2020 HAWAI'I FISHERMEN OBSERVATIONS

Hawai'i fishermen met with the Council's Advisory Panel on Thursday, February 4, 2021 to discuss observations in the fishery during Calendar Year 2020. The COVID-19 pandemic was identified as a driving factor in 2020 playing a large role in fishing motivations, market loss, and ability to fish. From the lockdown of parks and the limiting of numbers of people allowed to gather, the restrictions in place had a large impact on fishing.

On-the-water observations from fishermen in each of the Council's fisheries are provided below to provide context to the fishery-dependent data provided in previous Annual SAFE Report modules. Fishermen also noted that drones are going to be used more from here on out for fishing and should be noted in future reports.

2020 Pelagic Fisheries

The longline fishery experienced consistent tuna fishing through August 2020 after which catch rates dropped off significantly with landings dropping to 5,000 lbs. per vessel per trip through October 2020. The 'Ahi (Yellowfin or Bigeye Tuna) disappeared in August or fishermen couldn't find the fish. Fishers speculate that in year's past, they relied on surface temperatures and their network to get the latest info on where to fish. With the pandemic, there were fewer boats on the water to provide this information and captains had to rely on past knowledge. Vessels fishing on the Cross Seamount noted lots of "red rover" 'Ōpelu, similar to Karnella's Rover, in the 'Ahi stomachs as well.

The small-boat fishery reported that 'Ahi fishing was variable on O'ahu with a good fishing year on the northeast side (Kane'ohe) but not good on the north shore (Kahuku to Haleiwa) in 2020. O'ahu fishers reported that most of the 'Ahi caught were mostly males initially early in the season and were smaller (80-110 lbs.) than normal. Fishers on O'ahu heard from Kaua'i that the 'Ahi came in as early as March-April. A strong run of 'Ahi showed up at FADs X, LL, MM and U for about a month between late May and June and then died off in July. One fisher reported catching male 'Ahi with no stomach content while another reported that some had silver dollar, ama ebi, and lizard fish in the stomach. Maui fishers reported that larger 'Ahi hung around Maui longer into the fall. On Hawai'i Island, fishers reported that there were no shibi at the 'Ahi ko'a on the "grounds" off of Kona since the current turned south (Kau). But said the Kampachi cage off of Keahole held large (110+lb.) yellowfin through the end of 2020. They also reported that Aku were hard to find but there were large (15-20+lb.) otaru. O'ahu fishers also reported that Kaneohe boats were catching large "otaru size" Aku from spring to fall (late April /May to September/October) and when the 'Ahi left in July, boats turned back to catching Aku.

Fishing for Ono (wahoo) was good on the eastside of Hawai'i Island with a really good bite in Hilo in December 2020. The Ono run was unusually slow everywhere else with mostly smaller than normal fish (under 20 lbs.) being landed.

Observations on other pelagic species in 2020 seemed to have been similar across the state. The Mahimahi (Dolphinfish) run was slow with smaller Mahimahi (under 15 lbs.) being landed. Fishers noticed that the run did not come or was weak in the spring (March to May) and trickled in during the summer. Off of windward Oʻahu, fishers reported that the 30-40 mile offshore

current line that would usually have large rubbish holding many Mahimahi, only would hold a couple of Mahimahi. Akule (Bigeye Scad) and 'Ōpelu (Mackerel Scad) showed up early in 2020 and in large numbers off of O'ahu and Kaua'i. Large schools continued throughout the year and are still around in some places. One O'ahu fishermen noted that the water was full of "bugs" (zooplankton) in early 2020.

Marlin fishing off of Kona was good from June through December with one charter captain landing 40 marlin in 45 days fished. However, fishers noted an increase in shark depredation at the buoys and ledges over previous years.

Pelagic fishers noted that in 2020 the Fish Aggregation Devices (FAD) were breaking off at a higher than normal frequency. Some newly deployed FAD's went missing within a few days to a couple of weeks after deployment. There were some speculating about this being attributed to the materials being used from a new vendor, but fishers also noted that there were heavy winds in 2020 in parts of the islands and changes in currents.

COVID-19 played a large impact in pelagic fisheries in 2020 particularly in the market and the economy. Hawaii's longline fishery led the nation in lost revenue with \$40 million resulting in new markets such as direct sales to the public by fish wholesalers to help move fish. This in turn provided deep discounts to the community and opened up alternative markets to fishers, including peddling fish on the roadside.

Other pelagic fleets like the charter sector suffered an entire shutdown with permits taken away from March through June and the loss of tourism. While supplemental funding through the CARES Act helped, many charter operations went out of business and the remainder of the fleet seeing 2-3 boats operating per day where as it would typically be at least 15 per day. The few vessels operating were owned by off island interest who came over to fish own their own vessels. Owner operated charters have had the hardest time surviving due to the lack of tourist.

In 2020, some islands like Kaua'i experienced more people fishing but less fish made it to the market as people were feeding themselves or providing for the community. Even those that did supply the markets found that markets would stop taking fish driving excess fish to be given away. Kaua'i fishers noted that even more fishing would have occurred had there been enough parking for boats at some of the ramps. The regular fishers were often turned away at ramps because of the number of boats that were out fishing during the pandemic. Other areas saw fewer boats due to the confusion about rules during the pandemic, which some fishers reported contributed to a strange feeling to being out alone, seemingly losing a sense of security.

2020 Bottomfish Fisheries

Bottomfish fishing in 2020 ranged from average to good across the state but was severely hampered by the market as it dealt with the COVID-19 pandemic. Fishing that did occur for individual species, however, differed between the islands.

Fishers targeting Onaga (Ruby Snapper) on O'ahu noted that fishing was poor and the worst some have ever seen. They noted that they found "blips" or "piles" of the species but usually of smaller individuals in the 1-3 lb. size range. These small Onaga were more likely to pick up

hooks quicker than Ehu (Red Snapper). Maui fishers had similar experiences with small Onaga. Kaua'i fisherman Marvin Lum set a new state record of 34 lbs. 2 oz. with an Onaga that he caught off of Niihau.

Both Maui and Oʻahu noted larger individual size Ehu and Gindai (Oblique-banded Snapper) landed in 2020, with a larger abundance caught earlier in the year. The two islands also experienced a lot of what seemed to be 'Ōpakapaka (Pink Snapper) around both islands but were mostly made up of smaller fish. Maui, which normally would catch an average of 8 lb. 'Ōpakapaka, saw an average of 2-3 lbs. in 2020. Oʻahu fishermen saw large 'Ōpakapaka schools of fish less than one pound in size in December. Other schools were of mixed sizes where they usually are more stratified based on size. Others reported 'Ōpakapaka missing on traditional grounds on such as the Penguin banks, Honolulu, Lanai those who tried at night and during the day, resulting in 2 or 3 individual fish caught compared to what is normally 200-300 lbs. of fish. Oʻahu fishers in 2020 also saw Hapuʻupuʻu (Hawaiian Grouper) in lower numbers at certain spots than in previous years.

Uku (Gray Jobfish) fishing in 2020 across the State was poor to terrible with the spring aggregation failing to show up in normal areas. A fisherman reported the bite (catch rates) was really slow on the north shore and others confirmed similar experiences in other areas. The slow bite was to two factors - first, there has been an increase in shark predation and hooked was usually lost to sharks. The increase in shark depredation has been noted since 2018 with silky and sandbar sharks identified as the culprits. The result of the increased depredation was that fishermen stopped targeting Uku. The second reason for the poor fishing in 2020 for Uku was that fishers noted currents tended to be much stronger and pulling in different directions than normal. The currents normally running parallel along the ledges were moving perpendicular either onshore or offshore. They surmised that the change in currents also had an effect on water temperature and bait distribution which resulted in less favorable conditions for the fish.

Overall, fishers noted that the currents observed in the bottomfish fishery were running strong and in the wrong direction. The expected favorable currents at certain times in previous years were not there in 2020. On Hawai'i Island, the South current has been the predominant current in the last two years, but at Ka Lae, the current had been pulling straight offshore at the end of 2020. Other ecosystem observations made by fishermen in 2020 was that heavy rains contributed to mudlines that run straight offshore on Hawai'i Island and the habitats for bottomfish in Maui have changed as muddy areas appear to now be hard bottom. Fishers estimate that the grounds are moving eastward as they have changed their land marks according to depth recorders.

From the market perspective, fishers noted that prices were stable in 2020 but would tank if too much fish was brought in. The COVID-19 pandemic caused a huge change for Oʻahu fishermen as United Fishing Agency changed policies to not receive fish after hours in the evening. Fishermen were required to drop off their catch early the next morning if they wanted to sell their catch from the day before. This forced some fishermen skip a day of fishing in order to hold their catch to be dropped off the next day. This also led to people selling locally and exclusively peddling fish or giving it away. As a result, Oʻahu fishers noted they specifically targeted smaller bottomfish for direct sales to the community. The lack of restaurants, markets and stores

open to sell the fish resulted in fish dealers and wholesalers not buying fish. Those that would typically fish uku in the summer did not go because the restaurants were closed so they had no outlet for their fish in Kona. Meanwhile, fishing supply stores did very well in 2020 and some were often sold out of supplies. As many who were unemployed or working from home turned to fishing to feed their family or for recreation and peace of mind.

2020 Kona Crab Fisheries

Kona Crab (Spanner Crab) fisheries in 2020 was average on O'ahu but fishers noted that there were a lot of small, "sand turtle" size crabs in some areas on the North shore (good recruitment). They also reported that the sandy areas on Penguin Bank that were old Kona crab fishing grounds were not there. Where sandy areas/patches had apparently shifted or moved and was now hard substrate which Kona crabs do not live on. In Hilo, the Kona Crab catch was down and really hard to catch in 2020, and fishers noted that this could be because of large amounts of rain (runoff).

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