

**Oregon Commercial Dungeness Monthly Crab Pot  
Effort Estimates for the 2014-15 crab season**

Oregon Department of Fish and Wildlife  
September 2017

The data summary is provided in response to NOAA’s request for crab effort information on August 8, 2017. Methods for this data summary are consistent with crab effort estimates provided to NOAA through the inter-governmental personnel agreement between the Oregon Department of Fish and Wildlife and the National Marine Fisheries Service beginning June 14, 2010 (account number 30-40-0005-03-00-00/H8LEM09-P00).

**Part 1. Landings-based crab pot effort estimations by month: 2014-15 crab season.**

Estimated numbers of crab pots used by the Oregon commercial crab fishery by month for the 2014-15 crab season are summarized in Table 1. These estimates were derived from crab fishery permit information that identifies the owner, vessel, and pot limit number (the maximum number of pots a vessel is allowed to fish) during applicable years. The pot limit numbers associated with each vessel that made a landing during that month were totaled to estimate the amount of gear in the water during each month. A vessel’s pot limit was included only for the months that vessel made one or more landings in Oregon. These estimates do not take into consideration fishermen changing the amount of gear they fish or any gear loss.

Table 1. Estimated number of pots used to harvest Dungeness crab in Oregon waters in the 2014-2015 crab season by month.

| <b>Month</b> | <b>2014-15</b> |
|--------------|----------------|
| Dec          | 103,700        |
| Jan          | 100,600        |
| Feb          | 78,000         |
| Mar          | 64,000         |
| Apr          | 35,100         |
| May          | 29,100         |
| Jun          | 25,600         |
| Jul          | 19,800         |
| Aug          | 15,700         |

**Part 2. Crab pot effort estimates by month, latitude and depth for the 2014-15 crab season.**

Spatial estimations of crab pot effort through the 2014-15 crab season was completed utilizing fishery information recorded in crab logbooks for waters off Oregon (42°-46.25° N Latitude). String data that had complete location, depth and pots per string information were included in this analysis, representing 32% of the pounds landed throughout the 2014-15 crab

season. Each string of data was indexed by depth (shallow or deep) and degree of latitude for each month of the crab season. The total number of pots for each area by month was divided by the total number of pots fished in that month to obtain the proportion of pots fished in each area. This value was multiplied by the total estimated number of pots by month, calculated in Part 1 for the 2014-15 season, to derive an estimated total number of pots per area (Table 2).

Table 2. Number of Dungeness crab pot estimates by depth, latitude and month for the 2014-15 crab season.

|                        | Latitude          | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug   |
|------------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| <b>Shallow ≤ 30 fa</b> | <b>46°-46.25°</b> | 13,912 | 13,342 | 12,792 | 10,205 | 4,374  | 2,974  | 1,824  | 3,882* | 0     |
|                        | <b>45°-46°</b>    | 8,528  | 6,708  | 6,637  | 9,529  | 4,614  | 2,416  | 2,583  |        | 2,534 |
|                        | <b>44°-45°</b>    | 16,242 | 16,362 | 7,249  | 8,325  | 5,562  | 3,875  | 6,398  | 3,444  | 2,829 |
|                        | <b>43°-44°</b>    | 15,974 | 16,038 | 14,349 | 10,801 | 6,177  | 6,350  | 5,102  | 4,269  | 2,509 |
|                        | <b>42°-43°</b>    | 10,506 | 13,743 | 10,464 | 8,799  | 9,681  | 9,547  | 7,930  | 7,806  | 7,828 |
|                        |                   |        |        |        |        |        |        |        |        |       |
| <b>Deep &gt; 30 fa</b> | <b>46°-46.25°</b> | 3,458  | 4,163  | 2,663  | 2,201  | 1,958* | 0      | 1,372* | 0      | 0     |
|                        | <b>45°-46°</b>    | 12,085 | 8,032  | 4,547  | 3,433  |        | 0      |        | 0      |       |
|                        | <b>44°-45°</b>    | 15,093 | 16,341 | 14,014 | 6,988  | 3,034* | 3,937* | 0      | 398*   | 0     |
|                        | <b>43°-44°</b>    | 7,317  | 5,172  | 4,685  | 3,179  |        |        |        | 0      | 0     |
|                        | <b>42°-43°</b>    | 587    | 699    | 600    | 541    |        | 0      | 391    | 0      | 0     |

\* Number of pots combined with adjacent latitude number of pots for confidentiality purposes.