

2020 EXEMPTED FISHING PERMIT ACTIVITY REPORTS

This attachment contains exempted fishing permit (EFP) activity reports submitted to National Marine Fisheries Service for fishing in 2020 as listed below. Submission of reports is specified in Council Operating Procedure 20 and EFP terms and conditions.

Bateman, F/V Calypso
Breneman, F/V Circle Hook
Burke, F/V Pilikia
Ellis, F/V Defiance
Ford, F/V JB
Foster, F/V Chula
Fuller, F/V Audax
Gerritsen F/V Piky
Graves, F/V Fishtail
Greyslock, F/V Emma Ray
Haworth, F/V Elizabeth H. & F/V Pacific Horizon
Hepp, F/V Spaniard
Hutto, F/V Terlingin
Jacobs, F/V Patricia J
Kirkpatric, F/V Jonesita
Lins, F/V Epic
Mintz, F/V DJ
Perguson, F/V Espada
Perez, F/V Bear Flag 2
Pfleger Institute
Stephens, F/V Tres Mujeres & F/V DEA
White, F/V Lil Jack

F/V Calypso 2020 Final Report

F/V Calypso engaged in the Standard DSBG Fishery from May - December, 2020, for a total of 38 sets, 11 of which were observed. Observer coverage came in May, June and August. The only issue was bunk space on the Calypso. I believe this fishery has been proven clean enough not to warrant required observation under the current restrictions.

Totals:

40 DSBG swordfish, 1 small fish released

1 harpoon swordfish

3 Bigeye Thresher Sharks successfully released

I believe this fishery has potential, but that the gear limit should be raised to 30 buoys per boat. With the current restriction to 10 buoys, I don't believe there have been enough encounters with non-target species to not take this under consideration, try it, observe the data and try to raise the profitability of this fishery to a realistic level.

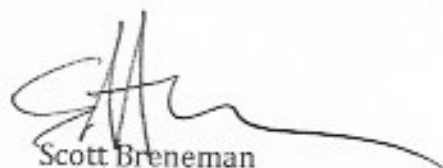
Attn: Chris Fanning

May 12, 2021

Unfortunately, due to the effects of Covid19, I did not fish my Deep Set Buoy Gear Permit. First, with restaurant closures, obtaining the premium price I require in order to make this fishery feasible to me was impossible. Second, and on a more personal note, my father, who I have fished with my entire career, was diagnosed with stage 4 cancer. As such, we have been extremely careful and cautious during this time and having an observer on the boat was not a risk we were willing to take.

With all this said, I do plan on and look forward to fishing this permit this year, 2021. All the barriers, which kept me off the ocean, are all but lifted now and I look forward to a successful season of sword fishing.

Thank you for understanding.



Scott Breneman
(949) 394-1904

SEAN BURKE
F/V PILIKIA
DSBG 2020

DSBG 2020 Report

For the 2020 season we conducted 22 sets using DSBG. Of those sets we caught 11 swordfish, and released two bigeye threshers. Our average weight was 146 pounds. Observer coverage was approximately 45%. We personally had no issues with the recreational fleet, nor did we have any issues with any commercial counterparts.

In regards to any recommendations, we agree with the others who are vouching for more sets of gear to be allowed. 15 or 20 sets can be responsibly managed by one boat. With more sets of gear we can establish a larger spread of gear which would allow us to expand our zone of fishing. A larger footprint than the currently allowed 5 miles would also allow for increased coverage in conjunction with the harpoon fishery.

RON ELLIS 2020 REPORT FOR DSI36

I HAD A TOUGH SEASON AT THE BEGINNING. I CAUGHT A FEW FISH AND WENT ON A LOSING STREAK. I LOST ABOUT 27 FISH ALMOST IN A ROW GETTING 1 HERE AND THERE. AFTER CHANGING TO A DIFFERENT BRAND OF HOOKS MY CATCH STARTED TO INCREASE. ALTHOUGH I STILL DONT THINK I LANDED 50 FISH FOR THE SEASON. I ONLY FISHED 1 HOOK PER SET. I USED BOTH SQUID AND MACKEREL AND REALLY CANT SAY I SAW ANY DIFFERENCE IN ONE GETTING BIT OVER THE OTHER. HOPEFULLY THIS NEXT SEASON WILL BRING BETTER RESULTS

R. Ellis

FV JB John Ford 2020 DSBG EFP Report

I just one set this year. Due to covid, I did not fish much.
Nothing on the DSBG but I caught four swords and some bluefin in the
drift net the same day as the DSBG.

John Ford**Wild Alaska Fish Market**

2020 Deep set buoy gear EFP summary report for the Chula

In 111 sets we got 137 swordfish and less than 10 big eye and thrasher and were released in good condition. We got 6 Escolar and they were released.

We only used 1 hook, 16/0, on each set of buoy gear and used only squid.

Recommendations:

We always try to fish by ourselves as much as possible. And There are more boats fishing and the sport fleet. And with all of the expenses going up it would be nice to be able to set at least 15 sets of the deep set buoy gear away from the crowded areas.

Johnny Foster

FV Chula

Summary of Deep-Set Buoy Gear Fishing activities for *F/V AUDAX* during 2020

Executive Summary

The exempted fishery permit (EFP) for Daniel and William Fuller to fish deep-set buoy gear (DSBG) targeting Swordfish in the southern California bight was approved in September 2018. The vessel and crew have made continuous improvements to the vessel and gear to increase efficiency and fishing productivity.

Building on experiences in 2018 and 2019, fishing during 2020 was conducted with nine sets of gear utilizing one or two branch lines per set. Improvements to highflyer configuration allowed for more effective monitoring of the gear, both visually and with radar. To try to improve increase CPUE, in some instances a second branch line was added to the set, however, no bites were detected on the second branch line.

Between August 30 and December 18, 2020, a total of eleven 1-day trips and 1 two-day trip were undertaken for 13 total fishing days. The average trip duration was 16:20 hours (range: 12:00 – 41:00) and the average set duration was 5:06 (range: 1:35 – 11:36). A total of 799.4 hook hours were fished. For an absolute CPUE of 1 fish per 53.3 hours, or 1.15 fish landed per fishing day. Squid was the primary bait utilized, but bridled live mackerel were utilized in ~17% of sets. Recent experience indicates that mackerel can be an effective swordfish bait, and it appears that bridling mackerel to the hook greatly reduces the probability of tangling, improving bait presentation.

Gear configuration

No modifications were made to the construction of the buoy (float) line for 2020 fishing. While a bit cumbersome for stowage, the float line system is one piece and streamlined to minimize any possible entanglement.

Highflyers were further modified for 2020 fishing activities to improve visibility, both with binoculars and radar. The current design is modular, consisting of a 10' and an 8' piece of 1" aluminum tubing. The modular design serves no purpose other than making transportation easier. Two 10-pound (7x14") PVC floats were slid over the aluminum tubing with the bottom of the lowest float being approximately 5' above the bottom of the aluminum pole, where 5.5 pounds of lead is attached. A lightweight radar reflector was attached to the pole about 24" from the top, ultimately about 8' above the water. A strobe light is attached just below the radar reflector. A black flag is attached to the very top of the pole. This seems to give ample stability in most conditions and provided easy deployment and stowage. A rack to store the highflyers was constructed along the starboard side of the vessel. This allows for easy, out of the way stowage for fishing other gears when warranted.

Observer Coverage

Twelve trips were undertaken during 2020 fishing operations and no observer was assigned to the vessel. The unfortunate issues surrounding the pandemic and the fact we generally fish one day trips inhibited observer placement (other vessels were prioritized).

Fishing Summary

All fishing was conducted during daylight hours and gear pulled well before sunset. A total of 15 Swordfish were captured during 8 of the twelve trips. There was a total of 40 probable swordfish bites (determined from bait and leader damage), of which 28 were hooked (identified by strike indicator being up), and 15 of those landed. There was a total of 8 confirmed shark bites, and two sharks hooked

and released. Both sharks, one bigeye thresher and one blue shark, were released alive.

Fishery Interactions

During most fishing trips during 2020 it was common to be fishing in relative proximity (~1-3 miles) to other DSBG vessels. At no time was there any issue or conflict with any of those encountered and all interactions were professional. Generally, contact was either made by radio or directly boat side and efforts were made to ensure there was enough area for each boat to fish their gear.

During 2020 there was a considerable increase in recreational effort and on any given day there would be 5 to 30 recreational vessels nearby. Most recreational fishers are courteous and avoid the gear, but there is a small proportion of them that refuse to be respectful. Many of which have deployed gear within 30 meters of our flags. Fortunately, there were no entanglement issues, but I suspect it is a matter of time.

Considerations for 2021

More trials with bait types and the rigging of baits will be continued in 2021, including some artificial baits. We also plan to continue fishing more than one hook per gear set, but conditions will dictate when and how that will be employed.

Data

We maintain a detailed fishing log for every set made. This data is available for research purposes upon request.

Pacific Fisheries Management Council Summary Report
2020 EFP DSBG Season
F/V PIKY

James J. Gerritsen, Gregory K. Minobe

Summary Of Work Completed

The F/V Piky fished a total of **4** trips during the 2020 DSBG season, from dates **13 Nov - 15 Dec**. Within those separate trips, 19 sets of 10 pieces of gear were made. Of those sets, the gear soaked on average between 7 and 8 hours per day and with 1 hook per piece of gear. 35 swordfish were landed, 1 escolar landed, 2 bigeye thresher sharks released alive, and 2 blue sharks released alive. General area fished as far north as the vicinity of Catalina Island to as far south as the vicinity of the US, Mexico border. From +3 NM to +-100NM offshore. Primary bait used was squid and mackerel. Although, we had obtained a Linked Gear DSBG permit for 2020, we were not able to set the boat up for the fishery in time. However, we have obtained all gear and permits for the Linked Gear fishery and intend to put forth fishing effort for the 2021 season.

Trip breakdown as follows:

Trip #1: 11/12/20-11/18/20

Days fished: 5

Swordfish Landed: 13 (1552lbs.)

Bigeye Thresher Shark: 1 released alive.

No other bycatch.

Trip #2: 11/19/20-11/24/20

Days fished: 2

Swordfish landed: 2 (297lbs.)

Bigeye Thresher Shark: 1 released alive.

No other bycatch

Trip #3: 11/29/20-12/05/20

Days fished: 5

Swordfish landed: 10 (1034lbs.)

Escolar landed: 1

Blue Shark: 2 released alive

No other bycatch.

Trip #4: 12/06/20-12/15/20

Days fished: 7

Swordfish landed: 10 (1096lbs.)

No other bycatch.

Observer Coverage

Prior to each of the 4 trips departing, proper 48 hr notification was made to the West Coast Region Observer Program. By the time that we had returned to southern California in November, to start the DSBG season, we were not able to obtain observer coverage. It was explained to us that due to COVID-19 restrictions, observers were not available to be dispatched to our vessel as each observer was assigned to a vessel in order to mitigate spread of the virus. After each successful attempt to report to the Observer Program we were instructed to depart w/o observer onboard in hopes that the next trip an observer would be made available.

Conclusion/Recommendations

If we were to make any comments or recommendations, we would suggest the opportunity to use more pieces of gear per vessel. We generally fish one hook per piece of gear in order to minimize tangles and ensure confidence that our gear is fishing effectively. It is our opinion that the current 10 pieces of gear are properly managed and serviced. An increase of gear allowed per vessel would increase our potential catch thus making the fishery more economically viable. Thank you for the opportunity to participate in the EFP DSBG program.

Vessel Fishtail
doc 1030136

owner /operator. Michael R Graves.

Homeport Santa Barbara

I made two trips aboard Fishtail in search of swordfish. Both trips were started and ended in Santa Barbara and both trips buoys were deployed in roughly the same area behind Santa Cruz Island .

During the 24 hour departure check in I was informed that covid 19 had halted the Observer program so neither of my trips this year were observed -

First trip had a hook up at about 350 fathoms with a squid bait and a green light. Not enough caution was taken in the close game , the fish was able to pull the hook and break free only after some time trying .

Second trip found us in the same zone and more or less same depth -another fish was hooked , it ran around and we chased into the dark hours and finally -it was subdued well after midnight, fish was 225 dressed for the dock, small squid and some boney bait parts are all this fish had in its digestive track . After that fight night my outdrive -blew up mechanically. Requiring a tow back home and a lengthy repair process .

This break down ended my 2020 D.s.b.g. campaign .

Seemingly the boat is ready to go as am I. Looking forward to ,hopefully a more prosperous 2021 deep set bouy season.

Regards M.G

FV Emma Ray Greyshock/Howlett 2020 Deep-set Buoy Gear EFP Report

During the 2020 season we were only able to make 7 trips, partly due to difficulty in getting crew members. possibly because of covid. 4 of those trips were with an observer. The location we fished was from Pt Dume to Santa Rosa Island, from 30-50 miles. We observed very limited fish, possibly due to the extremely cold water. We were only able to hook 2 fish during that time and we lost them before they landed. I believe the circle hook is not as effective as an offset J-hook. The circle hook does not allow the hook to hold as well and I feel it is what cost us the fish.

In talking to other fishermen, they agree that there was also a lack of pelagic bait offshore. It appears that the majority of the sword fish came in closer to the beach, between the 9 mile bank and the 209 bank (the border of San Diego to Dana Point.) The fish were tucked in closer to shore, 3-10 miles out.

I have been fishing for over 40 years and i have noticed that when there is a lack of squid and hake, the sword fishing is not as good. This year because there seems to be a return of squid and because of La Nina, I feel that we should have better fishing

I look forward to using more of deep-water buoy fishing gear this year. I do feel that this is a viable fishery even though there is still much to learn.

Stephen Greyshock
FV Carol-N-Rose, Inc
Vessel, Emma Ray

David Haworth
Nick Haworth
Kris Honings
John Vogel

Deep Set Buoy Gear Report - F/V Elizabeth H. & Pacific Horizon

This year we fished 76 days for 162 swordfish, 12 thresher sharks and 1 Escolar.

Our observer coverage was above 30%.

This past year we enjoyed a fair amount of swordfish with little by catch.

It was very crowded during this years fishing season. Because there was a high cost most boats chose to stay close to shore with many of these boats being sport fishermen.

We believe that fishing more gear would help increase profits in this fishery. Often times when the fishing is slow having an extra 5 to 10 pieces of gear would help us explore different types of water.

To eliminate the issue of gear loss we started using tracking devices on all of our buoys. This way we are able to watch our buoys and even tell when they are getting bit on a small GPS screen. These systems will help with gear loss either when fishing more gear or if the weather is bad.

We also believe extended fishing hours would increase profitability, with the use of GPS buoys that I mentioned above combined with the strobe lights we already use it would be simple to keep tabs on all of our gear even at night, allowing us to catch more fish while hardly increasing expenses.

This year we were unable to fish buoy gear with our larger vessel (Pacific Horizon) as the Covid-19 pandemic made it difficult to market fish. Between the low prices and the high expenses we couldn't afford to fish with our larger vessel. This was also another reason we would like to fish more gear. We have a crew of 6 on board the Pacific Horizon and fishing 10 buoys just doesn't provide enough swordfish to pay 6 crew members and all the expenses.

We still notice every year that when imported swordfish from Mexico arrives the overall price of swordfish drops. Even though our fish are high quality we are still affected by imports because people are using lower grade fish as a substitution. These lower quality fish from the south end up flooding our markets and bringing buoy gear fish price down all the way to \$4-5 dollar price range. Making it very difficult to profit unless the fishing is above average.

2020 deep set buoy gear report for F/V Spanaird Hepp/Robertson

New year for us as my vessel F/V Plumeria was being fished by my son for salmon ,we switched permit onto an old harpoon swordfish boat built in 1924 the Spanaird. After a short time re-plumbing the old hydraulics we were finally cleared to go in August. It was a good feeling being on an old boat giving it new life.

We primarily did two day trips out of Santa Barbara fishing from the backside of Anacapa island up to Santa Cruz and even off Santa Rosa. As this was a slow old boat we were not getting around anywhere fast and this did dictate are fishing zones. We also visually were looking for finning swordfish in a combo set up with buoy gear. One of the odd things that happened this year was that there was show of finning swordfish 5-6 miles off Channel Islands Harbour but the depth there is 600'-700' and I wasn't sure we could fish there without shortening are 1000' lines. This also presents a question of if this is legal with our EFP which maybe we should discuss.

Our fishing was highlighted by the fact that we caught a fish on the first line we set this year, definitely good for motivation. We ended up with 14 sets of 10 pieces of gear set usually for 5-6 hour sets. We used a single hook baited with squid and a blue or green light set at appoximately 1000'. We caught 3 swordfish, and lost 2 bigger swordfish that were lively. We had two other bites. We had no other fish caught. One of the issues we observed was that the water in our area was very warm 70-74 Fahrenheit and not much life in it. We only observed 1 other boat with buoy gear that was a few miles away. We did observe several sport boats fishing on the backside of Santa Cruz island but had no interaction. No observer coverage but we were twice boarded by Cal Fish and Game officers that were kind of clueless to what we were doing. It did help to have our EFP to show them.

Overall I think we had a decent chance to catch fish and the system was working. I could see going to more buoys but really think to make this a viable fishery there would need to be 30 plus hooks set at depth. Kind of like a mini longline with 600' teathers you could then go out and fish the open ocean. Another issue was when we were in open ocean where there are big swells that your flags can go out of sight and cannot be seen on radar. Our final numbers were: 3 swordfish: #150, #285, #158

\$ 6.50/ lb

\$ 3802

Pretty sure we did not cover our expenses, but I do see this as a way to catch swordfish but might need to be tweaked to make it commercially viable.

Thanks

Fred Hepp
Sean Robertson

2020 deep set buoy gear report F/V Terlingin

F/V Terlingin deployed 58 set DSBG in result landed 64 swordfish(our biggest dressed 384), 1 escolar and 1 giant squid (60lbs), also 8 big eye thrashers and 3 blue sharks which were successfully released unharmed.

Gear set up

F/V Terlingin DSBG is set up with the mainlines being 1,000 feet depth with **one** 20 foot leader and **one** 16/0 circle hook which we attach at the 8 pound weight and 2 lights, 1 flashing and 1 steady.

Bait used

F/V Terlingin use squid and mackerel some set fished half squid and half mackerel.

Recommendations

F/V Terlingin we feel that 15-20 sets of DSBG can be manageable (especially with a good pair of binoculars) keeping most set in full sight. If given the opportunity to set more DSBG it would be beneficial to set different depths, color lights, length of leader during slower parts of the season, after all we only use **one** hook on each line resulting in just 10 baits. We have experimented with using 2 hooks on one line which resulted in massive tangles.

F/V Terlingin would like to thank everyone involved with DSBG program and giving us the opportunity to participate in this amazing fishery

Owner/operator David Hutto
Operator Jordan Souza
F/V Terlingin

Patricia J .2020 year end summary

Kent Jacobs and Toni Gomez

We fished a total of 96 days setting DSBG in 2020; we had an observer for a total of 15 sets. We fished 2 days in January and 2 days in February we caught one 200 lb swordfish in February and sold it to Avalon seafood Catalina Island, then COVID hit and we were told to stop fishing by our buyer J&D seafood. Near the end of July we were told that with the opening of outdoor seating at restaurants the market could use some fish July 23 we began fishing. We caught 0 fish in July, 15 fish for 24 days in August, 15 fish in September for 19 days, 21 fish in October for 21 days, 19 fish for 14 days in November and 9 fish for 9 days in December. For a total of 77 DSBG Swordfish, 3 harpoon fish. We caught and released 3 Thresher sharks on 9/11/21; these were the only Thresher sharks we caught all year. We caught and released 1 Blue shark 12/06/2020, these 4 sharks were the only other catch other than swordfish. We had only 8 fish dress under 100 pounds, the smallest 80 pounds. We fished from Santa Cruz Island to the Mexico border. We had a lot of fish on the hook come off. our diabetic crew member Harold got an infected toe so we went in to the closest port "Oceanside" and had an ambulance take him to emergency this happened again a few weeks later and again we stopped fishing and went in to get him to the doctor, they took his toe off this time so Harold retired from fishing for now. On one trip with Sophia on board as NMFS observer, the main fresh water tank blew a hose and all the water drained out so we cut the trip short to repair and refill, We had a complete set of gear; buoys, flag pole, radar reflector, 3 strobe lights 1000 ft of line, weight, underwater lights and a swordfish stolen by another boat in the area, we have had harpoon fish and gear stolen in the past so just a matter of time for this to happen, we were busy at the other end putting a weight on a fish on the line and moving a couple of sets that were drifting into the 3 mile line. Due to COVID we had some difficulties, had a hard time getting the Coast Guard to do a dock side safety inspection for our sticker, and the demand for fish dropped way down our buyers J&D seafood and Santa Monica seafood were full, but would purchase them for 3.00 a pound, so September 19th was our last delivery date to J&D we began selling to Doug at California Harpoon Swordfish Association, he is able to sell to Santa Monica as well as a handful of other buyers at a slightly better price and provided us with dock side pickup and bait delivery, but by November Doug was having difficulties moving fish and the price was falling with restaurants closing, by thanksgiving the demand had stopped, we were told to stop fishing on several occasions when we were doing good, so we sold around 1000 pounds off the back of the boat to the general public, this actually went pretty well, and I will be doing this some in the future, as we are still waiting to get paid by some struggling restaurants 2 months later. So it was overall a good year not as good as last year but way better than if we were still only harpoon fishing, I would like to see an understanding with the state and DSBG so we would be able to fish inside of the 3 mile limit, there are many areas that would open up for us all

allowing us to fish closer to home, and fish safer staying away from the shipping lanes, and not have to pull and set because of drifting into 3 mile zone

Thank you for this opportunity this is a great fishery

Kent Jacobs, Toni Gomez and the crew: Jake, Harold, Joe, and Dylan

FV Jonesita Kirkpatrick 2020 DSBG EFP Report

To whom it may concern;

I would like to thank all those involved in this DSBG project , and for allowing me to fish with this gear. I have been fishing for over 40 years professionally in different capacities and this has been an exciting and rewarding experience for me.

I have turned in a log book report after each trip to Chris, so I assume you don't need me to go into exact detail about the numbers ect..Here is a summary of my season:

We fished a total of 38 fishing days with the first 10 days with nick as observer. With covid, it was impractical to put in more observer trips although I checked each time. We were able to bring in 28 swordfish between 63 and 263 lbs dressed with an average of about 160 lbs for a 22,219\$ payout. The only by-catch was 2 big eye thresher sharks that were released unharmed.

We did a trial run with Nick (skunk) in june but almost all of the successful fishing was in aug -nov. 2020.

After a little trial and error, we got the gear handling down very good and I would be happy to share info with the others. The one innovation I came up with (after a scary time handlining heavy mono and big fish) is the use of strong but small swivels to attach the leader to the main line that fit onto the roller, so as to not have any loose mono to deal with with a tough fish.

I am sure you hear this from all of the guys, but I feel that there are enough of these permits out and I know some sportfishermen are trying to get in, but I feel they should be bonafide commercial fishermen to qualify.

I honestly feel this is a truly eco-friendly fishery and promoting it as such will go a long way to help the reputation of local fishing in general.. I also think allowing the influx of foreign long line fish into the local markets is detrimental to the reputation and price of swordfish in general, as well as harmful to the stocks. That is my 2 cents worth !

I can upgrade the details if you want, just tell me via e-mail

John Kirkpatrick USCG 100 ton master 1976 818-429-1940
3607 Kingsley st
San Diego 92106

2020 Deep Set Buoy Gear Summary Report F/V Epic

We fished 31 days with 10 sets of gear per day. 5 of those fishing days were with an observer on board. We used 2 hooks per line with a mackerel on the top hook at about 900 feet deep. We used a modified leader to prevent tangles and a squid on the bottom hook at about 1,100 feet deep. Both hooks with a green and blue light. About 85% of the fish that were caught were caught on the bottom hook and the remaining 15% of fish caught on the top hook. We had 2 fish on the same line once. We managed to bring both swordfish to the surface however, one of the hooks pulled out and we only landed one.

In total, we caught 20 swordfish with an average of 130 pounds per fish, 1 thresher shark and 1 blue shark which was released alive at the boat. We had 6 swordfish pull out of the hook near the boat during our season.

Most fishing days we were alone in the area we fished but, on some occasions, we saw about 4-5 other deep set buoy fisherman near us setting gear as well. We also saw private sport fishing boats in the area. Only one time did I have someone get too close that made us concerned about wrapping up, however we did not have any problems.

Recommendations:

To continue with a 30-hook maximum but more sets of gear to appropriately disperse the 30 hooks with 1-2 hooks per set.

I also recommend that NOAA work with California Fish and Wildlife on allowing deep set buoy gear to be fished within 3 miles of shore. We have found many areas within the 3 miles that would be ideal for deep set buoy gear fishing.

Thank you.

Nathan Lins

F/V Epic

F/V DJ, Steve Mintz 2020 DSBG EFP Report

Dear NMFS: The fishing with the DSBG was slightly better for 2020 but still not equivalent to an average Drift-Net season. We fished 12 trips, a total of 60 days fishing DSBG and only 1 set DSLG, 10 days of which we carried a NMFS Observer. We had a total of 121 Swordfish, total weight of 15,243 #'s, average weight of 126#'s, gross revenue of \$75,608.50 which is an average price of \$4.96. We also had 4 Brown Threshers and 4 Escolars which we released alive because of little or no market value.

Our total gallons of fuel used was 4710, with all oil & fuel expense was \$ 11,549.70. To add to our expenses we averaged approximately \$350 in bait plus \$60 ice each trip. We were continuing to add to our gear each trip approximately \$200 and after paying our crew and normal other expenses such as insurance, dockage, communications, repairs, the unexpected and endless others, needless to say, not many \$ left over to pay myself.

My thoughts, hopes and wishes are for more markets to utilize this premium quality product so we could average a few extra dollars per trip on fish price. The market blamed Covid because of reduced restaurant sales and that and quite a number of Swordfish being dumped directly from dayfishers possibly sport caught and small capacity DSBG fishers. Interesting that sightings on market and restaurant floors of whole swordfish lying on the floor with beak, head and guts intact. This is an indication of mishandled product which also drives prices down. Dual purpose vessels (sport and sometimes commercial), should be required to deal with same licensing, observer requirements, and other state regulations. In addition show a bit of courtesy by not drifting through other gear already set and giving respectful distancing.

This coming season, I am very optimistic on more production, have some marketable by-catch for extra revenue, put in more days with a more aggressive crew member so as to fish the link gear more often. Fishing more hooks will increase our bait expense but hopefully will increase our production.

Thank you,

Stephen R. Mintz
FISHING VESSEL D J

Espada Perguson 2020 DSBG EFP Report

We did not fish the year of 2020 due to COVID 19 and the restrictions put in place in the County of Orange and the state of California.

I do have some concerns of the sport guys deep dropping and selling their catch to our markets.

We hope to fish this year 2021.

Thanks

Tim Perguson
F/V ESPADA

DSBG and NSBG 2020 Fishing Summary and Report

In 2020, the F/V Bear Flag 2 fished with standard deep set buoy gear (DSBG) and night set buoy gear (NSBG). We made a total of eight sets fishing NSBG, six sets with 10 buoys and two sets using 5 links and 5 standard. We caught a total of five bluefin tuna with no catch of anything else. Every NSBG set was 100% observed.

With low production of swordfish by the drift gillnet (DGN) fleet this year, we were discouraged to fish in December and January with the NSBG when we planned to see productive fishing for swordfish. We tested NSBG in productive areas of DSBG with no catch. For example, we caught seven swordfish on DSBG and set the same area that night with NSBG, and caught nothing. We set DSBG the next day and hooked five swordfish. This wasn't surprising because we've seen the DGN fleet be unproductive in DSBG areas and vice versa.

The goal for the 2021 season and beyond is to test NSBG next to the DGN fleet during a productive year. **I would like to request another two years on my EFPs to test the efficiency of NSBG alongside the DGN fleet.**

Fishing DSBG this year proved to be a little more difficult due to the increase in commercial boats fishing DSBG, and the increase in recreational boats fishing swordfish. Areas that could previously handle about half the DSBG fleet were heavily crowded with buoys and boats this year.

Due to the lack of knowledge and skill by these new boats, we saw these issues:

- guys setting gear closer to each other than ever before
- gear being lost
- recreational boats drifting between sets of commercial gear potentially catching their fish.

It's only a matter of time before situations occur such as gear tangling, feuds between commercial and recreational boats, and disputes on who has right of way, etc. Having a standard for the gear used to fish DSBG will help prevent gear loss.

Well built hi-flyers with good radar reflectors would be a great place to start. A lot of the gear I've seen has insufficient radar reflectance, which makes the hi-flyer hard to see on radar. As the day ends, guys lose sight of their gear and the strobe goes out, causing them to lose track of their gear because they can't locate it on radar. Also having good reflective tape on the hi-flyer with a bright forward-looking bow light on the boat will help the guys find their lost gear at night.

Pacific Fisheries Management Council Summary Report

2015-2020 PIER Deep-Set Buoy Gear and Linked Buoy Gear EFP Updates

Summary provided May, 2021

Prepared by: Chukey A. Sepulveda, PhD & Scott A. Aalbers, MS

Affiliation: Pflieger Institute of Environmental Research, PIER

Address: 315 Harbor Drive South, Oceanside CA. 92054; www.pier.org

PIER EFP background and progress to date: PIER has managed two groups of cooperative fishers operating under exempted status to test both deep-set buoy gear (DSBG; 2015-20) and linked buoy gear (LBG; 2018-20) off the California coast. To standardize gear between vessels, both DSBG and LBG configurations were designed and assembled by the EFP manager. Fishers were also trained on safe gear deployment, responsibilities as EFP participants and rationale behind different bycatch mitigation features. Gear characteristics were detailed in the initial EFP submission based on gear development work conducted during NOAA sponsored research trials (2011-20). Cooperative fisher training sessions were performed with all team members onboard both the PIER research vessel as well as during dockside trials on respective team-member vessels. All cooperative fishers were issued vessel logbooks, signed EFP documentation and observer staffing protocols prior to the initiation of fishing activities. Vessels were mandated to carry NOAA certified observers following provisions and observation rate criteria outlined by the West Coast Region Observer Program.

COVID-19 Impacts: In 2020 PIER EFP applicants experienced difficulties with both the market as well as consolidating and maintaining steady crew. Market uncertainty made it so that fishers had to communicate more frequently with buyers and tailor trips around market demand. This dynamic resulted in shorter trips and likely reduced effort and catch. For a portion of the season, crew availability was problematic, further complicating the unusual season and making trip scheduling more problematic. Additionally, given the shorter trip lengths, reports of crowding around local 1-day range spots was also reported (discussed below). In the fall months restaurant closures in Southern California severely limited market price, resulting in several fishers ending their season earlier than they had hoped to.

DSBG EFP Fishing Effort (2015-2020): Despite cooperative fisher interest in DSBG deployments above Point Conception, all DSBG fishing effort to date continues to be focused from the Channel Islands (~34°N) to the

Mexican border out to ~100 nautical miles (~120°W). Set activity and locations continue to be influenced by proximity to homeport, market price and fish availability.

Similar to past seasons, fishing was patchily distributed in 2020 with effort clumped into small areas of regional productivity. During the 2020 fishing season, 291 DSBG sets were performed on 73 trips (mean trip duration=4.0 d) by five vessels, bringing the total number of DSBG sets performed under the PIER DSBG EFP to more

than 1,500 (Figure 1). Since 2015, more than 14,800 pieces of DSBG have been deployed under the PIER DSBG EFP, with just one piece lost due to engine problems during the 2016 season. DSBG fishing effort by the PIER EFP team increased to 20,859 soak hours in 2020 compared to 16,323 soak hours during the 2019 fishing season, for a total of more than 100,000 soak hours performed to date (Figure 1).

DSBG Catch: Since 2015, the PIER DSBG EFP team has landed 2,303 swordfish on 1,344 standardized 8-hr fishing days. Overall, swordfish have comprised over 90% of the catch, with bigeye thresher sharks making up an additional 8% (Figure 2). Other marketable species caught during the EFP trials include opah, escolar and mako sharks. Non-marketable catch has made up less than 1% of total catch and has primarily consisted of blue sharks.

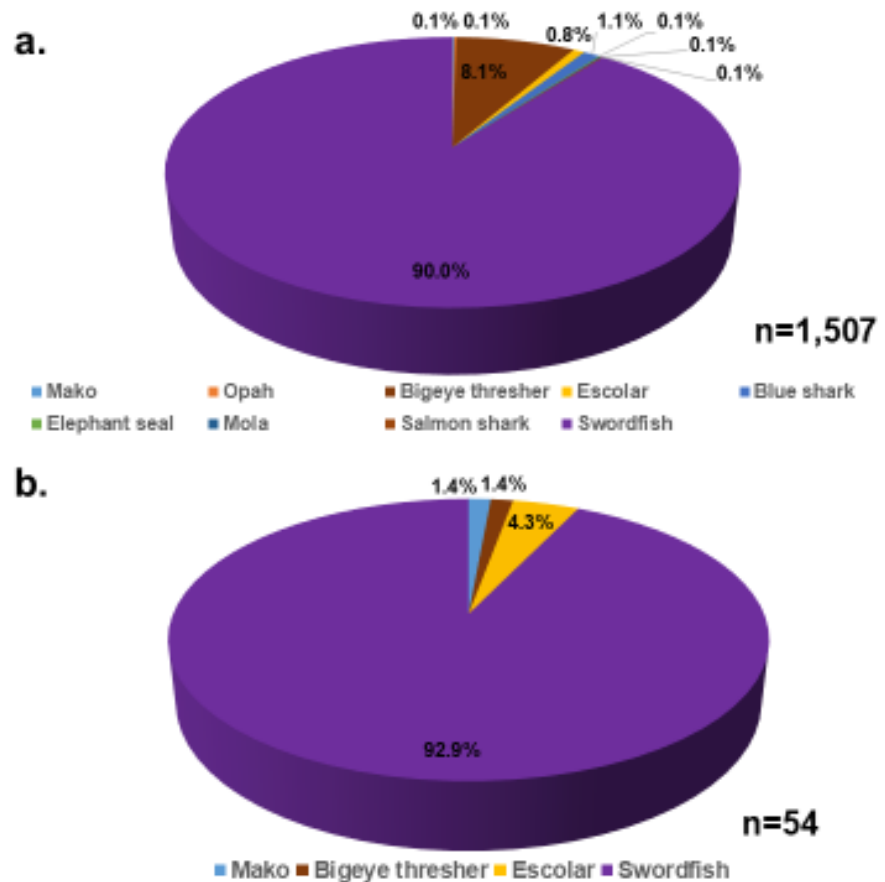


Figure 1. Catch composition for (a.) 1,507 deep-set buoy gear and (b.) 54 linked buoy gear sets conducted under the PIER DSBG-EFP from 2015-2020.

Target catch rates have varied by vessel and year, with mean annual catch rates ranging from 1.3 to 2.0 swordfish per standardized 8-hr set day and non-standardized catch rates from 1.03 to 1.71 swordfish per day. The average annual catch rate on DSBG was 1.76 swordfish per standardized day among all five vessels in 2020, with one of the EFP vessels averaging 2.28 swordfish/8-h day. Average daily catch rates in 2020 were similar to 2016, 2017 and 2019 catch rates and higher than both the 2015 and 2018 seasons.

EFP Observation: Observation of the PIER-DSBG EFP was initially (2015-2018) staffed and coordinated by PIER. In 2018, responsibility for observer coordination shifted to the NOAA West Coast Regional (WCR) Observer Program. Because observer placement was managed by the WCR over the past three seasons, observation rates and specifics are not reported in this summary. In 2020 EFP participant's voiced concern over carrying observers due to Covid-19 concerns and the close proximity of onboard and overnight operations. One EFP fisher reported that he and his crew member became sick after housing a health-compromised observer. This complaint was followed by a negative Covid-19 test, however, this alarm resulted in an increased reluctance to carry observers among the participants.

All EFP vessels continue to perform check in and out procedures (with NOAA, CDFW, and PIER) and vessels continue to furnish PIER with detailed activity logs. To more accurately assess non-observed trips, catch and bycatch were reported daily to PIER via a mandatory call in procedure and verified through observer, logbook and landings records. Since 2016, all swordfish catch was also tracked using traceability collar tags on each fish. The collar tagging program continues to receive positive feedback from markets and processors.

Linked Buoy Gear Description: LBG was designed to facilitate fishing under rough conditions or from less maneuverable vessels that do not want to worry about tracking individual pieces of DSBG. LBG also provides fishers with the capacity to fish across a wider range of depths compared to DSBG. Hook depths, catch composition and bycatch mitigation features (i.e., rapid descent rates, strike detection, active tending) for LBG are comparable to that of DSBG.

LBG EFP Fishing Effort (2018-20): Since September 2, 2018, four EFP vessels have made a total of 54 LBG sets for a total of 400 h under the PIER LBG EFP. A total of 487 LBG sections containing 1,460 baited hooks have been deployed between Santa Cruz Island and the Mexican border. Eighty-two percent of LBG sets consisted of a full complement of 10 LBG sections, including 30 baited hooks, while the remaining 10 set days included a combination of both DSBG and a partial complement of between 3 and 7 sections of LBG.

LBG Catch: Catch on LBG has consisted primarily of swordfish (93%; n=65), with additional EFP catch consisting of bigeye thresher shark, mako shark and escolar (Figure 2). All LBG catch was marketable and no catch was released or discarded. Comparison of catch rates between LBG and DSBG are premature due to (1) the limited number of LBG EFP sets to date, (2) the learning curve associated with the gears, and (3) lack of a full season for comparison. Despite these limitations, the initial daily swordfish catch rates on LBG are similar to those of DSBG. We believe these data to be preliminary given that catch rates during LBG research trials have increased steadily since 2015, suggesting that EFP catch rates will increase with gear experience. Differences in gear configurations, crew familiarity and other variables between LBG and DSBG also confound initial comparisons. To promote increased LBG effort during the 2021 fishing season, PIER continues to train and assist non-PIER-EFP vessel captains and crew.

Market Dynamics: Seasonal market price trends show an initial high in the months of July and August and a subsequent decline throughout the season as foreign market volume begins to increase in the Fall. In 2020 price for buoy-gear caught swordfish reached an all-time low in November-December, primarily due to Covid-19 restaurant restrictions. Cooperative fishers ceased all deep-set fishing operations in December, 2020 when ex-vessel price fell below \$4/lb.

Social Interactions: Several members of the PIER-EFP reported multiple conflicts with other commercial deep-set EFP vessels along with deep-drop sport fishing/charter vessels that interfered with their gear (i.e., setting too close to deployed gear, tangling). Considering that less than 30 commercial deep-set vessels were active during the 2020 season, a great deal of concern continues to be voiced by the EFP participants over the potential future issuance of >300 permits. In 2020 verbal confrontations between fishers and gear interactions (i.e. tangling) were common, especially since the swordfish resource was largely aggregated over regional high spots. Allegations of sport-caught swordfish entering the market were also common in 2020.

EFP Outreach: Throughout the EFP trials, PIER has worked with cooperative fishers to communicate EFP progress, summarize logbook data, place observers on vessels, and provide routine reports to HMS managers. In addition, PIER has continued to refine gear design (DSBG and LBG), assess stock structure and address other research questions that relate to swordfish and other HMS species, including the post-release survivorship of bigeye thresher sharks captured on DSBG and LBG. PIER will continue to provide updates to the community, PFMC, and the HMS Management Team & Advisory Subpanel throughout the duration of DSBG and LBG EFPs.

Dr. Tracy, Chairman Anderson, PMFC, HMSMT, HMSAS
Executive Director PFMC
7700 NE Ambassador Pl. Suite 101
Portland, OR 97220
503-820-2299
www.pcouncil.org
kit.dahl@noaa.gov

Dear Dr. Tracy, Chairman Anderson, PMFC, HMSMT, HMSAS

PFMC, HMSHT

This is the 2020 annual report for DSBG fishing efforts under the EFP issued to Ben and Jack Stephens pertaining to the F/V Tres Mujeres (33ft. trawler) and DEA (24ft. trailerable skiff)

Tres Mujeres

In 2020 F/V Tres Mujeres engaged in 55 days of fishing effort using standard DSBG combined with other gear types to target primarily swordfish and any other marketable species. 55 sets were made using 10 pieces of gear each day for each set (some were hauled and re-set). Each piece mainly used a single hook at bottom of gear configuration. Out of a total 550+ pieces set, only 10 pieces used a 2 hook configuration (1 at 200m and other at 300m). No fish were either hooked nor landed on the 2 hook configuration. Squid was the primary bait used on 95% of the pieces of gear. The only other bait used was mackerel.

During the 55 total days fished, 10 days were with observable coverage which amounted to 18%. Labor cost of observers was covered by NMFS. Over those 55 days 26 swordfish were landed. 4 swordfish and 2 other specie (2 Big-eye brown threshers) were released alive. Other gear (Harpoon and Rod&Reel) used in conjunction with the DSBG resulted in 1 Mako shark and 1 Yellowfin Tuna.

The **Gross** revenue for fish landed:

DSBG swordfish - \$19,347.25 (\$744.13 average price per fish)

Mako – \$291.00

Yellowfin Tuna – \$146.50

Total revenues for DSBG activity/days fished – \$19,784.75

Primary **third** year operating expenditures were approximately \$18,326.65 which included the basic fuel & oil, bait, ice, tackle, crew, food (observer included).

***Total Third year Revenues (all species): \$19,784.75 (\$706.60 per fish average price)**

****Total Third year Operating Expenditures: \$18,326.65**

**NOTE: revenues were not nearly as high as projected due to both smaller than average size of fish landed and market price lower than expected and COVID-19 impacts upon market price, demand and overall operation.*

*** NOTE: Expenditures do not account for the overall cost of operations. This does not represent operational cost like safety equipment and inspections, boat repairs, slip and insurance fees.*

DEA

In 2020 F/V DEA did not fish due to inoperable repairs to vessel though attempts were made to try and fish before end of season. In addition, low catch and poor market demand affected decision on viability to economically make it worth fishing.

In analyzing the data from both vessels and comparing their efficiency and effectiveness, 2020 was a season that did not yield as much catch/revenues as hoped. 2020 was an unpredictable year mostly due to COVID-19 factors.

Moving forward, we would like to continue to pursue fishing the standard DSBG in 2021 in order to record further data that will help determine the economic viability of using standard DSBG to target swordfish using both larger multi-day vessels vs. 1-2 day smaller fishing vessels.

As an endnote we would like to point out that 2020 commercial DSBG fishing season continued to be significantly impacted by the influx of sport/recreational fisherman. As the season progressed and more and more recreational fisherman participated in the “Deep Drop” fishing (due to one particular commercial fisherman from Newport and his operation who sold Commercial Fishing techniques in 2019), we noticed the catch ratio go down and small fishing grounds became highly competitive with a concentration of recreational fishing vessels. This opened up the door for a whole host of conflicts:

1. Recreational vessels setting gear in close proximity to Commercial Fishing resulting in gear conflict and competition for same concentration of fish selecting multiple baits.
2. Recreational gear’s surface footprint (horizontal line attached to their gear) extends upward of ½ mile behind their vessels. This becomes a danger to both navigation and entanglement of protected marine species which Commercial Fishing are scrutinized for and have to fish a vertical line with minimum surface footprint (usually less than 5 yards).
3. Often there is a > 10:1 ratio of Rec vessels to Commercial Fishing vessels. Each rec. vessel fishes 2-3 lines and can bring aboard 2 fish **per** angler. (some vessels have 6+ anglers. = 12+ fish harvested a day). This leads to overfishing by recreational anglers and opens the door for illegal sales of fish and does NOT promote a sustainable fishery.
4. **Recreational vessels using illegal harpoons to assist in landing their fish and use on surface swimming Swordfish and Bluefin Tuna (as observed by federal observer).**

This DSBG method/fishery was designed and tested within the commercial swordfishing fleet to help **augment** the harpoon and DGN fisheries. It should be kept solely as a commercial fishing method/fishery. Allowing recreational fisherman to use practices and techniques that Commercial Fishing use to land swordfish and bluefin tuna would be a grave mistake. By allowing recreational fisherman to use harpoons and spears to assist in landing these species will open up the door for more illegal activities and blur the lines between Commercial Fishing and recreational fishing permitting and legal regulation. Lastly, allowing “Deep Drop” fishing and the use of power assisted reels, recreational fisherman are not truly practicing “sport” techniques and harvest more fish than they can reasonably personally consume in one year thus opening the door for continued illegal sales of “sport” caught fish.

Dave Stephens

Ben Stephens

Jack Stephens

F/V Tres Mujeres & F/V DEA

Matt White F.V. Lil Jack 2020 DSBG EFP Report

My fishing activity participation was limited due to Covid and I only fished a few days. In those days I was immediately crowded by sport fishing vessels that thought it would be appropriate to drop their swordfish gear within 100' of my gear. Since nothing has been done to include a gear proximity rule to the list of rules and regulations for DSBG, it made it difficult, along with Covid to participate as the year progressed. I was also limited in participation by the location and distance of productive fishing areas. My advice to the council is to listen to the participating fisherman and take their reports into serious consideration. In last year's reports there were multiple requests for a gear proximity rule and it has not been addressed. Until the council recognizes the sport fishing fleet is targeting DSBG fisherman nothing can unfortunately be done to curtail this ongoing problem.

Sincerely
Matt White
F.V. Lil Jack
#32648 DFW
US Doc. 595177