Graduate School of Oceanography - OCG 695
April 21,2008, 3:30 PM, Corless Auditorium
Seminar Abstract
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Recent phytoplankton trends in Narragansett Bay

Phytoplankton play a vital role in carbon and energy fixation and in biogeochemical cycling through their position at the base of the aquatic food chain. Narragansett Bay is a particularly important and exciting location in which to study phytoplankton dynamics for a variety of reasons. The location of the Bay just south of Cape Cod places it at the border of historically northern, boreal species and warmer, mid-Atlantic species. Changes in species composition and abundance due to temperature shifts are more likely to be observed at this transition zone. Fortunately, Narragansett Bay has been the site of regular phytoplankton monitoring which began roughly fifty years ago and continues to the present day. This virtually continuous record of weekly or bi-weekly observations of phytoplankton species data coupled with related physical, chemical, and biological parameters, is unique in America, if not the world. Furthermore, the record coincides with a warming trend in water temperatures (~ 1.2 °C since 1970) that makes these data particularly valuable from both ecological and biochemical perspectives. Despite the importance of these data, there has not been a multi-species study of bay phytoplankton using information collected later than 1990. Building on earlier analyses by D. Pratt, T. Smayda, D. Borkman, and others, I plan to analyze the GSO Plankton Dataset that covers the period from 1999 through 2007 to see how phytoplankton phenology and community composition may have changed with the continual warming of the bay.

Laura Windecker received an A.B. in Physics and Marine Science from Bowdoin College in 2003. She entered GSO in the fall of 2006. Her major professor is Scott Nixon.

Please rank the abstract and presentation in areas A-G using the scale below:

0=Decline to Evaluate 2=Above Expected Standards 4=Below Expected Standards
1=Outstanding 3=Acceptable 5=Poor

A. Quality of Abstract _____
B. Preparation of Material _____
C. Timing _____
D. Scientific Content _____
E. Quality of Verbal Communications _____
F. Adequacy of Visual Aids _____
G. Ability to Handle Questions During Discussion _____

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