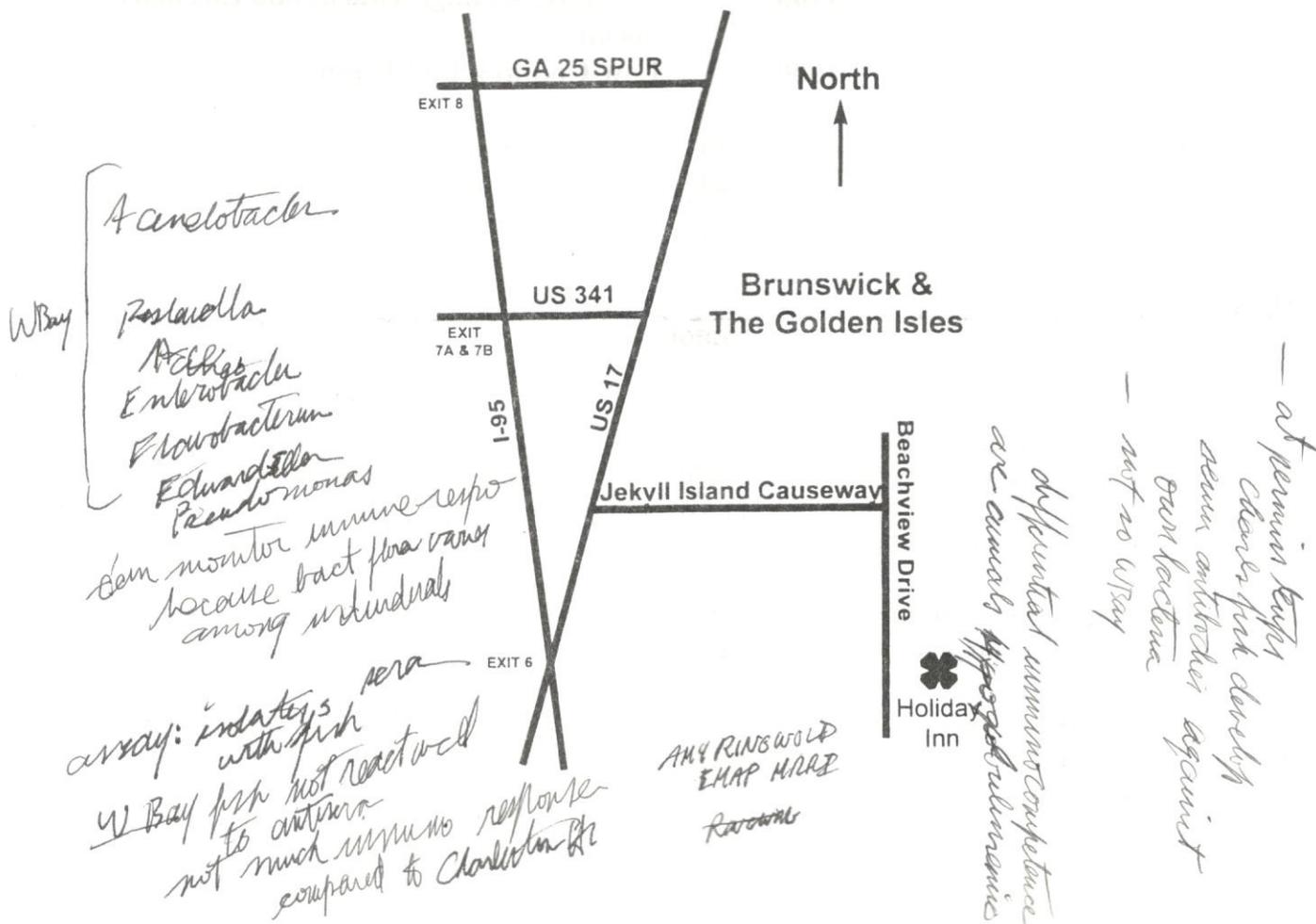
All oral papers will be limited to 15 minutes with 5 minutes for questions. Please prepare your talk so that you do not run over this allotted time. A one minute warning at 14 minutes will be given so you will know to wrap it up.

A few other meeting notes:

- * Many many thanks to Brad Williams, Local Arrangements Chair, for all his hard work!
- * We greatly acknowledge **HYDROLAB** for their financial support. Take a moment at the meeting to talk with Brian Wisehart, **HYDROLAB** representative.
- * Please note enclosed biographical sketches of SEERS nominees for President - Dr. Richard Bame and Dr. Fred Holland, and for Program Chair - Dr. Mary Moser and Dr. Keith Walters. Quite an impressive slate of candidates! Elections will be held during the business meeting.
- * Also during the business meeting, an award will be given for the best poster and the Patrick Adams Award will be presented to the student giving the best oral paper.

DIRECTIONS TO SEERS 1994 SPRING MEETING

Jekyll Island is seaward from Brunswick, Georgia. You can get to Brunswick on I-95 coming from the north or south. Coming from the north, you can also take scenic route US 17. Once you get on the island, you are there! Please see map below. Safe traveling.



POSTER SESSION
Thursday Night (1900-2200)

Reduction of organically-bound ferrous iron (Org.-Fe(II)) - A potential effect of coastal urbanization?

Kawaguchi, T., C.M. Aelion, M.H. Wahl, and H.N. McKellar. University of South Carolina, Columbia, SC.

Respiratory responses of grass shrimp, juvenile spot fish, and killifish to high CO₂.

Cochran, R.E., K.G. Krajniak, and L.E. Burnett. Grice Marine Lab, University of Charleston, Charleston, SC.

The physiological responses of the oyster *Crassostrea virginica* to infections by *Perkinsus marinus*.

Dwyer, J.J and L.E. Burnett. Grice Marine Lab, University of Charleston, Charleston, SC.

Aroclor 1254 body burden determination in two marine benthic copepods using a micro-extraction technique.

Wirth, E.F., G.T. Chandler, L.M. DiPinto, and T.F. Bidleman. University of South Carolina, Columbia, SC.

FRIDAY MORNING - PAPER SESSION I

Session Chair: Fred Holland (nominee)

0745 Welcome and Announcements

0800 **Natriuretic peptide receptors in the gill of the agnathan, *Myxine glutinosa*.**

*Toop, T. Zoology Department, University of Florida, Gainesville, FL.

0820 **Temporal expression of the *engrailed* gene product in *Fundulus heteroclitus*.**

*Ramcharan, S. and R. McCarthy. University of Charleston, Charleston, SC.

0840 **Evidence for a kinin-like peptide in the euryhaline elasmobranch, *Dasyatis sabina*.**

*Bain, C.A.¹, E.R. Lacy², and D.H. Miller³. ¹Grice Marine Lab, University of Charleston, and Departments of ²Cell Biology and ³Pharmacology, Medical University of South Carolina, Charleston, SC.

0900 **Serum antibody responses to indigenous bacteria in red drum (*Sciaenops ocellatus*) from Charleston Harbor and Winyah Bay.**

Larsen, S.C., L.K. Schwarz, ¹G.H.M. Riekerk, and K.G. Burnett. Marine Biomedical and Environmental Science, Medical University of South Carolina, and ¹Marine Resources Research Institute, Charleston, SC.

0920 **Host choice in the pea crab, *Pinnixa chaetoptera*.**

*Grove, M.W. and S.A. Woodin. University of South Carolina, Columbia, SC.

0940-1000 **COFFEE BREAK**

*Student Paper / Presenter

FRIDAY MORNING - PAPER SESSION II

Session Chair: Richard Dame (nominee)

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- 1000 Of gnats, nematodes, and nekton: Top-down, bottom-up regulation of salt marsh insect populations?
*Walters, K. Marine Institute, University of Georgia, Sapelo Island, GA.
- 1020 Transfer of an organophosphate pesticide from meiobenthos to fish: Effects on brain enzyme activity.
*DiPinto, L.M. and M.H. Fulton. University of South Carolina, Columbia, SC and National Marine Fisheries Laboratory, Charleston, SC.
- 1040 Effects of polycyclic aromatic hydrocarbons (PAHs) on the removal rate of meiobenthic copepods by juvenile spot (*Leiostomus xanthurus*).
*Marshall, K.R. Marine Science Program. University of South Carolina, Columbia, SC.
- 1100 Aerobic and anaerobic metabolic responses of juvenile striped mullet, *Mugil cephalus*, to changes in salinity within field tidal ranges.
Chipouras, E. Zoology Department, University of Florida, Gainesville, FL.
- 1120 Short-term fluctuations in salinity: Effects on planktonic invertebrate larvae.
*Richmond, C.E. and S.A. Woodin. University of South Carolina, Columbia, SC.

1140-1300 LUNCH

FRIDAY AFTERNOON - PAPER SESSION III

Session Chair: Clay Montaque

- 1300 The role of bivalve filter feeder material fluxes in estuarine ecosystems.
Dame, R.F. National Science Foundation, Arlington, VA and Coastal Carolina University, Myrtle Beach, SC.
- 1320 Oyster settlement patterns in coastal Georgia.
*O'Beirn, F.X., Heffernan, P.B. and R.L. Walker. Shellfish Research Laboratory Marine Extension Service, University of Georgia, Savannah, GA.
- 1340 Microbial ecology of estuarine sediments containing biogenic bromophenols.
*Steward, C.C. and C.R. Lovell. Department of Biological Sciences, University of South Carolina, Columbia, SC.
- 1400 How blue crabs (*Callinectes sapidus*) locate their prey in the field: Measurement and modelling of odor plumes in naturally turbulent flows.
*Finelli, C., D.S. Wethey, N.D. Pentcheff, and R.K. Zimmer-Faust. University of South Carolina, Columbia, SC.

1420 What do benthic communities tell us about environmental quality?

Holland, A.F., A. Ringwood, and G. Gilbert. Marine Resources Research Institute, Charleston, SC.

1440 Ecological Risk Assessment: Do we know what we are assessing?

Engel, D.W. and D. Hoss. National Marine Fisheries Service, Beaufort Laboratory, Beaufort, NC.

1500-1520 BREAK

FRIDAY AFTERNOON - PARER SESSION IV

Session Chair: Keith Walters (nominee)

1520 An introduction to the tides of Florida Bay.

Smith, N.P. Harbor Branch Oceanographic Institution, Fort Pierce, FL.

1540 Flow patterns in the vicinity of Florida Bay: An overview of available current meter data.

Pitts, P.A. Harbor Branch Oceanographic Institution, Fort Pierce, FL.

1600 Codistribution of total suspended solids, salinity and chlorophyll in Laguna de Terminos, Mexico.

*David, L.T.¹, B. Kjerfve¹, and C. Medeiros², ¹University of South Carolina, Columbia, SC and ²Universidade Federal de Pernambuco, Brazil.

1620 Suspended sediment flux at the North Inlet Salt Marsh, South Carolina.

*Vogel, R.L., B. Kjerfve, and L.R. Gardner. University of South Carolina, Columbia SC.

1640 Clay minerals distribution on the Amazon continental shelf.

Patchineelam, S.M.¹, A.G. Figueiredo², and C.A. Nittrouer³. ¹Department of Geological Sciences, University of South Carolina, Columbia, SC, ²Depto. de Geologia, Universidade Federal Fluminense, Niteroi, Brazil, and ³Marine Sciences Research Center, Stony Brook, NY.

1700 BUSINESS MEETING: Awards, Elections, and More!

1800 SOCIAL

1900 LOW COUNTRY BOIL DINNER

SATURDAY MORNING - PAPER SESSION I

Session Chair: Ed Caine

- 0800 Responses of tidal migratory animals to flooding characteristics of a brackish marsh.
Allen, D.A. Baruch Marine Lab, University of South Carolina, Georgetown SC.
- 0820 Detection of disturbance events in a long-term record of fish and shrimp at North Inlet, SC.
Ogburn-Matthews, V. and S.E. Hutchinson. Baruch Marine Lab, University of South Carolina, Georgetown, SC and Coastal Carolina College, Conway, SC.
- 0840 Ecology of juvenile Sphyraenids (barracudas) in a South Carolina marsh inlet.
SUBSTITUTE
P.J. HARRIS ~~Moore, R.H.~~, Coastal Carolina University, Conway, SC.
- 0900 Revegetation and faunal recovery in excavated *Spartina* saltmarsh.
Knott, D.M., A.S. Bury, E.L. Wenner, and P.H. Wendt. Marine Resources Research Institute, Charleston, SC.
- 0920 The North Inlet-Winyah Bay National Estuarine Research Reserve (NERR) Program: Evaluating human impact on two disparate southeastern estuaries.
Lewitus, A.J., D.M. Allen, P.D. Kenny, V. Ogburn-Matthews, and N.R. Rutherford. Baruch Marine Lab, University of South Carolina, Georgetown, SC.

0940-1000 BREAK

SATURDAY MORNING - PAPER SESSION II

Session Chair: Brad Williams

- 1000 A summary of MARMAP's research on gag, *Mycteroperca microlepis*, along the southeast coast of the US.
McGovern, J.C., G.R. Sedberry, M.R. Collins, and B.W. Stender. Marine Resources Research Institute, Charleston, SC.
- 1020 Status of vermilion snapper, red porgy, and black sea bass stocks in the South Atlantic Bight, 1983-1993.
McGovern, J.C., D.J. Machowski, and G.R. Sedberry. Marine Resources Research Institute, Charleston, SC.
- 1040 Summertime size frequency, distribution and relative abundance of shortnose and Atlantic sturgeon in the Ogeechee River estuary, Georgia.
Weber, W. and G. Rogers. Coastal Resources Division, Georgia Department of Natural Resources, Brunswick, GA.
- 1100 Red drum enhancement, Georgia's first experiment.
Woodward, S., Coastal Resources Division, Georgia Department of Natural Resources, Brunswick, GA.
- 1120 Biotelemetry of adult red drum (*Sciaenops ocellatus*) in Georgia.
Nicholson, N. and S. Jordon. Coastal Resources Division, Georgia Department of Natural Resources, Brunswick, GA.

NOMINEES FOR PRESIDENT-ELECT

Richard F. Dame

A native of South Carolina, Richard Dame was educated in biology and ecology at the College of Charleston (BS), University of North Carolina (MA), and University of South Carolina (PhD). A participant in the Baruch Institute since its inception, he has published over 60 peer reviewed articles and edited two books on marine and estuarine ecology. His early studies focused on the energy budgets of intertidal animals, particularly oysters. Gradually he became more involved in large scale estuarine ecosystem questions and was an active member of the North Inlet Outwelling team and later Bly Creek Ecosystem Study. With major funding from NSF for these and other studies, he has been at the forefront of investigating the role of bivalve filter feeders in coastal and estuarine waters, both in the USA and The Netherlands. In recognition of his building the Marine Science Program at Coastal Carolina University and his success in estuarine research, he was named South Carolina's first Palmetto Professor. He is now completing a two year appointment as Program Director of the Ecosystem Studies Program of the National Science Foundation.

Fred Holland

Education

- Ph.D., Marine Science, University of South Carolina, 1974
- M.S., Biology, University of South Carolina, 1972
- B.S., Pre-Medicine, The Citadel, 1964

Background

Dr. Holland is the Director of the Marine Resources Research Institute of the South Carolina Department of Natural Resources. In this position, he is responsible for the management and technical direction of research programs that provide the scientific knowledge required to protect, manage, and restore the state's estuarine and marine resources. The Institute is also responsible for development and evaluation of technology to support the state's growing aquaculture industry. Dr. Holland's technical experience includes the design and implementation of regional and national scale monitoring and research programs to assess the health of marine ecosystems and determine the effectiveness of pollution abatement, basic research on trophic dynamics and biological processes, and estuarine ecology. Most of his personal research has focused on determining the ecological role of benthic organisms in estuarine ecosystems. He recently co-authored a publication for the National Academy of Sciences entitled "Managing Troubled Waters" that reviewed the current status of marine and estuarine monitoring systems and strategies and developed recommendations for improving them. He also co-authored a manuscript detailing the role of filter feeding benthos in maintaining water quality of Chesapeake Bay.

NOMINEES FOR PROGRAM CHAIR

Mary L. Moser

Mary started attending SEERS meetings in 1983 as she began her research on the effects of salinity fluctuation on juvenile estuarine fish. During her graduate study at North Carolina State University she served as student representative to SEERS from 1984-1986. Upon completing her PhD in Zoology in 1987, Mary moved to Seattle, Washington to study the effects of changing abiotic conditions the estuarine phase of seaward migration in coho salmon smolts. Having broadened her estuarine horizons and missing warm shallow estuaries of the southeast, she returned to North Carolina in 1990 to continue study of migration behavior of anadromous fish in estuaries. This work included a description of the movements and distribution of the endangered short-nose sturgeon and increased involvement with protected species issues. Other interests have included juvenile grouper use of estuarine habitats, incidence of plastic ingestion by seabirds, *Sargassum*-associated fish communities and respiration of deep sea fishes. She currently teaches at the University of North Carolina at Wilmington and coordinates their joint PhD program with NC State University. Mary has benefitted greatly from being a SEERS member during the past decade and welcomes this opportunity to serve the society.

Keith Walters

Dr. Keith Walters is an Assistant Research Scientist with the University of Georgia Marine Institute and an Adjunct Professor in UGA's newly formed Marine Science Department. Keith received his undergraduate degree in Biology from the University of Oregon in 1974, his M.S. from Florida State University in 1977, and his Ph.D. from the University of South Florida in 1987. While in Florida, his research focused on the behavioral ecology of benthic and phytoplankton copepods in subtidal seagrass habitats. Before arriving at UGAMI in 1990, he was an Assistant Professor at Stetson University and a Senior Fulbright Research Fellow at CSIRO Marine Lab in Cleveland, Australia. In Australia, Keith conducted studies on the complex trophic interactions among benthic metazoans and microbes in an intertidal seagrass bed. Current research projects include studies of marine insect life history strategies, trophic and nontrophic interactions on marine snow, and salt marsh plant-animal interactions. His research has resulted in the publication of > 15 articles. Keith was a Member-at Large for SEERS (1990-92) and is a member of ERF, the Ecological Society of America, the Society of American Naturalists, and Sigma Xi.