



**NOAA UNDERSEA RESEARCH CENTER
UNIVERSITY OF NORTH CAROLINA - WILMINGTON**



SOUTHEAST & GULF OF MEXICO REGIONAL (SEGM) CENTER FOR NOAA'S UNDERSEA RESEARCH PROGRAM

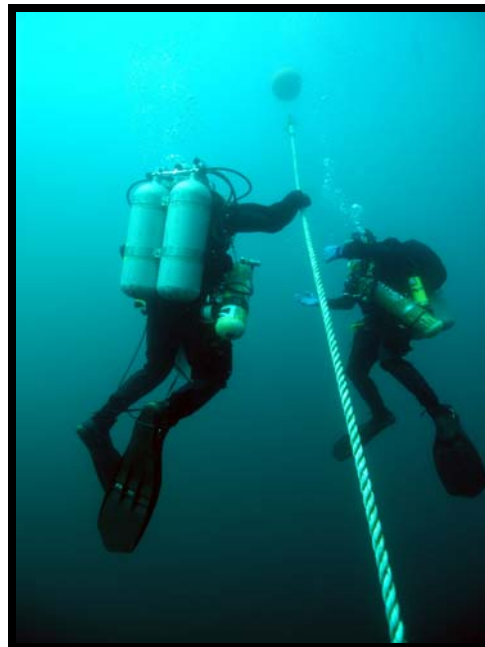
NURC/SEGM CAPABILITIES: NITROX SCUBA & TECHNICAL DIVING

The center specializes in providing advanced wet diving technology to the scientific community including training, a complete suite of highly maintained diving equipment and support systems, operational coordination and supervision, and well-trained medical personnel. This allows scientist to concentrate on their research instead of day-to-day dive operations for maximum effectiveness. Since 1995, the center has supported almost 4,000 participants, over 64,000 dives, and nearly of 550 undersea research projects. Center operations staff oversees an average of 6,646 dives per year. All other NOAA programs combined conducted a total of 13,427 in 2004 (<http://www.ndc.noaa.gov/pdfs/04FinalReport.pdf>). Within the American Academy of Underwater Sciences (AAUS), only the Smithsonian Institution and all its field stations, and the Epcot Living Seas exhibition at Disney World (aquarium dives), rival the number of dives supported by NURC at UNCW.

Enriched Air Nitrox: Nitrox contains more oxygen and less nitrogen than air. Therefore, less nitrogen accumulates in tissues during diving and bottom time can be increased without increasing risk of decompression sickness ("the bends"). Through use of proper tables, nitrox techniques can increase a diver's bottom time at 29-32 m by as much as 200 percent over ambient air diving during a 12 hour work day. The center has been a pioneer in supporting scientific nitrox diving since 1987.



NOAA technical diver conducts research on invasive lion fish off of North Carolina.



Technical divers decompress after conducting research in Thunder Bay Marine Sanctuary.

Photos by Doug Kesling

Advanced Scientific Technical Diving: Since 1999, the center has conducted hundreds of dives to as deep as 95 meters using multiple breathing mixtures (including helium) and in-water decompression. The center is the only NOAA entity routinely supporting deep scuba. Projects that the center has supported and supervised include: USS Monitor National Marine Sanctuary, Thunder Bay Marine Sanctuary, the Madison/Swanson Marine Protected Area, lionfish research off of North Carolina, and many missions in the Florida Keys National Marine Sanctuary.

FOR MORE INFORMATION: SEGM SCUBA and Technical Diving - Lance Horn, SEGM Operations Director (hornl@uncw.edu, 910-962-2443); SEGM Science programs - Tom Potts, Associate Director (pottst@uncw.edu, 910-962-2442)