

**Exempted Fishing Permit Application to Test
Alternative Gears and/or New Approaches or Methods for Targeting Swordfish
February 09, 2015**

Principal Applicants and Roles:

The owners and operators of the Sword Fishing Fleet (home port) of the Dana Point Harbor, Dana Point California are proposing to obtain an exempted fishing permit to test the performance of alternative fishing gear. e.g. Deep-Set Buoy Gear, Shallow-Set Buoy Gear, and to develop new experimental types of gear styles, such as Deep-Set Shortline Gear and Shallow-Set Shortline Gear to help improve on other alternative fishing gear for the research of reducing bycatch, to assist with eliminating drift gillnetters and to improve the harpoon swordfish fishery with harpoon gear/ hook and line (handlines) gear permit holders. This group of fishermen also has a variety of combined experience and knowledge in Drift-Gillnetting, Longlining, Deep-Set Trap types of gear and are very diverse in various commercial fisheries. They all have over 30 years of different gear types of fishing experience in the commercial fisheries and with their great collaboration with each other they will continue to be a great asset to the alternative gear, new approaches and methods for targeting swordfish.

Tim Perguson is the principal applicant, the overall coordinator and collector of submitting the findings or results of all the below fisherpersons collected surveys. All fishermen will fill out the same form and submitted monthly for creating a useful data spreadsheets on gear efficiencies, to determine patterns of all species and positive effectiveness of our efforts.

- Name: Timothy Perguson, (Principal Applicant) Owner/ Operator
Vessel Name: Espada
Current Permit: Harpoon Gear / Hook & Line
Experience: Drift Gillnet Gear Fishing, Trap Gear Fishing
USCG Documentation Number: 624462
Contact Information: 34581 Calle Portola
Capistrano Beach, Ca. 92624
949-661-8632
Tpergy20@yahoo.com
- Laura Perguson, (Assistant to the Principal Applicant) Owner/Operator/Crew Member of the Espada Sword Fishing Vessel-Harpoon Gear Fishermen
Contact Information: 34581 Calle Portola
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Purpose and Goals Statement:

The needed (EFP) Exempted Fishing Permit is for allowing our fleet to find alternative ways of utilizing different types of fishing gear for Deep-Set Buoy Gear, Shallow-Set Buoy Gear and implementing newly innovated ideas with experimenting on a Deep-Set Shortline Gear and Shallow-Set Shortline Gear, which have not been tested and/or have or have not been developed yet. To help find other useful methods to fishing with less bycatch, prove other substitutions to gillnetting and to find alternative gear usage to sustain the Harpoon Swordfish Fishery. Our goal is to only harvest targeted health highly migratory species (HMS) such as swordfish, certain tunas and shark, release all non-targeted fish and mammals unharmed, to ultimately preserve our oceans and save them from being depleted. The HMS would then be sold at the market for consumption by the local community.

The EFP applicants are responsive to the council's decision to solicit EFP proposals, to test alternative gear types or new approaches to using drift gillnet gear, as well as the following portions of policy goal statements identified by the council at the June 2014 Council meeting for managing a West Coast Swordfish Fishery under full Magnuson-Stevens Act authority.

What are the key aspects of this research?

- Support collaboration between fishing communities, agencies, scientists and non-governmental organizations to develop alternative fishing gears, conduct research to further minimize bycatch in the drift gillnet fishery.
- Reduce or eliminate domestic reliance on foreign caught swordfish with greater bycatch and impacts on protected species.
- To reduce bycatch and protected species in California's Pacific Coasts Fisheries, by researching the differences of gear types and implementing improvements needed to these alternative gears. Find the methods that work best for reducing the catch of non-targeted species and demonstrate progression in our research.
- What is the difference between target catch and bycatch comparisons to various testing alternative EFP gear types vs. drift gillnets.

The valid justification for the issuance of the Exempted Fishing permit is obvious and long term. We want to do our part to preserve our oceans, endangered species, protected species and highly migratory species. These first steps in finding other ways of achieving the same goals, is to prove there is an alternative to gillnetting. Our group of harpoon sword fishermen are very knowledgeable in locating a targeted species and can be very vital in proving the outcome we all want and strive for. Addressing the worldwide gillnet issues by finding other alternatives to the gillnet fishery, no bycatch to very little and provide fresh fish to the local consumers in our communities.

Preliminary Associate Applicants

- Name: Mark Heritage, (Associate) Owner/Operator
Vessel: Capt. Hook
Current Permit: Harpoon Gear/Hook & Line
USCG Documentation Number: to be submitted upon request
Contact Information: 1125 Moana Drive.
San Diego, Ca. 92107
808-895-9995
MarkHeritage19@msn.com
 - Name: Larry Mansur, (Associate) Owner/Operator
Vessel: Harpoon Billy
Current Permit: Harpoon Gear/ Hook & Line
Experience: Drift Gillnet Gear Fishing, longline, Salmon Troll
USCG Documentation Number: to be submitted upon request
Contact Information: 1703 South Ola Vista
San Clemente, Ca 92675
802-895-4802
 - Name: Glenn Dill, (Associate) Owner/Operator
Vessel: Espousa
Current Permit: Harpoon Gear/ Hook & Line
Experience: Deep Set Trap
USCG Documentation Number: to be submitted upon request
Contact Information: 204 El Levante
San Clemente, Ca 92672
949-842-7196
 - Name: Tim Heitkemper, (Associate) Owner/Operator
Vessel: Pilar
Current Permit: Commercial
USCG Documentation Number: to be submitted upon request
Contact Information: 425 Calle Impame
San Clemente, Ca. 92672
49-291-7050
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Experimental Design:

Fishing will occur on vessels of each gear type, Deep-Set Buoy Gear, Shallow-Set Buoy Gear and with experimental designs of Deep-Set Shortline Gear and Shallow-Set Shortline Gear. Primarily fishing will take place on months which are based on the fisherman's knowledge of swordfish presence, during the June thru January months of the known sword fishing season. In addition, our research will continue as weather permits into the remaining month of the year, February thru May, so that we can provide information of the successes and efficiency of these fishing gear types. We will set the gear during daylight or nighttime hours to experiment with the different thermocline layers and to provide sufficient studies to determine these layers of thermocline and times we fish will reduce or eliminate bycatch. For example, during the day we will fish below the thermocline with a deep-set gear type where swordfish are known, to be in deep water and where bycatch are known, to not be present. During the night, the thermocline rises and thus the shallow gear will be set above the thermocline where other fish types are not co-habiting. Fishing during these months will help our research to determine when the best time is to fish for the HMS, to understand the elimination to bycatch and to compare the gear types and different hook & line variations is optimal, i.e. sizes, styles, shapes which will be more efficient with the research. The depth of monofilament line used will be approximately 200 to 1500 feet below the surface or of the determined (fishing) depth of where the thermocline layer is. Buoys, flags and beacons will be used to keep close contact with the gear, the vessel will stay close to the area which it is fishing and pull the gear after it has soaked for approximately 4 – 8 hours. Times are approximate and will be adjusted as data is collected.

We will also conduct and compare side-by-side scenarios within a specified area which is desirable to evaluate the efficiency of each gear type on how well it produces an incidental take or non-incidental take. Comparisons will be based on how each gear fishes, depths, temperature, topography, currents and what differentiates the best locations of swordfish takes and with less bycatch. This information collaboratively gathered will change where, when and how we fish for the HMS.

The sword fishermen fleet will be working on their own vessels with crew member or together (operators) on one vessel to develop and test designs and collection of results, as well as making sure we have adequate observer coverage, when it is desirable.

Reasoning Why an EFP is needed:

The EFP is required to provide for fishing of experimental gear types that of which there are currently regulations implementing the HMS Fisheries Management Plan. Acquiring an EFP will ensure sufficient opportunities and flexibility to design and implement alternative fishing gear. This will help the fishermen to participate and maximize the success of new ideas to fishing and limit bycatch. Ability to perform as a legitimate fishery, address scenarios to alternative gear and gathering data to address research questions.

Broader Significant Goals:

By communally collecting data, we can prove that there is alternative ways to catching targeted HMS fish without bycatch. In return, we will then see our oceans become more plentiful and cleaner for all. These changes will benefit all commercial fishing as a whole and for the sport fishermen's of fishing.

Application of EFP Results to the Fishery beyond the Application:

In the event this EFP can demonstrate superior target fishery performance by the test vessels, it is possible that the results can form the basis of management objectives and regulations that would apply to existing drift gillnet permit holders and/or new permits for any gear type proven to be successful. If ultimately successful, a healthy West Coast swordfish fishery would reduce domestic reliance on foreign caught swordfish with greater bycatch and impact on protected species.

Duration Exempted Fishing Permit:

We expect to have good positive outcomes with our research and confidence with the methods used. We propose to start immediately and continue for at least 2 years or longer per council's approval. New ways of fishing can be a continuing process for years into the future.

Vessel Description:

We have 5 documented vessels with no prior or recent enforcement actions, who are available to participate at this time in the alternative HMS experimental fishing. They are all approximately 40 plus feet in length, one of each type of hull (plaining hull, deep-v hull, and displacement hull, trawler types). All are set up for harpoon sword fishing (permitted for HMS) and with hydraulic pulley that can be adaptable to pulling different types of gear. The vessels are US Documented and US Coast Guard inspected on an annual basis. They are equipped with radar, GPS, Depth Sounders, VHF radios, etc. We have the willingness to install and operate Electronic Monitoring gear.

In the future we would like the flexibility to invite other operators and vessel types to be involved in the EFP as we get more into the different gear types of testing. These participants will be focused on the goals of the EFP to test alternative gear, bycatch reduction effectiveness, not to eliminate DGN and implementing the Deep-Set Longline and Shallow-Set Longline Gear types that will work long range beyond the EEZ 50 to 200 miles offshore of the West Coast from Mexico Boarder to Cape Falcon, Oregon. The vessels included at a later date, will meet the specifications and requirements of the council. (These vessels and operators are not yet determined)

Target Species and Protected Species:

Swordfish are the primary targeted fish but, not excluding other healthy HMS stock as certain Tuna and shark species that of which are not limited by quota or impact levels, with little to no bycatch. If bycatch is imminent with the targeted species take, the finfish, marine mammals and overfished species, will be released alive and unharmed. Any interactions with these types of species will be documented.

Targeted fish will not be taken in protected areas or near hot spot areas for marine mammals; unless otherwise needed for data collection; by council's requirement only.

Catch Counting and Observer Methods:

All targeted species, marketable species and protected species that are caught/landed/released will be accounted for by an observation program. The principle and associate applicants of the Harpoon Sword Fishing Vessels will be mostly conducting the data collecting, as well as the measuring and/or documentation of all catches/bycatches. As well as, by an on-board observer, electric monitoring, videotaping, vessel monitoring system for all or as needed to accommodate proper monitoring of the catch counting and release methods, etc. The ability to install monitoring devices on the vessels is applicable and warranted. We are open to any new observation methods for use or for testing, we encourage it.

An observer is required 100% for each fishing vessel. The funding of the observer program has become an issue. Self-funding could be a source of an observer placement, our limited funds available to cover the cost of the observer program could dictate the amount of fishing trips that will commence. Private and /or an environmental organization could be a potential resource, all which will be determined at a later time. Fishery impact accounting will be recorded by observers consistent with current protocols in place for the NMFS observer program. An observer is more than welcome to be part of our operation and will be included as such, we have clean facilities onboard; head, bed (no bedding) and galley. Anyone who comes on board, will be treated with respect.

*When applicable, the long range (longliners) operators will be required to have an independent observer onboard 100% of the time per the NMFS.

Marketable catch will be sold to licensed fish dealers, recorded on commercial fish receipts tickets and documented in the required logbooks.

Data Collection & Analysis Methodology:

Recent year oceanographic data will be analyzed in determining trigger thresholds for time/area optimal zone identification. Catch comparisons between gear types and with annual average DGN catch, by target species and non-retained species will use standardized tests of catch per unit efforts (CPUE) and non-retained per unit effort (N-RPUE) values to determine statistical significant levels. Released catch will be distinguished as alive, dead and serious injury.

All fishermen will be required to fill out an identical form and collected monthly to upload data to show comparisons to gear types, hooks, bait, line, depths, weather, currents, species, bycatch, alive or dead, length of time gear is tended, etc. These comparisons will help us find the best efficient ways to catch HMS and reduce bycatch.

We are willing to test and try out new innovated tools and technology for additional data and analysis collection, such as the Electronic Monitoring (EM) and video cameras as an added source of exploration.

All our findings by comparisons between gear types will be publicly available. All our activities will meet all state and federal laws and regulations including future take caps, as well as following restrictions on fishing in restricted sensitive habitat areas.

Description of how Vessel Participation is Chosen:

All participating vessels are chosen for their ability to obtain the proper documentation and permits to be eligible for an EFP. As well as, being able to accommodate the needs and functions required in setting different or alternative gear types efficiently and safely while adhering to all rules and regulations of the council. Choosing also goes beyond the vessels criteria; involvement is for all fisheries and fishing families to become motivated in making our oceans clean and productive. The commercial fishing industry has a lot in common and if someone feels they can work hard and make a difference we encourage them to be on our team. We do question the fact if they are a good fit: can they follow Instructions, are they trainable, can they afford the amount of gear needed and adhere to observer requirements. We are taking the risk and if they are excepting in these criteria, we welcome them.

Area to be Fished and Gear used:

The buoy gear types and experimental shortline gear will be fished in the Southern California waters, US EEZ 3-50 miles offshore of the West Coast. This means fishing the South West Coast waters from Point Conception to the US-Mexican border, with the emphasis in areas known to have had high concentrations of swordfish in the past.

Future vessels who participate in the long-ling gear will set gear from the US EEZ 50 to 200 miles offshore of the California West Coast waters from the Mexico Boarder to Cape Falcon, Oregon. (as mentioned above, These vessels included at a later date will meet the specifications and requirements of the council).

Fishing will commence throughout the day and nightly hours to determine the best results and study for times fished and gear used, on an annual basis as weather permits. All gear will be attached with F&G identification numbers and/or HMS numbers, as well as radar reflector devises, homing beepers, lights, strobes and any new types of tracking devises found in the industry for following of, locating of and retrieving of the gear. Gear will also be identified with attached flags and buoys, as needed with different gear types for visual allocation.

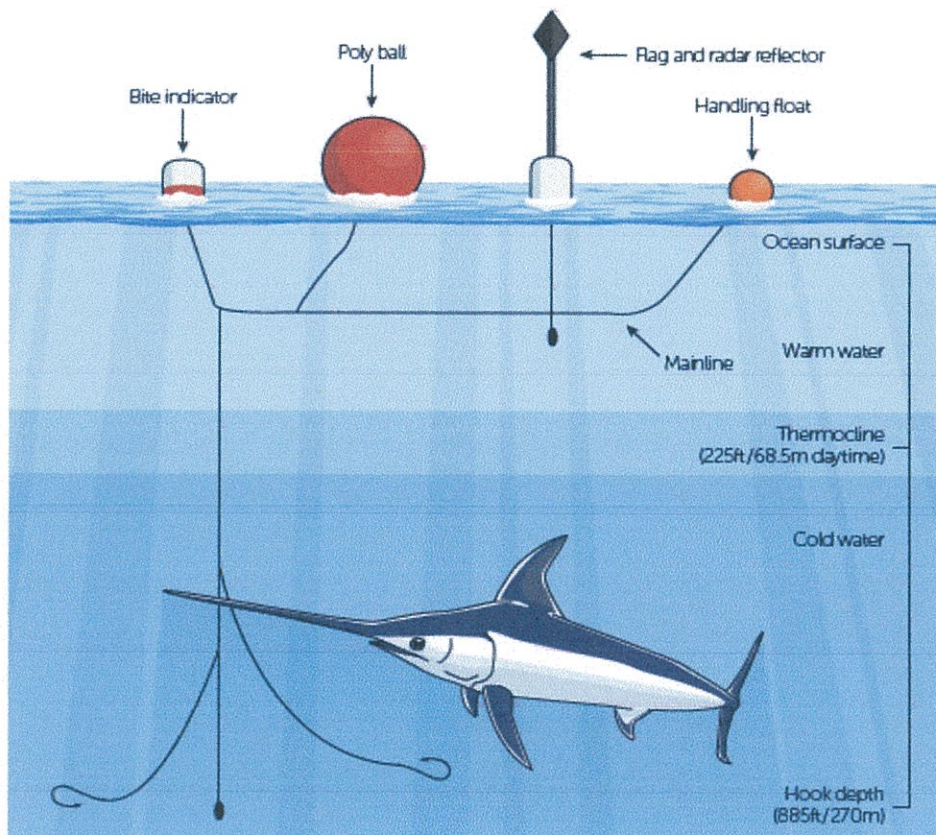
The following proposed alternative gear method types and components are primarily the same (i.e., style and size of hook, line, buoys, identification flags, reflectors, strobes/beacons). Please see the examples of attached descriptions of alternative gear types that we are proposing to test and document.

BOUY GEAR- Shallow-Set Buoy Gear and Deep-Set Buoy Gear

Swordfish buoy gear consists of approximately 200 – 1500 feet long single piece of 2.2mm heavy fishing line attached to 2 baited (mackerel, squid or scrap recycled from cleaning facilities or companies of the like) 18/0 circle hooks on one end and flotation devices at the top with buoy and flag equipped with a light/beacon on the other end. Each of the vessels will use between 12 to 24 of these free-floating gear sets at a time. The buoys which are deployed are set in a straight line. In theory, when a fish takes the bait, it drags the buoy out of line, indicating that it has been hooked; the fisherman will then quickly retrieve the fish and make a decision to retain, tag and/or release the catch. Soak time before pulling between the sets is approximately 4 to 8 hours. This gear will be set during the daylight hours below the thermocline to eliminate bycatch and target only swordfish which are known to be deep during the day. It will also be utilized at night above the thermocline targeting only swordfish which are known to surface during the night hours, thus the down line would be much shorter but all else will stay the same, i.e. bait, hook size, line, weight etc. Differences during the night sets will be calamine sticks/light sticks will be used as needed near the baited hooks and lighted beacons on topside gear will indicate location of gear at dark hours. This type of fishing will be the focus of the harpoon sword fishing vessels, working within the 3 - 50 miles inside the US EEZ, annually as weather permits to collect data.

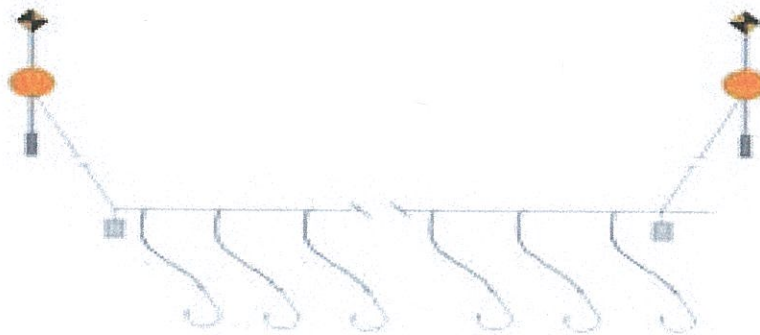
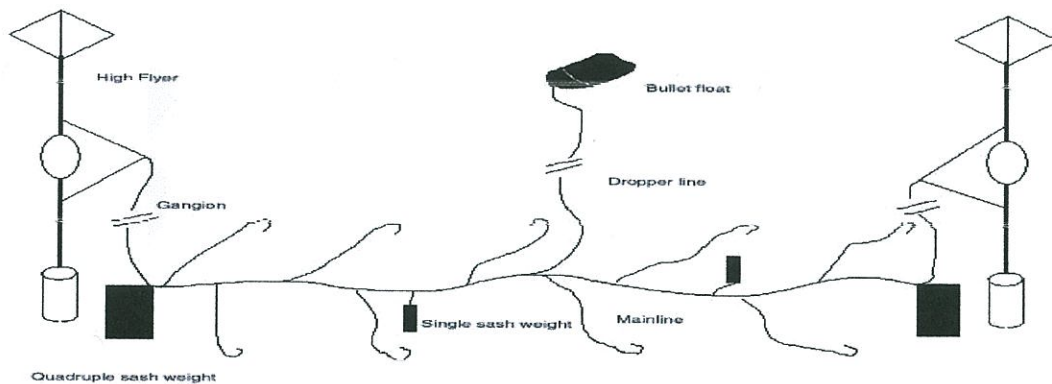
Finding a Better Alternative

Deep-set buoy gear, depicted here, is one of the alternative types of gear being explored by researchers and fishermen to catch swordfish and thresher sharks while minimizing harm to other animals.



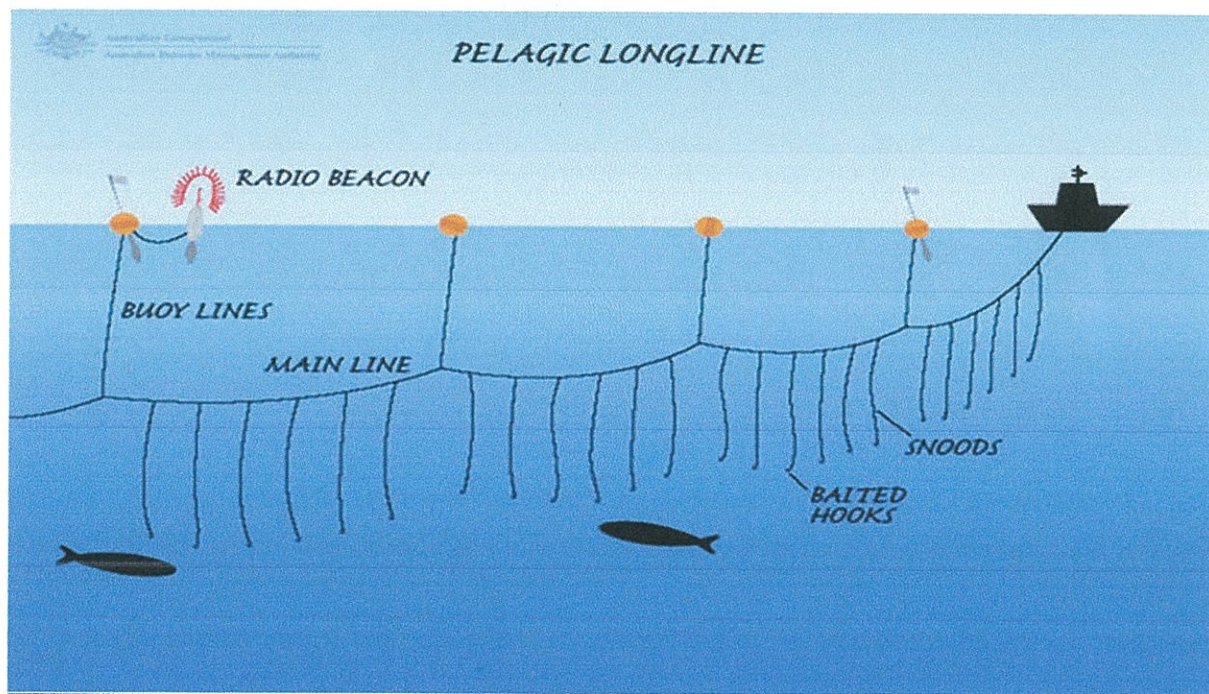
CLOSE RANGE SHORTLINE - Deep-Set Shortline and Shallow-Set Sortline (Expeirmental Design)

This gear will be set during the daylight hours below the thermocline to eliminate bycatch and target swordfish. It will also be utilized at night above the thermocline targeting only swordfish which are known to surface during the night hours, thus the down line would be much shorter when set at night, but all else will stay the same, i.e. bait (mackerel or squid or scraps recycled from fish cleaning facilities or companies of the like) , hook size, weight etc. Calamine sticks/light sticks will be used as needed. Each set will consist of a mainline strung 100 feet (X-10) horizontally across and supported ends at appropriate intervals of 200 -1500 feet (depths depending on thermocline-day or night fishing) and vertical float lines connected to surface floats at appropriate intervals. Descending from the main line is 10 branch lines, each ending in a single baited hook. Each set consists of 100 feet (horizontal), of 2.2mm heavy monofilament fishing line in length with 10 -18/0 circle hooks branched with space of 10 feet apart. There would be approximately 10 of these sets connected to one another creating 1000 feet of fishing shortline gear, thus being a short line can be pulled in quickly, with less soak time, thus eliminating bycatch and survival rate . Each complete set of gear will have buoys, flags and beacons used to indicate the sets. Fewer sets can be added, connected/disconnected as needed which is determined by the fishermen to test for optimal functions of the gear through knowledge of currents, depths, temperatures, etc. One end of the gear will be secured to the vessel as sections are added. The sets will have soak time of 4 -8 approximate hours (soak times may vary as data is collected). This type of fishing will be the focus of the Harpoon Sword fishing vessels, working within the 3-50 miles inside the US EEZ, annually as weather permits.



LONG RANGE LONGLINE - Deep-Set Longline Gear and Shallow-Set Longline Gear

EFP fishing will utilize traditional longline gear consisting of a main line strung horizontally across 50 to 100km of ocean, supported at appropriate intervals by 18m vertical float lines connected to surface floats. Descending from the main line is some number (2-25) of 24m branch lines each ending in a single baited hook. Longline gear configuration will be consistent with regulations enacted for the Hawaii longline shallow-set swordfish fishery found at 50 CFR §660.33(d), (f) & (g). For targeting swordfish, hooks used will only be offset circle hooks sized 18/0 or larger, with a 10^o offset. For targeting tuna, smaller circle hooks with no offset can be used. For targeting swordfish or tuna, mackerel-type bait and or squid will be used. From 400 to 1,200 hooks may be deployed per set. EFP fishing will not occur within 50 miles of the coastline, or within the southern California bight. Each trip will consist of about 14 sets or more, approximately 14,000 hooks per trip (1,000 hooks per set x 14 sets). This gear will be set during the daylight hours below the thermocline to eliminate bycatch and target swordfish. It will also be utilized at night above the thermocline targeting only swordfish which are known to surface during the night hours, thus the down line would be much shorter, but all else will stay the same, i.e. bait, hook size, weight etc. Calamine sticks/light sticks will be used as needed. This type of fishing will be the focus of the Long Range Fishing Vessels working outside the 50 mile US EEZ, West Coast annually as weather permits. Any out of state licenses required will be obtained by the operator before fishing for in Oregon/Washington for the EFP process.



Results Reporting Schedule:

By granting the EFP, it will allow us to experiment with the above alternative ways of fishing for swordfish. Reporting of findings will adhere to the council's suggestion.

Other:

Thank you for giving us the opportunity to submit and participate in the application process. We believe that given the opportunity, we can help find new alternatives to DGN fishing. With our teams collective knowledge we will be an asset to finding new methods of taking swordfish. In return, these efforts will help support the Harpoon Fishermen to continue striving in an almost, dyeing-out, non-existent fishery. From the Harpoon Fishermen's perspective, Buoy Gear methods of fishing goes hand and hand with the harpooners, in our beliefs and what we strive for is, absolutely no by-catch.

Also, we would like to request information on and provided the ability to tag swordfish and release. This will help with the research, learn patterns of swordfish fish which will help with sustainability. Also, we are researching the catch and release program with the PEW foundation, we are working on implementing tagging on other pelagic fish as well.

Thank you for your consideration,



Timothy Ferguson



Laura Ferguson
