RACE Seminar Series

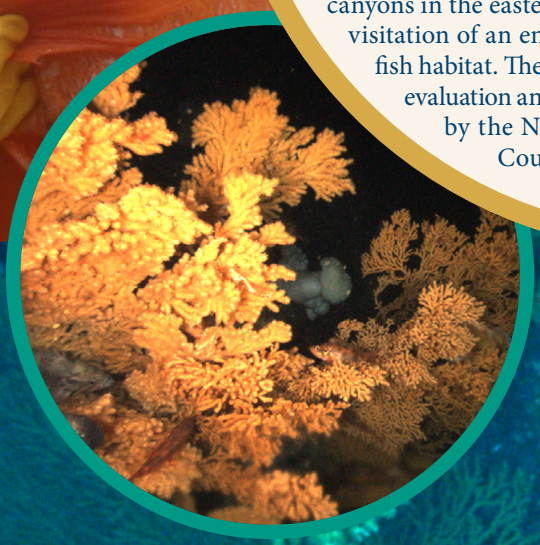
April 1, 2014, 10–11 a.m.

Traynor Seminar Room

Bldg 4, Rm 2076

NOAA FISHERIES

Chris Rooper

Development of Predictive Maps of Coral in Alaska and Their Use in Ecosystem Management

Deep-sea coral and sponge ecosystems are widespread throughout most of Alaska's marine waters. Deep-sea coral and sponge communities are associated with many different species of fishes and invertebrates in Alaska and can be vulnerable to the effects of commercial fishing activities and climate change. The challenges facing management of deep-sea coral and sponge in Alaska begin with the lack of knowledge of where these organisms occur in high abundance and diversity. Because of the size and scope of Alaska's continental shelf and slope, the vast majority of the area has not been surveyed for deep-sea coral and sponge abundance. In 2011, the Alaska Fisheries Science Center initiated a three-year field research program funded by the Deep Sea Research and Technology Program in Alaska to better understand the location, distribution, ecosystem role, and status of deep-sea coral and sponge habitats. One of the diverse array of projects that was initiated will produce distribution maps for deep-sea coral and sponge in all regions of Alaska. This project and the associated fieldwork groundtruthing the predictions will be presented. Additionally, since 2012 a number of issues surrounding corals and sponges in Alaska have arisen, including a petition to close two submarine canyons in the eastern Bering Sea to commercial fishing, and a re-visitation of an environmental impact statement for essential fish habitat. The predictive maps have proved useful in the evaluation and discussion of these management issues by the North Pacific Fishery Management Council and the Alaska Regional Office of NMFS.