

Amendment 11
to the Fishery Management Plan for the
Bering Sea/Aleutian Islands King and Tanner Crabs.

(1) in Section 6.0 entitled "Specification of Maximum Sustainable Yield, Optimum Yield, Minimum Stock Size Thresholds, Overfishing Levels, Annual Harvest, and Annual Processing," add the following as subsection 6.1 "Rebuilding Overfished Fisheries."

6.1 Rebuilding Overfished Fisheries

6.1.1 Bering Sea Tanner (*Chionoecetes bairdi*) crab

NMFS declared Bering Sea Tanner crab overfished on March 3, 1999, because the spawning biomass estimated from the NMFS trawl survey was below the minimum stock size threshold of 94.8 million pounds specified in this FMP. The Council developed a rebuilding plan for the Tanner crab stock within one year from this date, as required by the Magnuson-Stevens Act in section 304(e). The rebuilding plan is sufficient to rebuild the stock to the Bmsy level, and the rebuilding time period satisfies the requirements of section 304(e)(4)(A) of the Magnuson-Stevens Act. The plan complies with the national standard guidelines at 50 CFR 600.310(e). The Council's rebuilding plan incorporates the harvest strategy developed by ADF&G and adopted by the Alaska Board of Fisheries. Section 8.0 of the FMP defers to the State of Alaska the authority to develop harvest strategies, with oversight by NMFS and the Council.

The rebuilding plan approved by the Council in October 1999 contains the following three components to improve the status of this stock: a harvest strategy, bycatch control measures, and habitat protection measures. The rebuilding plan is estimated to allow the Bering Sea Tanner crab stock to rebuild, with a 50% probability, to the Bmsy level in 10 years. The stock will be considered "rebuilt" when the stock reaches Bmsy in two consecutive years. The revised harvest strategy should result in more spawning biomass as more large male crab would be conserved and fewer juveniles and females would die due to discarding. This higher spawning biomass would be expected to produce strong year-classes when environmental conditions are favorable. Protection of habitat and reduction of bycatch will reduce mortality on juvenile crabs, thus allowing a higher percentage of each year-class to contribute to spawning (and future landings).

Harvest Strategy ADF&G has recently developed a stairstep harvest strategy for Tanner crabs, which was adopted by the Board in March 1999, and detailed in the ADF&G regional information report "Overview of Population Dynamics and Recommended Harvest Strategy for Tanner Crabs in the Eastern Bering Sea" (Zheng and Kruse 1999), which is appendix 2 in the Environmental Assessment for the Rebuilding Plan, Amendment 11.

The harvest strategy contains five components:

- **Threshold** 21.0 million pounds of females biomass >79 mm CW. The fishery will be closed when the stock is below threshold
- **Mature Harvest Rates.** 20% of molting mature males when biomass of females >79 mm CW is ≥45.0 million pounds and 10% of molting mature males when the biomass of females >79

mm CW is ≥ 21.0 million pounds and < 45.0 million pounds. Molting mature males are 100% of newshell and 15% of oldshell males > 112 mm CW.

- Legal Harvest Rate Cap: a 50% cap of exploitable legal males, which are 100% of newshell and 32% of oldshell legal males.
- GHs for Bristol Bay and Pribilof Islands: GHs are determined separately for crabs east of 168°W (Bristol Bay) and west of 168°W (Pribilof Islands) in the Eastern Subdistrict of the Bering Sea.
- A Precautionary Measure: when the stock is reopened to fishing after having been closed to all commercial fishing in the preceding season due to the depressed stock condition, the GH in the season will be reduced to one-half of the value as computed in the above GH determination.

Bycatch Controls. Bycatch control measures have previously been implemented in the crab, scallop, and groundfish fisheries. Further, the Council requested the Board and ADF&G to consider additional measures (such as gear modifications and area closures) to reduce bycatch of Tanner crab in crab fisheries

Habitat protection Adequate habitat is essential for maintaining the productivity of fishery resources. Measures previously implemented that protect Tanner crab habitat from fishing impacts include several areas where trawling and dredging is prohibited. Essential fish habitat (EFH) has been defined and potential threats have been identified. Additional measures could be implemented to further protect habitat. For agency consultation purposes, the Council will highlight the importance of Tanner crab EFH in maintaining stock productivity. To the extent feasible and practicable, this area should be protected from adverse impacts due to non-fishing activities.

Mechanisms are in place for monitoring the effectiveness of the rebuilding plan. The NMFS eastern Bering Sea bottom-trawl survey provides an annual assessment of the status of the eastern Bering Sea Tanner crab stock. ADF&G will use the results of that survey to determine openings and harvest levels according to the eastern Bering Sea Tanner crab harvest strategy. The annual survey will allow the BSAI Crab Plan Team to include an assessment of the Tanner crab stock status relative to the overfished level and its progress towards the rebuilt level in the Stock Assessment and Fishery Evaluation (SAFE) Report for the king and Tanner crab fisheries of the BSAI. Programs exist within ADF&G and NMFS to constrain levels of catch and bycatch at those prescribed in the rebuilding plan. Estimates of Tanner crab bycatch from all commercial fisheries will be reported annually in the SAFE and the BSAI Crab Plan Team will assess that bycatch relative to the expectations and assumptions of the rebuilding plan.