Amount Reasonably Necessary for Subsistence (ANS)

Tanner Crab, Prince William Sound

Proposal 68

Adopt amounts reasonably necessary for subsistence for Tanner crab in the Prince William Sound (PWS) Area, outside the Valdez Nonsubsistence Area.



Residents of Old Harbor, Alaska, share fresh Tanner crab. Credit: J. Keating

This oral report can be found in RC 3, Tab 14
Written report Special Publication No. BOF 2021-01 can be found in RC 3, Tab 6

Background: Amounts Reasonably Necessary for Subsistence (ANS)

Subsistence statute requires the Board to determine the amount of the harvestable portion of a fish stock that is reasonably necessary for subsistence uses [AS 16.05.258(b)]

ANS is not:

- Indicator of subsistence "need"
- Quota or harvest cap
- In-season management tool
- Made for specific communities

ANS is:

- Guideline for the Board to evaluate if reasonable opportunity for subsistence uses is being provided under existing regulations
- Tool for the Board to allocate between subsistence and nonsubsistence uses
- Range of numbers: historical harvest and numbers of Alaskans
- Department is neutral
- Public input



History of C&T and ANS Findings for PWS Tanner Crab

Customary and Traditional (C&T) Use Findings

- 2008: positive C&T finding for shrimp, Dungeness crab, Tanner crab, king crab, miscellaneous shellfish (5 AAC 02.208(a))
- 2008: Subsistence Tanner crab fishery opened
- Postponed ANS finding until harvest record could be established through permit

Proposal 68: Amount Necessary for Subsistence (ANS)

No ANS adopted to date for Tanner crab in PWS Support adoption

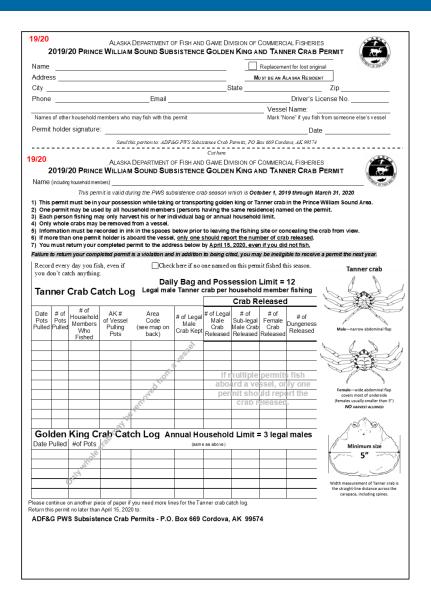
Staff Comments: RC 2, pgs. 218-221

Background Information: Special Publication No. BOF 2021-01 RC 3

Options for Amounts Reasonably Necessary for Subsistence Uses of Tanner Crab in Prince William Sound. January 2021. Alaska Department of Fish, Game Division of Subsistence. Keating and Fall.



Subsistence Crab Permits



Bag Limit History

- 2008 2016: 5 legal crab per person
- 2017 present: 12 legal crab per person

Subsistence Crab Permits

- 38% issued to residents of Chenega,
 Whittier, Tatitlek, Cordova, and Valdez
- 62% issued to residents of Anchorage Municipality, Kenai Peninsula Borough, Matanuska-Susitna Borough, other Alaska communities



ANS Options

- Options based on permit returns, not household harvest data
 - Only 1 year of household survey data (2014) exists, for Chenega, Cordova, and Tatitlek
- Permit data provide more comprehensive view of total Tanner crab harvest in PWS by all Alaska residents



Photo credit: ADF&G Tanner crab species page



ANS Options

	Permits		
Year	Permits	fished	Harvest
2008	115	40	44
2009	93	33	85
2010	73	29	78
2011	79	34	213
2012	151	87	2,067
2013	173	80	629
2014	211	91	793
2015	206	93	816
2016	183	91	548
2017	179	70	1,073
2018	192	96	624
2019	251	54	281
2020	358	70	428
Average 2008–2011	90	34	105
Average 2012–2020	212	81	807
Historical average 2008–2020	174	67	591

Permit participation increased after 2011, so ANS Options based on two time periods:

- 1. All years (2008–2020)
- 2. 2012–2020 increased participation

Source Rumble et al. 2020:36 for 2008–2018; J. Rumble, ADF&G, unpublished data for 2019 and 2020.



ANS Options A and B

OPTION A: 50–2,050 TANNER CRAB

Based on low and high annual harvests, rounded to nearest 50 crab, 2008–2020.

OPTION B: 300–2,050 TANNER CRAB

Based on low and high annual harvests, rounded to nearest 50 crab, 2012–2020.



ANS Options C, D, and E

OPTION C: 50–1,150 TANNER CRAB

Based on mean harvest 2008–2020 (591 crab), bounded by standard deviation (547 crab), rounded to the nearest 50 crab.

OPTION D: 300–1,350 TANNER CRAB

Based on mean harvest 2012–2020 (807 crab), bounded by standard deviation (525 crab), rounded to the nearest 50 crab

OPTION E: TAKE NO ACTION

Do not adopt an ANS range for Tanner crab at this time.

Pages 7-8, Special Publication No. BOF 2021-01 RC 3



ANS Options

Option A	50–2,050 Tanner Crab
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Option B 300–2,050 Tanner Crab

Option C 50–1,150 Tanner Crab

Option D 300–1,350 Tanner Crab

Option E Take no action

