



NExUS Ongoing Projects and Activities Sun Dec 16 06:30:35 EST 2018

Name	Predicting Impacts of Ocean Acidification on Northeast US Shellfish
Description	<p>From project description: "Two shellfish species are being studied: hard clams (<i>Mercenaria mercenaria</i>) and bay scallops (<i>Argopecten irradians</i>). These species are selected because they are commercially valuable, are especially vulnerable to ocean acidification, have different life histories, and show different sensitivities to ocean acidification. Population models will consider the survival, growth and reproduction of each species under various ocean acidification conditions. Field surveys will be performed to measure ocean chemistry at different sites within Rhode Island and New York estuaries. This data will be combined with 100-yr carbon emission scenarios to assess impacts of ocean acidification. By modeling two species with contrasting life histories and ocean acidification susceptibilities combined with comprehensive mapping of water chemistry in estuaries, the resulting predictions will enhance development of adaptation and management plans for these and other bivalve fisheries, provide guidance on sustainable harvest levels, and identify regions of estuaries that are most vulnerable to extremes in acidification. All information will be disseminated to regional shellfish and water quality managers through a workshop format.</p>
Sector	- Managed Ecosystems
Focus Area	- Sustainability of Marine Ecosystems
Region	- Regional Or State -- New England -- Mid-Atlantic
Status	- Ongoing
Timelines	2012-2015
Lead Agencies	NOAA National Centers for Coastal Ocean Science (NCCOS) Regional Ecosystem Prediction Program (REPP), NOAA Ocean Acidification Program
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