# Collaborating with Fishing Communities to Adapt: Codeveloping actionable strategies for the Atlantic Sea Scallop fishery

Presenter: Robert Murphy
Sea Scallop RSA Share Day 2026

The Atlantic sea scallop fishery generates over $500 million annually, making it the second-highest revenue fishery in the United States and the largest wild scallop fishery worldwide. The regional economic importance of calcifiers such as sea scallops has increased over recent decades, heightening community dependence on this resource. However, scallop habitat is changing as New England waters warm, freshen, and experience declining oxygen and pH. Ocean acidification alone is projected to reduce sea scallop biomass and growth rates by the end of the century under a high emission scenario with spatially variability in the magnitude of impact. These changes are likely shifting scallop landings north on the Northeast U.S. Shelf with impacts for coastal communities that depend on this fishery for livelihoods, culture, and well-being. The resilience of fishing communities to warming and ocean acidification requires embracing new tools, approaches, and flexibility**.** Operationalizing resilience requires responsive as well as adaptive management practices. In response, we present spatially explicit seasonal forecasts of ocean conditions across scallop fishing zones to inform and support management decisions. We are currently working to codevelop forecast products for use by the fishing industry and are planning to run focus groups and interviews to better understand how this tool and various adaptation strategies could improve fishery resilience.