

Sustainable Fisheries Partnership Bycatch Solutions Hub- Project Report Providing Smart Buoys for the California Swordfish Deep-Set Buoy Gear Fishery

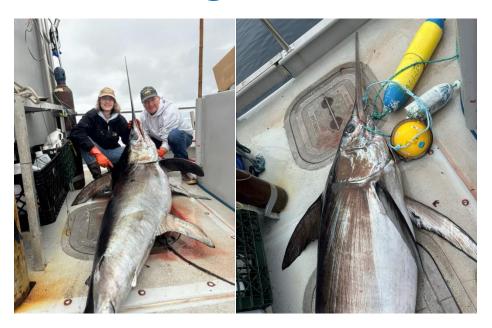
On December 6<sup>th</sup> 2023, twenty Smart Buoys were delivered to two vessels that were participating in the Experimental Fishing Permit for Deep-Set Buoy Gear (DSBG). The Smart Buoys, equipped with GPS, are used to prevent lost gear and subsequent bycatch. One of the vessels, the Aurelia, had completed fishing already because it was nearing the end of the season. The other vessel, Shearwater, continued fishing and made one trip, while its sister vessel, the Audax, made one trip also. Both received remote training on the buoys and they both successfully caught one swordfish each using the Smart Buoys. Details of their trips follow.

December 13th 2023, Captain Dan Fuller of Audax, caught one swordfish and zero bycatch using the Smart Buoys. The captain knew the exact moment the fish bit the hook, because they got a 'moved alert' via text message indicating that one of the deep set buoys was on the run. The sun went down before they could bring the fish on board, and the Smart Buoy helped keep track of the fish while it tired itself out and became safe for the crew to bring the fish into the boat.



On December 19<sup>th</sup>, 2023, Captain Markus of the Shearwater, sister vessel of the Audax, caught one swordfish and again zero bycatch. The fish weighted in at 218lbs dressed. Photos below.

## Blue Ocean Gear



The captain of the Shearwater plans to use the Smart Buoys on Bluefin Tuna in June 2024 using DSBG. The Smart Buoys will help reduce stress, lost gear and subsequent bycatch, especially in low visibility conditions. This technology enables the vessels to fish DSBG more days than they would otherwise. The Shearwater plans to use the buoys again with Swordfish this Fall and will be providing more feedback and photos. The Aurelia plans to fish the Smart Buoys starting the last week of July. We thank Santa Monica Seafood for their generous support and look forward to continuing to build on projects like this in the future. Thanks to SFP and their Bycatch Solutions Hub for establishing a platform for fisheries innovation.