

PROPOSAL 274

5 AAC 34.920. Size Limits for Registration Area Q. and 5 AAC 34.925. Lawful gear for Registration Area Q.

Increases the legal size of male red king crab from four and three-quarter inches to five inches and increase size of pot escape mechanisms, as follows:.

34.920 (d)(1) male red king crab five inches or greater in width of shell;

Escape mechanism regulations are tied to legal size generally. In this case the need for adjusting the escape mechanisms does not seem needed. The current regulations will be adequate since these fisheries have short soak times with little time for bait spoilage or for crab seek egress. The current regulation reads: 34.925 (b)(3) (d)(4) must have at least four circular escape rings with a minimum inside diameter of four and one-half inches... or an escape mesh of six and one-half inch stretched mesh webbing.... (no change regarding escape mechanisms)

What is the issue you would like the board to address and why? In the late 1970s, the legal size of Norton Sound red king crab was set at 4.75 inches in width based on a now obsolete estimate of maturity and by adding a year's growth. This maturity estimate is now thought to be too large making the current size limit a couple years beyond male sexual maturity. The fact that the Norton Sound population has been allowed more time for reproduction has not resulted in any perceived detriment to the population, rather it may be more resilient than populations to the south which have legal size determinations close to maturity plus one year. Crab in the 4.75-5 inch size range have relatively lower mortality and higher growth rates than crabs a year older. High volume sorting is reducing long term harvest due to handling mortality. The half year of negligible mortality for mature crab that the legal-size increase allows is not likely to produce any detrimental biological effects.

This proposal would raise the legal threshold to five inches to make the harvested crab more marketable. The single buyer has required a five-inch threshold for deliveries at their buying stations for over five years. They plan on continuing the practice. The management of the fishery still estimates the biomass of the less desirable small crab along with the desired crab. When a cohort of crab are recruiting to the fishery this provides a misleading biomass of marketable crab resulting in greater handling mortality as crab are sorted. The misleading expectations of marketable crab causes the season to drag on with marginal rates of marketable crab harvest.

Did you develop your proposal in coordination with others, or with your local Fish and Game Advisory Committee? Explain. Yes, this proposal was proposed to the NNSAC and passed unanimously.

PROPOSED BY: Northern Norton Sound Advisory Committee

(HQ-F24-074)
