

TECHNICAL DIVING

- Safe access to ocean frontiers beyond the reach of compressed air and nitrox open-circuit Scuba
- Diving techniques can be applied to many operational scenarios
- Operate in a wide variety of surface and bottom sea conditions
- Dive equipment is easily transported to research sites and deployed on vessels of opportunity

October - 2010

Ascent Line

NEWSLETTER FOR THE NOAA C.I.O.E.R.T.

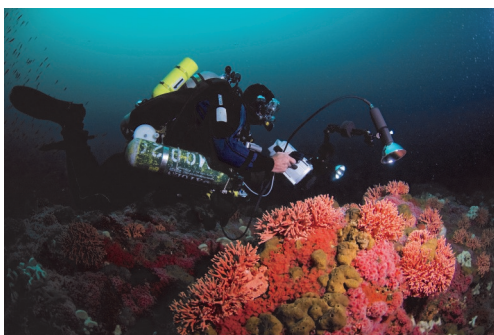
Advanced diving tools and technologies for the marine science community

Our continuing mission will be to provide marine scientists with the highest quality and most innovative diving project support possible for accomplishing undersea research and exploration. We will continue to offer an unparalleled approach to project management, field support, job safety and the completion of your research goals and objectives. Our staff will continue to facilitate a suite of “state of the art” research tools and diving equipment available for your use, combing the necessary expertise to assist you in achieving productive field research. With 20 years of experience in NOAA based undersea research programs, we will strive to produce the finest science results and associated products for our customers at a considerable cost savings.



Cordell Bank is teaming with life!
(Photo: Joe Hoyt/CBNMS/NOAA)

News



NOAA Expedition diver Russ Green explores the deep reef on Cordell Bank (Photo: Joe Hoyt/CBNMS/NOAA)

Dive Mission to Re-Discover Cordell Bank National Marine Sanctuary

After 30 years, a research diving expedition on Cordell Bank took place October 5-12th 2010. Cordell Bank National Marine Sanctuary staff, ONMS technical divers, University of California-Davis Bodega Marine Lab, California Academy of Sciences, Cordell Expeditions, University of North Carolina-Wilmington, NOAA’s Cooperative Institute for Ocean Exploration, Research and Technology (CIOERT) collaborated to put Technical SCUBA divers on Cordell Bank for the first time since original explorations took place in 1978. Divers collected samples to be archived and identified by the California Academy of Sciences, photos/videos documented and characterized the habitat (and will be compared to photos/video from 30 years ago). The expedition was documented and details can be seen here: <http://sanctuaries.noaa.gov/missions/2010reefcrest/welcome.html>

Featured Project

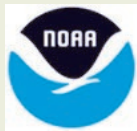
Lionfish Study continues for NOAA Scientists

NOAA NOS AND NMFS Divers completed 5 sea-days on the NOAA Ship *NANCY FOSTER* during September and were able to complete underwater surveys at 10 stations across the Atlantic continental shelf. The dive team retrieved 9 of the 10 temperature sensors, at a 90% recovery rate. With this data the scientists now have evidence of the cold bottom water temperatures controlling lionfish distributions, as the lionfish have disappeared from all the inshore sites less than 110ft of water (including 210 rock study site). However, offshore there appear to be similar or greater densities of lionfish assemblages. NOAA Scientists now have 5 years of fish density data (algae, habitat data included) that will be incorporated into upcoming manuscripts examining the influence of temperature on not only lionfish, but the entire fish community within the Onslow Bay region off the North Carolina coast. There will also be upcoming manuscripts to describe the algal and other habitat community components as well. The data will be very important both for describing potential community changes due to climate change and also for better understanding the temperature impacts on lionfish distribution and their ultimate impact to NC hard bottom communities.

— Paula Whitfield, NOS, Beaufort, NC.

ADT supports technical scientific dives to 330 fsw, including;

- On-site Dive Supervision
- Dive Training Programs
- Equipment Support
- Medical Response Teams
- Project Management
- Mobile Dive Facilities
- In-water Diver Support



NOAA Diving Program (NDP) authorized and approved dive training and operational support facility



Advanced Diving Technology Program
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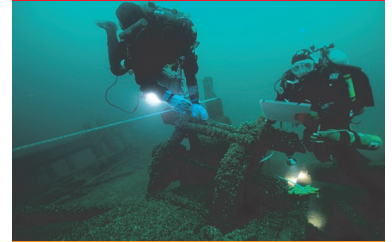
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NOAA's Cooperative Institute for Ocean Exploration, Research and Technology (CIOERT) at the UNCW Center for Marine Science

<http://cioert.org/>

Emerging scientific diving technologies and procedures



TECHNICAL DIVING

“The use of advanced and specialized equipment and techniques to enable the diver to gain access to depth, dive time and specific underwater environments more safely than might otherwise be possible.” (Palmer, 1994)

