2023 IPHC Catch Protection Pilot Study (CPS)

Vessel Tender Specifications

PREPARED BY: IPHC SECRETARIAT (28 FEBRUARY 2023)

TABLE OF CONTENTS

PURPOSE

The International Pacific Halibut Commission (IPHC) is requesting tenders from commercial fishing vessels to conduct a study to investigate the effectiveness of devices designed to protect Pacific halibut caught on hook and line gear from whale depredation. The purpose of the charter is to (1) investigate the logistics of setting, fishing, and hauling two pilot catch protection devices: a) an underwater shuttle and b) branch gear with a sliding shroud system, and (2) investigate the basic performance of the gear on catch

rates and fish size compared to traditional gear. This project will help refine potential devices that can be used in the Pacific halibut fishery to protect catch on the gear from removal or damage by whales and to potentially interrupt the reward cycle leading to depredation.

The IPHC Catch Protection Pilot Study will require 5 days of fishing with the test devices and standard gear in parallel. Up to two days of time in port will be required before the beginning of the charter to fabricate a raised cradle to stow and potentially launch the shuttle devices, and to do final configuration of the branch gear. Test fishing is expected to take place in an area where catch rates will be high enough to be instructive to the performance of the devices but is not restricted to a particular IPHC Regulatory Area. Vessels must be capable of carrying up to four research staff. Crew will assist with duties associated with longline baiting, setting, hauling, and maintenance of gear, and with fish removal. Gear specifications and device descriptions are described in Section B. All Pacific halibut captured during this project will be assessed for injuries, sampled for length and weight, and then be released. No fish will be retained for consumption or otherwise as part of this study. The vessel must have adequate deck space for accommodating a measuring cradle and scale 1.2 m x 0.6 m x 0.2 m (48” x 24” x 8”) and preference may be given to vessels capable of also accommodating a recording shack (approximately 0.91 m by 0.97 m by 1.9 m high (36” by 38” by 74” high). The location of the measuring cradle and scale or shack must not obstruct fishing or processing operations. Additionally, there must be sufficient room to stow two shuttle devices securely (each approximately 2.60 m long by 0.80 m in diameter (8.5’ x 2.6’), each weighing approximately 100 kg (220 lb.) when empty.

Vessel must be available to conduct the five days of fishing at a time between 1 April and 30 June 2023 as mutually agreed by the IPHC and the vessel. The project is open to being completed immediately prior to work on the IPHC Fishery Independent Setline Survey (FISS). Conducting the work as day trips will also be considered if this makes the project more cost effective. It will be necessary to schedule in such a way that key research staff can be in attendance. It is essential that the vessel clearly indicates its availability.

This work is expected to require one less crew member than IPHC FISS work, as no fish will be retained for sale.

Vessels are reminded to carefully consider all costs associated with performing the work (including fuel) and to budget these into their proposal(s).

The IPHC will not be obligated to accept the tender with the lowest bid or any tender received and will contract according to its best interests. Vessels will be rated using the following criteria:

1. Seaworthiness and general condition of the vessel and its equipment,
2. Vessel’s availability within the schedule determined solely by the IPHC Secretariat,
3. Vessel captain's experience and fishing record,
4. Qualifications of the selected crew,
5. IPHC operating costs (tender amounts),
6. Previous interactions with the IPHC and its Secretariat, experience operating as a charter vessel, scheduling flexibility, and ability to take additional Secretariat are other factors to be potentially considered in the decision-making process.

Tenders must be submitted to the IPHC Secretariat via e-mail to secretariat@iphc.int no later than **16:59 Pacific on 10 March 2023**.

A. General Operations

1. The IPHC is requesting a vessel to complete five days of testing of catch protection devices (described below) between 1 April and 30 June 2023. Pilot work is focused on logistics and performance of the devices and as such, this phase of the project will not occur in the presence of marine mammals.
2. Additionally, one to two days of gear preparation (creation of a wood/steel cradle to manipulate the shuttle device on deck and to configure a branch line system) are expected. The shuttle devices are approximately 2.60m (8.5ft) long by 0.80m (2.6 ft) in diameter, each weighing approximately 100 kg (220 lb.) when empty.
3. Preference may be given to vessels with an open deck layout (no bait claim or shelter deck) and vessel must have a boom (crane) to aid in hoisting shuttle device (see dimensions above) on and off the vessel.
4. Vessel must supply 6 skates of conventional longline gear fitted with size 16/0 circle hooks on 18ft (5 m) spacing, as well anchors, buoy lines, and flags. This gear will need extra groundline at the start and end (an extra skate worth of groundline without hooks) to allow a shuttle unit to slide to the bottom to ensure it is encountering hooks only near the bottom, and that potential food attractants aren't coming up into the water column and exposing it to depredation.
5. Vessels must construct and supply 3 sets of branchline gear (without snaps/gangions/hooks) as described in Section E below. Please note in your bid if this element cannot be achieved and IPHC will attempt to work with you to source alternatives.

B. Project description

The 2023 Catch Protection pilot study will investigate the logistics of setting, fishing, and hauling as well as the basic performance of two different pilot catch devices: a) an underwater shuttle and b) shrouded branch gear designed to protect the captured fish from depredation by toothed whales.

Underwater Shuttle:

The underwater shuttle design is modelled after the Sago Extreme, and consists of an aluminum cage which slides down the gear near the seabed during haul-back, unhooking fish and securing the fish inside. After 100 hooks, the device encounters a stopper and is hauled to the surface with fish inside. At the surface the device must be hoisted aboard using a boom and winch. One set will consist of two skates of fixed gear: one skate without a shuttle device (control) and one skate with a shuttle device (treatment). Two shuttles will be aboard, for gear redundancy and modifications. Traditionally shuttles have been set with the gear in known depredator areas, however recent testing has shown that units can be launched from the surface during haulback, and our plan is to try to test it in this configuration, as this is more likely how it would be deployed and is more functional on smaller boats used in the Pacific halibut longline fleet.

A) 

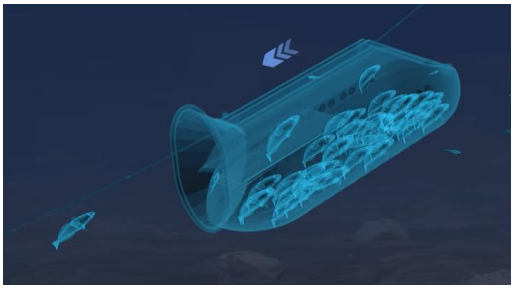
B) 

Figure 1. Schematic of underwater shuttle device, as it slides down the groundline (A) and cross-sectional view of fish released and contained within the device (B) (images from Sago Solutions presentation).

Shrouded Branchline:

Branchline longline fishing consists of a main groundline, with several weighted side branches affixed to it, with the gangions and hooks affixed to the branchline. For this project a set will consist of six (6) branchlines of 15m (48') that will be affixed on 30m (100') spacing along the groundline. Ten (10) gangions and hooks (16/0) will be snapped to the branchlines on 4' spacing. Three branchlines will have no shroud attached (control) and three branchlines will have an open-ended weighted spring coiled shroud attached (treatment), designed to slide over the 10 sets of hooks.

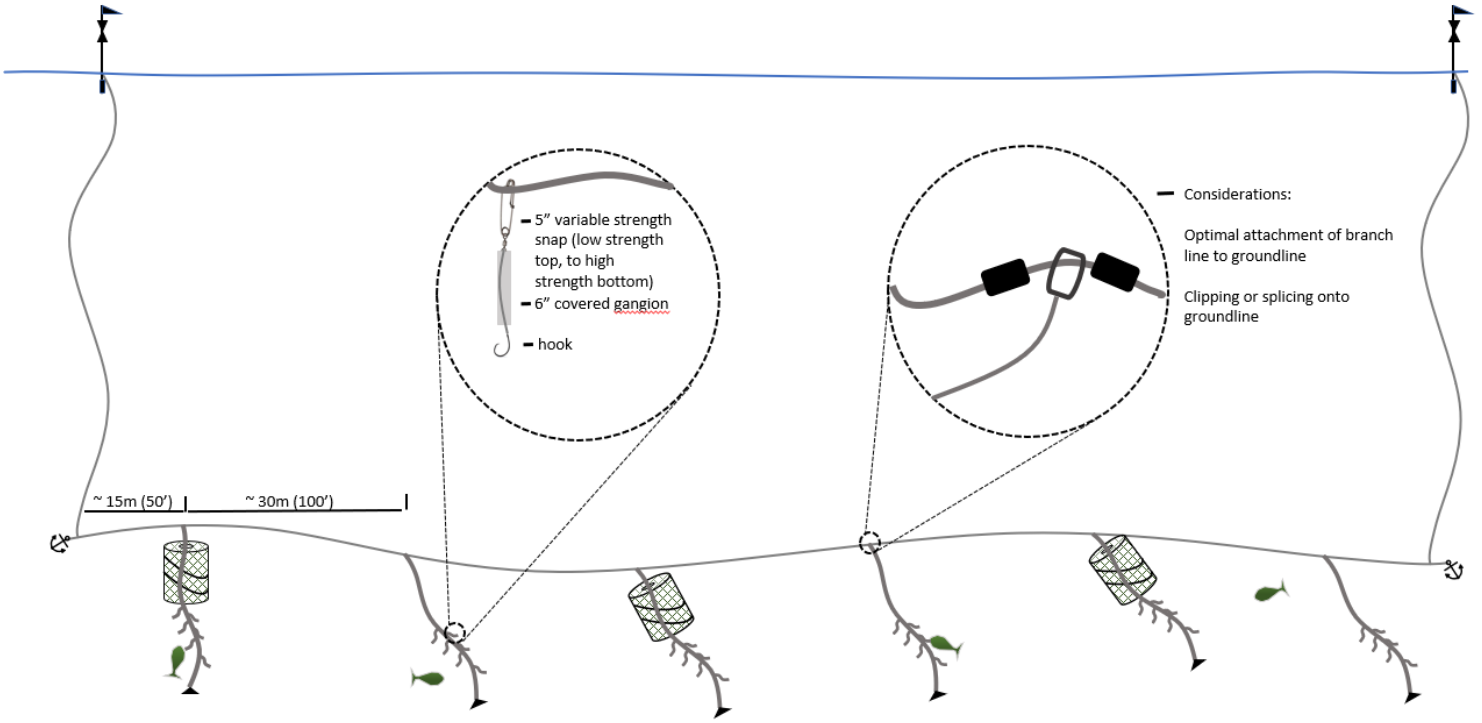


Figure 2. Schematic (not to scale) of branchline gear as viewed from the side during the soak. Branchlines are 15 m (~48ft) long and are affixed at 30m (~100 ft) spacing. Ten (10) short covered gangions with hooks are snapped to the branchlines on 1.2m (4') spacing. Three branchlines will have a shroud device meant to slide over the gear and catch upon retrieval.

Two sets of each configuration will be set each day, for a total of 10 deployments of each gear configuration over five fishing days. Setting will begin no earlier than 05:00 hrs local time or at first light each morning, whichever is later. Setting must be immediately preceded by a 15-minute observation period as required by the national law of the USA and intended to avoid interactions with federally designated protected species. (See additional protected species requirements at Appendix I). Hauling may begin once the gear has soaked for a minimum of three hours. Data will be collected on optimal configurations of the gear (weighting, attachment methods, etc.) to optimize setting and hauling of the devices, to minimize fouling, and to effectively use deck space, deployment and retrieval logistics, and basic performance of the units in comparison to fishing without the devices including species caught, injury classifications, catch rates, and size compositions between treatments. After sampling, all fish will be returned to the ocean as carefully as possible.

C. Vessel requirements

Prior to tender acceptance, the IPHC Secretariat may need to inspect the vessel and determine the adequacy of deck space, accommodations, and confirm that the vessel meets all minimum requirements.

1. The vessel must be mechanically sound in all respects, seaworthy for fishing in the designated areas, and suitably equipped for fishing Pacific halibut with conventional longline gear.
2. The vessel must have adequate deck space to allow the IPHC Secretariat and Partner staff to carry out their duties. This requires space to mount a measuring cradle and scale 1.2 m x 0.6 m x 0.2 m (48" x 24" x 8"). Preference may be given to a vessel that also has room for a recording shack (approximately 0.91 m by 0.97 m by 1.9 m high (36" by 38" by 74" high). The location of the cradle/scale and shack must not obstruct fishing or processing operations and must be close to the dressing table. With the application, please provide a deck diagram indicating proposed scale/cradle position and location for data recording.
3. The vessel must have adequate deck space to store two shuttle devices that are approximately 2.60m (8.5ft) long by 0.80m (2.6ft) in diameter, each weighing approximately 100 kg (220 lb.) when empty. Vessel must have a boom and winch system capable of hauling up the shuttle units along with any entrapped catch (~2 ton capacity seems sufficient from other testing). Preference may be given to a vessel with an open deck (no bait claim or weather house) which can aid with ease of movement of the large shuttle units during initial pilot work.
4. Accommodations shall be clean and sanitary. The vessel shall have adequate accommodations for the vessel crew and at least four (4) research staff (2 IPHC scientists, 1 NOAA scientist, 1 gear specialist), including women. The vessel must be equipped with clean, sanitary, dry, and comfortable mattresses, but no bedding, for research personnel.
5. The vessel must have a functioning marine head that can be used in privacy.
6. The vessel must have a galley reasonably equipped with a cook stove, refrigerator for food storage, and a sink.
7. The vessel must have appropriate facilities for personal hygiene.

D. Electronic equipment <u>minimum</u> requirements

1. Two (2) VHF radios and one (1) single side-band unit.
2. A satellite communication system capable of reliably communicating with the IPHC Secretariat's Headquarters office.
3. Reliable email system.
4. Two (2) GPS (Global Positioning Systems) units.
5. Two (2) depth sounders.
6. Two (2) radar units. One (1) must have a range of at least 44 kilometers (24 nm).
7. An intercom from the fishing deck to the bridge is desirable.
8. Reliable 110V AC power to the sampling shack for powering a light, tablet, and a small computer. The ability to provide 110V AC during hauling operations is required (power draw of 5 amps). For those vessels without a constant AC supply during hauling, the power supply requirements can likely be met with a simple inverter.

E. Gear requirements

The vessel owner shall provide and replace, as needed, all gear and associated equipment necessary for commercial longline fishing. At least 6 skates of conventional fixed-hook gear, and 3 sets of branchline gear as specified below must be prepared before the charter begins.

For all gear:

1. A weight of approximately 3 to 4.5 kg (7 to 10 pound) must be snapped on or tied to the groundline at each skate junction.
2. Fishing gear must be maintained strictly in accordance with the specifications outlined in this document. If it is found that the gear is not being maintained to standards, the IPHC Secretariat may halt fishing operations and the owner or his/her representatives will be required to bring it up to standard. No payment will be made for the time required to meet or maintain gear standards.
3. Automated hook strippers, or 'crucifiers', are prohibited and must NOT be on the vessel while conducting IPHC work.
4. All vessels must use an approved seabird deterrent device (e.g., tori line) while setting the gear, as required by state and/or federal agencies. See Appendix I for seabird deterrent requirements.

Fixed-hook gear (to be used in conjunction with shuttle device):

5. All skates must be 1,800 feet long (300 fm or ~549 m) with 100 hooks per skate. Gear may be provided as full or partial skates coiled either in tubs or on skate bottoms. Gear must be flagged at the half skate so we can identify where within the individual skates each fish is caught.
6. Skates must be uniformly rigged with circle hooks (#3 (16/0) Mustad model 39965 or equivalent) in average or better condition spaced along the groundline at 18-foot (5.5 m) intervals (100 per skate). Spacing and hook counts will be monitored and verified by the IPHC Secretariat.
7. Gangions must be 72-thread count, hard lay material between 24 and 48 inches (61 and 122 cm) after tying. Swivels are not allowed on the gear. Hooks must be oriented on the gangions by inserting the gangion through the front of the hook eye (Figure 3).

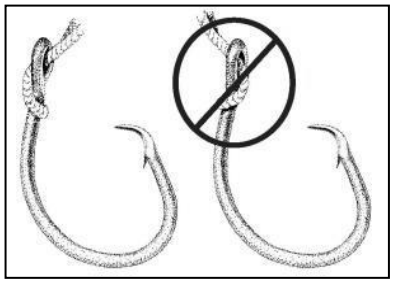


Figure 3. Proper orientation of gangion through front of hook eye.

8. One full skate of groundline (no hooks) must be deployed at each end to allow a shuttle unit to slide to near bottom before encountering hooks/catch thereby minimizing the potential for catch being available to depredators higher up in the water column.

Branchline gear (to be used in conjunction with shroud device):

N.B. Please note if the creation of the gear described below presents challenges, please let us know so we can come up with a solution that works for all parties. We would rather that this portion not be an impediment to receiving bids to conduct the work.

9. Vessel will create 3 sets of branchline gear to be used with the shroud device. Branchline gear consists of a main groundline (180m or ~600 ft), with several weighted side branches (each 48') affixed to it. For this project, a set will consist of six (6) branchlines 15 m (~48 ft) in length affixed at 30 m (~100 ft) spacing along the groundline (Figure 2). This equates to roughly 270m (900 ft) of groundline for each of the 3 sets of gear.
10. Ten (10) short hard covered gangions rigged with circle hooks (#3 (16/0) Mustad model 39965 or equivalent) and 5" stainless steel snaps (Figure 4.) will be snapped to each branchline on 1.2m (4 ft) spacing. Gangions must be 72-thread count, hard lay material between 15cm (6") and 18cm (7") after tying. Swivels are allowed on the snap end of the gear, but hooks must be oriented on the gangions by inserting the gangion through the front of the hook eye (Figure 3).

Gangions will be fortified/stiffened by the presence of plastic or rubber tubing (garden hose) which will keep the hooks oriented away from the groundline and minimize fouling with the shroud treatments.

11. Three branchlines will be fished without a shroud (control) and three branchlines will have a weighted spring coiled shroud (treatment) attached (~2m (6.5ft) x 1m (3.25ft),12kg (26lb) designed to slide over and cover the 10 hooks and any catch during haulback. This results in 180 sets of snap/gangion/hooks.

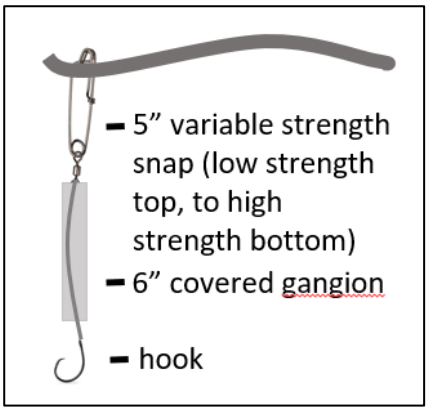


Figure 4. Shortened snap gear configuration for branchline fishing.

Shuttle Device: Two aluminum shuttle devices approximately 2.60m (8.5ft) long by 0.80m (2.6ft) in diameter, each weighing approximately 100 kg (220 lb.) when empty have been manufactured in Norway for this project. IPHC will have them shipped to whichever port the work is conducted from. The designer of the device plans to be onboard for the testing.

Shroud Device: Nine weighted spring coiled shrouds ((~2m (6.5ft) x 1m (3.25ft) ,12kg (26lb)) will be provided for this project by the IPHC. In concept these will effectively be weighted slinky pots with no webbing on one end, which will be affixed to the branchlines and designed to slide over and cover the 10 hooks and any catch during haulback.

Bait and Ice

The vessel owner will bear the cost of all bait purchased before or during each charter and shall also arrange for bait to be shipped to or to be available in the intended ports of embarkation. Bait sufficient for setting 520 hooks per day for 5 days will be needed (for comparison this represents approximately 1,040 lbs of chum salmon on our typical FISS work). Vessel is also responsible for obtaining adequate ice to keep bait fresh for the duration of the charter.

F. Crew requirements

The crew number required to maintain, bait, set and haul longline gear, depends on the skill and professionalism of the crew as a whole. Vessel owners are cautioned to consider the ability of crew assigned to gear maintenance, baiting, and fish handling, and to select crewmembers with the best possible skill and motivation levels. No cleaning and storing of fish is required on this study, so we have reduced the number of required crew by one.

1. The owner will be solely responsible for providing at all times during the study a fully qualified and experienced crew. The normal daily workload for gear maintenance, baiting, deployment/retrieval of fishing gear, and handling of fish have shown that the necessary crew must consist of at least a vessel captain plus two (2) to three (3) additional crew members for this type of experiment.

Submitting a tender with less than this complement of crew may result in your operation being excluded from consideration.

2. The vessel captain must possess any required U.S.A. Coast Guard or maritime licenses or certifications applicable to the vessel and charter region of operation.
3. The vessel captain shall have a minimum of three (3) years of longline fishing experience as a master of a comparable-sized vessel and be competent in the use of modern navigational equipment.
4. The vessel captain is responsible for being knowledgeable and adhering to all state, federal and international laws pertaining to commercial fishing. This includes fishing regulations, area closures (rockfish, sea lion rookeries, etc.), state or federal No Discharge Zones (sewage/blackwater), MARPOL (International Convention for the Prevention of Pollution from Ships) and the COLREGs (International Regulations for Preventing Collisions at Sea).
5. At least two (2) crew shall have a minimum of three (3) years of Pacific halibut longline fishing experience and be competent in longline construction and repair, hand-baiting methods, and fish release techniques. The remaining crew must be capable in longline repair, hand-baiting methods, and fish release.
6. The vessel captain and crew will be responsible for all phases of gear maintenance and the daily setting and hauling of the fishing gear.
7. The crew will be responsible for loading and unloading all vessel supplies prior to, during and after the charter.
8. All catch must be carefully released from the hook. This includes shark and skate species as well. Rockfish and Pacific cod must be returned to depth with a descender device to minimize mortality due to barotrauma if possible.
9. Fishing plans must be mutually agreeable to the IPHC Secretariat and the vessel captain. The vessel captain will communicate to the IPHC Secretariat on a daily basis all changes to fishing plans and contingencies as they develop.
10. All vessel personnel are expected to conduct themselves in a professional manner at all times. If a conflict arises, the IPHC will reevaluate staffing options and work with the vessel owner, vessel captain, and crew to resolve the conflict.
11. The vessel captain and crew shall create a working environment that is free from intimidation and harassment (verbal, physical, or sexual). Please refer to Appendix II for further information regarding harassment and professional work environments.
12. All vessel captains and crewmembers must be acceptable to the IPHC. The IPHC may require the replacement of any crewmember during the charter if found unacceptable in skill, experience, or behaviour.

G. Safety

The vessel captain is responsible for all matters relating to safety of personnel, the vessel, and equipment operation. The vessel captain will adhere at all times to navigational rules whether it be during fishing operations, running, drifting, or when at anchor. He/she (or vessel captain's representative) shall review safety procedures and equipment with the IPHC Secretariat at the beginning of the research trip and after any crew change.

1. Vessels licensed in Canada must possess a current Ministry of Transportation certificate (Canada Steamship Inspection Certificate) for the purposes for which the vessel is to be used. The vessel shall be mechanically sound in all respects, completely seaworthy, and comply with all federal Transport Canada regulations.
2. Vessels licensed in the U.S.A. must possess a current U.S. Coast Guard inspection sticker. The vessel shall be mechanically sound in all respects, completely seaworthy, and comply with all applicable safety regulations.

3. All vessels shall adhere to the regulations for power driven vessels underway in International Waters. In relation to the practice of drifting at night, the operator must maintain a proper lookout and ensure that his/her vessel is properly lighted as per the regulations (specifically 1972 International Regulations for Prevention of Collisions at Sea (72 COLREGS): Rule 2, 5 and 23. These regulations are available online at: CG_NRHB_20151231.pdf (uscg.gov)
4. All safety equipment (such as life rafts) must have passed inspection requirements and be of sufficient capacity for the vessel captain, crew, and all IPHC Secretariat aboard.
5. The IPHC will provide immersion suits, personal EPIRBs, and personal floatation devices for its employees.
6. No alcohol consumption or illegal drug use is allowed aboard IPHC chartered vessels, including days at sea, anchor days, or when the vessel is at the dock.

   The IPHC has a zero-tolerance policy for alcohol or illegal drug use which is in effect at all times. Violation of this policy is sufficient cause for immediate contract termination, and shall result in a five (5) year exclusion from future contract eligibility for the vessel and the vessel captain.

H. Owner's responsibilities

1. The owner will be responsible at their own expense to maintain the vessel, its engine(s), machinery, equipment, and fishing gear in good and seaworthy condition.
2. The owner will be responsible to provide lube oil, grease, filters, other engine-room supplies, and all other vessel operating supplies normally required for guided recreational fishing operations.
3. The owner will be responsible for the purchase of all fuel required to operate the vessel for the duration of the charter period.
4. The owner will be responsible for providing a working environment that is free from intimidation and harassment (verbal, physical, or sexual). Please refer to Appendix II for further information regarding harassment and professional work environments.
5. The owner agrees to indemnify, defend and hold harmless the IPHC from any and all claims by whomsoever brought for loss, damage or personal injury from any cause arising out of the charter of the vessel, including but not limited to, claims arising out of the negligence of the IPHC, its agents or employees.
6. As part of the bid, the owner shall submit a disclosure statement specifying any conviction for the violation of any fishing regulations pertaining to the Pacific halibut fishery within the past five (5) years by the vessel's owner, vessel captain or crew.
7. The vessel owner will provide adequate and wholesome meals for the crew and all IPHC representatives. This includes days when the vessel is in port, weather days and any time the IPHC Secretariat is sleeping on board the vessel.
8. The owner shall be responsible for the payment of all crew salaries, including any bonuses, and for the payment of all payroll taxes on salaries, such as income tax, unemployment, workers compensation, and other taxes as applicable. With respect to vessels operating in the waters of foreign countries, the owner is responsible for ensuring that all crew have adequate health insurance coverage.
9. The owner shall be responsible for all fees incurred arising out of the operation of the vessel including, but not limited to, harbour dues, moorage, watchman costs and environmental fees.
10. Prior to commencement of the charter, vessel owners shall provide to the IPHC a copy of the insurance policy verifying that all IPHC Secretariat and collaborating researchers (NOAA, private industry) aboard the vessel for the purposes of this chartered activity are included on the vessel's P&I insurance policy as either a crewman or business invitee, and that the IPHC is listed as an additional insured or co-insured on the P&I policy for the term of the charter agreement. The policy

must provide protection with minimum limits of $1,000,000 USD or equivalent if vessel is licensed in Canada. The IPHC will not reimburse the owner for any premiums incurred to meet their obligations under this paragraph. Owners should incorporate these costs into their Tender.

11. The vessel owner agrees to maintain at its sole cost and expense throughout the period of the charter hull and machinery insurance to the full market value of the vessel with trading warranties appropriate to the charter, said policy to include a waiver of subrogation against the IPHC. The vessel owner will provide proof that the above coverage and subrogation is in place prior to the commencement of the charter.
12. The vessel owner agrees to maintain at its sole cost and expense throughout the period of this charter pollution/environmental hazard insurance with minimum limits of $5,000,000 USD (or equivalent if vessel is licensed in Canada), said insurance to name the IPHC as an additional insured. Prior to commencement of the charter, vessel owners shall provide to the IPHC a copy of the operations' pollution/environmental hazard insurance policy that is effective through the period of this charter.
13. The vessel owner is responsible for any costs and fees associated with sending and receiving electronic communications (satellite phone, email) pertaining to IPHC business. Any anticipated costs are to be included in the tender amount.

I. IPHC responsibilities

1. The IPHC will provide all scientific sampling supplies and equipment.
2. The IPHC will provide 2 shuttle devices and 9 shroud setups.
3. The IPHC will **not** replace fishing gear lost in the course of the gear being put into the sea as part of this experiment, nor will we pay for wear and tear on the gear.
4. The IPHC will ensure all scientific permits for this work are in place.
5. The IPHC will pay the owner the specified amount, 50% upfront and the remaining 50% upon successful completion of the contracted work.
6. The IPHC may terminate the charter at the nearest port if for any reason the owner fails to render the required services or the vessel and/or crew do not meet the specifications as stated on the Vessel Tender Form.

J. Fish caught during the charter

1. All catch, including shark and skate species, will be required to be carefully released from the hook with minimal injury.
2. Pacific halibut will be measured, weighed, and sampled on board, after which they must be returned to the sea with minimal injury.
3. Rockfish and Pacific cod will be avoided and must be returned to depth with a descender device to minimize mortality due to barotrauma if possible.
4. **No fish will be kept** during the course of this charter.

K. Post-award meetings

1. Upon the award of a contract and prior to the start of the charter, a post-award meeting will be held at a mutually agreeable time to discuss logistics and issues relating to the charter.

L. Tender procedures

1. The IPHC will consider tender submissions based upon a lump sum for the successful completion of two preparation days and five active fishing days within the mutually agreed upon period (between 1 April 2023 and 30 June 2023). A second lump sum outlining your cost to create three

sets of branchline gear and accompanying snap/gangion/hook assemblies is also required. Should the gear preparation be an impediment, please indicate, and IPHC will work with you to accomplish this step. The IPHC will pay 50% of the combined tender price once a charter agreement is signed by all parties and work in a given charter area has commenced. The remaining 50% of the tender price will be paid upon the completion of said work.

2. All submissions should specify the dates they are available for charter.
3. The IPHC is not restricted as to the nationality of the vessels it contracts for operation in any charter region and will contract according to its own best interests. Also, vessels need not be licensed for Pacific halibut fishing in the U.S.A. to be eligible for consideration.
4. The IPHC will not be obligated to accept the lowest submission, or any submission received and will contract according to its best interests. Vessels will be rated using the following criteria: seaworthiness and general condition of the vessel and its equipment, the vessel's availability, the vessel captain's experience and fishing record, the qualifications of the selected crew, and IPHC operating costs. Scheduling flexibility may be a possible factor in the decision-making process.
5. Submissions must be completed and sent to the IPHC Secretariat via e-mail to secretariat@iphc.int no later than 16:59 (Pacific Daylight Time) on **10 March 2023**.
6. If you have any questions, please contact the IPHC Secretariat.

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IPHC Secretariat
International Pacific Halibut Commission
2320 W. Commodore Way, Suite 300
Seattle, WA 98199-1287
206-634-1838 | www.iphc.int

Appendix I: Protected Species information

A. Marine Mammal Interactions

As part of receiving a Letter of Acknowledgment from NOAA Fisheries for IPHC research operations, the vessel requirements and procedures for avoiding marine mammals and reducing interactions are detailed in the vessel contract and summarized in part below.

Monitoring Measures

The vessel captain or any crew on watch, or the IPHC Secretariat onboard will be required to visually monitor the area of operation for marine mammals and other protected species during all longline operations. The objective is to avoid transecting or operating in areas with significant concentrations of animals.

Operational Procedures

The "move-on" protocol will be implemented if protected species are present near the vessel and appear to be at risk of interactions with the longline gear; longline sets are not initiated if marine mammals are detected and represent a potential interaction with the longline gear, as determined by the professional judgment of the lead setline survey specialist and vessel captain. The location of the sampling station may not be altered to avoid potentially adverse interactions; however, the fishing plan can be adjusted to return to the area at a later time or date.

To reduce depredation and habituation of whales, if whales begin to depredate, IPHC research vessels are instructed to sink the line back down and travel to and haul gear on a different station set, returning to the station where the whales were later the same day (within 24 hours). IPHC research protocols specifically prohibit chumming before or during the longline setting operations (i.e. releasing any bait or entrails from previous catch).

Reporting

The vessel captain and crew should work with the IPHC Secretariat to record any marine mammal sightings and depredation events. Incidentally captured marine mammals that are still alive should be released from longline gear to the water as soon as possible with no gear or as little gear remaining on the animal as possible. Animals are released without removing them from the water, if possible. Any data collection should not delay the animal's release.

In the event that the animal can safely be brought aboard or near enough for closer inspection, the setline survey specialist will collect as much data as possible from captured animals considering the disposition of the animal; i.e., if it is in imminent danger of drowning, it is released as quickly as possible. If the safety of the crew and captured animal will not be compromised, the scientific party will attempt to collect biological information from captured marine mammals before they are released, including species identification, sex identification, estimated length, and photographs. Photos of dead marine mammals (and live if possible), should include a picture of the nature of gear entanglement, and for cetaceans an image of the left and right side of the dorsal fin to help determine stock ID. Information should also describe whether the animal was seen prior to the entanglement, a description of its behavior, and any mitigation measures used and discretionary decisions made by the IPHC Secretariat, including a rationale for those decisions. This information will be recorded in the research cruise logbook, and the

Protection Species Mitigation and Handling Forms and conveyed to NOAA Fisheries within 24 hours of capture or as soon as ship-to-shore communication allows.

In the event of any incidental capture or entanglement of marine mammals in any gear or any collisions of marine mammals with the vessel, the scientific personnel will contact the IPHC Secretariat with the encounter and condition information as soon as possible and within 24 hours.

B. Seabird Regulations

The current regulations are as follows but may change prior to the experimental period. All IPHC contracted research vessels must comply with seabird deterrent measures as required by federal management authorities. Check current regulations prior to the start of the experiment.

U.S.A.: For vessels fishing in USA waters, all vessels over 16 metres (55 ft) must comply with the following seabird regulations:

Requirements:

The operator of a vessel must conduct fishing operations in the following manner:

(i) Use hooks that when baited, sink as soon as they are put in the water.
(ii) Must not discharge offal while gear is being set.
(iii) Make every reasonable effort to ensure that birds brought on board alive are released alive and that wherever possible, hooks are removed without jeopardizing the life of the birds.

The operator of that vessel must employ one (1) or more of the following seabird avoidance measures:

(i) For inside waters (Prince William Sound, Southeast Inside District, and state waters of Cook Inlet), all vessels must tow a <u>single</u> streamer line to prevent birds from taking hooks;
(ii) All other waters all vessels must tow a <u>paired</u> streamer line while gear is being set to prevent birds from taking hooks

<u>Single Streamer Standard:</u>

(i) A single streamer line must be deployed in such a way that streamers are in the air for a minimum of 40 m aft of the stern and within 2 m horizontally of the point where the main groundline enters the water.
(ii) **<u>Material Standard:</u>** The minimum streamer line specifications are as follows:
<u>Length</u> 91 metres (300 feet)
<u>Spacing of streamers</u>: Every 5 meters until performance standard is achieved.
<u>Streamer material</u>: Brightly colored, UV protected plastic tubing or 1 centimetre (3/8 inch) polyester line or material of equivalent density. An individual streamer must hang from the mainline to 0.25 meters off the water in the absence of wind.

<u>Double Streamer Standard:</u>

(i) Deploy a minimum of two (2) streamer lines while setting hook-and-line gear. If both streamer lines cannot be deployed prior to the first hook, at least one (1) streamer line must be deployed before the first hook and both streamers must be fully deployed within 90 seconds
(ii) Exceptions: In conditions of wind speeds exceeding 55 kilometres per hour (30 knots), it is acceptable to fly a single streamer from the windward side of the vessel. In winds

exceeding 83 kilometres per hour (45 knots), the safety of the crew supersedes deployment of the streamer lines.

(iii) Paired streamer lines must be deployed in such a way that streamers are in the air for a minimum of 40 m aft of the stern for vessels under 30 m (100 ft) and 60 m aft for vessels over 30 m (100 ft). The paired streamer lines must be deployed on each side of the main groundline.

(iv) **Material Standard:** The minimum streamer line specifications are as follows:

Length 91 m (300 feet)

Spacing of streamers: Every 5 meters until performance standard is achieved.

Streamer material: Brightly colored, UV protected plastic tubing or 1 centimetre (3/8 inch) polyester line or material of equivalent density. An individual streamer must hang from the mainline to 0.25 meters of the water in the absence of wind.

FOR MORE INFORMATION:

https://www.fisheries.noaa.gov/national/bycatch/seabirds
https://www.fisheries.noaa.gov/alaska/bycatch/seabird-avoidance-gear-and-methods

The following link has a video demonstration of tori tine deployment by Washington Sea Grant, Clip#3 specifically:
https://www.youtube.com/playlist?list=PLpZeSH7XVl0wa4BSVSbY1qR5wVicFAXhb

A. What is harassment**?**

Federal regulations (U.S.A. Civil Rights Act, U.S.A. Equal Employment Opportunity Commission, and Canadian Human Rights Commission) protect employees from harassment in the workplace based on race, color, ancestry, place of origin, political belief, religion, marital status, family status, physical or mental disability, sex, sexual orientation, age and criminal convictions. The IPHC and vessels contracted to the IPHC adhere to these laws. Harassment is any behavior that demeans, humiliates, or embarrasses a person, and that a reasonable person should have known would be unwelcome. It includes actions (e.g., touching, pushing), comments (e.g., jokes, name- calling), or displays (e.g. magazines, posters, cartoons). Speech (including swearing and offensive jokes) can also be considered workplace harassment if someone feels that the language used is severe or pervasive enough to create a hostile or abusive work environment.

Some examples of harassment include:

- unwelcome remarks, slurs, jokes, taunts, or suggestions about a person's body, clothing, race, colour, place of origin, religion, age, marital status, family status, physical or mental disability, sex, sexual orientation, political belief, or criminal or summary conviction offence unrelated to employment;
- unwelcome sexual remarks, invitations, or requests (including persistent, unwanted contact after the end of a sexual relationship);
- displays of sexually explicit, sexist, racist, or other offensive or derogatory material;
- written or verbal abuse or threats;
- practical jokes that embarrass or insult someone;
- leering (suggestive staring) or other offensive gestures;
- unwelcome physical contact, such as patting, touching, pinching, hitting;
- patronizing or condescending behavior;
- humiliating an employee in front of co-workers;
- vandalism of personal property;
- and/or physical or sexual assault.

Whether or not behavior is harassment depends on the individual's tolerance or sensitivity to it. The law supports this interpretation.

Consensual Banter

Two (2) or more employees bantering back and forth is not harassment if everyone involved is in agreement. However, such banter is harassment if any employee feels uncomfortable with this behavior, and the behavior continues even after that person has expressed their discomfort, or if the others involved should have known the person was uncomfortable. This type of harassment can create what is known as a "poisoned work environment," where employees do not feel safe and feel consistently humiliated.

B. IPHC Secretariat and the vessel captain and crew must abide by the following:

i. Respect others

Each employee has the right to be treated fairly and respectfully in the workplace. Each employee also has the responsibility to treat others in a way that respects individual differences. No matter what your opinion, or that of the people with whom you interact at work, showing mutual respect and consideration will make everyone's work and life aboard the boat easier. If you have doubts about whether a joke, comment, coarse language, or other behavior will embarrass, humiliate, degrade, or otherwise bother someone, then don't say or do it.

ii. Speak up and report harassment

If someone behaves in a manner that offends, harms, humiliates, or degrades you, do not put up with it. First, if you feel that you can speak to that person, do so. Let them know how you feel. Tell them the behavior is inappropriate. If they continue the behavior, or if you do not feel you can speak directly to the person, you have several options, from speaking to the vessel captain, the IPHC lead setline survey specialist, or the setline survey coordinator.

C. Vessel captain and IPHC Secretariat responsibilities

i. Put a stop to harassment

The vessel (owner/captain) and the IPHC have full responsibility for making sure the work environment is free from harassment. If you become aware of harassment in your work environment, you must do everything you can to stop it, whether or not a complaint has been made. Not knowing that one's actions are perceived as harassing is not an excuse. It is important for you to be aware of the behavior of those around you and how it affects a professional working environment. If a reasonable person should have known that harassment was going on, you will still be held responsible if you let the situation continue. Harassment will not be tolerated, and necessary actions will be taken to stop it.