

2004 “CORMP in the Classroom” Summer Workshop

As part of the CORMP Summer Workshop for Teachers, participants were treated to a day on the R/V Cape Fear. Here, teachers learned more about oceanographic data collection, scientific research diving, and general operations of the Coastal Ocean Research and Monitoring Program. On board, the teachers were able to observe as well as participate alongside CORMP researchers and the crew of the R/V Cape Fear. It was a successful day for all and provided a springboard for discussions of how to incorporate CORMP collected data into their classroom curricula.



The R/V Cape Fear serves as the central vessel for CORMP research operations. For the workshop, teachers observed and assisted CORMP research technicians in oceanographic data collection duties at several sites out to 30 miles offshore.



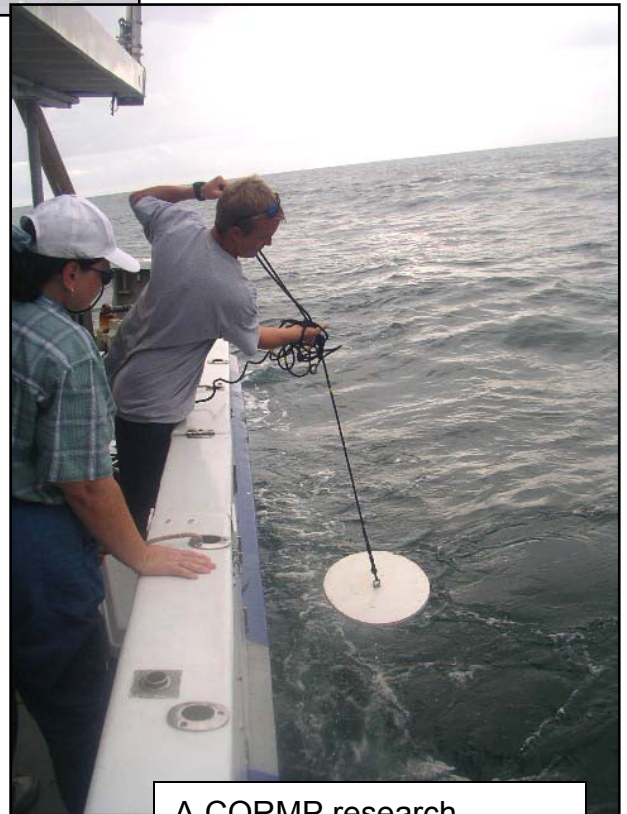
Jay Souza, a CORMP research technician, demonstrates the collection of light flux data to interested participants.

Teachers observed CORMP dive operations in action. As part of the CORMP sampling cruise, research divers serviced oceanographic equipment and collected benthic algae samples and surface sediment samples at several offshore locations.

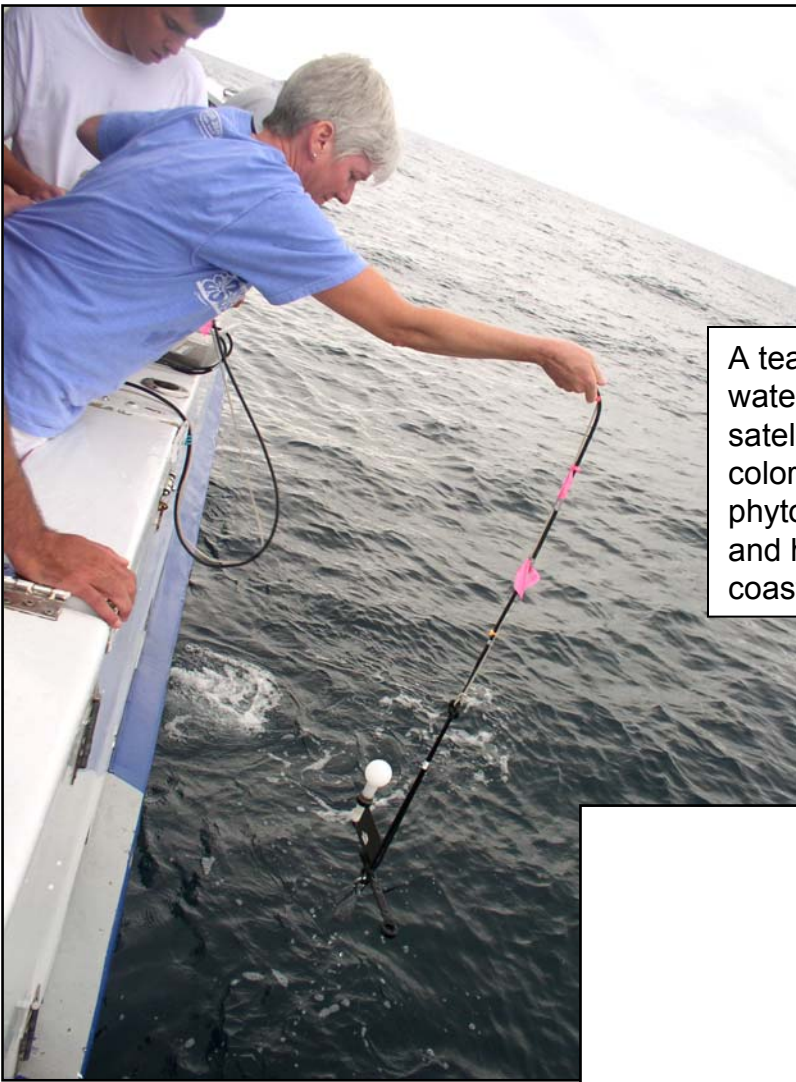


Teachers receive a lesson in research diving. Here a CORMP research diver explains the tools used to service oceanographic instrumentation moored on the ocean floor.

Teachers try their hand at deploying the secchi disk as a summer storm looms in the background.



A CORMP research technician demonstrates the classic method for determining water clarity using a secchi disk.



A teacher samples light flux through the water column for use in calibrating satellite derived ocean water color. Water color provides information on phytoplankton living in the water column and helps biologists better understand the coastal ocean ecosystem.



Teachers watch and learn as a CORMP research technician obtains water samples off the side of the R/V Cape Fear.



The pilothouse of the R/V Cape Fear contains computing facilities that allows researchers to control and monitor tethered oceanographic equipment as it is lowered through the water column. Teachers were able to view data collection on the screens in real-time.



CORMP research technician Dave Wells filters water samples obtained from a carousel water sampler. This allows researchers to characterize the salinity, temperature, and nutrient content of the water at different depths.

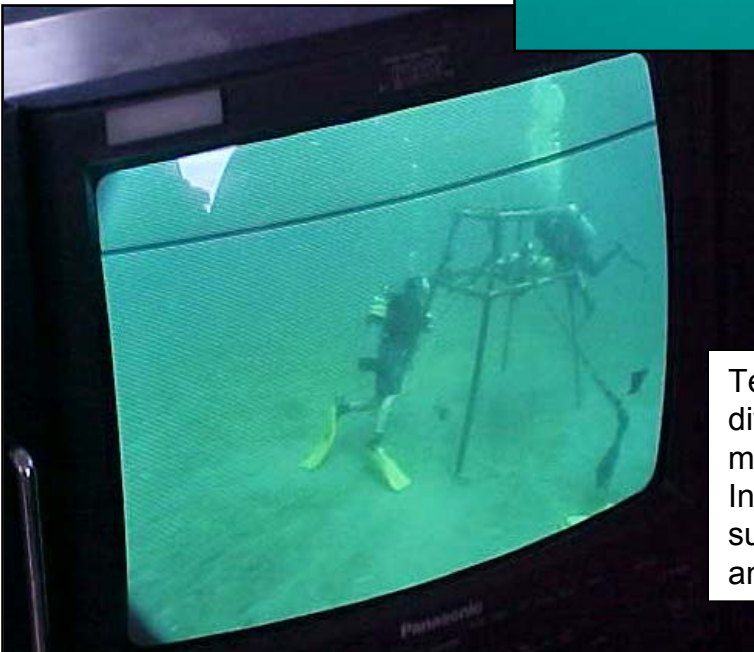
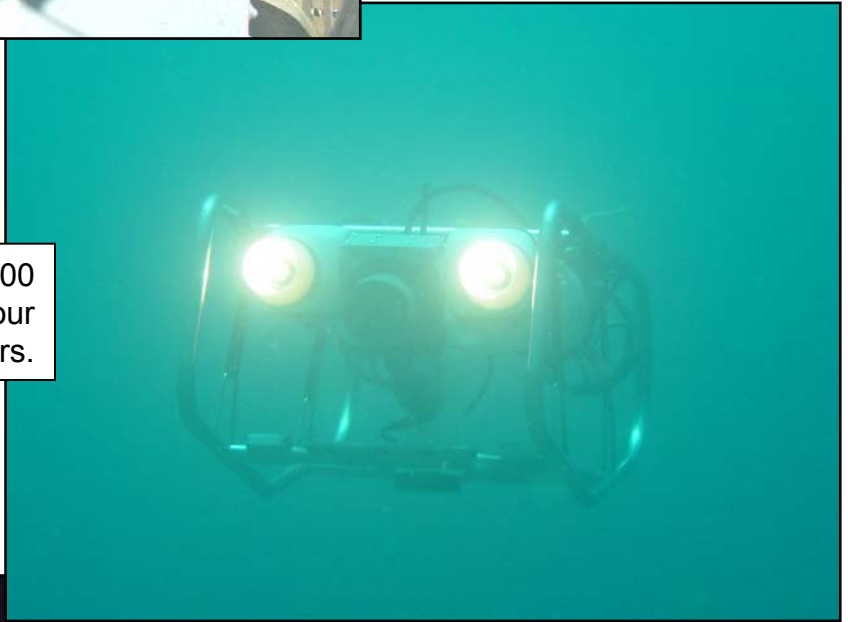


The CTD Rosette is outfitted with a suite of oceanographic sensors to directly sample or derive measures of salinity, temperature, dissolved oxygen, and depth. Teachers observed these measures being obtained in real-time via a computer monitor in the pilothouse of the R/V Cape Fear. The Rosette doubles as the carousel for obtaining water samples.



A remotely operate vehicle (ROV) tethered to the boat allowed teachers to follow underwater dive operations.

A snapshot of the Phantom 300 ROV as seen by one of our research divers.



Teachers watched as CORMP research divers serviced one of the subsurface moorings located in Onslow Bay. Instruments on the moorings collect data such as currents, waves, fluorescence and turbidity.



Teachers tested their driving skills as they all had the opportunity to operate an ROV videoing dive operations.



Glen Taylor, field operations manager with the National Underwater Research Center (NURC), instructed teachers in the art of ROV operation.