

Essential Fish Habitat project status report

Reporting date: August 11, 2008

Project number: 2008-07

Title: Rockfish abundance and diurnal habitat associations on isolated rocky habitat in the eastern Bering Sea

PIs: Gerald R. Hoff, Chris Rooper

Funding year: 2008

Funding amount: \$90,850

Status: Complete Incomplete, on schedule Incomplete, behind schedule

Planned completion date if incomplete: June 2009

Reporting: Have the project results been reported? No
If yes, where were the results reported?

Results: What is the most important result of the study?

During July 11-17 of 2008 a study was conducted aboard the FV/*Vesteraalen* on a unique rocky ridge habitat in the southern Zhemchug Canyon region. Acoustic data for relative biomass estimates as well as bottom topography and general substrate types were collected using an EK60 single beam (38 kHz) hydroacoustic system. A stereo-video drop camera system was used to collect data on fish and invertebrate species and habitat associations at 15 transects. EK60 transects conducted during daylight and nighttime hours along the same tracklines showed rockfish in greater abundance in the water column during daylight hours than night. Video from camera drops showed rockfish to be predominantly benthic during night, when fish were observed lying directly on the bottom and not visible using hydroacoustic methods. During daylight hours fish were demersal to pelagic forming large active schools above the bottom with smaller fishes present on bottom throughout the daytime.

Hydroacoustic and video data showed the rocky ridges to be highly productive as rockfish habitat and the ridges possessed an abundance of HAPC indicating species such as coral and sponges, unlike the surrounding eastern Bering Sea slope habitat. Analyses of the acoustic data will be conducted during the fall and winter of FY09, and will produce relative biomass estimates for rockfish and substrate maps. The video analyses will produce species identifications, length frequencies (using the stereo video capabilities) and habitat associations for rockfish species.