

General Synopsis:

- both shore & boat fishing activity generally increased during state-mandated restrictions
 - all islands except Moloka‘i (always in subsistence mode)
 - Moloka‘i deer population explosion significantly increased hunting activity & may have offset fishing response to pandemic
- beach park closures tended to concentrate fishers at more easily accessible areas
 - particularly on O‘ahu & Maui
 - noticeable increase in off-roading by fishers on Big Island & probably Maui likely due to park closures
- community closures on Big Island (e.g. Miloli‘i & Hōnaunau) by community members using signs & sometimes “guards” to discourage outsiders from entering
 - community-driven measures attempting to limit the spread of COVID-19 into the community & possibly minimize impact on local nearshore resources
- akule fishing tended to cluster fishing effort which often negating social distancing protocols
 - particularly on O‘ahu, Maui, & Moloka‘i
- rod & reel fishing generally dominated observed shoreline gear types but spear & net fishing may be underestimated due to limitations with surveyor visibility & accessibility
- small portion of observed shore fishing by people pretending to fish as an excuse to stay on the beach
 - particularly on Kaua‘i, O‘ahu, & Maui
- many boat fishers were presumably fishing non-commercially for subsistence (providing food for family, friends, neighbors, etc.)
 - very poor market price for fish resulting from relatively low retail demand
- some observed behavioral changes in local marine fauna
 - turtles & monk seals hauling out on Kaua‘i beaches normally crowded with people
 - surgeonfish, nenue, & ‘ō‘io observed congregating close to shore on O‘ahu (north shore)
 - newborn black tip reef sharks observed congregating near shore on Big Island (North Kona)

O‘ahu Shoreline Fishing Effort During COVID-19 (O‘ahu DAR Staff)

Number of surveys done	Month	Total Number of Fishers	Pole and Line				Diving			Net		Miscellaneous			
			Dunking	Flyfishing	Hand Pole	Whipping	Three Prong	Gun	Unknown	Thrownet	Laynet	Look Box or Wading for Tako	Picking Opihi	Picking Limu	Crab Pot
13	April	206	115	5	7	60	21	24	12	3	0	0	0	1	1
12	May	369	215	7	10	123	56	34	3	10	0	7	0	0	0

Table 1. Sum of all surveys conducted during the COVID-19 shutdown (April 2020 to May 2020). There was a total of 13 surveys conducted during April and 12 surveys conducted during May as of May 7th. Note these summaries do not include HMRFS roving surveys.

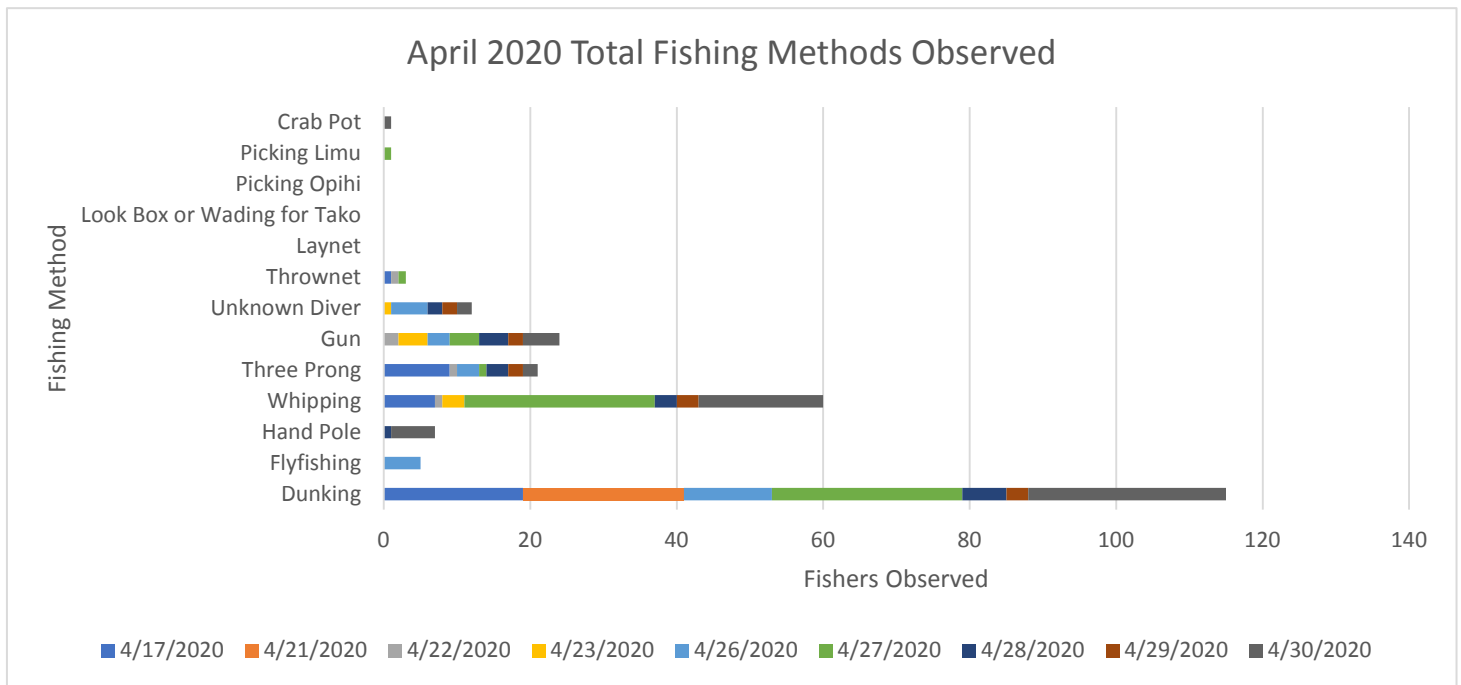


Figure 1. Breakdown of observed fishing methods during April 2020. Somedays multiple surveyors collected data at multiple points around the island. There were 3 surveys conducted on 4/27/2020, 2 surveys conducted on 4/28/2020, and 2 surveys conducted on 4/30/2020

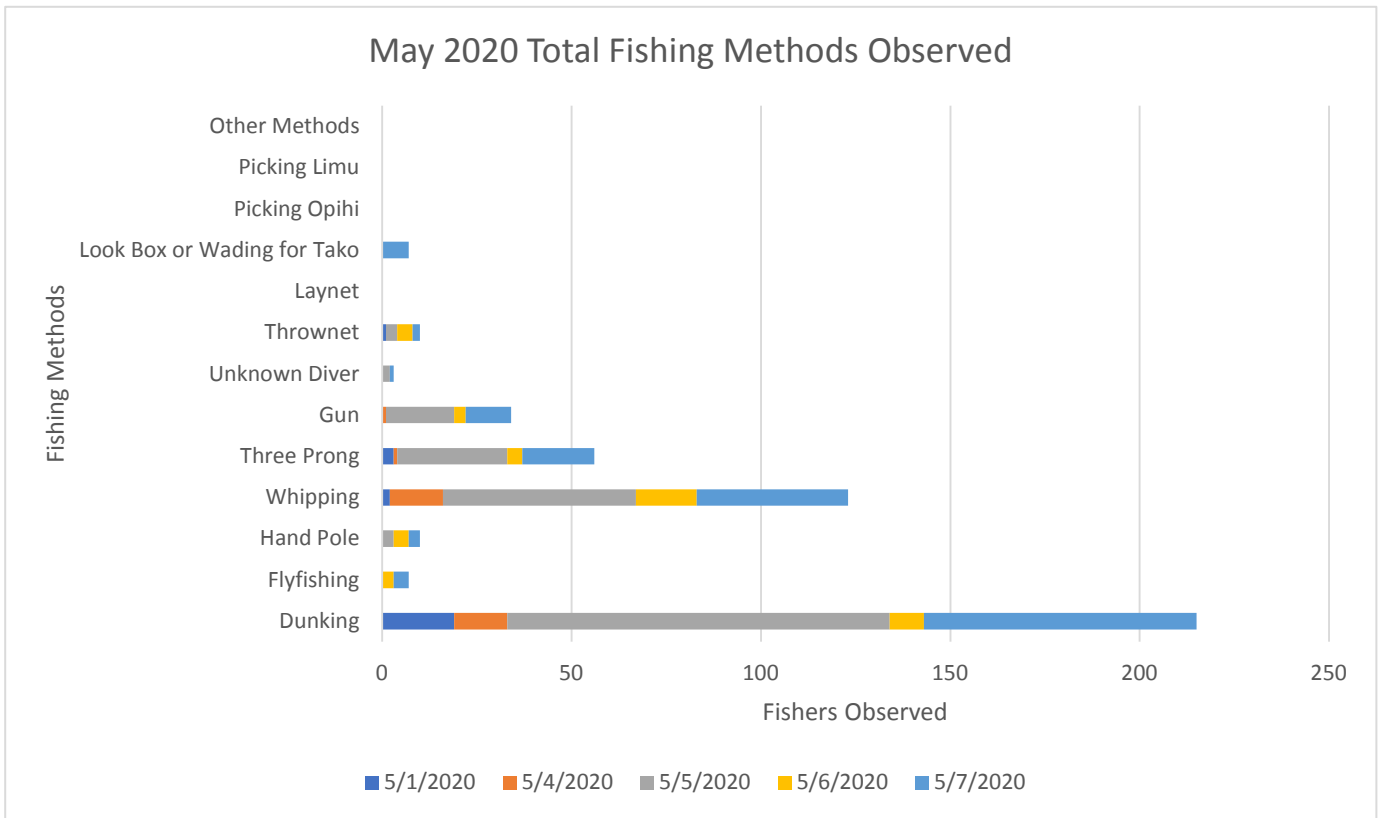


Figure 2. Breakdown of observed fishing methods during May 2020. Somedays multiple surveyors collected data at multiple points around the island. There were 2 surveys conducted on 5/1/2020, 3 surveys conducted on 5/5/2020, 2 surveys conducted on 5/6/2020, and 4 surveys conducted on 5/7/2020.

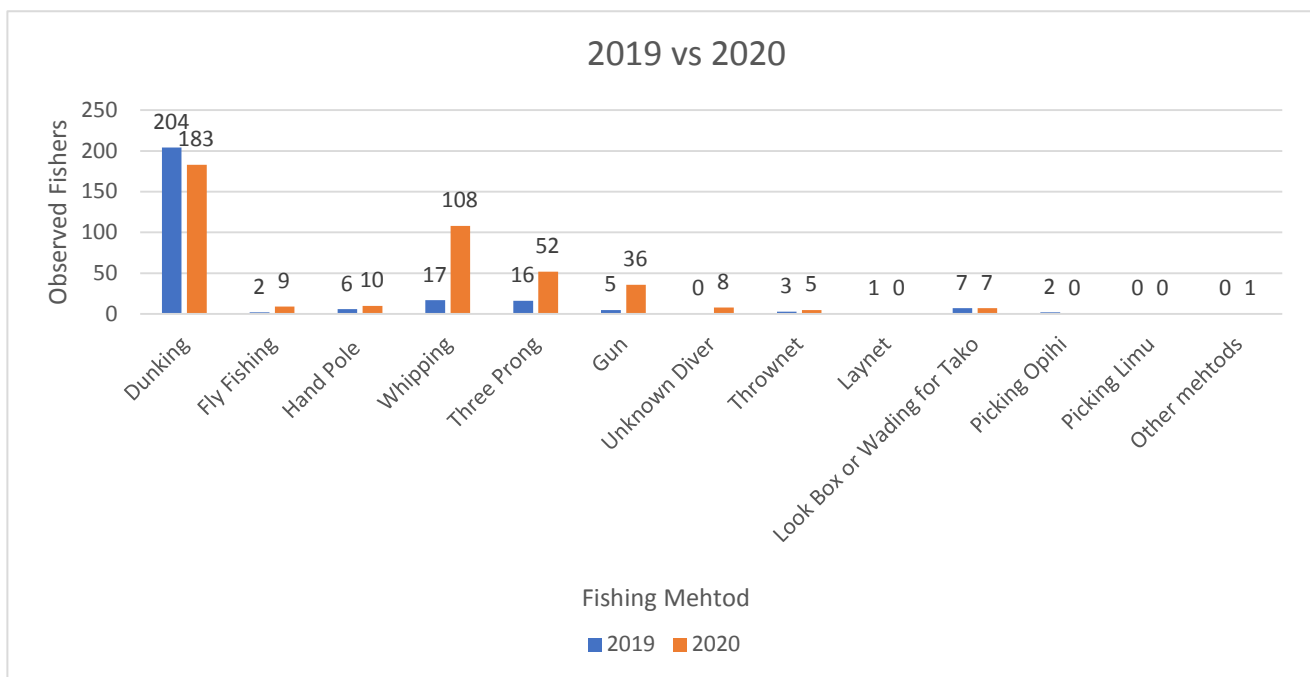


Figure 3. Comparison of fishing gears between 2019 and 2020. In 2019, 8 surveys were conducted from March 15, 2019 - May 14, 2019 and during the same period in 2020, 25 surveys were conducted. Eight surveys were randomly selected from the 2020 data set and compared with the 2019 data set. The total fishermen for the 2019 period was 184 while 2020 had 323.