

Oregon Whale Entanglement Working Group Meeting **Friday, July 21, 2017, 1pm-5pm**

*Location: Englund Marine and Industrial Supply Conference Room
880 S.E. Bay Blvd., Newport, OR 97365*

*This summary has been reviewed by members of the Oregon working group participants for accuracy, and is publicly available at our website:
<http://extension.oregonstate.edu/clatsop/oregon-whale-entanglement-working-group>.*

This was the second meeting of the newly convened working group on whale entanglement in Oregon. The group was convened by Oregon Sea Grant to develop strategies for reducing the risk of whale entanglements in trap and pot fishing gear off Oregon. The group includes representatives of commercial and recreational Dungeness crab fishing, other fixed gear fisheries, marine mammal researchers, state fisheries managers, and conservation NGOs interested in whale populations. A list of members can be found at the end of this document.

The following summary captures key themes discussed by the Working Group during the July 21, 2017 meeting. Oregon Sea Grant facilitators will make all efforts to capture the prevailing sentiment within the working group, as well as dissenting perspectives. Working Group next steps are captured throughout the document (blue). Short-term next steps that should occur before the next scheduled working group meeting will be captured in a separate 'Next Steps' section at the end of the summary document. These summaries will be available to all working group participants for review before being more broadly distributed. Once final, these summaries will be distributed to all working group participants, the Oregon Department of Fish and Wildlife (ODFW), and National Marine Fisheries Service (NMFS). This summary will also be shared with the Oregon Fish and Wildlife Commission, the Oregon Coastal Caucus, other leadership and other interested parties throughout Oregon.

Oregon Sea Grant facilitators will develop summaries following all Working Group meetings. These summaries are designed to provide Working Group participants with information to share and discuss with their peers, as well as inform ongoing discussions within the Working Group itself. Additionally, these summaries will act as a source of information for other stakeholders interested in this topic. Meeting agendas, summaries, and other information about the Working Group will be available at:

<http://extension.oregonstate.edu/clatsop/oregon-whale-entanglement-working-group>.

Meeting goals:

- Finalize decision making processes for the group.
- Gather information about humpback whale distribution, movement and behavior in Oregon from marine mammal expert guest speaker.

- Discuss working group responses to time sensitive opportunities, including 1) communication with the broader fleet through the ODFW Annual Crab Newsletter and 2) gear modification research funding.
- Review working group goals from the first meeting and determine priorities for our third meeting.

Welcome, Introductions and Review Proposed Agenda

All working group members and visitors introduced themselves, provided information about their affiliation and role. No formal changes were made to the agenda. However, the discussion regarding broader communications was combined with work planning, and the discussion of gear modification research was truncated because of time constraints.

Process Decisions and Official Group Name

Review options for decision-making discussed at last meeting. Discuss options and give new and absent group members an opportunity to provide input. Determine group decision-making process, and official group name.

At the first meeting, the group agreed that our goal for making recommendations would be consensus. However, the group needed a method to determine working group recommendations in the absence of consensus. We discussed a simple majority vote, or a super-majority consisting of 60% or 2/3rds of voting members. Options for a quorum also included 50%, 60% or 2/3rds of members. The group needs to decide how it will put forward recommendations. For this decision only, we will use a simple majority, written vote. Thereafter, the group will use the method the group decides on.

We had a discussion to clarify the process by which recommendations from the working group will be passed along to ODFW, communicated out to the fleet for additional feedback and input, and then depending on the level of broader support, ODFW may take them to their commission. Several group members highlighted the benefits of using a super majority to vote on recommendations for which the group is unable to reach consensus. They argued that a recommendation made with a super-majority of the working group was more likely to be viewed as a valid recommendation by ODFW, and potentially better able to garner broad support from the wider fleet than a simple majority. There were concerns from a few group members about not being able to make a meaningful impact on the risk of whale entanglement if a super-majority was required to make a recommendation. There were also concerns regarding group members who were unable to attend in person, but who could participate by phone. A request was made to consider a quorum of $\frac{2}{3}$ of group members who were in attendance in person, or who could be reached by phone. After confirming that a conference line could be available in the meeting room, the group took a written vote on the following decision making method:

- The group will seek consensus whenever possible.
- When consensus is not possible, a vote will be used to decide whether a recommendation moves forward.

- To hold a vote, a quorum of $\frac{2}{3}$ of group members must be present at the meeting or be reached by phone.
- Recommendations, proposals, or motions will carry if $\frac{2}{3}$ of members present in person or by phone vote in favor.
- For all future meetings, Oregon Sea Grant will ensure that a conference line is available for group members to call in to participate in discussion and votes.

The group voted unanimously in favor of the aforementioned decision making method.

Announcements & Updates

Brief updates on current entanglement reports for 2017, scarring research by Leigh Torres, recent developments in Canada & California, and updates from the CA Dungeness Crab Gear Working Group.

Amanda Gladics provided a preliminary update on the current status of 2017 entanglement reports, provided by Lauren Saez (Ocean Associates). The document shared during the meeting is included at the end of these notes.

Kaety Jacobson, Bob Eder and Justin Yager provided a brief update on a research project led by Leigh Torres and Alyssa Gomez to assess entanglement scarring rates in the Pacific Coast Feeding Group of gray whales. The marine mammal research team has a series of photographs of grey whales with and without scars, and sought input from fishermen on identifying the source of scars. Eder and Yager both reported that they thought their judgement on sources of scars lined up pretty well with the assessments made by the research team.

The group briefly discussed the recent death of Joe Howlett, a fisherman and experienced whale disentanglement responder in Eastern Canada, during the disentanglement of a Northern right whale. In response, NOAA issued a brief moratorium on whale disentanglement response which had been lifted prior to our meeting. One group member reported watching videos online of Howlett conducting previous disentanglements and expressed concern that people in the videos spent a long time cutting through lines. John Calambokidis reported that the techniques used for whale disentanglement in the US differ than those used in Canada, and that longer poles are used in the US to reduce rescuers exposure to potential strikes from the whale flukes or pectoral fins.

Justin Yager provided an update on a whale entanglement that he and Brian Nolte reported off Crescent City, CA. Brian Nolte observed a suspected entangled whale while fishing but was unable to call it in because he was outside of cell phone range. Nolte knew that Yager was involved with the whale entanglement issue and could be a resource. In line with recommendations from NOAA Fisheries, Yager advised the California fisherman to stay with the whale and gather as much information about the entanglement as he could. Nolte was able to collect a precise description of the gear involved, the whale's location, and, crucially, the whale's direction of travel. While neither fisherman knew the NOAA hotline number (1-877-

SOSWHALE), Yager had phone numbers for several marine mammal scientists because of his involvement with the Oregon working group. Despite not knowing the exact number to call, Yager persisted in calling all the marine mammal scientists he could think of until he was able to reach someone, who then initiated the whale entanglement response network. There were many additional contributors to the disentanglement effort, including a highly trained disentanglement response team and local fishermen who stood by and assisted in the disentanglement effort, but none of that would have been possible without the initial report of the entangled whale. Yager emphasized how difficult it was for fishermen to report an entanglement, particularly at a time when each entanglement report would likely bring increased scrutiny and unwanted negative attention on to their industry.

Gladics provided a brief update on the California Dungeness Crab Gear Working Group meeting that occurred on July 18-19, 2017. Once finalized, complete summary notes of that meeting will be available at <http://www.opc.ca.gov/whale-entanglement-working-group/>. Key discussions and outcomes included:

- The California working group was asked to respond to a timely request from the California Department of Fisheries and Wildlife for an outline of a general legislative framework that could be provided upon request to members of the California State Legislature. The group developed and endorsed [this document](#) during their meeting, which summarizes the framework of identifying priority fisheries, establishing working groups, the development of a risk assessment and adaptive management framework, and steps the Dungeness Crab gear working group is currently taking.
- The group provided guidance to CDFW that they recommend universal buoy marking on all fixed gear if there was interest from the legislature on immediate regulatory actions.
- The California working group continued to articulate the details of the Whale Hazards Assessment Team (WHAT) framework & program. A sub-committee of the working group conducted a hind-casting retrospective analysis of assessing whale entanglement risk for the past 5 years based on the information available at the time. The full group conducted a hindcasting exercise for 2015, as an exercise to determine what elements of the framework require additional definition and detail in order to be more functional and useful for forecasting whale entanglement risk.

Humpback Whale Presentation and Discussion

Presentation from John Calambokidis from Cascadia Research on Humpback whale distribution, migration, and behavior off Oregon, followed by questions and discussion.

Calambokidis's presentation slides can be found [at this link](#).

The group had questions during and after the presentation. Summaries of main questions and answers are reflected below:

Q: What information is known about interactions/entanglements in Alaska?

A: Not much is known - it is a large area, and not many people to observe and report.

Q: Is there seasonality in the depth distribution of whales?

A: No data on that currently, but the concentration and accessibility of prey is a much more important driver of whale distribution than total amount of prey. Density of prey has a major impact on the cost-benefit of whale foraging behavior.

Q: Has there been any documentation of domoic acid in anchovies?

A: Unknown. But there has been testing in whale tissues and has found elevated amounts but no clear link between whale behavior changes or deaths associated with domoic acid.

Q: What advice do you have regarding gear, depth of gear or other approaches to reduce the likelihood of interactions between crab gear and whales?

A: The dungeness crab fishery is lucky to have a natural separation between the peak of the fishery and the peak of whale abundance in this area, so whatever you can do to further separate the peak of the effort from the peak of whale abundance is a good place to start. Since humpback whales spend a lot of time at the surface, shortening lines at the surface and reducing the amount of slack line should also help.

Q: How do Northern Right whales and humpback whales compare in terms of behavior? Is research on the East Coast transferrable to the situation here on the West Coast?

A: The species differ in their habit and behavior, so while some of the research is transferrable we should expect differences between the two species and how they interact with fishing gear and gear modifications.

Q: What happens to gear that gets disentangled? Does NOAA have a good understanding of what gear rigging might be more likely to entangle whales?

A: Very little gear is recovered, so there isn't enough data to know whether the gear that entangled a whale differs from gear that doesn't entangle whales. However, when gear can be identified to a particular fisherman Dan Lawson and Lauren Saez gather detailed information on the set-up of the gear to be able to examine patterns.

Q from visitor to fishermen in the group: Are fishermen using floated, sinking or neutrally buoyant line? Are there regional differences?

A: The fleet historically used more floating line, but would attach leads to keep it off the surface to avoid fouling, or getting snagged by other vessels. The fleet has been transitioning to neutrally buoyant line over the last four to five years. The whole fleet uses floating line between the trailer buoys so that the buoys will be spaced a fathom or more apart at the surface to aid in retrieving the gear.

Q from John to the group: How much of the gear he saw while conducting fieldwork off southern Oregon was Dungeness crab gear?

A: Inside 50 fathoms, essentially all of it is probably crab gear.

John Calambokidis also shared some observations of fishing gear he made while at sea off Southern Oregon. He observed a lot more crab gear still deployed in Southern Oregon compared with northern California. He also observed more gear that appeared to be derelict or abandoned. The distance between trailer buoys also appeared longer in Oregon compared with California.

Time Sensitive Opportunities: Broader Communications

The working group has the opportunity to include targeted communication to the broader fleet in the ODFW Crab Newsletter, distributed in late October each year. If the group wishes to include something in the newsletter or as an enclosure with the newsletter, the communication product must be completed by mid-September. If the group desires, this is potentially a way to distribute an Oregon specific best practices guide ahead of the 2017-2018 crab season or deliver key messages about the group to the broader fleet.

During our announcements about recent entanglement events, a group member mentioned that few fishermen knew what number to call to report an entangled whale. Therefore, the group spent some time discussing how they could support getting this information to the fleet.

- Group members suggested obtaining or making waterproof stickers that had the entanglement reporting hotline number in large text and bold colors. Group members suggested that ports, and processors would be good places to provide these stickers and enlist their assistance in distributing them. There was a brief discussion of trying to sell the stickers or target coastal visitors, but the group decided they did not want to pursue that route because of concerns about less credible reports or drawing unwanted attention to the issue. [Oregon Sea Grant will pursue developing and distributing this communication resource.](#)

[Update 8/10/17: NOAA Fisheries has a sticker available, and will be sending ~500 to Oregon Sea Grant. Oregon Sea Grant will be working with group members and ODFW to distribute these to the fleet. Initial ideas include 1\) distribute a limited number by group members to fellow fishermen 2\) Work with marine mammal group members to reach the whale watching fleet 3\) send as an enclosure with the ODFW Dungeness Crab newsletter 4\) after an initial phone call, mail copies of stickers to processors and requesting that they distribute to fishermen they buy from 5\) partner with Fran Recht to distribute at meeting for Oregon Port managers.](#)

- Group members suggested getting the phone number printed on the cover of logbooks for both crab and other sectors, as well as in the recreational fishing synopsis. [Kelly Corbett will be following up on this suggestion to determine if ODFW can do this, and next steps.](#)
- The Dolphin and Whale 911 App was suggested as a way to get more detailed information from entanglement reports. The app allows observers to submit entanglement reports with photos tagged with the users GPS location. Information about the app would likely be best targeted toward whale watching businesses. (http://sero.nmfs.noaa.gov/protected_resources/outreach_and_education/mm_apps/).

Oregon Sea Grant will follow up to determine if the Dolphin and Whale 911 App has expanded to the West Coast.

Update 8/10/17: The Dolphin and Whale 911 App is set up to work in Oregon, and automatically calls the marine mammal stranding network hotline number (1 866-767-6114).

- The group noted that with more awareness among fishermen and coastal residents about how to report whales, there could be an increase in reporting unrelated to any actual increase in entanglement rate. The group suggests finding ways to keep track of the relationship between increased awareness and increased entanglement reports. Oregon Sea Grant will communicate this concern with NOAA Fisheries, and ensure that NOAA Fisheries knows where and how the SOSWHALE hotline has been distributed in Oregon.

Another point of discussion was the need to get information out to fleet on importance of this issue. Oregon Sea Grant will work with Kelly Corbett at ODFW to develop a short communication piece for inclusion in the ODFW Dungeness Crab Newsletter that includes some justification on why this is an important issue.

Others in the group brought up the need to take advantage of breaking news on whale entanglements to engage with the media to ensure that information about fishermen's contributions to a proactive response to the issue are communicated to a broad audience. The group will take up further discussion about talking points and media-ready documentation of the group's work at a future meeting.

Work Planning

The group will review the goals and potential activities discussed during the first meeting and identify which initiatives are top priority for action in the short-term.

The group identified several priorities for immediate action by the group:

Best Practices Guide

Several in the group felt that updating and endorsing a Best Practices guide would be a good initiative for the group to work on. This view was not universally held, as other group members felt that the best practices guide had already been distributed to the fleet and encouraging voluntary actions was not going to be sufficient to successfully reduce the risk of whale entanglement. However, on the whole, the group was interested in spending some time between meetings critically reviewing the Best Practices Guide developed by the California Dungeness Crab Gear Working Group, collecting comments prior to the meeting, and see if we need to discuss as a whole group during our September meeting. In particular, the group felt that best practices on distances between the surface trailing buoys needed examination for Oregon's fishing conditions. Better data on who is already using best practices was also requested. Oregon Sea Grant will solicit input on the best practices guide from working group members prior to the September meeting.

Coordination with California Working Group

There were diverging ideas about how our group should be collaborating with the California Dungeness Crab Gear Working Group. Overall the group felt that coordination was a continued priority, and the group wanted to stay connected. However, there were somewhat different ideas about how to do that. Some in the group felt that Oregon needs to follow California's lead, particularly on gear modifications while other group members prefer not to wait for California to come up with a solution to the issue. One suggestion was to provide gear testing ideas to California, since information about gear effectiveness would be most easily gathered in the area with higher frequency of whale entanglement reports. [Oregon Sea Grant will continue to attend California Dungeness Crab Gear Working Group meetings and report to the Oregon working group on their activities. Oregon Sea Grant will also communicate with the facilitation team for the California working group on the possibility of in-person exchanges between the groups, in the form of Oregon fishermen attending the California working group meeting or having California fishermen attend an Oregon working group meeting.](#)

[Update 8/10/2017: Oregon Sea Grant contacted Kelly Sayce, the facilitator of the California group, who will be relaying our request to send Oregon Group member\(s\) to the September California working group meeting during their conference call on 8/17/2017. Sayce will also gauge interest in bringing California group members up to Oregon working group meetings.](#)

Lost and Derelict Gear

Group members proposed that additional work could be done on encouraging derelict gear clean-up. Other members pointed out that Oregon had a robust derelict gear removal program in place. In particular, working group members were interested in developing better incentives for in-season clean-up, and additional support for out of season cleanup.

Understanding the economics of the Dungeness Crab fishery

As noted elsewhere in this summary, there was extensive discussion about determining an appropriate response to whale entanglement in light of the economic impact on the fishery. [Oregon Sea Grant will be gathering information for the group to review and requesting expert guests to be available for the next working group meeting.](#)

Reputation and Brand Maintenance

Maintaining the reputation and elevating the brand of the Oregon Dungeness crab fishery, as separate from the West Coast Dungeness Crab Fishery was identified as a priority. The group identified a few key elements: the lower number of reported whale entanglements in Oregon, the switch several years ago from buoyant to neutral line throughout the fleet, and fishermen's interest in addressing whale entanglement proactively. [We did not actively assign next steps. ODCC is likely the most appropriate entity to focus their efforts on this, with support from other working group members.](#)

Time Sensitive Opportunities: PSMFC funding (if time allows)

There is funding available this fall/winter to evaluate operational feasibility of gear modifications. We will briefly review [input Oregon fishermen provided](#) during the March workshop in Portland, and discuss. If appropriate, we will decide if there are any gear testing initiatives that the working group would like to endorse or recommend for further exploration.

We announced that PSMFC was seeking fishermen interested in identifying specific gear modifications to test. We did not have time to discuss this funding opportunity further or consider whether there were gear options the group was interested in endorsing for further exploration.

Wrap up and Next Steps

Outline action items and responsible group members for any interim efforts, determine priority discussion topics for next meeting.

The group discussed what key agenda items should be addressed at our next full working group meeting in September.

A presentation from Dan Lawson (NOAA Fisheries) was identified as an important component of our next working group meeting. [Oregon Sea Grant has already requested his presence, and will coordinate with NOAA staff as the meeting gets closer to ensure that they are able to participate.](#)

The group also identified that a discussion about proposing changes to the length of the season or effort in the late season was also needed. The 'season conversation' was described as the 'whale in the room'. [Kelly Corbett will develop month by month crab landings reports to inform the discussion. Oregon Sea Grant will follow up with Hugh Link of the Oregon Dungeness Crab Commission to request weekly revenue reports for the crab season using the bioeconomic model. Oregon Sea Grant will contact Shannon Davis and Gil Sylvia, who worked on developing the bioeconomic model, to request that they attend and be available to answer questions during our September meeting. Oregon Sea Grant will also work with the marine mammal experts in the group and at NOAA Fisheries to provide information about whale populations and sightings on the Oregon coast by month.](#)

The group requested information about their options from experts in the following areas: Economics, Marketing/Image, whale biology, regulatory, technology/real-time, and fishermen. When asked to identify which of those was missing from the current makeup of the group, economics was identified as the priority.

Public Comment (Maximum 10 minutes)

The group will listen to comments from visitors in attendance. Visitors are asked to keep their comments concise, respectful, and follow the ground rules of the group.

During public comment period, the group heard input from visitors in attendance.

Bruce Mate shared that in his experience, observing whale entanglements in Oregon is rare. In his years of research on whales on the Oregon coast, he has only observed a handful personally. He felt that if California fishermen were in the position that Oregon fishermen were in, they would be celebrating and no one would be talking about taking action. Overall he expressed that he didn't really think that Oregon had a problem with whale entanglement. In response, several group members expressed that it was nice to hear that but they wished that he could convince NOAA of that. Other members expressed that they were concerned that regardless of the frequency of reported entanglements in Oregon, Oregon fishermen could be affected by the overall entanglement numbers up and down the West Coast. They also shared that part of the threat to commercial fishing was rooted in the public perception, marketing, broad definition of take and uncertainty about unobserved entanglement events.

Mike Pettis suggested that it would be important to have a more informed discussion about what the fishery would actually be giving up if there were changes to the season. He suggested having Kelly Corbett from ODFW look at revenue from landings month by month to help inform discussion in September.

Corbett suggested that it might be more useful to have Shannon Davis' work on the bioeconomic model to help inform that discussion, since it contains a much more detailed analysis of economic impacts to sectors within the fleet. [As mentioned above, Kelly Corbett will develop month by month crab landings and ex-vessel value reports to inform the discussion. Oregon Sea Grant will follow up with Hugh Link of the Oregon Dungeness Crab Commission to request weekly revenue reports for the crab season using the bioeconomic model. Oregon Sea Grant will contact Shannon Davis and Gil Sylvia, who worked on developing the bioeconomic model, to request that they attend and be available to answer questions during our September meeting.](#)

Meeting Participants

Group Members in Attendance	Affiliation
Bob Aue	Commercial Fisherman - Newport
Susan Chambers	West Coast Seafood Processors Association
Kelly Corbett	ODFW Commercial Dungeness Crab
John Corbin	Commercial Fisherman - Astoria
Debbie Duffield	Portland State University
Bob Eder	Commercial Fisherman - Newport
Sheila Garber	Englund Marine & Industrial Supply
Mike Lane	Commercial Fisherman - Coos Bay
Hugh Link	Oregon Dungeness Crab Commission
Ron Mason	Recreational Crabber - Corvallis/Newport
Tony Pettis	Commercial Fisherman - Newport
Joy Primrose	Oregon Chapter of the American Cetacean Society
Jim Rice	OSU, Marine Mammal Institute
Justin Yager	Commercial Fisherman - Newport
Oregon Sea Grant	
Amanda Gladics	Facilitator
Kaety Jacobson	Co-Facilitator
Visitors in Attendance	
Bruce Mate	OSU, Marine Mammal Institute
Terry Thompson	Commercial Fishermen, Lincoln County Commissioner
Mike Pettis	Commercial Fisherman - Newport
Lindsay Eng	Oregon Department of Agriculture
Shannon Davis	Economist - The Research Group
Dalin D'Alessandro	PSU - Marine Mammal Researcher
Alyssa Gomez	OSU - Marine Mammal Institute Intern
Caren Braby	ODFW
Group Members Unable to Attend	

Meeting hosted by Oregon Sea Grant

Gway Kirchner	The Nature Conservancy
Rick Lilienthal	Commercial Fisherman - Coos Bay
Tyler Long	Commercial Fisherman - Coos Bay
Stuart Schuttpelz	Commercial Fisherman - Reedsport
Sarah Skamsar	Foulweather Trawl
Leigh Torres	OSU, Marine Mammal Institute