

SouthEast Acoustics Consortium

The Southeast Regional Acoustics Consortium (SEAC) formed in 2012 to bring together academic institutions, federal and regional fisheries and environmental management agencies, and private industry that conduct acoustics research in US coastal environments from North Carolina to Texas and the US Caribbean. The Consortium members actively engage in collaborative research and partnerships to meet the following objectives:

- ✚ To Inventory activities, interest, expertise and assets related to acoustic science in the region.
- ✚ To inform regional managers and science leads on the state of the science and emerging acoustic technologies.
- ✚ To identify data gaps and management needs, and the potential to fill those gaps using acoustic technologies.
- ✚ To encourage education and training through academic and research opportunities.

The Consortium maintains a website (seac.fiu.edu) , an email listserv [seac\(at\)fiu.edu](mailto:seac(at)fiu.edu), and hosts workshops on alternate/even years.

Highlights of SEAC activities in 2015

- ✚ 2015 saw the continued growth of partnerships and sharing of assets and expertise to address technical problems, development of new applications, and identification of emerging regional management needs. For example, AUV-sonar studies are underway involving SEAC members at three federal laboratories to map seafloor hardbottom habitats and detect fishes, sea turtles and other marine organisms.



Figure 2 An Iver2-580 with Klein UUV3500 side scan sonar, underway during testing

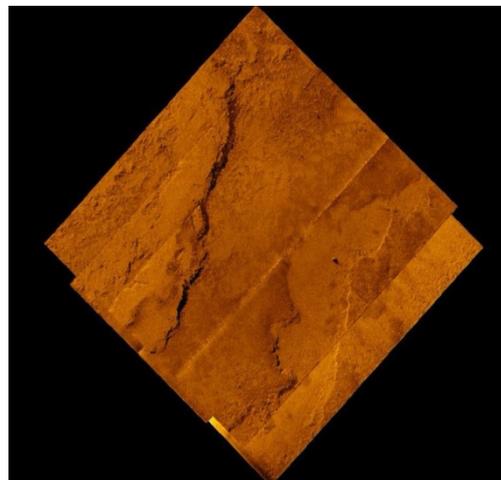


Figure 2 Mosaic of side scan data collected off Panama City Beach, FL

- SEAC-born collaborations encourage sharing of methodologies and analytical approaches to interpreting data. For example, SEAC members at Continental Shelf Associates, Inc. and collaborators have recently used imaging sonars to evaluate interactions between species of concern and power plant water intakes.

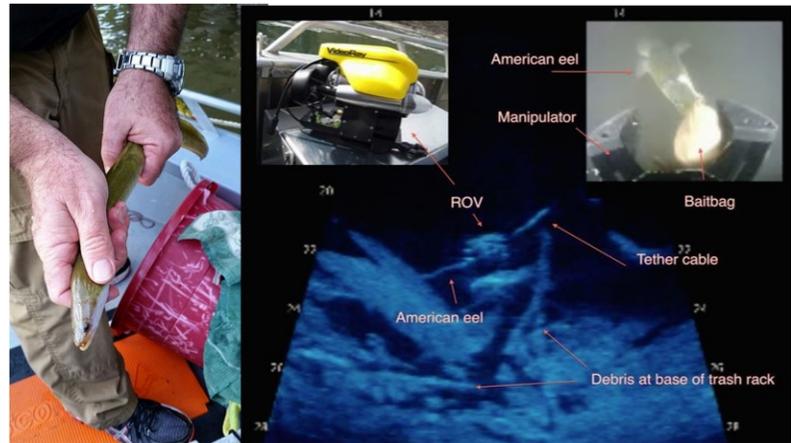


Figure 3 Imaging sonar and ROV in use on a fish impingement and project

- Growing seafloor mapping and fishery survey programs in the Gulf of Mexico by the Florida Institute of Oceanography benefited from networking and partnerships initiated through SEAC workshops. Consultation between organizations and agencies ensured high-quality and common data standards.
- Partnerships between the NOAA National Centers for Environmental Information water column sonar data archive team, agency scientists, and academic institutions in the region grew “immensely through our participation in SEAC workshops.” These partnerships result in public accessibility to data from water column sonar surveys, searchable by instrument, institution, or research program.



Figure 4 Page view of the NCEI Water Column Sonar Data viewer

- Acoustic data holdings at the Florida Fish and Wildlife Conservation Commission (FWC) helped university partners identify essential fish habitat with an AUV in previously unsurveyed Gulf of Mexico areas. The FWC is also completing benthic habitat maps for the Florida Reef Tract, incorporating all known acoustic information within the region.

- ✚ Cruise participation by undergraduate/post graduate students continues to be an important mission of SEAC. 2015 witnessed several opportunities for students to join NOAA and partner research cruises involving acoustic technologies
- ✚ SEAC members and a 2012 SEAC Workshop keynote speaker contributed to a practical, international guide on the calibration of acoustic instruments.
Demer, D.A., Berger, L., Bernasconi, M., Bethke, E., Boswell, K., Chu, D., Domokos, R., et al. 2015. Calibration of acoustic instruments. ICES Cooperative Research Report No.326. 133 pp. [Link](#).

Save-The-Date: Third Biennial SEAC Workshop and Forum
Saint Petersburg, FL
22-24 March 2016

Following the success of the SEAC workshops at Florida International University in March 2012 and Gulf Coast State College in April 2014, the SEAC planning team is excited to focus on a meeting in the scientifically active St. Petersburg area. As with previous workshops, we are striving for a registration-free meeting and seeking contributions from agencies and partners to defray the cost to participants. Efforts to schedule a venue and secure meeting support at the Florida Fish and Wildlife Research Institute have been successful. Invitations and calls for presentations will be sent in early 2016. The workshop will include formal presentations and informal discussion and demonstration of emerging sonar technologies. Coordinated training sessions for acoustic data processing by Echoview and other vendors are also being discussed (please contact the planning team with interest).



Figure 5 Group picture of SEAC 2014 workshop participants, Panama City, FL