



California Department of Fish and Wildlife - Marine Region

2020-2021 DUNGENESS CRAB FISHERY INFORMATION

October, 2020

CONTENTS

Commercial Dungeness Crab Fishery Updates pg. 2-4

- *Summary of 2019-2020 Season*
- *Pre-Season Testing*
 - *Updates on Domoic Acid Testing and Biotoxin Management Areas*
 - *Quality Testing*
- *2020 Tri-State Meeting*
- *Status of Dungeness Crab Task Force*
- *Crab Disaster Funding*

Reducing the Risk of Marine Life Entanglement pg. 5-7

- *Season Changes for 2020-2021*
- *Working Group Best Practices Guide*
- *Conservation Plan and Incidental Take Permit*
- *Trap Gear Innovation*
- *Lost or Abandoned Gear*

FISHERY INFO AT:

www.wildlife.ca.gov/Crabs

[www.wildlife.ca.gov/Conservation/
Marine/Whale-Safe-Fisheries](http://www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries)



Dungeness crab
illustration by Amadeo Bachar

The Department of Fish and Wildlife is providing a summary of IMPORTANT updates and developments affecting the commercial Dungeness crab fishery that includes measures to reduce risk of marine life entanglement of whales and sea turtles.

Summary of 2019 - 2020 Season

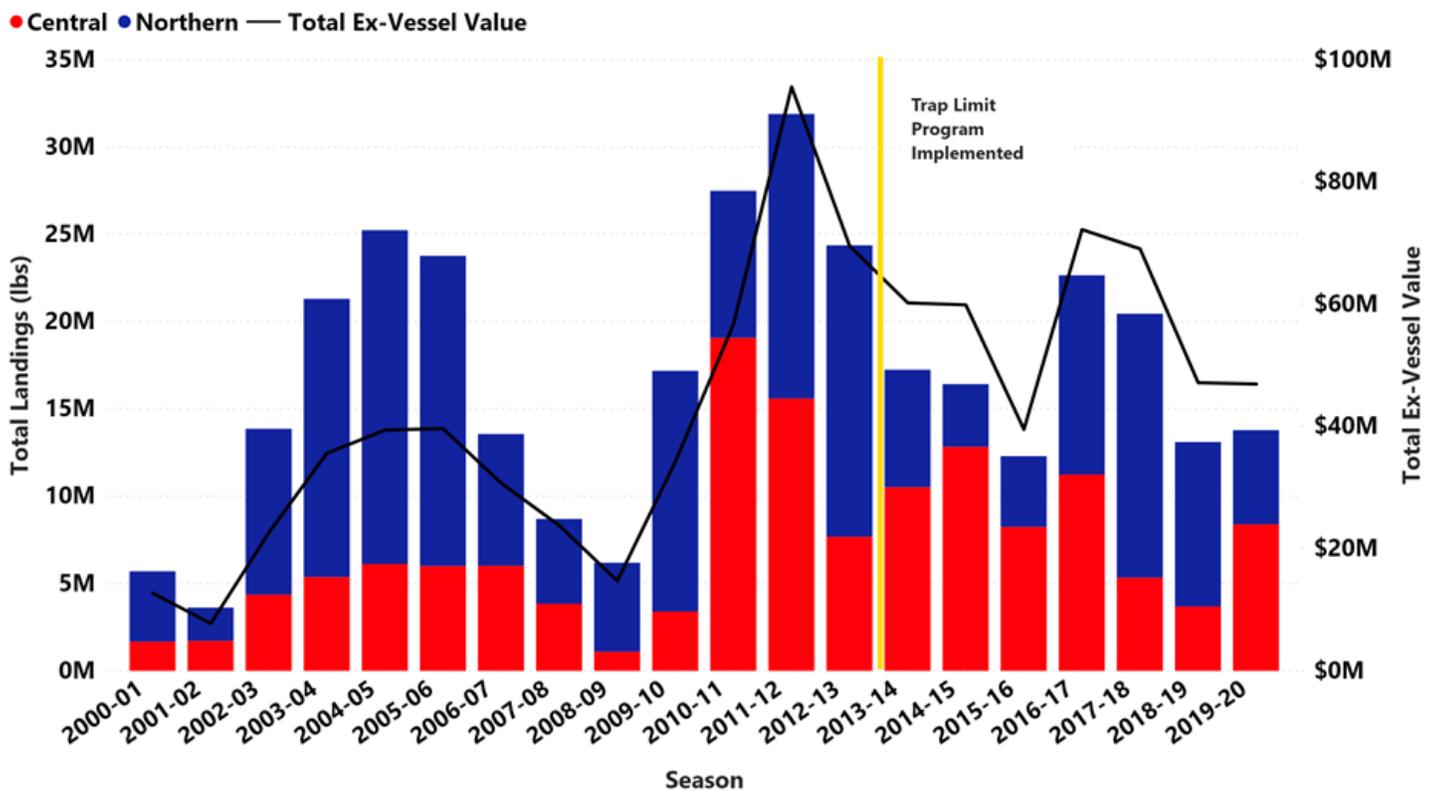
Region	Total Pounds (millions)	Ex-Vessel Value (millions)	Average Price per Pound	Season Duration
Northern Management Area	5.4	\$18.7	\$3.66	Dec 31, 2019* – July 15, 2020
Central Management Area	8.4	\$28.2	\$3.91	Dec 15, 2019 – May 15, 2020**
Statewide	13.8	\$46.9	\$3.80	

*Season delayed due to poor meat quality

**Season delayed and closed early due to marine life entanglement risk

The table above summarizes 2019-2020 Dungeness Crab Landings by Region.

The figure below gives a summary of landings and total value by season and management area for the past 20 seasons from 2000-2001 to 2019-2020 season. Colored bars represent landings in pounds (primary axis) by management area. The black line represents ex-vessel value (secondary axis).



Commercial Dungeness Crab Fishery Updates

Pre-Season Testing

NEW Updates on Domoic Acid Testing and Biotoxin Management Areas

The Department participated in several discussions with Office of Environmental Health Hazard Assessment (OEHHA) and California Department of Public Health (CDPH) to determine if area closure boundaries could be pre-established based on the 17 sites that have been sampled for domoic acid from prior seasons. As a result of those discussions, OEHHA and CDPH identified nine (9) "Biotoxin Management Areas" (BMAs) between the California/Oregon border and the California/Mexico border.

BMAs considered number of sampling locations within a given area, geographic extent of an area, access to neighboring port areas, boundaries used in prior seasons, or boundaries proposed under new regulations (i.e., Department's Risk Assessment and Mitigation Program or RAMP, Section 132.8, Title 14, CA Code of Regulations). Designating pre-established boundary areas are intended to build more predictability and consistency from season to season and help the fleet prepare for any season delays based on current test results.

The Department is coordinating with CDPH and fishermen to begin collecting Dungeness crab samples for domoic acid testing. During sampling, vessels are required to carry a electronic solar logger and skippers must maintain chain of custody documentation. Sampling started in mid-September and all ports are expected to be tested over the next several weeks. The first round of testing is expected to be completed by October. Test results will be posted on the following CDPH website:

<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/DomoicAcid.aspx>.



Photo credit: C.Juhasz CDFW

Quality Testing

Due to COVID-19 public health safety concerns, Department staff and contracted observers will not be able to conduct onboard sampling for meat quality this year. The Department is exploring measures to ensure testing protocols are followed and provide assurance for the integrity of the test results. Similar to domoic acid testing, the Department will require participating vessels to carry a solar logger to verify sampling locations. The first round of quality testing will be coordinated during the last week of October for the port areas of Crescent City, Trinidad and Eureka. These are subject to change pending domoic acid testing results.



Illustration credit: C.Makeyev CDFW

California Department of Public Health Website:

www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/DomoicAcid.aspx

2020 Tri-State Meeting

In May 2020, a Tri-State meeting was held with state managers and industry to discuss several topics affecting the fishery. The primary goal of the meeting was to discuss lowering meat recovery criteria south of Cascade Head, Oregon. Lowering the criteria could potentially expedite a season opener in the northern management area (Sonoma/Mendocino county line to the CA/OR border) where crab quality testing occurs. Tri-state managers agreed to reduce the meat yield criteria south of Cascade Head from 25% (rounding allowed) to 24% (no rounding). This change will be in effect for the upcoming season. The Dungeness crab task force did recommend changing the meat recovery criteria at its October 2019 meeting.

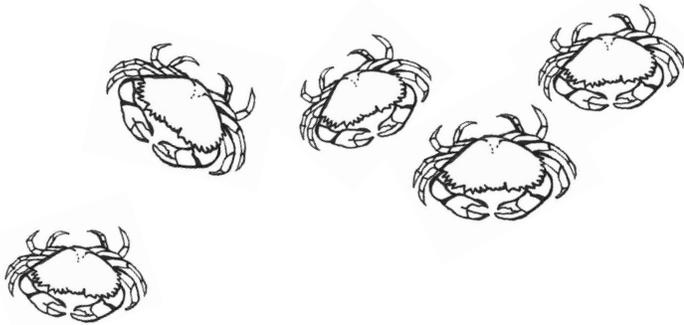


Photo credit: C.Juhasz CDFW

Additionally, all three states continued to discuss their respective initiatives for identifying Dungeness crab fishing gear involved in marine life entanglements. These included new and proposed regulations for gear and line marking as well as coordinating unique buoy tag shapes and colors between the states.

The Dungeness Crab Task Force

In July, the Ocean Protection Council announced the results of the Dungeness crab Task Force (DCTF) elections for the ports of Eureka, Bodega Bay, Half Moon Bay and the non-resident seat.

A virtual DCTF meeting was held October 21-22, 2020. Agenda items for this meeting included updates to the Dungeness crab fishery including but not limited to the trap limit account, Tri-State initiatives, and the RAMP rulemaking.

A more detailed agenda and meeting summaries will be posted on the DCTF website when it becomes available:

<http://www.opc.ca.gov/2009/04/dungeness-crab-task-force/>



Photo credit: C.Juhasz CDFW

Crab Disaster Funding

Federal funding for the 2015-16 California Crab Fisheries Disaster was received last year. Under the approved spending plan, a portion of the disaster funds was allocated for direct payments to eligible entities with the remainder to be used for mitigation through competitive research grants and directed grants. The Department concluded issuance of direct payments in October 2019.

Mitigation funds are currently being disbursed. The California Department of Public Health has received a grant for the purchase of laboratory supplies. Research proposals were solicited in early 2020 that aim to better understand domoic acid and how the fishery can better respond to future domoic acid events.

Three research grants have been awarded focusing on the socioeconomic impacts of domoic acid on California crab fisheries and fishing communities, transfer and retention of domoic acid in California crab species, and development of predictive modeling tools to better inform the commercial crab fleet. All funds need to be spent by June 2023.



Photo credit: C.Juhasz CDFW

Reducing the Risk of Marine Life Entanglement

Season Changes for 2020-2021

New regulations (Section 132.8, Title 14, CCR) which formally establish the Risk Assessment and Mitigation Program (RAMP) will be effective on November 1, 2020 and will govern operations of the fishery this season.

The Department will evaluate risk for each Fishing Zone at least monthly from November – June. If risk is elevated, the Director will determine appropriate management action after receiving a recommendation from the California Dungeness Crab Fishing Gear Working Group.

Potential management actions include: a fleet advisory, depth restriction, gear reduction, Fishing Zone delay or closure, or authorization to use Alternative Gear. CDFW will provide a minimum of 72-hour's notice to the fleet before implementing any management action. Notice will be provided via the Whale Safe Fisheries email listserv and the Whale Safe Fisheries webpage. CDFW will also work with the U.S. Coast Guard to make informational broadcasts on VHF Channel 16.

CDFW will provide in-season changes to the fleet via:

- Posting to Whale Safe Fisheries Listserv
- Posting to Whale Safe Fisheries page www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries
- U.S. Coast Guard informational broadcasts on VHF Channel 16.

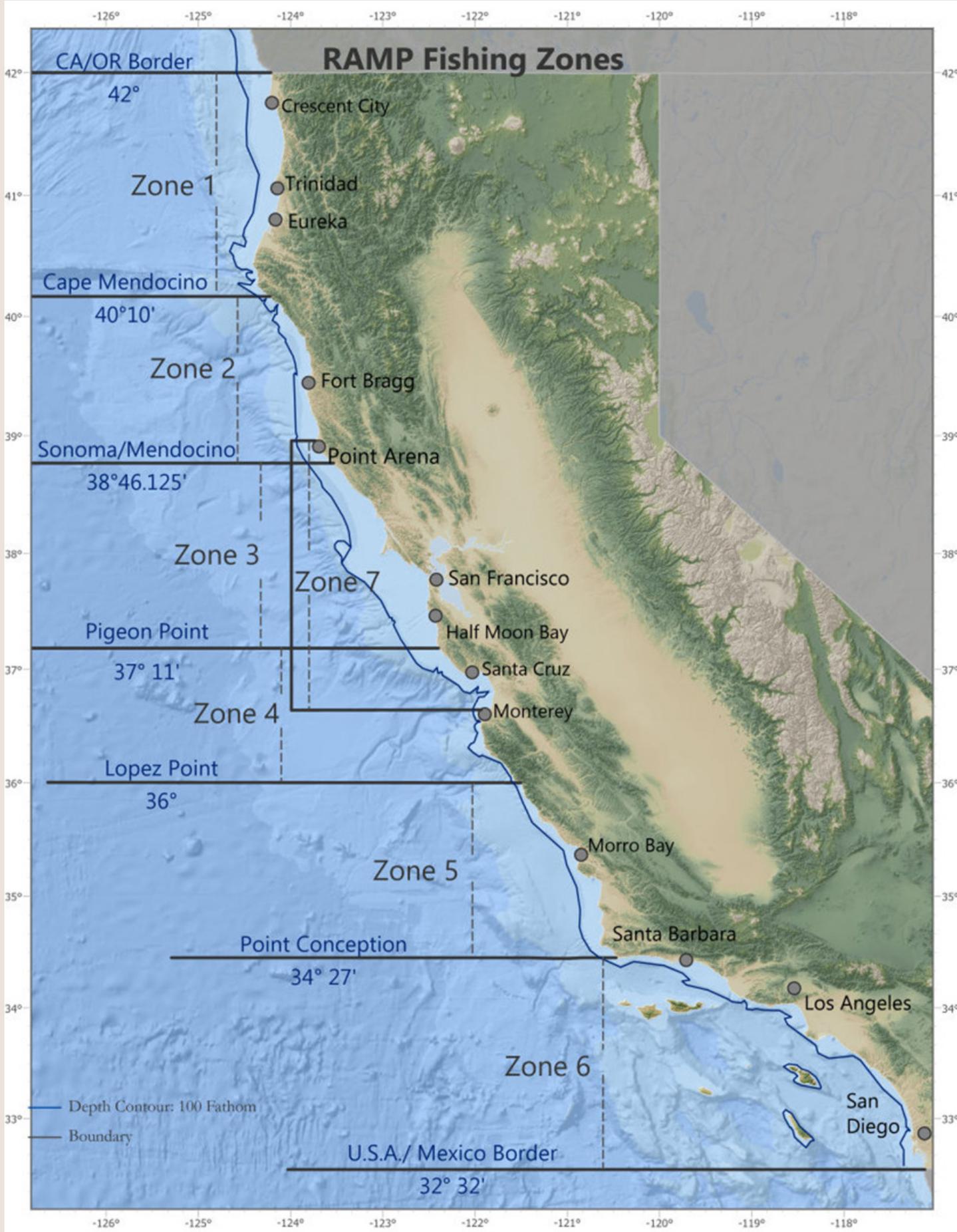


Photo credit: D. McDermott CDFW

The RAMP regulations also establish new mandatory reporting requirements for this season. **All vessels participating in the fishery must submit bi-weekly reports to CDFW (on or before the 1st and 16th day of each month) with their permit number, current Fishing Zone, depth range, and number of deployed traps.** The final report must include the number of lost traps. Bi-Weekly Reports must be submitted via email or text to WhaleSafeFisheries@wildlife.ca.gov

When operating under a depth constraint or using Alternative Gear, all vessels must have an electronic monitoring system. By the 2023-2024 Fishing Season all vessels participating in the commercial Dungeness crab fishery will be required to carry an electronic monitoring system.

Additional information regarding the RAMP and this new reporting requirement are available at <https://wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries>



Regulation Updates

2020-2021 Best Practices Guide Now Available!

The **California Dungeness Crab Fishing Gear Working Group** has produced an updated Best Practices Guide for the 2020-2021 fishing season.

A hard copy can be obtained by contacting WhaleSafeFisheries@wildlife.ca.gov. The Department also reminds fishermen that it is illegal to leave trap gear unattended for more than 96-hours and recommends those no longer making Dungeness crab landings to remove their trap gear (including pots, lines and buoys) from the water as soon as possible.

Conservation Plan and Incidental Take Permit

The Department is developing a Conservation Plan to address protected species interactions in the Dungeness crab fishery. Species of concern include Humpback Whales, Blue Whales and Pacific Leatherback Sea Turtles. The Conservation Plan is one component of the Department's application for an Incidental Take Permit (ITP) under Section 10 of the federal Endangered Species Act. The Department submitted a preliminary draft to National Marine Fisheries Service for review on May 15, 2020 and is currently making appropriate revisions based on initial comments from NMFS.

During the revision process the Department will continue to engage stakeholders in the development of the Conservation Plan prior to submission of a formal ITP application. For more information about the ITP process and to learn about upcoming opportunities for involvement please visit: www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries

Trap Gear Innovation

At their June 2020 meeting, the California Ocean Protection Council approved a grant to the National Marine Sanctuary Foundation to conduct testing of both pop-up and low-tech gear innovations during the 2020-21 commercial Dungeness crab fishing season. The Department is closely collaborating with the California Ocean Protection Council and National Marine Sanctuary Foundation and the California Dungeness Crab Fishing Gear Working Group on design and implementation of the testing project.

Additional information about the project and opportunities for participation will be posted at:

www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries

Lost or Abandoned Commercial Dungeness Crab Trap Gear Retrieval Program

The Department issued Retrieval Permits to qualified entities in seven ports (Crescent City, Trinidad, Eureka, Bodega Bay, San Francisco, Half Moon Bay, Monterey Bay) for this year's Trap Gear Retrieval Program. Dungeness crab vessel permitholders had until October 21 to arrange payment for their retrieved gear.

Any gear not paid for or picked up by that date becomes property of the Retrieval Permittee, and CDFW will levy a per-trap fee on the Dungeness crab vessel permitholder which must be paid before the permit can be renewed or transferred. Summaries of this year's program outcomes are anticipated to be available in early 2021 and will be posted at:

www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries



Photo credit: C. Juhasz CDFW

Retrieval Permit applications for the 2021 season will be posted early next year on the Department's License and Revenue Branch page:

<https://www.wildlife.ca.gov/Licensing/Commercial>

IF YOU NEED ADDITIONAL INFORMATION ON SPECIFIC 2020-2021 TOPICS

Please visit our blogsite or website, or contact these CDFW scientists:

For:

- 2020-2021 Season Changes
- Risk Assessment and Mitigation Program
- Working Group Best Practices Guide
- Conservation Plan and Incidental Take Permit
- Trap Gear Innovation

Ryan Bartling

CDFW Senior Environmental Scientist
(415) 761-1843
Ryan.Bartling@wildlife.ca.gov



For:

- Disaster Relief Funds
- Domoic Acid and Quality Testing
- Dungeness Crab Task Force
- Gear Retrieval Program

Christy Juhasz

CDFW Environmental Scientist
(707) 576-2887
Christy.Juhasz@wildlife.ca.gov

2020-2021 BEST PRACTICES GUIDE

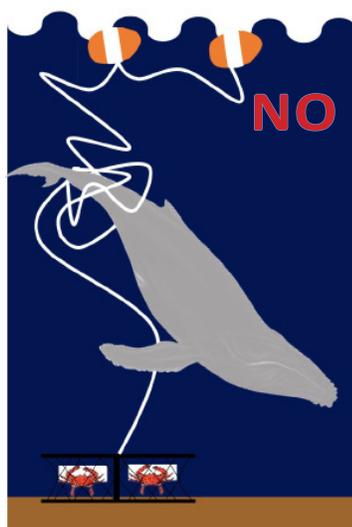
FOR MINIMIZING MARINE LIFE ENTANGLEMENT

Whale and sea turtle entanglements are a concern for fishermen, the public, California Department of Fish and Wildlife (CDFW), Ocean Protection Council and the National Marine Fisheries Service (NMFS). **The California Dungeness Crab Fishing Gear Working Group** developed this guide as part of a proactive and comprehensive approach to addressing entanglements in Dungeness crab gear. Taking these important steps will help maintain the fleet's access to this valuable resource.



BEST PRACTICES

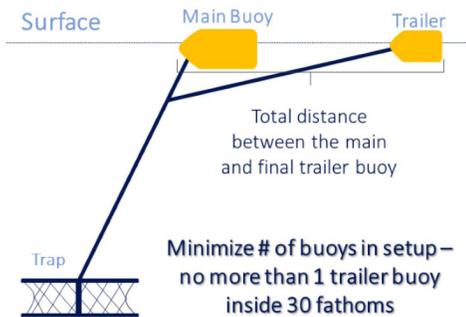
- **ADJUST** trap line length when changing set location across depths by maintaining optimal scope.
- **MINIMIZE** knots, leads and scope when compensating for tides, currents, and weather.
- **ELIMINATE** excess lines floating at the surface. Floating line should only be used between the main buoy and the trailer.
- **REDUCE** slack surface line.
- **KEEP** vertical lines taut.
- **AVOID** setting gear in the vicinity of whales and sea turtles.
- **COMMUNICATE** locations of high whale activity to other fishing boats.
- **REMOVE** fishing gear before 11:59 pm on the last day of the season.
- **PROMPTLY** remove gear not being actively fished.
- **MARK** gear consistent with regulations.
- **MAINTAIN** gear to ensure lines and buoys are in good working condition so they do not break and get lost.
- **RETRIEVE** lost or abandoned commercial Dungeness crab traps as authorized in Title 14, CCR Section 132.2 and 132.7.



**KEEP LINE
BETWEEN
POT AND
MAIN BUOY
TAUT
AND
VERTICAL**

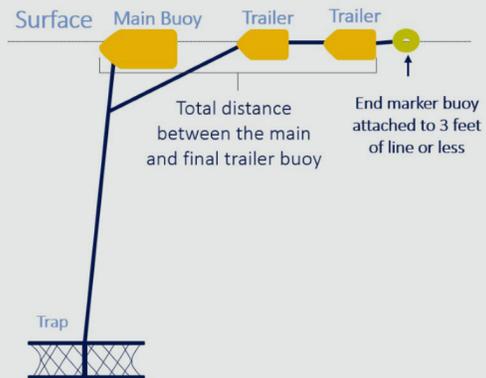
REDUCE SLACK SURFACE LINE

Buoy Setup: Best Practices (Recommended)



RECREATIONAL	Shortest as possible, max of 2 fathoms (12 ft) at any depth
COMMERCIAL	
Inside 30 fathoms	Shortest as possible, max of 3 fathoms (18 ft)
30 – 50 fathoms	Shortest as possible, max of 4 fathoms (24 ft)
Outside 50 fathoms	Shortest as possible, max of 5 fathoms (30 ft)

Buoy Setup: Regulations



RECREATIONAL	No Regulation
COMMERCIAL	
Inside 35 fathoms	Max of 4 fathoms (24 ft)
Outside 35 fathoms	Max of 6 fathoms (36 ft)

IMMEDIATELY REPORT ENTANGLEMENTS

- **CALL NMFS RESPONSE HOTLINE: 1-877-SOS-WHALE**
- **HAIL THE COAST GUARD: CHANNEL 16**
- **NOTE** date, time, location and take a photo
- **STAND BY** for responders
- **MAINTAIN A DISTANCE OF 100 YARDS** for the safety of you and the whale
- **DO NOT ATTEMPT TO DISENTANGLE** Removing the easily accessible lines at the surface leaves others attached to the whale and may make it impossible to detect or remove them
- **RESPOND** promptly if contacted by NMFS and CDFW

More information at:

opc.ca.gov/whale-entanglement-working-group

and

wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries

NMFS MMHSRP
Permit #18786-03
Photo Credit
Jodi Frediani



If you have suggestions for reducing entanglements in fishing gear, contact Dan Lawson at the NMFS Protected Resources Division: Dan.Lawson@noaa.gov or Ryan Bartling at California Department of Fish and Wildlife: Ryan.Bartling@wildlife.ca.gov
For other related inquiries or questions about this Best Practices Guide: WhaleSafeFisheries@wildlife.ca.gov