



Name	Does the Phenology of Plankton Blooms Affect the Recruitment of Spring Spawning Fishes on the Northeast Shelf?
Description	<p>From the project proposal: Objectives:</p> <ol style="list-style-type: none"> <li>1. Develop indices of phytoplankton bloom timing, intensity, duration, and areal extent for the U.S. Northeast Shelf Ecosystem. Investigate compound indices using temperature data associated with bloom conditions.</li> <li>2. Evaluate the temporal and spatial resolution needed to characterize regional blooms.</li> <li>3. Compare several algorithms/methods used to quantify bloom dynamics</li> <li>4. Combine bloom indices with stock trend data from assessments to develop descriptive and predictive models.</li> <li>5. Develop system production indices for integrated ecosystem assessments.</li> </ol> <p>Benefits</p> <p>These data and analyses will help forward the goal of the agency to provide advice on fisheries using an ecosystem management approach. Mechanistic explanations of recruitment for species and stock groups will be useful to Fishery Management Councils in evaluating past management practices and preparing the fisheries for anticipated changes that will affect their regulation and strategies of capitalization and employment. Understanding better the effects of environment on size-at-age and the cascading effects on reproduction, may be used to adapt advice and management measures to protect spawning fish and thus insure the highest possible reproductive output of the stock. Advice on catch and effort levels will benefit from improved model fits that will reduce the risks associated with measures aimed at rebuilding depleted resources and protecting endangered species, especially those affected by fisheries interactions.</p>
Category	- Climate-change Specific Projects
Sector	- Managed Ecosystems - Natural Ecosystems
Focus Area	- Sustainability of Marine Ecosystems
Region	- National - Regional Or State -- New England
Status	- Ongoing
Lead Agencies	NOAA National Marine Fisheries Service (NMFS)
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