

## Oregon Fishermens' Input on Ways to Reduce the Risk of Whale Entanglement

Important Questions for Oregon's Dungeness Crab Industry



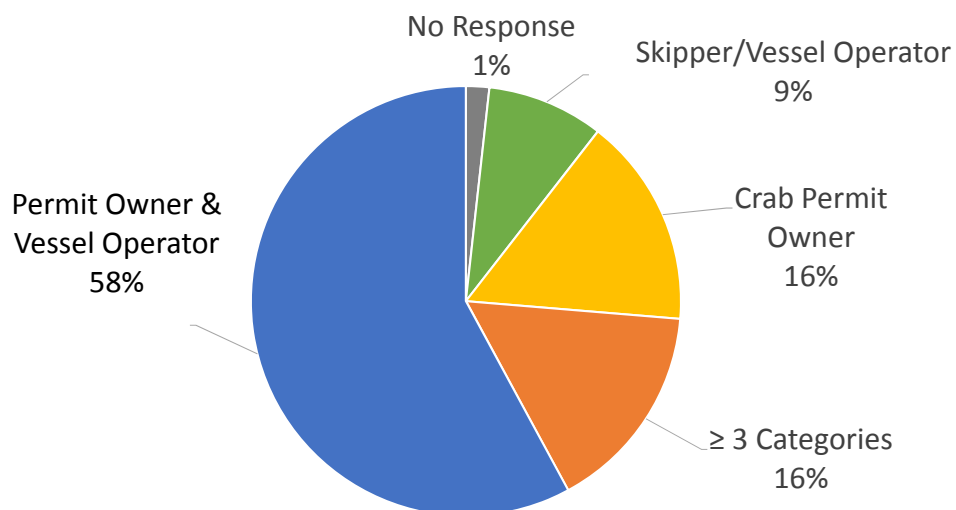
### What did we do?

Late Oct	Decided to do a survey
Nov	Drafted survey, consulted with OSU IRB, submitted application for IRB oversight determination.
Dec	Received OSU IRB oversight determination (not research), distributed draft survey to working group, conference call, revised survey based on feedback.
Late Dec	Mailed survey to all permit owners (424)
Early Jan	Began receiving mailed surveys
Mid Jan	Start of crab season
Jan – Apr	Group members conducted follow up with fleet to encourage participation, continued to receive mailed surveys.

## Survey Responses

- Mailed 424 surveys
- Received 57 responses
- Response rate = 13.4%
  
- 48 (84.2%) of the survey respondents provided contact information

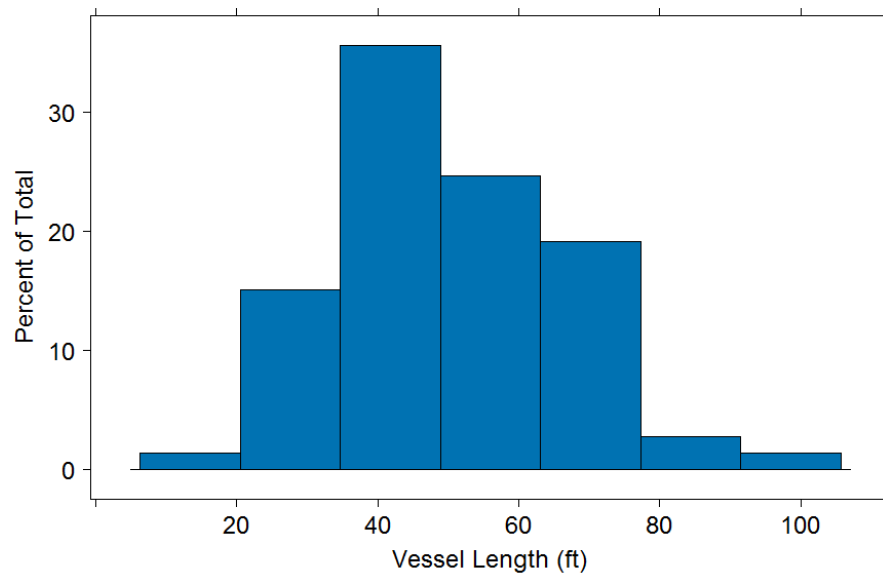
### 1. What is your role in the industry?



## 2. What is your home port?

Port	#	% Survey Respondents	% Permit Addresses
Astoria/Warrenton/Ilwaco	12	21% ↑	16%
Garibaldi	4	7%	5%
Newport	19	33% ↑	25%
Winchester Bay	4	7%	1%
Coos Bay	4	7% ↓	15%
Port Orford	6	11%	6%
Brookings	6	11%	10%
Eureka	1	2%	
No Response	1	2%	

## 4. What is/are your vessel lengths?

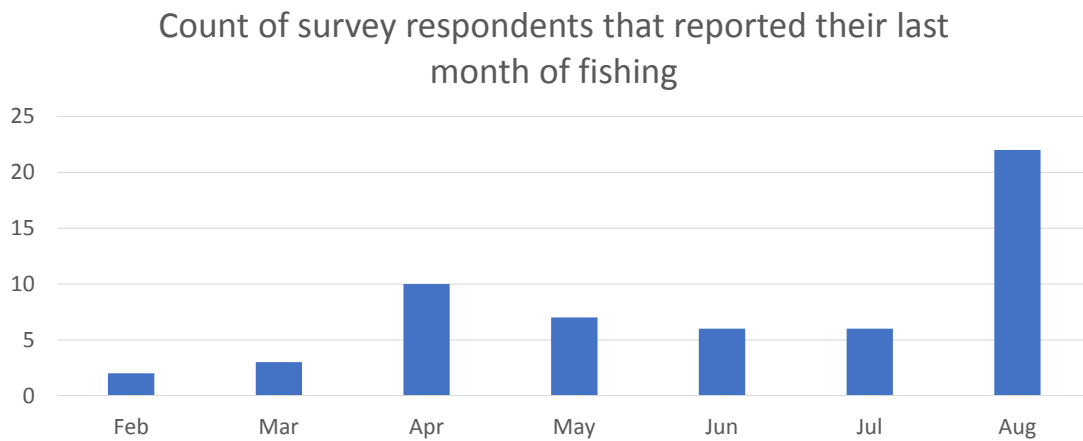


## 5. What tier permit(s) do you fish?

Permit Tier	Number	Proportion of Total
200 pots	10	13%
300 pots	36	46%
500 pots	33	41%
Total permits	79	

Many survey respondents had more than one permit  
Also includes a few vessels that reported crab permits from other states

## 6. In the last 5 years, what months did you typically crab?



## Perceptions about Whale Entanglement

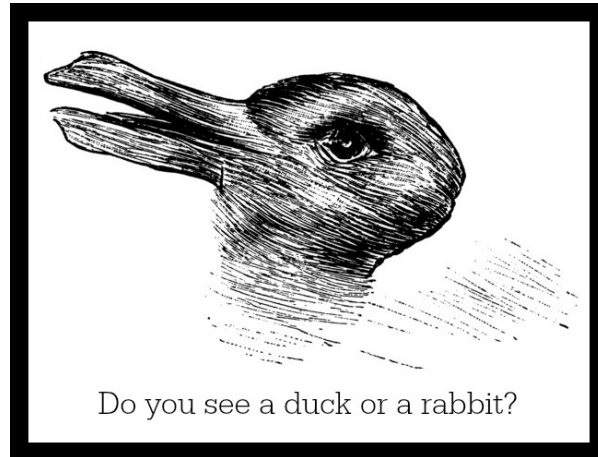
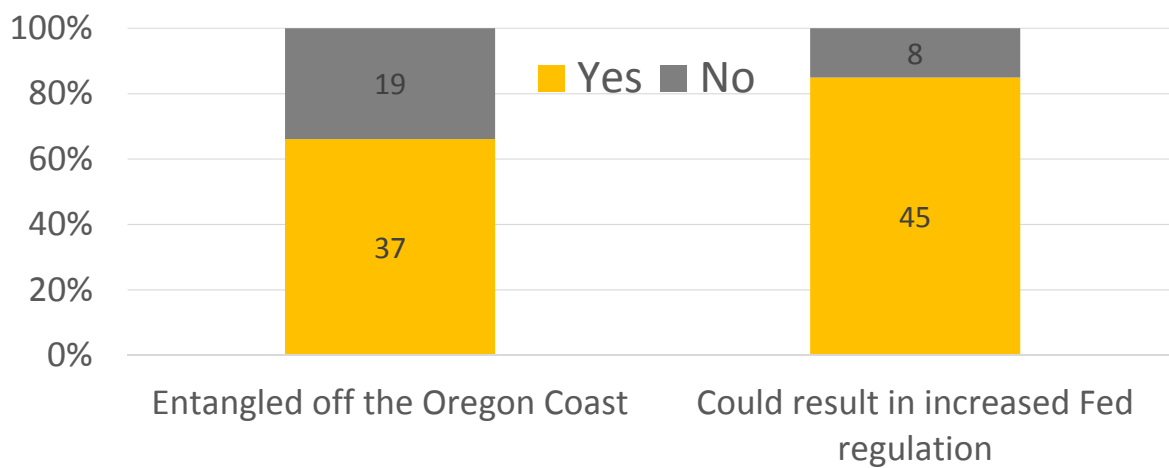
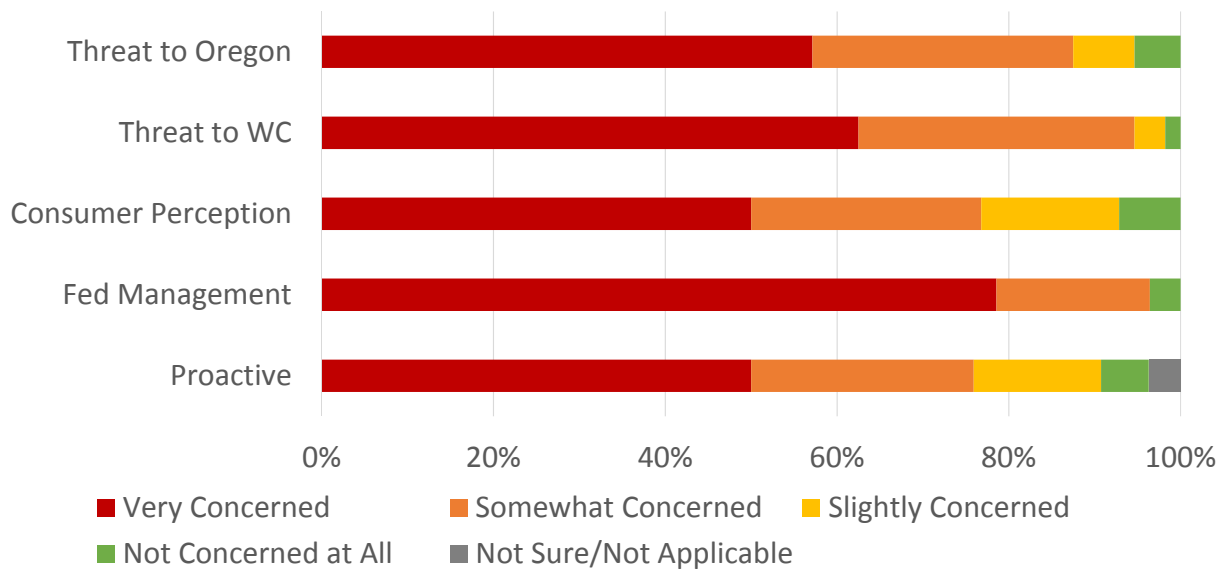


Image courtesy of <https://www.all-about-psychology.com/optical-illusions.html>

### 7,8. Before survey, did you know?



## 9. Rank your concern about the following issues:



## 10. What questions do you have about whale entanglement issues?

- 72% did not answer
- More info about reported entanglements
- Ways to reduce risk of entanglements
- Other stressors
- Process
  
- Comments:
  - Not a problem
  - Haven't personally seen any entanglements

# Feedback on the Directive

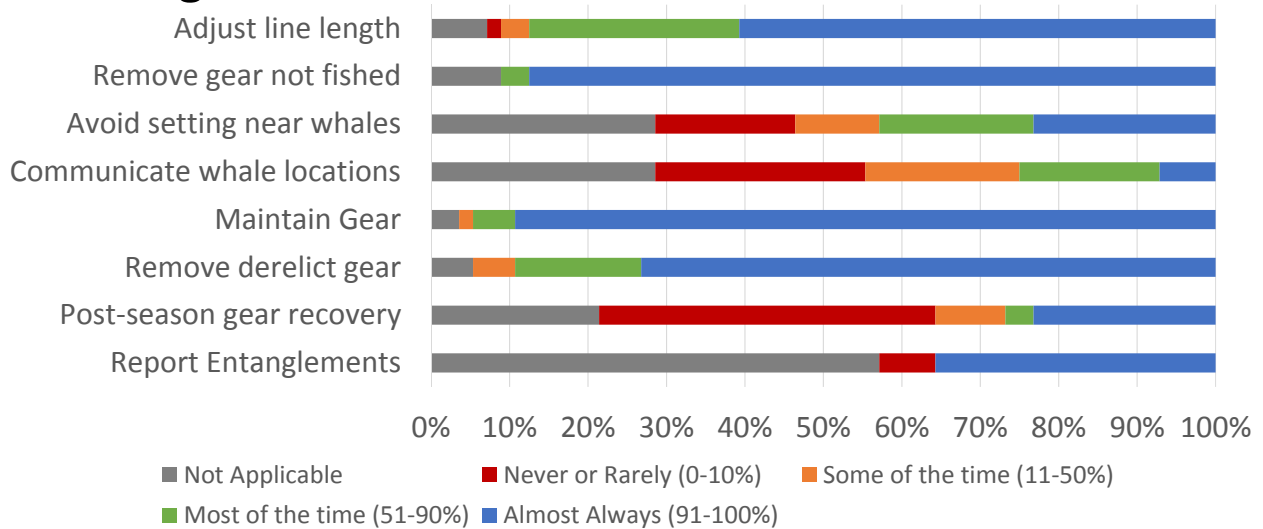
Oregon Commercial  
Dungeness Crab Fishing

**2017 - 2018 Directive  
to Minimize Whale  
Entanglement Risk**



Recommended by the  
Oregon Whale Entanglement Working Group

## 11. How frequently did you do the following things?



## 12. How or when would these practices be difficult to implement?

### Concerns:

- Avoiding setting in the vicinity of whales will be difficult
  - Early season
  - Reducing scope will lead to more lost gear
  - Needed?
  - Measures don't solve problem, and could be used to disenfranchise the industry
- 
- Many thought measures sounded generally reasonable.

## 13. Do you have recommendations to make the Best Practices Directive better?

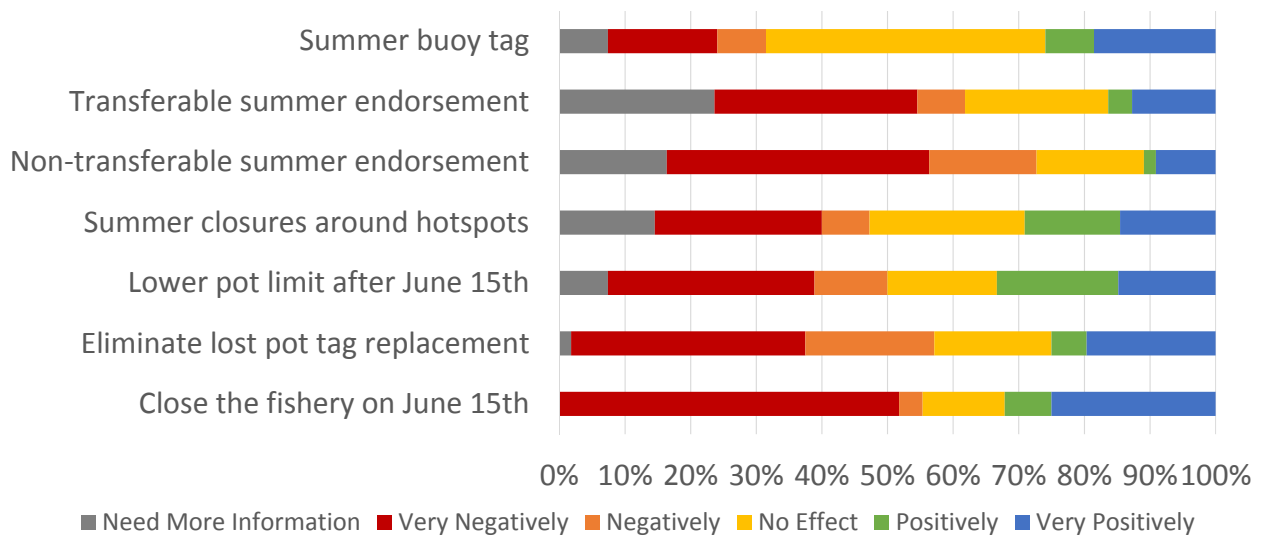
- Gear: Sinking Lines & Trailer length reductions
- Area & Seasonal restrictions
- Derelict gear program improvements
- Education & Enforcement
- Pot reduction
- No changes needed



## Feedback on Management Recommendations



### 14. Management options impacts on your fishing business?



## 15. How much to support or oppose?

