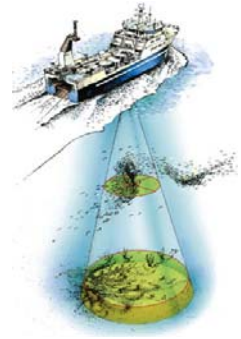


Developing Acoustic Methods for Surveying Groundfish Ocean Trust Woods Hole Oceanographic Institution Summary

The Alliance for Coastal Technologies (ACT) Workshop “Developing Acoustic Methods for Surveying Groundfish” was convened by Woods Hole Oceanographic Institution and Ocean Trust in Rockport, ME, 26-28 February 2003, with sponsorship by the Gulf of Maine Ocean Observing System. The goals of the workshop were (1) to advance understanding of operational survey applications of acoustics for estimating fish stock abundance, (2) to gain acceptance and support for the broad application of acoustic survey techniques in coastal waters, and (3) to define specific mechanisms, funding requirements, and research priorities to foster the development and application of acoustic methods to benefit coastal fisheries. *Click on the Ship for the full workshop report.*



To achieve these goals, representatives of four different activities were invited to participate. These included researchers with working experience in operational acoustic surveying techniques, fishery managers, fishermen, and sonar and sonar-related manufacturers. Working groups were convened within the workshop to address the use of acoustics in groundfish stock assessment, the application of acoustics, limitations of acoustic methods, and remedies for these. Four general recommendations were made:

- Further develop acoustic methods for application to groundfish surveying.
- Encourage education and training in fisheries acoustic methods.
- Examine existing data including acoustic, physical capture and fishery derived data for new or changing applications of acoustic surveying to groundfish.
- Prepare specifications for the sonar and sonar-related manufacturers to adapt or develop commercial fishery echo sounder systems to enable commercial fishing vessels to contribute useful quantitative data on groundfish.

Three additional recommendations were directed to ACT:

- Increase awareness of the potential of acoustic methods for groundfish surveying.
- Disseminate current information on acoustic methods for surveying groundfish and keep the community informed through a website.
- Form a subcommittee to draft performance specifications for acoustic systems to be used in groundfish surveying.

In summary, the participants at the workshop agreed that acoustic methods are credible sources of information for groundfish stock assessments. At the same time, the methods can provide much new information about groundfish biology: geographical distribution, behavior, movements, and association with bottom habitat types and other organisms. There are resources available nationally for developing acoustic methods. These consist of on-going acoustic survey programs at NMFS, research vessels carrying scientific echo sounders, echo-data postprocessing systems in routine use, fishing vessels that can serve as platforms of opportunity, formal programs for engaging fishermen in research, acoustic calibration techniques and facilities, research and operational expertise, sonar manufacturers, and the Alliance for Coastal Technologies. Through partnerships of the research community, fishery managers, fishermen and sonar and sonar-related manufacturers, acoustic methods can be refined and adapted for much wider use in surveying groundfish resources.