

Fishing Activity in Hawai'i during the COVID-19 Pandemic (April - May 2020)

Summary:

In an attempt to document the role of fishing relative to the state's food security network, staff at the Hawai'i Division of Aquatic Resources began conducting roving fishing effort surveys soon after the stay-at-home restrictions were mandated resulting from the COVID-19 pandemic. The roving survey consists of individual staff driving a segment of coastline and recording the number of fishers and gear types observed (catch records were not a part of the surveys). The roving surveys have focused mostly on shore-based fishing activities and are ongoing on Kaua'i, O'ahu, Maui, Moloka'i, and Big Island.

General Synopsis:

- both shore & boat fishing activity generally increased during state-mandated restrictions
 - all islands except Moloka'i (always in subsistence mode)
- 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 led by community members with signs discouraging entry by outsiders
 - 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, 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, nenu, & '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)

Shore Fishing Effort on O'ahu (April-May 2020):

Table 1. Sum of shore fishers and methods observed on O'ahu during the COVID-19 shutdown from April 13, 2020 to May 7, 2020.

month	number of surveys	number of fishers	pole & line				spearfishing			net		miscellaneous			
			dunking	flyfishing	hand pole	whipping	3-prong	gun	unknown	thrownet	laynet	wading for tako	picking opihi	picking limu	crab pot
April	13	206	115	5	7	60	21	24	12	3	0	0	0	1	1
May	12	369	215	7	10	123	56	34	3	10	0	7	0	0	0

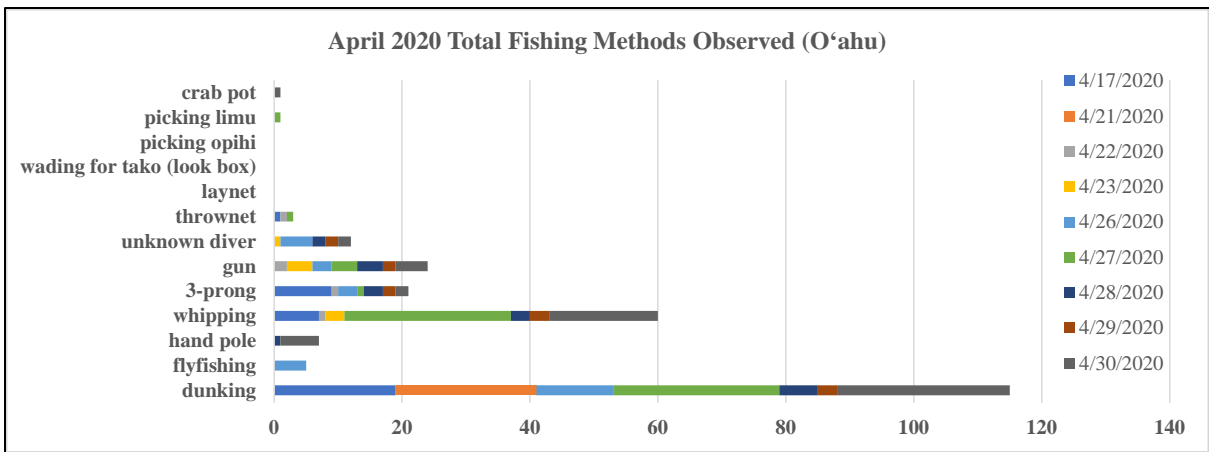


Figure 1. Shore fishing gears/methods observed on O'ahu in April 2020. On certain days, multiple surveys were conducted at different areas around the island: 3 surveys conducted on 4/27/2020, 2 surveys conducted on 4/28/2020, and 2 surveys conducted on 4/30/2020.

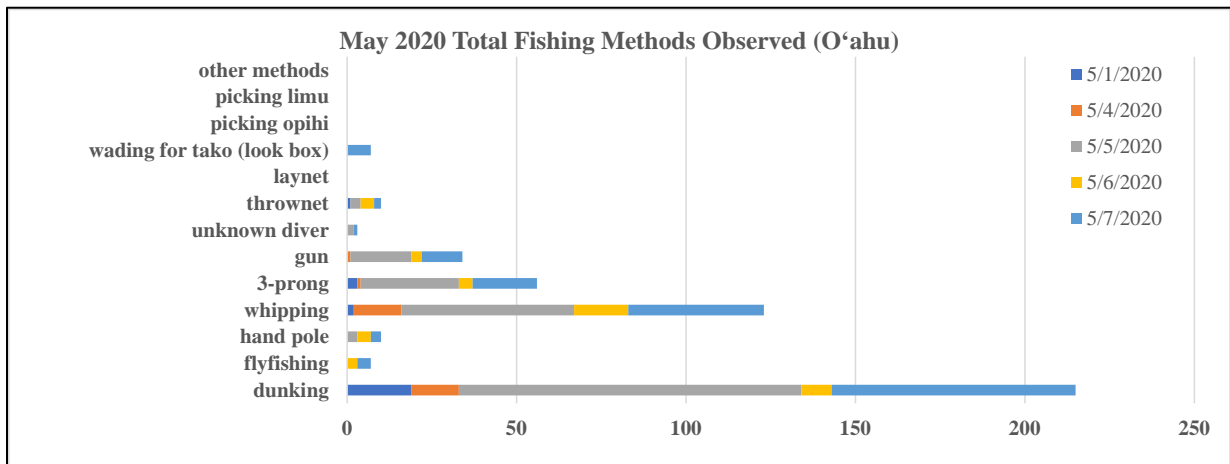


Figure 2. Shore fishing gears/methods observed on O'ahu in May 2020. On certain days, multiple surveys were conducted at different areas around the island: 2 surveys conducted on 5/1/2020, 3 surveys conducted on 5/5/2020, 2 surveys conducted on 5/6/2020, and 4 surveys conducted on 5/7/2020.

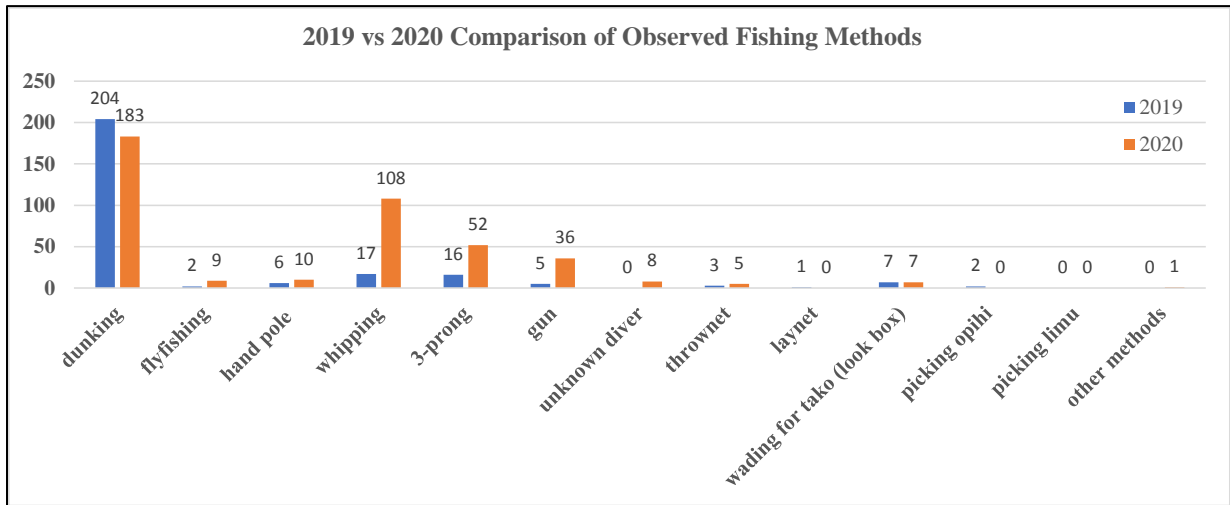


Figure 3. Comparison of fishing gears/methods between 2019 and 2020. In 2019, 8 surveys were conducted from March 15, 2019 - May 14, 2019 and during the same period in 2020, 25 surveys were conducted. Eight surveys were randomly selected from the 2020 data set and compared with the 2019 data set. The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