

Title: Crab Research**Contact: Robert Foy****Overview**

The Alaska Fisheries Science Center (AFSC) and the Bering Sea Fisheries Research Foundation (BSFRF) have been working cooperatively on research relative to Bering Sea king, snow, and Tanner crab surveys, biology, and assessment since 2004. These cooperative projects have focused on the evaluation of alternative survey methodology for Bristol Bay red king crab, the experimental determination of the trawl efficiency of the AFSC's Bering Sea survey trawl, the tagging of both snow crab and red king crab to determine movements of these stocks within the survey area, the assessment of red king crab in the nearshore waters of Bristol Bay, the estimate of handling mortality aboard commercial snow crab vessels, and the determination of snow and Tanner crab growth increments in the field and in the laboratory. Research projects are chosen based on level of importance for the survey and assessment of crab stocks in the eastern Bering Sea. This research is a cooperative effort not only with the commercial industry but also with other agencies cooperatively managing these crab stocks. The Alaska Board of Fisheries and the North Pacific Fishery Management Council jointly manage the king, Tanner, and snow crab fisheries in the Eastern Bering Sea. Implementation of the management decisions is then the responsibility of the Alaska Department of Fish and Game (ADFG) in consultation with NOAA Fisheries Service's Alaska Regional Office and the Alaska Fisheries Science Center (AFSC). In this partnership, the AFSC is responsible for providing biomass estimates from the annual eastern Bering Sea bottom trawl survey for these stocks. AFSC and ADF&G stock assessment modelers then utilize these biomass estimates along with catch data and other biological information to determine the status of the stock and predict the overfishing limit (OFL), allowable biological catch (ABC), and total allowable catch (TAC).

Research Description

The 2012 plans for cooperative research with the BSFRF have yet to be finalized pending the direction from the October 2012 North Pacific Fishery Management Council meeting. Research priorities for eastern Bering Sea crab will be defined once the 2012 survey results are finalized and once assessment recommendations from the North Pacific Fishery Management Council's Crab Plan Team and Science and Statistical Committee identify needed cooperative research for 2012. Staff from the AFSC and the BSFRF met and preliminarily identified research priorities associated with net selectivity, survey methodology, additional survey areas, growth, handling mortality, and natural mortality. In late October final projects for 2012/13 will be identified that can be accomplished cooperatively in 2012/13. This proposal is therefore a placeholder for the next phase of this cooperative research. It is anticipated that the 2012 research will involve a focus on Bristol Bay red king crab and Tanner crab stocks. The proposed budget represents what has been provided in recent years to support this research and the anticipated needs for 2012.

Budget: \$130,000 (depending on actual project selected for 2013 work this budget may be able to be reduced.)