



NOAA FISHERIES SERVICE



The Northeast Fisheries Science Center conducts ecosystem-based research and assessments of living marine resources, with a focus on the Northeast Shelf, to promote the recovery and long-term sustainability of these resources, and to generate social and economic opportunities and benefits from their use.



Electronic Monitoring Pilot Study

Project Summary The Fisheries Sampling Branch (FSB) of the Northeast Fisheries Science Center is initiating a pilot program in association with Archipelago Marine Research Ltd., to test the applicability of electronic monitoring system (EMS) technology to collect catch and fishing effort data on board commercial vessels. Results from the study will determine if EMS is a suitable alternative and more cost effective option to human observers.

Why Should Fishermen Participate?

- If EMS is found to be an acceptable monitoring alternative, the industry may be able to elect for EMS monitoring coverage over human monitoring
- EMS technology may provide a more detailed account of catch and therefore a more accurate portrayal of discarding events on a consistent basis
- EMS has provided accurate, timely, and high quality data in a variety of fisheries throughout the world with minimal invasion of privacy and inconvenience
- EMS could be useful for verifying catch (chain of custody), illustrating fish quality, and demonstrating sustainable fishing practices
- EMS may provide a method to verify self-reported fishermen data
- Compensation will be provided to participating fishermen

How EMS Works, What it Records, When it Records?

- EMS consists of 2-4 cameras, a control box, a user-interface (monitor), GPS receiver, and two sensors (hydraulic and a rotation sensor)
- Cameras record when the sensors are triggered by the drum rotation or hydraulic pressure transducer and **only records fishing activity**
- Camera views are focused only on the areas of the deck where catch handling occurs (i.e., sorting table, hauling station, checkpern, etc.)
- Cameras are set up to turn on at the beginning of each fishing event and turn off following the event and all recording is visible via the monitor
- The system does **NOT** record audio

How is the Data Going to be Used?

- Data is stored on a hard drive inside the control box (hard drives can hold up to a month's worth of data) and is treated as confidential observer data
- Hard drives are removed and reviewed by Archipelago and FSB staff and will be compared to other catch reporting sources (VTR, observer, and dealer data) to test the efficiency of EMS
- If found to be a suitable monitoring tool, study results will help draft possible minimal standards for consideration in the development of 2012 sector monitoring plans

For more information please contact Amy Van Atten at (508) 495-2266 or email Amy.Van.Atten@noaa.gov.