

East Central Golden King crab management plan

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November 2019

East Central GKC

Description of the management area. Where it is located, typical participation from fleet and brief history of fishing pressure.

Proposed plan

Metrics to assess stock health and fishery performance.

Operational Objective

Maintain the average commercial catch per unit effort (CPUE) at or above 3.38 crab per pot and XX lbs per day.

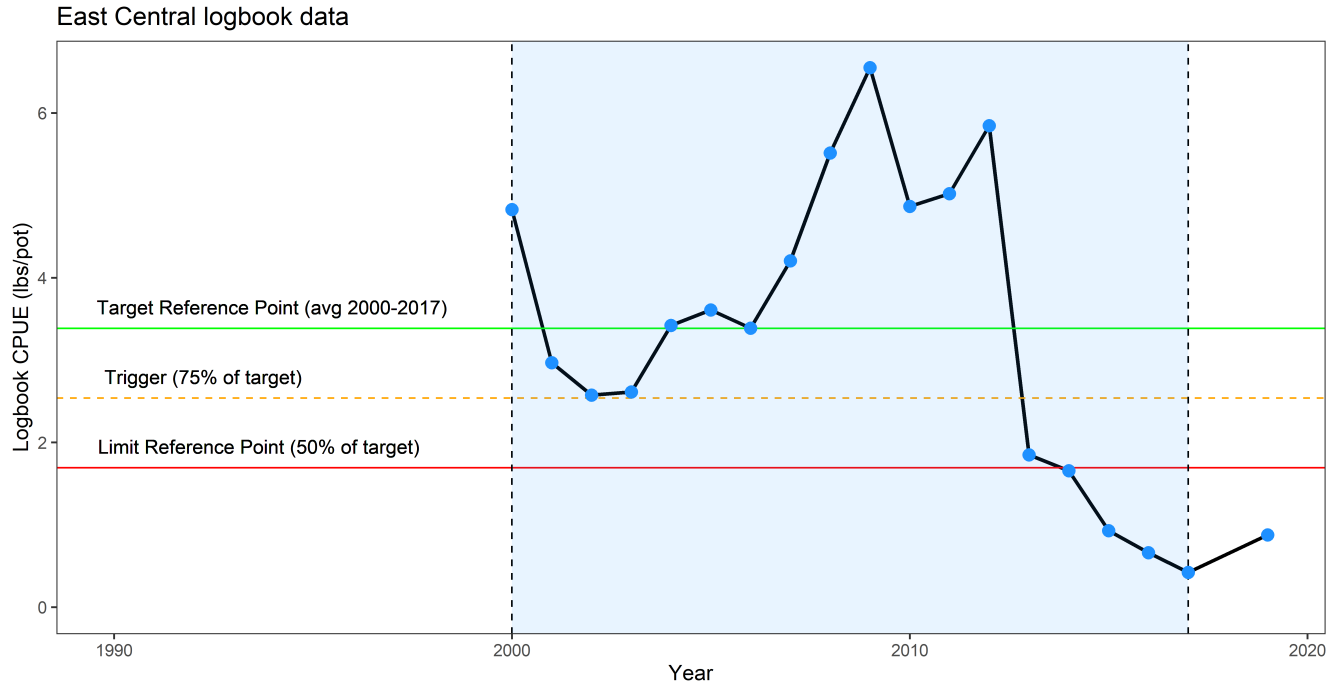
Performance Indicators

The primary performance indicator used in this harvest strategy is commercial catch rate defined as logbook CPUE calculated from the CPUE at each logbook entry and averaged for the entire season. Commercial catch rate is the number of of legal sized male golden king crab per potlift.

Reference Points

The Target Reference Point (RP_{targ}) is set at the average logbook CPUE for the years 2000–2017 as these years capture when logbooks were required for the fishery in 2000 and represents contrasting data (highs and lows) in fishery performance. The Trigger Reference Point (RP_{trig}) is set at 75% of the RP_{targ} and the Limit Reference Point (RP_{lim}) is set at 50% of the RP_{targ} .

Indicators	Reference.Point	Description
Target Reference Point	3.4 crab/pot	Average Commercial logbook CPUE from 2000-2017
Trigger Reference Point	2.5 crab/pot	75% of the Target Reference Point
Limit Reference Point	1.7 crab/pot	50% of the Target Reference Point



Monitoring Strategy

Decision Rules

Considering the primary performance indicator (logbook CPUE) being the most readily available estimate of fishery performance the following decision rules will be considered to guide in-season and post-season management decisions.

- **Option A**

- If logbook CPUE is \geq the RP_{targ} increase the guideline harvest level (GHL) the following season;
- If logbook CPUE is \geq the RP_{trig} increase the GHL the following season;
- If logbook CPUE is $<$ the RP_{trig} close fishery early and decrease GHL the following season;
- If logbook CPUE is \leq the RP_{lim} close fishery early, subject to multiple year closure, and upon re-opening set GHL at a reduced level

- **Option B**

- If logbook CPUE is \geq RP_{targ} for 1 year increase GHL 0%-10% the following season and if logbook CPUE is $>$ RP_{targ} for at least 3 years 0-15% increase in GHL the following season;
- If logbook CPUE is \geq RP_{trig} but $<$ RP_{targ} increase GHL 0%-10% the following season;
- If logbook CPUE is $>$ RP_{lim} but $<$ RP_{trig} close fishery early, decrease GHL 0%-20% the following season;
- If logbook CPUE is \leq RP_{lim} close fishery early, subject to multiple year closure, and upon re-opening set GHL at a reduced level

Other considerations for management

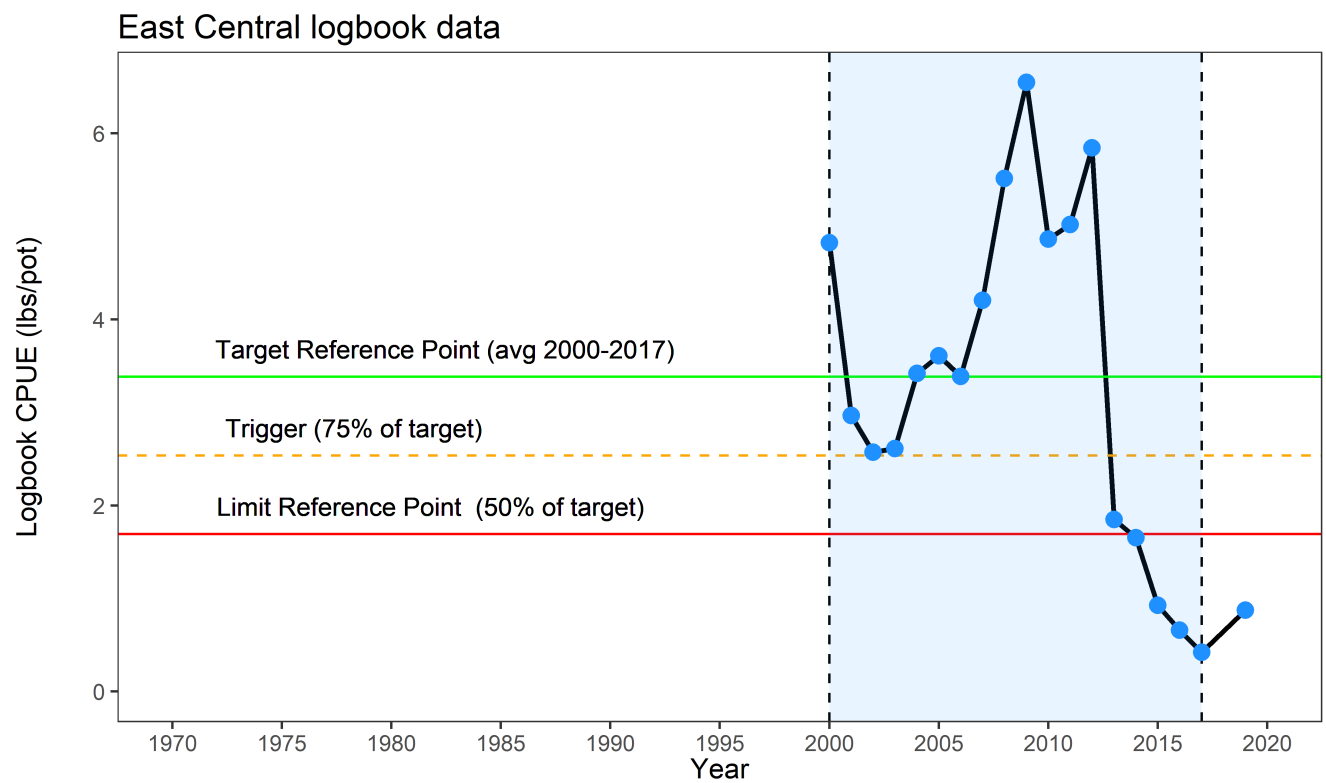
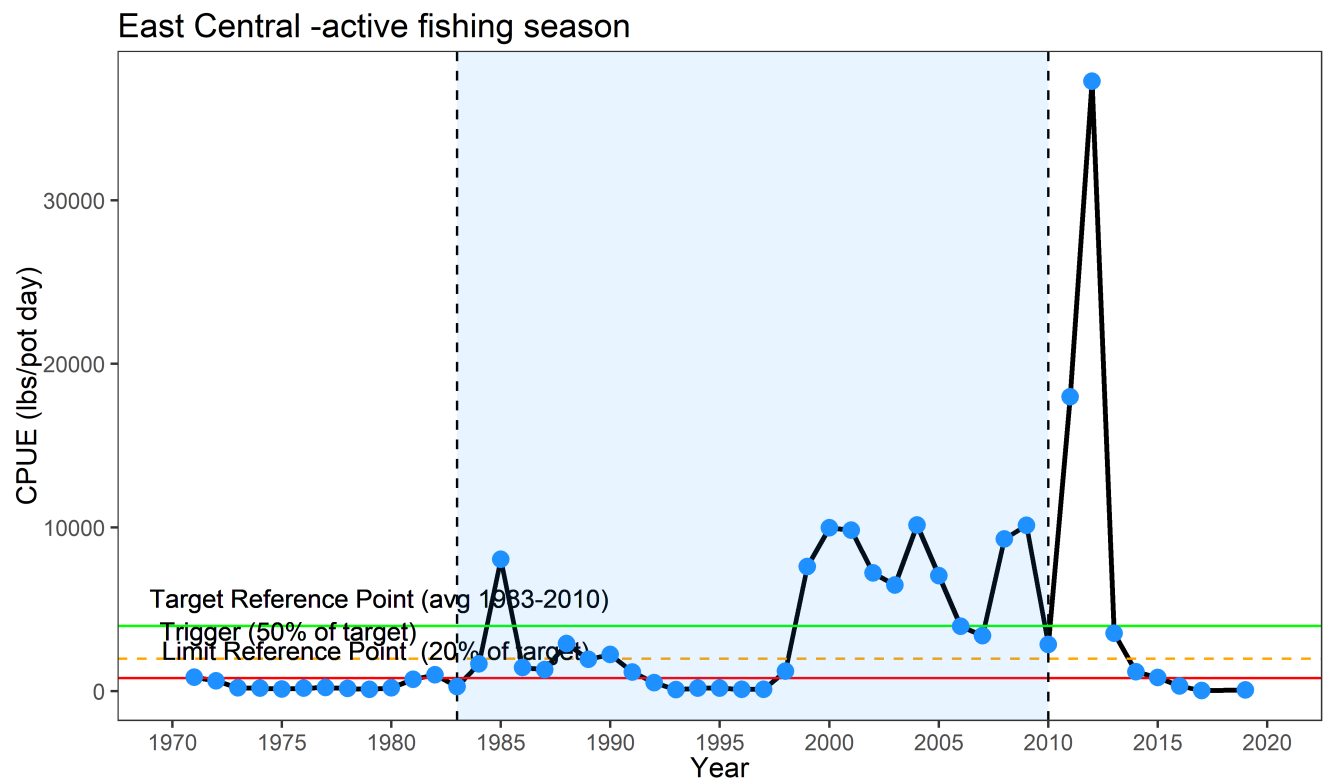


Figure 1: