



C5 – Bering Sea Snow Crab PSC Data Report

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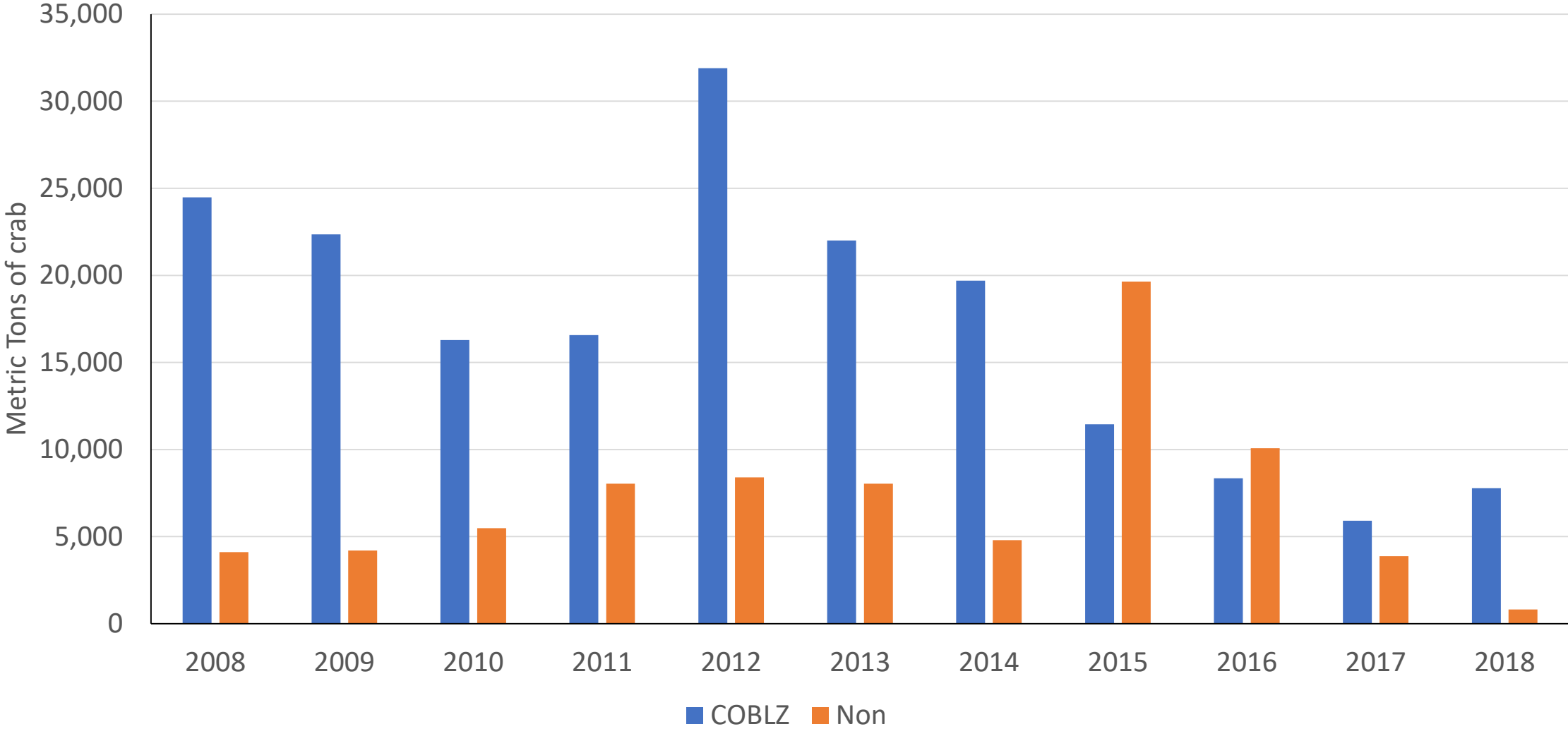
Council motion – December 2018

The Council requests that Council and NMFS staff provide additional data on *C. opilio* bycatch in the directed crab and groundfish fisheries that describes the spatial distribution of bycatch throughout the BSAI by gear and fishery. The Council requests staff provide information on possible gaps in bycatch data, identify regulatory provisions that could hinder the ability to minimize bycatch to the extent practicable, and provide a qualitative description of potential impacts of avoiding *C. opilio* on fishery participants.

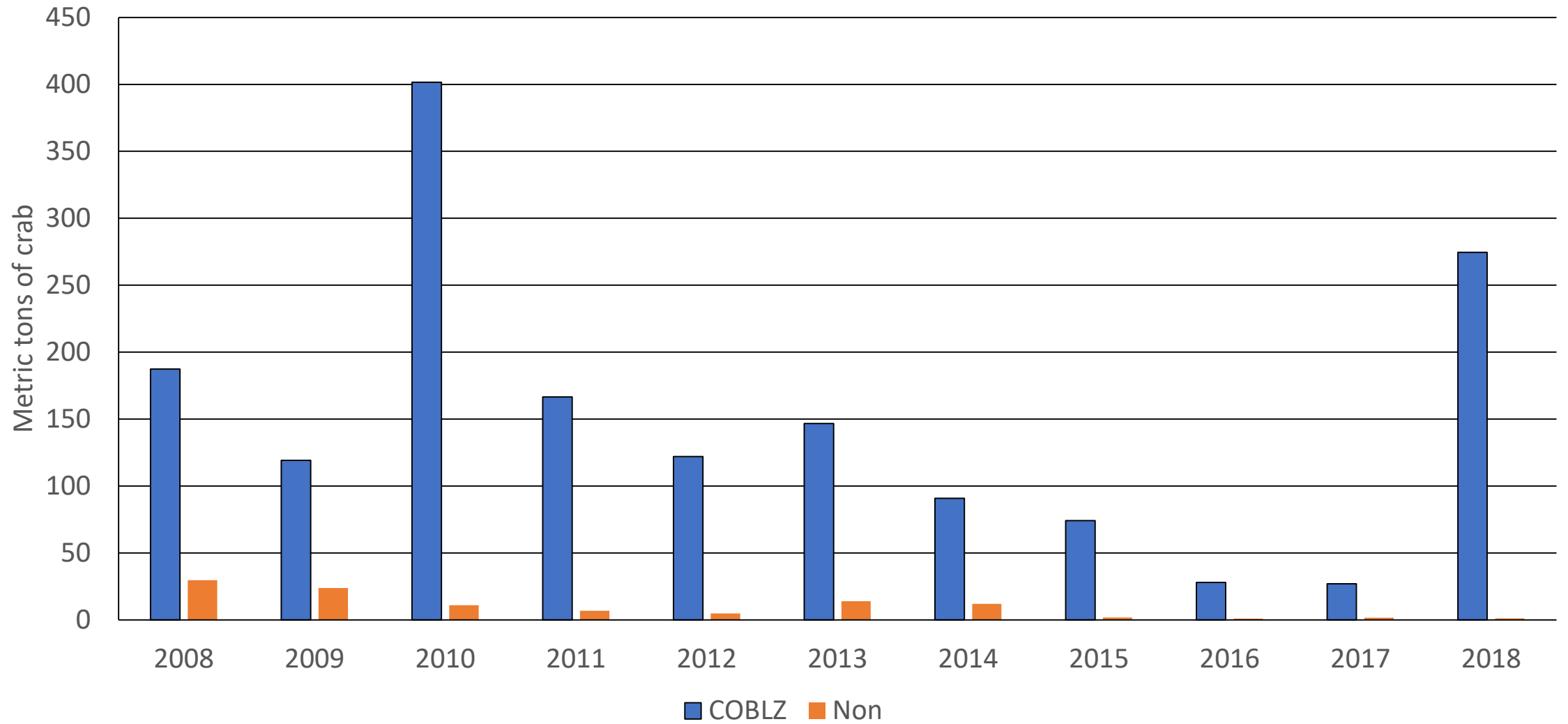
Table 1. Retained and discarded catch and discard mortality in the directed snow crab fishery compared to snow crab PSC usage in the BSAI nonpelagic trawl (NPT), pelagic trawl, pot, and hook and line fisheries from 2008 – 2017 within (COBLZ) and outside (NON) COBLZ. All reported in metric tons. Directed fishery catch and discards is reported in standard tons and converted to metric tons for this table by multiplying standard tons by 0.907185. Directed fishery data from ADF&G (2.21.19). Dashes indicate no catch reported.

| | Directed Fishery | | | | NPT PSC | | PT PSC | | Pot PSC | | H&L PSC | | GF Total |
|------|------------------|-----------|-----------|-----------------------|---------|-------|--------|------|---------|--------|---------|-------|----------|
| | COBLZ | NON | Discards | 30% Discard Mortality | COBLZ | NON | COBLZ | NON | COBLZ | NON | COBLZ | NON | |
| 2008 | 24,478.08 | 4,110.97 | 6,580.59 | 1,974.18 | 187.37 | 29.66 | 1.33 | 0.06 | 14.14 | 176.21 | - | 23.25 | 432.02 |
| 2009 | 22,350.32 | 4,206.62 | 5,131.31 | 1,539.39 | 119.23 | 23.88 | 0.28 | 0.07 | - | 136.45 | - | 14.15 | 294.06 |
| 2010 | 16,287.60 | 5,491.19 | 4,262.18 | 1,278.65 | 401.54 | 11.02 | 1.12 | 0.11 | - | 175.49 | - | 8.79 | 598.07 |
| 2011 | 16,567.92 | 8,045.82 | 4,473.98 | 1,342.19 | 166.51 | 6.91 | 1.3 | 0.27 | 0.13 | 41.3 | - | 16.9 | 233.32 |
| 2012 | 31,890.27 | 8,403.25 | 3,899.24 | 1,169.77 | 122.1 | 4.82 | 0.53 | 0.31 | - | 10.13 | - | 18 | 155.89 |
| 2013 | 22,008.31 | 8,044.01 | 5,565.41 | 1,669.62 | 146.69 | 14.06 | 0.47 | 0.05 | - | 6.7 | - | 9.79 | 177.76 |
| 2014 | 19,689.54 | 4,796.29 | 11,692.07 | 3,507.62 | 90.9 | 11.99 | 0.63 | 0.07 | - | 41.64 | - | 9.43 | 154.66 |
| 2015 | 11,450.49 | 19,639.65 | 16,067.39 | 3,920.22 | 74.14 | 1.87 | 0.41 | 0.01 | - | 57.44 | - | 7.14 | 141.01 |
| 2016 | 8,349.73 | 10,071.57 | 13,114.65 | 3,934.39 | 28.01 | 0.95 | 0.14 | 0.00 | - | 8.43 | 0.01 | 3.81 | 41.35 |
| 2017 | 5,912.12 | 3,871.87 | 4,631.60 | 1,389.48 | 26.94 | 1.64 | 0.05 | 0.02 | - | 24.42 | 0.01 | 2.15 | 55.23 |
| 2018 | 7,781.83 | 820.10 | 6,317.70 | 1,895.31 | 274.5 | 1.15 | 0.04 | 0.01 | - | 9.71 | 0.01 | 2.62 | 288.04 |

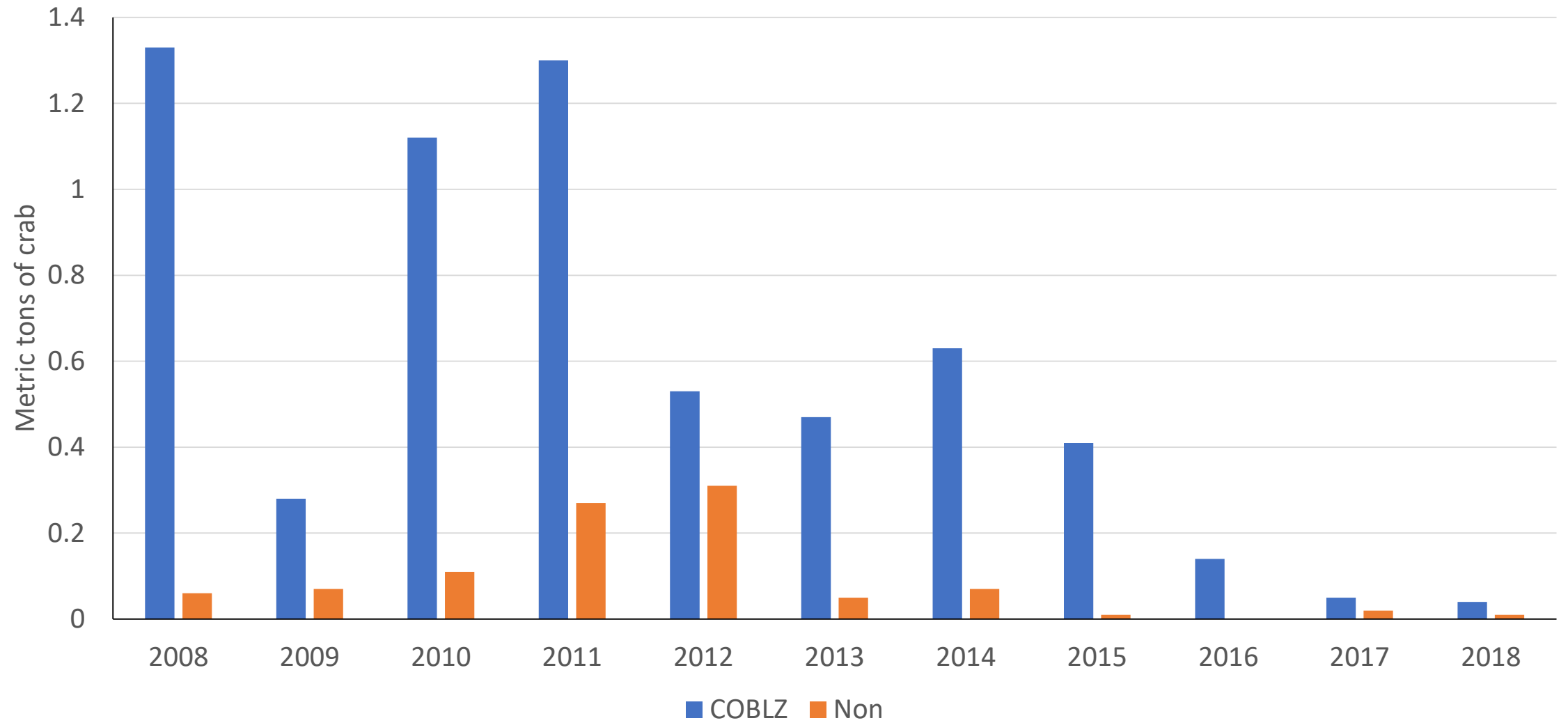
Directed Fishery



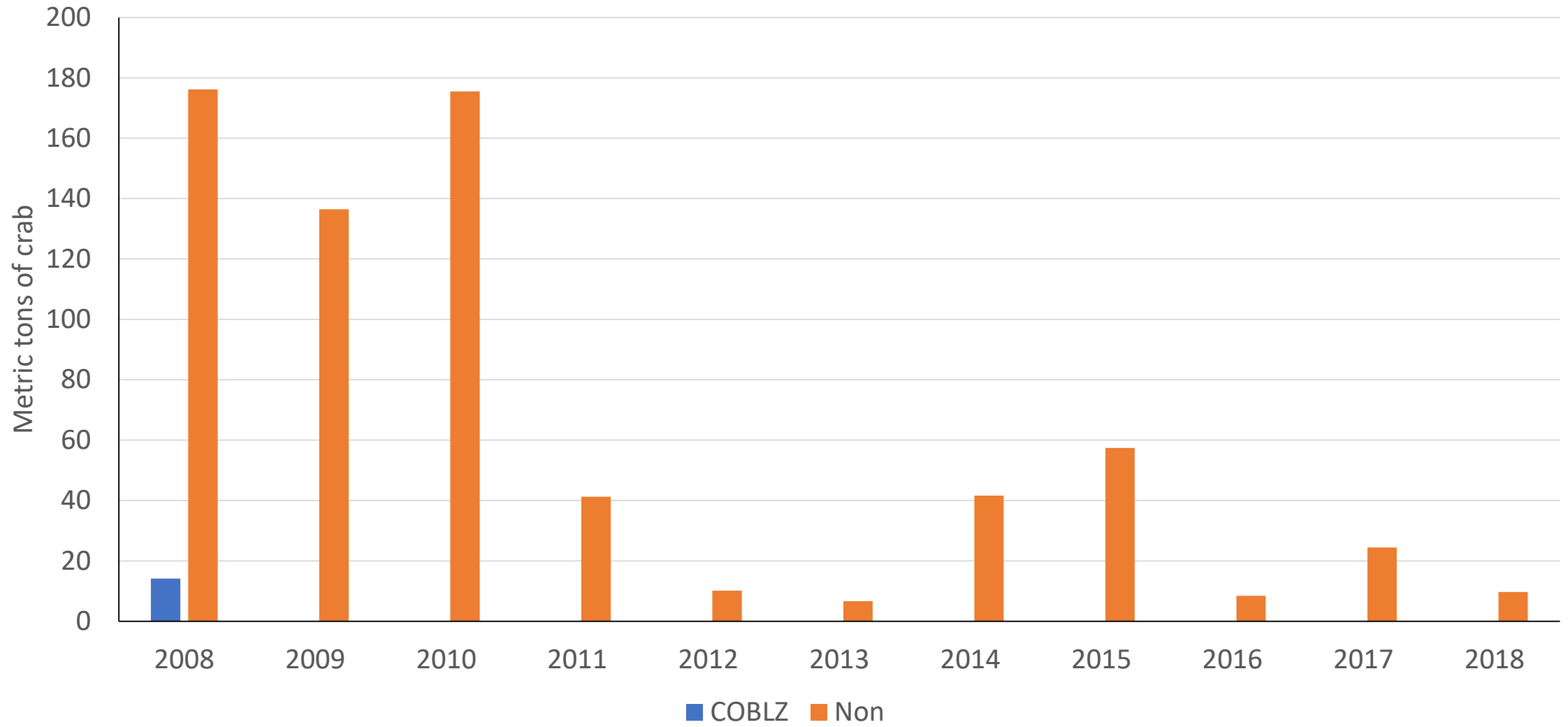
Non-Pelagic Trawl



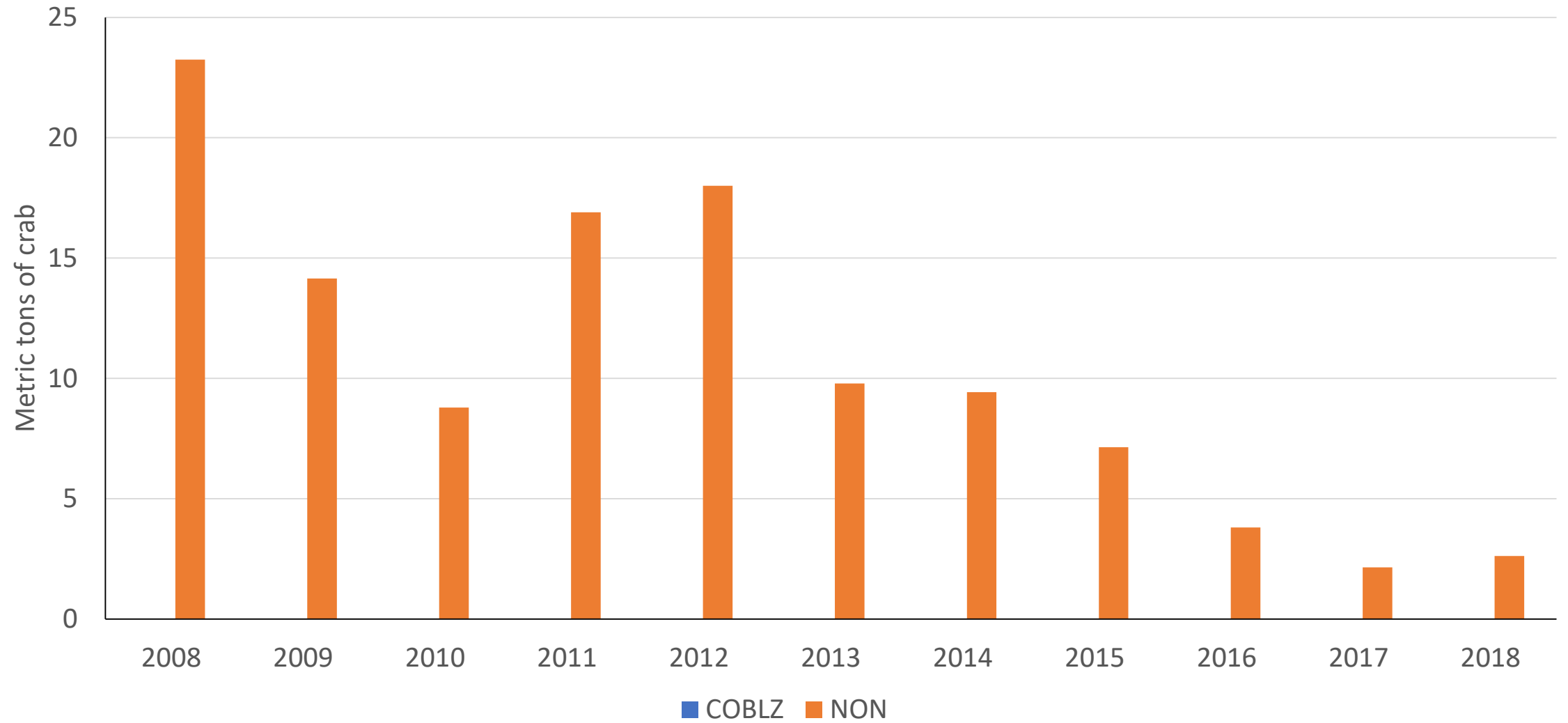
Pelagic Trawl

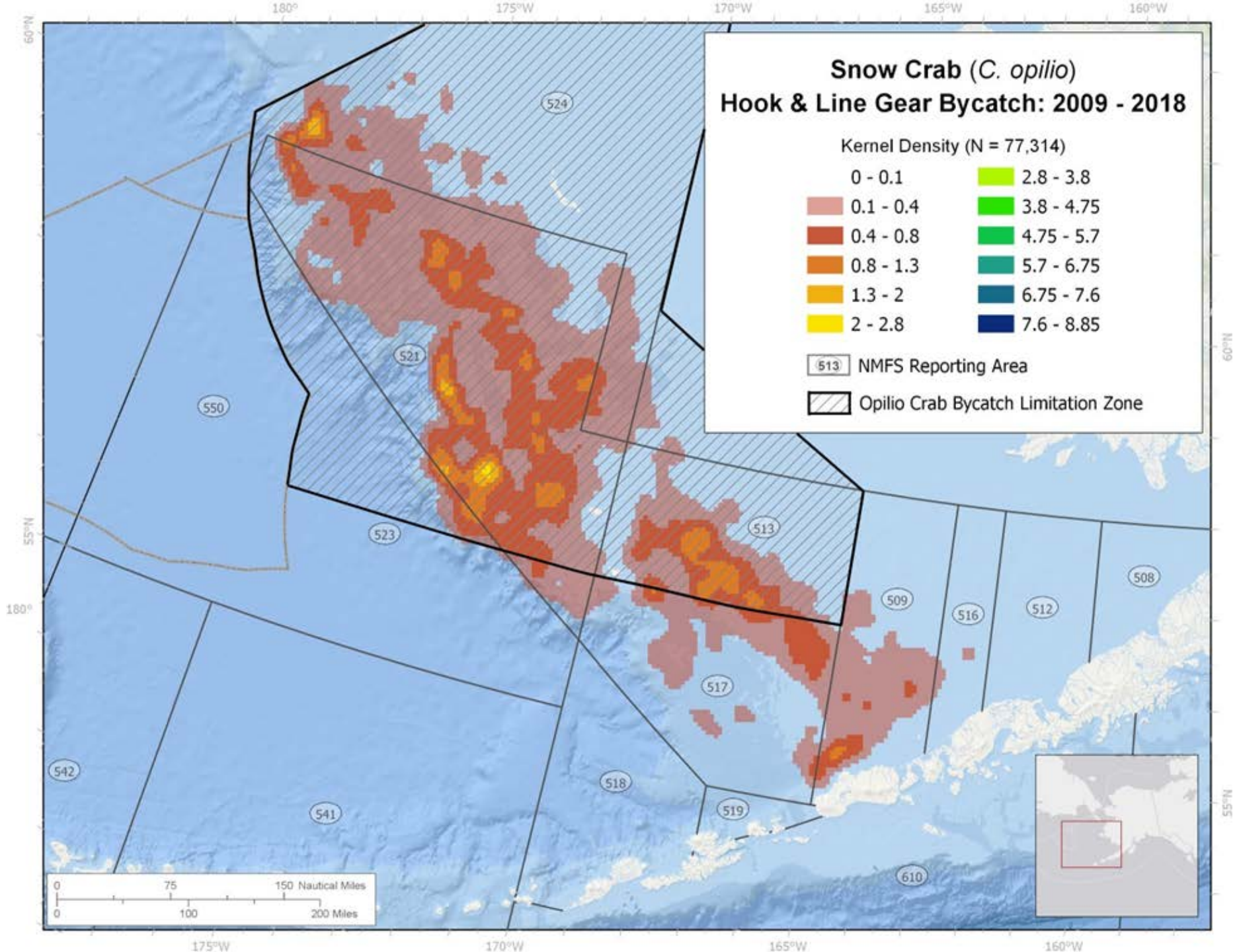


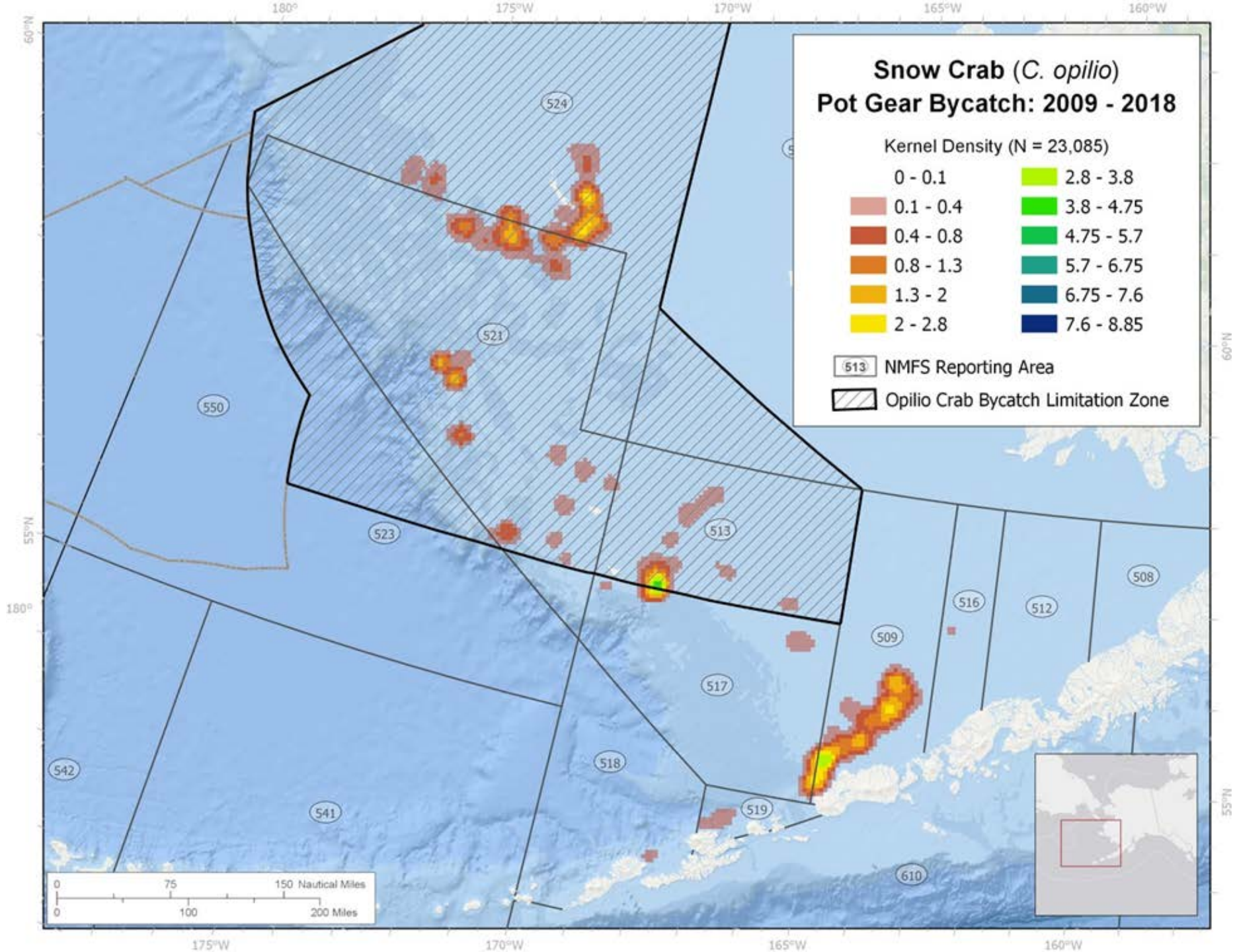
Pot



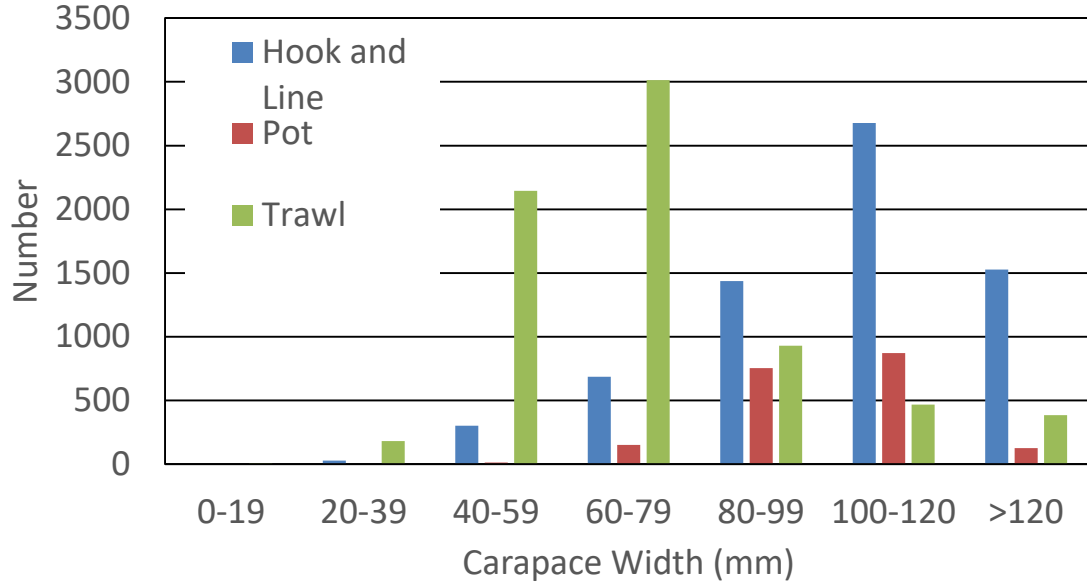
Hook-and-Line



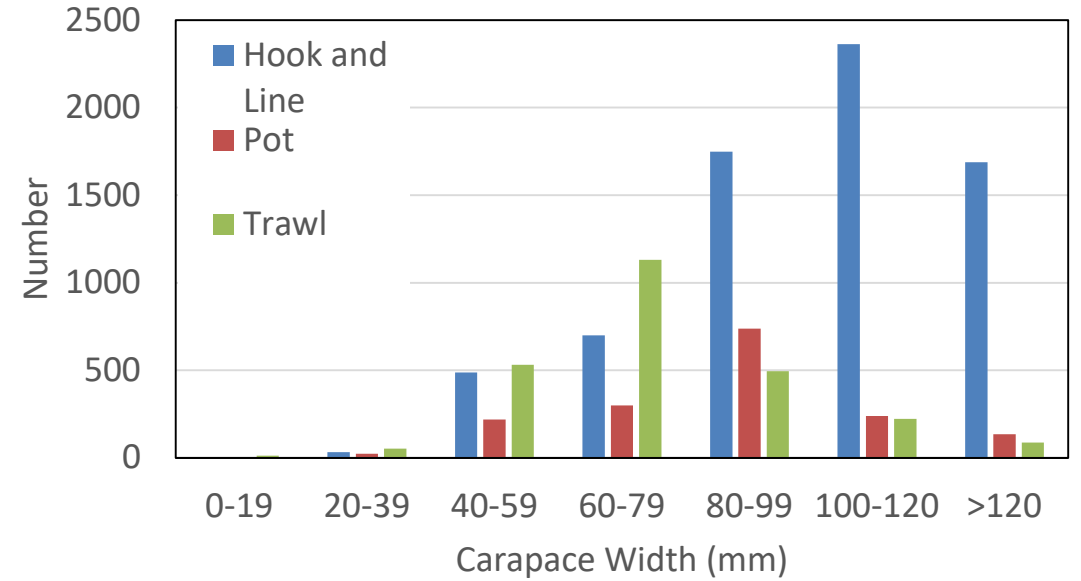




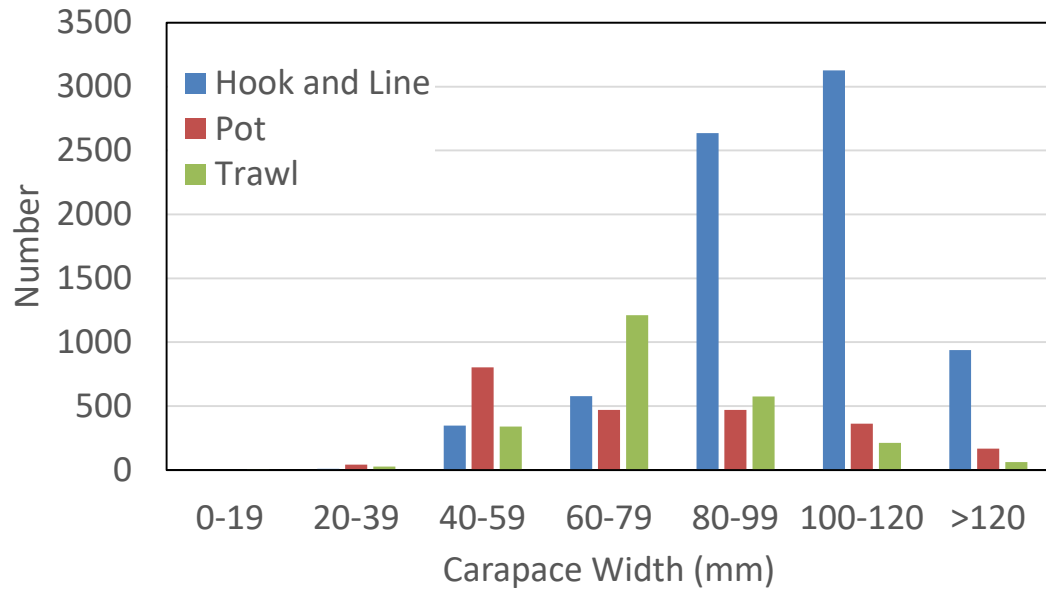
2015



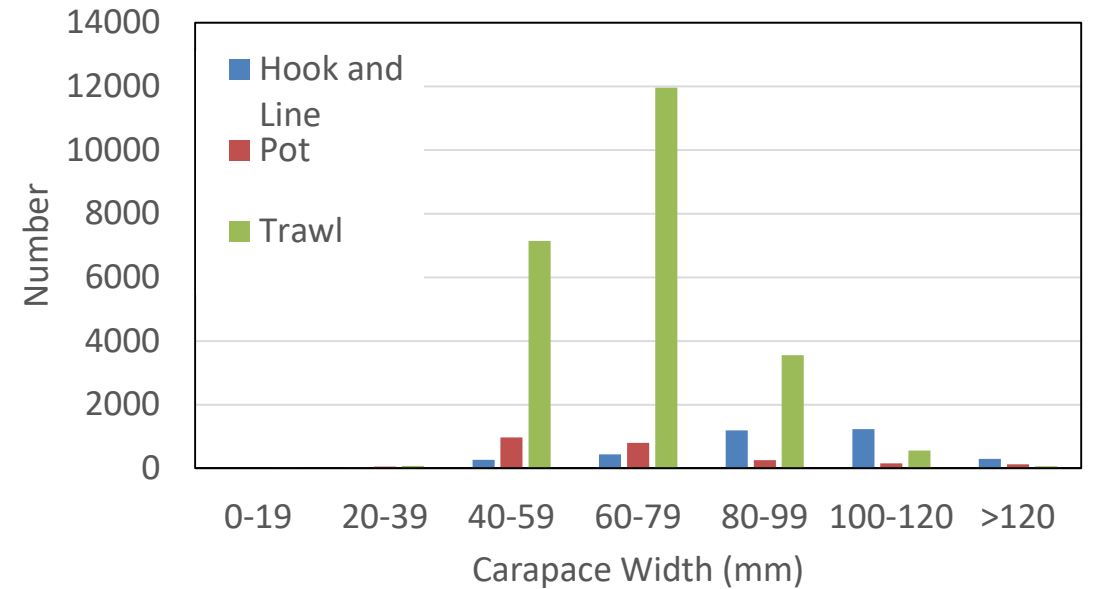
2016

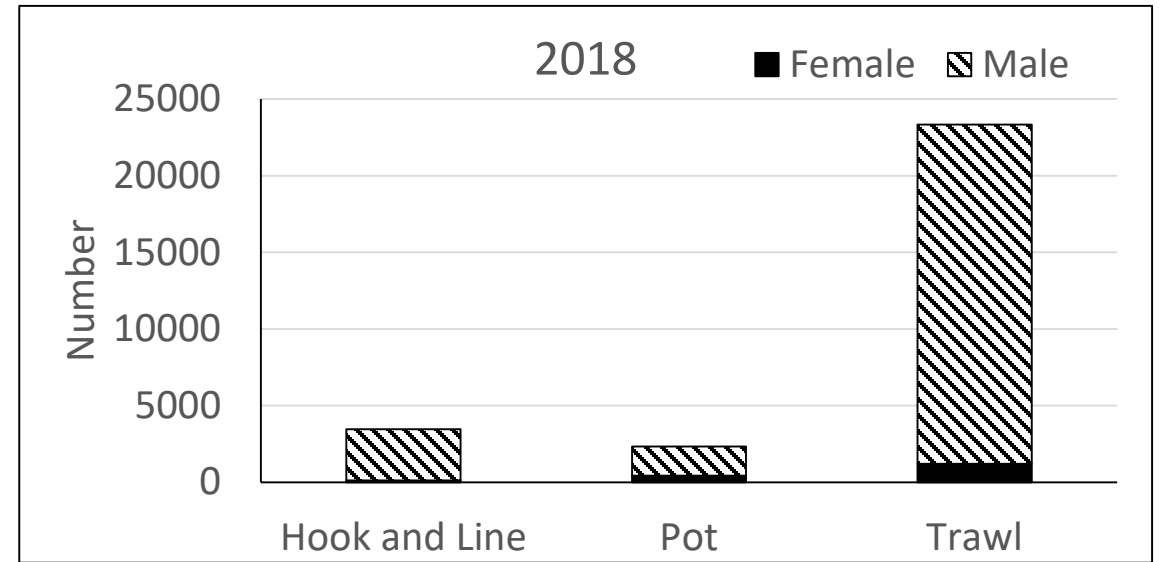
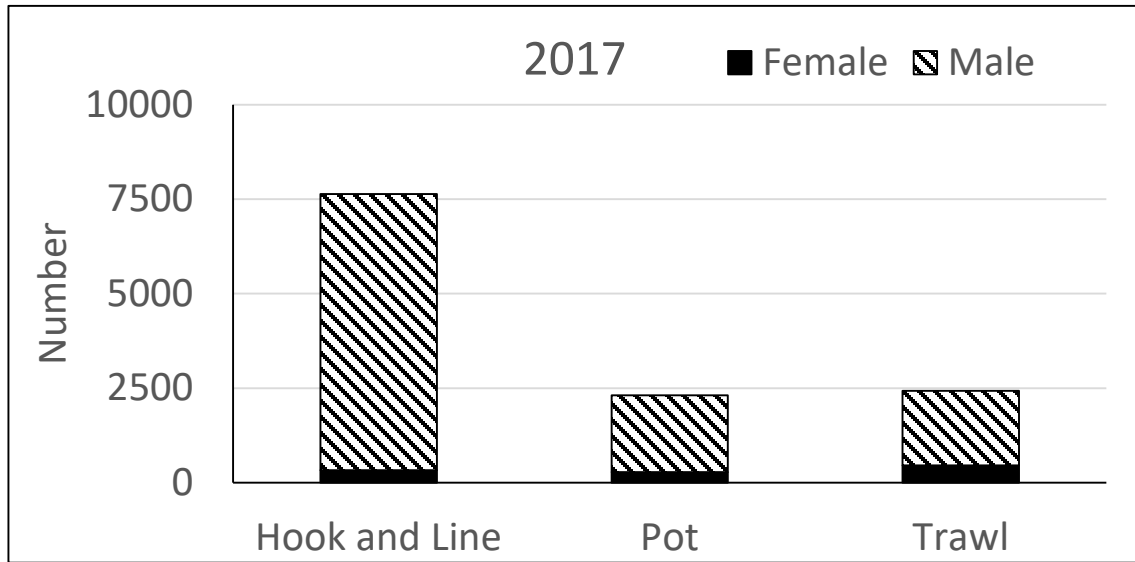
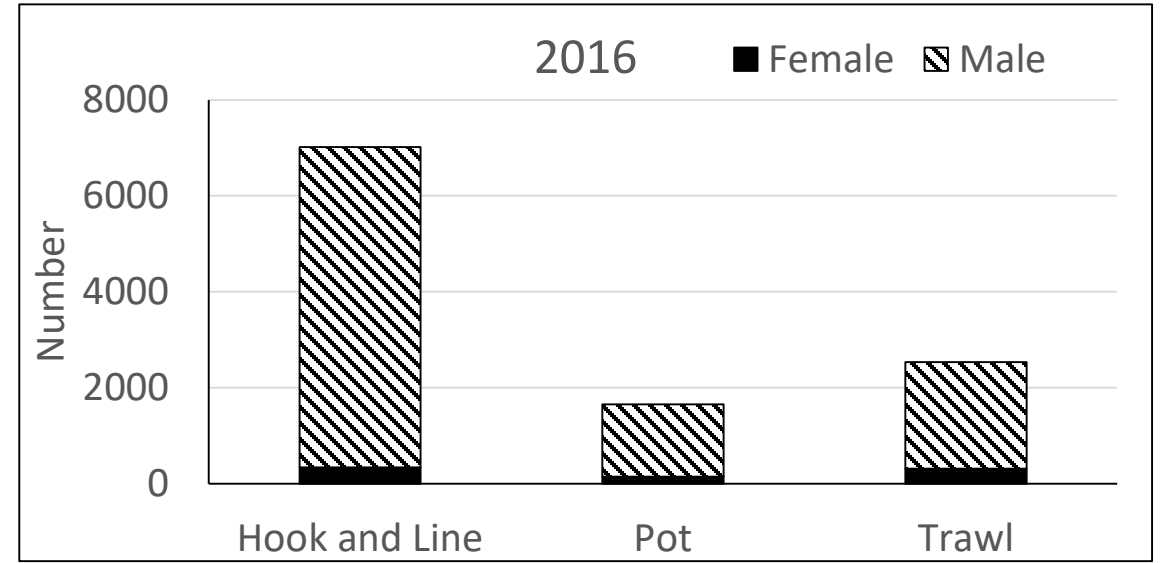
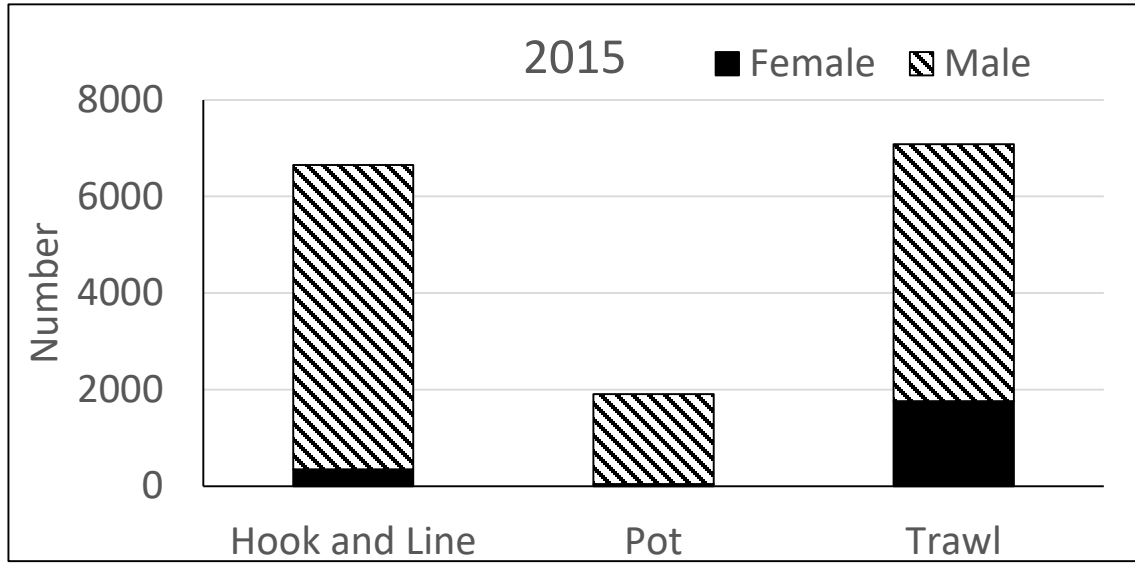


2017



2018





Gaps in bycatch data

- Bycatch recorded by observers. Data quality depends on observer coverage.
 - Difficult to make comparisons when observer coverage is different
- In groundfish fisheries snow crab PSC is managed by number of crabs, but stock specific OFLs in weight.

Potential costs of avoiding snow crab

- In the event of a COBLZ closure, assumed that affected operators will redeploy effort in adjacent areas
- Redeployment may lead to increased operating costs
- Gear modifications resulted in some costs to operators
 - No new gear modification proposed

Regulatory provisions that could hinder the ability to minimize bycatch

- No Federal regulatory provisions would hinder the ability to minimize snow crab PSC.
- State regulation 5 AAC 35.506(j) allows vessels fishing for tanner crab to retain snow crab up to 35% of tanner crab weight.
 - Before 2018, the allowable percentage was 5%. Snow crab above 5% of tanner crab weight were discarded
 - Change in regulation will reduce discards and discard mortality in the directed fishery
- Overall, no Federal or state regulatory provisions would hinder the ability to minimize snow crab bycatch.