

3rd QUARTER REPORT OF THE FISHERIES DIVISION THE DEPARTMENT OF MARINE AND WILDLIFE RESOURCES

This report briefly describes the activities undertaken by the DMWR April to June 2020

AMERICAN SAMOA SPORTFISH INVESTIGATION AND CONSERVATION PROJECTS

(Funding source: U.S. Fish and Wildlife Service)

Marine Protected Area Program: Restore a viable sportfish stock through village-based fishery management and monitoring;

There were no significant accomplishments for this quarter due to the suspension of community activities due to COVID-19 situation.

Inshore Fishery Documentations Program: Determine the performance of the near shore sport fish fishery;

The Shore-based Creel Survey completed a total of 97 runs in 41 sampled days of 65 Weekdays and 13 Weekend/Holiday for this third quarter not including the Manu'a islands. The monitoring team recorded 31 Participation counts and 16 Interview data including opportunistic interviews to calculate an estimate of catch and effort data. The data accumulates expansion totals that express the estimated landings by gear type in the near shore fishery

Note: During this quarter the COVID-19 pandemic declaration by the government to ensure employee safety within their workplace and work environment decreased our work hours and limited our survey field data collection. The situation also caused the Manu'a technician to work from home preventing any field work as per requirement of the COVID-19 declaration for employees "60 and above". DMWR implemented every necessary safety measures to avoid any risk of exposure to the disease which limited our surveys and caused the numbers to decrease for this quarter. There was no data collection reported from the Manu'a islands during this period.

Total expanded catch for this quarter is estimated at 5,022lbs; the total expansion for Gear/Hr amounts to 2,675lbs; and as a final point the expansion total for Catch/ Gear-Hr is 2.47lbs.

The expanded catch/ effort summary by gear methods:

2020	Rod/Reel	ThrowNet	Spearfishing
April - June	4,624lbs	347lbs	52lbs

The catch summary also provides numbers for species composition in total landings with no pooling. The three dominant species for this quarter is listed below.

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| 1. Bigeye scad/ <i>Selar crumenophthalmus</i> / Atule | 4,080lbs |
| 2. Convict tang/ <i>Acanthurus triostegus</i> / Manini | 391lbs |
| 3. Bigscale soldierfish/ <i>Myripristis berndti</i> Malau | 184lbs |

Key Reef Species Program: Evaluate the status of sportfish;

Due to CVOCID-19 Code Blue restrictions and limited hours staff were assigned to encode fish and coral data. Staff was also assigned to develop outreach materials and species identification for key reef species to improve commonly recorded fish species at different sites. Staff also followed up on project PR's and PO's regarding DAN insurance, Dive Gear, Safety gears for the boat, Boat engine maintenance, Dive watches and Underwater Camera's. Staff followed up on vehicles being repaired by Samoa Motors.

Fish Aggregating Device Program: Provide an alternative resource access by enhancing sportfishing through fish aggregating devices;

Staff continued to collect data from sports fishermen once a week. Purchase of other FAD materials were also processed.

MONITORING FISH STOCKS

Funding source: NOAA-NMFS

The pelagic fisheries report for longline vessels and purse seine are covered by the Pelagic Fisheries Ecosystem Report by the Western Pacific Fisheries Management Council and the Pacific Islands Fisheries Science Center. The pelagic fisheries by sportsfishing is reported under the Fish and Wildlife Restoration Grant. The pelagic fisheries reported here are from Alia longline, bottomfishing, trolling, mix bottomfishing/trolling, and spearfishing operations in American Samoa.

The Coronavirus pandemic-imposed changes in the fisheries data collection efforts starting March 24, 2020. There was a decrease in fisheries survey data collection efforts

from 8 – 16 hours to 5 – 10 hours a survey day. Surveys were conducted randomly throughout each month for at least 3 days a week. Also, there were no weekend surveys conducted in April and May. June is the first month to include the weekend surveys that will contribute to a thorough expansion calculation. Therefore, the expansion numbers used in this report are affected by the current pandemic. Although there was an increase in fishing activities, the COVID-19 restrictions have limited the collection of interviews.

There were 10 active alias that contributed to the landings from longline, bottomfishing, trolling, mix bottomfishing/trolling, and spearfishing activities from April 2020 to June 2020. Throughout this quarter, these vessels have landed a total of 13,120 expanded pounds of fish. There were 169 fishing trips with fishing effort recorded from 28 interviews this quarter.

The objectives of the project and corresponding activities for this reporting period are:

- 1. Monitor catches of highly migratory, species harvested within American Samoa’s EEZ through the port sampling of commercial vessels and continuous documentation of market sales.**

Five active fishing vessels caught an estimate of 3,294 pounds of pelagic fish species in this reporting period. The most dominant fish caught was Wahoo (*Acanthocybium solandri*) by mix bottomfishing/trolling and trolling activities. Table 1. lists the pelagic species caught from Alia boats this quarter.

Table 1. Pelagic catches from Alia boats from April 2020 to June 2020:

Species	Bottomfish	BTM/TRL	Trolling	Total (lbs.)
<i>Bigeye barracuda</i>	8	-	-	8
<i>Dogtooth tuna</i>	53	15	-	67
<i>Mahimahi</i>	-	34	14	47
<i>Rainbow runner</i>	11	-	-	11
<i>Skipjack tuna</i>	-	82	693	775
<i>Wahoo</i>	-	52	781	833
Total (lbs.)	72	183	1,488	1,742

- 2. Monitor catches of Bottomfish species harvested within American Samoa’s EEZ through documenting market sales and port sampling.**

There were six Alias that contributed to the total landings of 4,774 expanded pounds of bottomfish species this quarter. Gray jobfish (*Aprion virescens*) was the dominant species caught this reporting period with an estimated 719 pounds which accounts for 15% of the total landings. The following table lists the ten

most common species caught this quarter which accounts for 77% of the total bottomfish species landings.

Table 2. Total bottomfish landings by species/group from April to June 2020.

Common Name	Samoaan Name	Scientific Name	Total (lbs)
Gray jobfish	Asoama	<i>Aprion virescens</i>	719
Bigeye trevally	Malauli matalapo'a	<i>Caranx sexfasciatus</i>	698
Humpback snapper	Malaī	<i>Lutjanus gibbus</i>	495
Redgill emperor	Filoa pa'o'omumu	<i>Lethrinus rubrioperculatus</i>	366
Silverjaw jobfish (lehi)	Palu gutusiliva	<i>Aphareus rutilans</i>	305
Black jack	Tafauli	<i>Lutjanus</i>	297
Longtail snapper (onaga)	Palu loa	<i>Etelis coruscans</i>	265
Yelloweye snapper	Palu sina	<i>Pristipomoides flavipinnis</i>	192
Ruby snapper (ehu)	Palu malau	<i>Etelis carbunculus</i>	189
Blue lined snapper	Savane	<i>Lutjanus kasmira</i>	167
		Others	1082
		Total (lbs)	4774

3. Monitor catches of Spearfishing activities within American Samoa’s EEZ through documenting market sales and port sampling.

There were five Alias actively spearfishing this quarter with a recorded catch of 2,518 pounds of nearshore marine species. There are two boats a day spearfishing up to 4 days a week. There were 11 interviews collected from 60 fishing trips recorded. The most dominant species caught is the Blue-banded surgeonfish (*Acanthurus lineatus*) which accounts for 21% of the total landing of nearshore fisheries caught. Parrotfish species account for 58% of the total catch this quarter. Whereas, surgeonfish species account for 28% and groupers at 5%. The least common species caught was squirrelfish (1%). The following table lists the most common species caught this quarter.

Table 3. A total of nearshore fish species landed by boat-based spearfishing activities.

Common Name	Samoan Name	Scientific Name	Total (lbs.)
Blue-banded surgeonfish	Alogo	<i>Acanthurus lineatus</i>	484
Redlip parrotfish	Fuga/Laea	<i>Scarus rubroviolaceus</i>	470
Dark-capped	Fuga/Laea	<i>Scarus oviceps</i>	438
Redtail parrotfish	Fuga/Laea	<i>Chlorurus japanensis</i>	428
Goldspot trevally	Malauli	<i>Carangoides orthogrammus</i>	172
		Others	482
		Total (lbs.)	2,474

4. Disseminate information of American Samoa's Fisheries and Data Collection efforts

- a. It is required for all fishermen to have a briefing of local and federal regulations with our Enforcement Division before acquiring a Commercial Fishing License. During these briefings, fishermen are issued copies of the American Samoa Fishing Regulations brochure.
- b. Posters on Common Species caught from fishing activities on the Reef, Bottomfishing, and Trolling/Longline have been distributed to the public upon request. These have helped with species identification by Samoan and Common names.
- c. Radio public service announcements were made regarding staggering work hours due to the COVID-19 proclamation. Therefore, applicants for a Commercial Fishing License were asked to call in for an appointment.
- d. Radio public service announcements were made to all vendors participating in the Commercial Invoice system. The announcements reminded commercial vendor representatives to turn in their invoices at the department office on or before the 16th of every month, as reflected in the local regulations (A.S.C.A. § 24.0305)

5. Fund Enforcement activities related to inter-jurisdictional fish species.

- a. The department issued 18 commercial fishing licenses for local fishermen this quarter. There were four renewals amongst this list.
- b. The Enforcement Division conducts random checks at local commercial vendors to see if they are selling fresh and/or frozen local fish. Any new vendors are referred back to the team for registration. The survey team enrolls the dealers into the commercial invoice system and then conducts training for the vendor representative(s) on filling out vendor invoices. Representatives are informed of any regulations regarding commercial invoices and the scheduled pick up of commercial receipts.
- c. To ensure the safety of our employees and the territory, it is important to comply with the current COVID-19 proclamation. Therefore, our commercial invoice visits to vendors were minimized to one visit per vendor each month with priority to train new vendor representatives and review receipt books. Vendor

representatives were reminded of the current regulation to submit their invoices to the department office.

RE-STOCKING OF GIANT CLAMS IN AMERICAN SAMOA

Funding source: U.S. Fish and Wildlife Service

DMWR reached out to potential sources of giant clam juveniles for restocking: Samoa, Palau, Marshall Islands, and Philippines. The department has contacted the Marine Science Institute of the University of the Philippines for potential to import juveniles of the giant clam *Tridacna gigas*. Informal communication has been conducted with the relevant staff of the Institute and department has been informed for the necessary documents needed for the importation.

DATA PORTAL FOR CLIMATE CHANGE VARIABLES IN AMERICAN SAMOA

Funding source: U.S. Fish and Wildlife Service

A study on the impact of climate variability on octopus gleaning has been completed and current analyses cover other nearshore fisheries, spearfishing and bottomfishing. The hypothesis is that climate variability will have highest impact in nearshore fisheries with impact declining with depth.