## **PROPOSAL 288**

## 5 AAC 35.517. Bering Sea C. opilio Tanner crab harvest strategy

Amend definition of preferred sized males in the commercial Bering Sea District snow crab harvest strategy, as follows:

**5 AAC 35.517. Bering Sea** *C. opilio* **Tanner crab harvest strategy.** Revise the harvest strategy definition of "exploited legal males" to allow for periodic changes in the size of exploited legal males, as follows (additions noted with bold and underlining, deletions in caps and brackets):

...

- (d) For the purposes of this section,
- (5) "exploited legal males" means 100 percent of the new-shell male *C. opilio* Tanner crab that are at least **95 millimeters** (**3.74 inches**) [102 MILLIMETERS (FOUR INCHES)] in width of shell, plus a percentage of old-shell male *C. opilio* Tanner crab that are at least **95 millimeters** [102 MILLIMETERS] in width of shell estimated at the time of the survey; the percentage of old-shell male *C. opilio* Tanner crab will be based on the expected fishery selectivity for old-shell verses new-shell male *C. opilio* Tanner crab; **the size of exploited legal males will be based on landing sizes from the previous open season's fishery harvest**;

What is the issue you would like the board to address and why? The basic framework of the Bering Sea snow crab harvest strategy applies an exploitation rate to the estimated mature male biomass or a percentage of exploited legal males to establish annual harvest limits. Currently, the legal minimum size for Bering Sea snow crab (*C. opilio* Tanner crab) is 3.1 inches. However, historically an industry preferred size of 4 inches or larger is used to prosecute the fishery, thus, 4 inch or larger male snow crab are defined as "exploited legal males" in the harvest strategy. Retaining crab at the industry preferred size provides for better product recovery and market yield relative to smaller sized legal crab. Several factors highlight the possible need to consider a smaller industry preferred size.

During the TAC setting process, harvest limits are scaled to the abundance of exploitable legal males to avoid overharvest of the largest crab in the population. Recent information is showing that some *Chionoecetes* crab may reach maturity and terminal molt below 4 inches, meaning they would never enter the fishery under the current definition of exploited legal males. Further, smaller snow crab at 95 millimeters (3.74 inches) is already in US markets largely from imports from Canada.

Revising the definition of "exploited legal males" in the harvest strategy to 95 millimeters remains above the minimum legal male size of 3.1 inches. Each year, ADFG could change the exploited legal male size for the harvest strategy calculation during TAC setting by using information from landed sizes from the previous open season's fishery harvest. This lower industry preferred size is expected to result in benefits to the Alaskan snow crab resource consistent with Magnuson-Stevens Act National Standards and the *Board's Policy on King and Tanner Crab Resource Management*. Specifically, these benefits include but are not limited to: 1) increased abundance of exploited legal males available to the fishery resulting in higher TACs in some years, and potentially reduced inter-annual variation in TAC levels; 2) improved vessel harvest efficiency; 3) reduced discard mortality of legal snow crab <4 inches (adding to conservation of the stock); and 4) harvest pressure distributed among multiple cohorts of legal snow crab. Reducing the size of exploited males and, therefore, re-directing some current exploitation pressure away from ≥4 inch snow crab

is consistent with the Board's policy that seeks to maintain crab stocks comprised of various age classes and sizes of mature animals to maintain long-term stock reproductive potential and reduce inter-annual dependency on annual recruitment pulses.

Did you develop your proposal in coordination with others, or with your local Fish and Game Advisory Committee? Explain.

PROPOSED BY: Alaska Bering Sea Crabbers	(EF-F24-157)
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