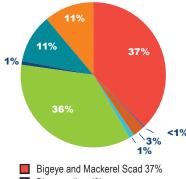
# NORA THORPOOLING THE THORPOOLI

# **NOAA**FISHERIES

At 1.5 million square miles, the area of federal waters in the Western Pacific is nearly equal to that of all other federal waters combined.

#### HAWAI'I PRIMARY TARGET SPECIES

In 2017, non-commercial anglers took an estimated 1.3 million shoreline and private boat fishing trips in Hawai'i. The popular species listed here were targeted in about one-fifth of all non-commercial trips. Of those trips, the primary target species breakdown is as follows:



Blue marlin <1%
Deep 7 Bottomfish <1%
Dolphinfish 3%

Goatfishes 1%
Jacks 36%

Skipjack Tuna 1%
Smallmouth Bonefish <1%

☐ Snappers <1% ☐ Wahoo 11%

Yellowfin Tuna 11%

Source: Marine Recreational Information Program, 2017.

# **Western Pacific Non-Commercial Fisheries**

HAWAI'I • AMERICAN SAMOA •

#### **COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS • GUAM**

U.S. fisheries in the Western Pacific—a vast expanse of nearly 1.5 million square miles of federal waters—encompass highly productive coral reef, ocean bottom, and open ocean ecosystems surrounding all or part of three Pacific archipelagos (Hawai'i, Mariana Islands, and American Samoa) and seven widely spaced remote islands and atolls. Non-commercial fisheries in the Western Pacific are major economic contributors to coastal communities and have important social and cultural significance through the perpetuation of subsistence and traditional fishing practices and their accompanying cultural values. Marine resources are regularly harvested for non-profit distribution within fishing communities (customary exchange) and portions of the catch often are sold to defray expenses to allow the continuation of fishing activities.

The Western Pacific region also has well-established and is developing for-hire recreational fishing opportunities available through deep-sea charter boats, guided reef fishing, and eco-tourism. NOAA Fisheries Pacific Islands Regional Office (PIRO) and the Pacific Islands Fisheries Science Center (PIFSC) recognize the fundamental role that non-commercial and recreational fishing plays in the lives and livelihoods of Pacific Islanders. Working alongside fishermen, partners, and others, PIRO and PIFSC work to conserve fish populations and protect our unique fishing traditions.

#### **HAWAI'I POPULAR NON-COMMERCIAL SPECIES**

Species/Local Names	Total Catch (number of fish)	HARVESTED RELEASED	Caught in State Waters	Caught in Federal Waters
Bigeye and Mackerel Scad Akule, 'Ōpelu	1,178,000	)-	92%	8%
Goatfish* Weke, Kūmū, Moano, Munu, etc.	438,000	)	100%	0%
Jacks** 'Ōmilu,Pāpio, Ulua, Kagami, Kahala, etc.	268,000	)	98%	2%
Skipjack Tuna Aku	115,000	)-	6%	94%
Snappers*** Ta'ape, To'au, Uku, Wahanui	114,000	)-	76%	24%
Yellowfin Tuna 'Ahi	82,000	)-	8%	92%
Dolphinfish Mahimahi	47,000	)-	7%	93%
Smallmouth bonefish 'Ō'io	36,000		100%	0%
Wahoo Ono	31,000	)	38%	62%
Deep 7 Bottomfish^ Lehi, Ehu, Onaga, 'Ōpakapaka, Kalekale, Gindai, Hāpu'upu'u	21,300	<b>)</b>	47%	53%
Blue Marlin Aʻu, Kajiki	4,200	)	18%	82%

This table depicts catch data from shoreline and private boat fishing. Data from Hawai'i charter boats are reflected in commercial catch and trip reports. \*Goatfishes include bandtail goatfish, blue goatfish, doublebar goatfish, goatfishes, manybar goatfish, Pfluger's goatfish, sidespot goatfish, whitesaddle goatfish, yellowfin goatfish, yellowstripe goatfish. \*\*Jacks include African pompano, bigeye trevally, black trevally, bluefin trevally, giant trevally, greater amberjack, island jack, jack family. \*\*\*Snappers include blacktail snapper, bluestripe snapper, green jobfish, smalltooth jobfish. ^"Deep 7" Bottomfish include Brigham's snapper, Hawaiian grouper, ironjaw snapper, long-tail red snapper, pink snapper, ruby snapper, Von Siebold's snapper.

Source: Marine Recreational Information Program

## Hawai'i Overview

In a recent survey of non-commercial fishermen in Hawai'i, 66 percent indicated fishing for food was important, in particular catching fish for home consumption and for sharing with friends and family. Approximately 36 percent indicated that their catch is extremely or very important to their regular diet. Across the state, anglers spent more than \$120 million on fishing trips, resulting in sales impacts (gross regional business sales) of \$146 million, and supporting more than 1,000 jobs in 2017. About 88 percent of non-commercial fishing trips occurred in state waters and the remaining 12 percent in federal waters.

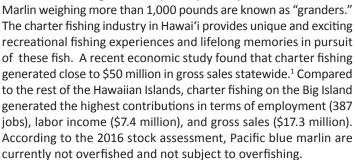
## **Species Spotlight**

BLUE MARLIN, Makaira nigricans, a'u

Pacific blue marlin, locally known as a'u, are a prized big game sportfish that may grow to be more than 12 feet long and weigh

up to 2,000 pounds. Females grow larger than males and may live 20 to -30 years; males





<sup>1</sup>Source: E. Rollins, S. Lovell, 2019

# **American Samoa Overview**

Recreational, subsistence, and commercial fishing all play an important sociocultural role in American Samoa's island communities by promoting sharing, social cohesion, and the perpetuation of traditional fishing practices. As all methods of fishing are typically reported together, the specific economic contributions of non-commercial fishing are not clearly understood. Even fishermen who sell some of their catch typically fish to feed their own families and contribute fish to their churches and villages. In 2003, local anglers played a key role in reviving recreational fishing by forming the Pago Pago Game Fishing Association (PPGFA). The association has hosted tournaments for over more than 15 years, and recently teamed up with members of the nearby Samoa International Game Fishing Association to hold their annual international tournaments within

weeks of one another to accommodate boats and fishermen visiting from New Zealand. The PPGFA has coordinated with several government offices, including the American Samoa Visitors Bureau, the Office of the Governor, Ports Administration, and Customs, to make it more convenient for foreign anglers to visit American Samoa and participate in the tournament.

# **Species Spotlight**

**RAINBOW RUNNER,** 

Elagatis bipinnulata, samani

The rainbow runner, samani in Samoan, is a common marine fish that is closely

related to the amberjacks. The species is widespread throughout the tropical and subtropical waters of the



world, inhabiting both coastal and offshore areas. The rainbow runner is easily distinguished by its body shape, and the brilliant coloration that gives the fish its name. It is a fast-swimming predator that eats small fish, squid, and a wide variety of planktonic crustaceans. The species reaches sexual maturity at around 24 inches, and spawning takes place year-round for some populations, while others only spawn at certain times of the year. Rainbow runner is a popular game fish that is caught by a variety of fishing methods, and is also a well-regarded table fish.

#### AMERICAN SAMOA POPULAR NON-COMMERCIAL SPECIES

Species/Local Names	Total Catch (lbs)	% Caught Inshore	% Caught Offshore
Rainbow Runner Samani	2,600	99%	1%
Dogtooth Tuna Tagi	1,200	98%	2%
Bluefin Trevally Malauli-Apamoana, Atugaloloa	860	100%	0%
Greater Amberjack Talafa, Malauli	700	100%	0%
Bigeye Scad Atule	500	100%	0%

Source: American Samoa Department of Marine & Wildlife Resources, Western Pacific Fisheries Information Network (WPacFIN). Catch offshore is unsold boat-based catch.

# Commonwealth of the Northern Mariana Islands Overview

To better understand the economic and social characteristics of fishing in the Commonwealth of the Northern Mariana Islands (CNMI) and Guam, in NOAA's Pacific Islands Fisheries Science Center (PIFSC) conducted the Marianas Fishing Survey in collaboration with the Pacific Islands Fisheries Group (PIFG) in 2018. Survey results revealed that CNMI fishermen have mixed motivations for fishing, which can simultaneously include subsistence (47%), purely recreational (38%), recreational expense\* (32%), and cultural (18%) purposes. Boat-based fishing trips primarily targeted pelagic fish (33%), deep slope bottomfish (27%), and shallow complex bottomfish (22%). Commercial and non-commercial fishermen participating in the survey also reported that 33 percent of their catch is consumed at home, 32 percent sold, 28 percent given away, 4 percent donated to a community event, 2 percent traded for goods or services, and 1 percent released.

#### \*A portion of the catch is sold to defray trip costs.

# **Species Spotlight**

LONG-TAIL RED SNAPPER





Long-tail red snappers, locally known as buninas, are highly valued deep-water bottomfish due to their brilliant color, large flaky meat, and mildly sweet flavor. This species is distributed throughout the Indo-Pacific region and inhabits reef-associated waters with rocky bottoms at depths ranging between from 150 to 1,300 feet. Buninas feed on small fishes, squid, and crustaceans, and grow to about 48 inches in length, and weigh more than 30 pounds. The bottomfish fishery in the Northern Marianas Islands includes two distinctly targeted complexes. The shallow-water complex (<300 feet deep) is dominated by the emperors (Lethrinidae); and the deep-slope complex (>300 feet) that buninas are a part of is primarily comprised of deep-water snappers (Lutjanidae), and one member of the grouper family, the eight-banded grouper.

#### **CNMI POPULAR NON-COMMERCIAL SPECIES**

Species/Local Names	Total Catch (lbs)	% Caught Inshore	% Caught Offshore
Skipjack Tuna Bunito, Katsu'	21,180	7%	93%
Trevally Bluefin, Bigeye I'e', I'e'e (juvenile)	5,630	100%	0%
Dolphin Fish Mahimahi	3,780	0%	100%
Long-tail Red Snapper Buninas	3,480	0%	100%
Yellowfin Tuna Ahi	1,420	0%	100%
Parrotfish Blue-barred, Stareye <i>Laggua, Palakse</i>	1,070	100%	0%
Unicornfish Bluespine, Orangespine Tátaga, Guåsa, Hangon	840	100%	0%
Wahoo Toson	820	0%	100%
Emperor One-spot, Red Gill, Yellowstripe, Mafute'	600	84%	16%
Surgeonfish Bluebanded, Orangeband, Yellowfin Hiyok, Hugupao	510	100%	0%

Source: CNMI Dept. of Lands & Natural Resources, Division of Fish & Wildlife, WPacFIN



Photo credit: R. Seman

# **Guam Overview**

The 2018 PIFSC/PIFG Marianas Fishing Survey revealed that recreational and non-commercial fishermen on Guam also have mixed motivations for fishing, which include for purely recreational (47%), subsistence (44%), recreational expense\* (26%), and cultural (26%) purposes. Boat-based fishing trips targeted migratory open ocean fish (trolling 45%), a wide variety of coral reef species (spearfishing 19%), shallow complex bottomfish (14%), and deepslope bottomfish (14%). Commercial and non-commercial fishermen participating in the survey also reported that 39 percent of their catch is consumed at home, 33 percent given away, 7 percent donated to a community event, 2 percent traded for goods or services, 18 percent sold, and 1 percent released.

# **Species Spotlight**

YELLOWSTRIPE GOATFISH

 ${\it Mulloidichthys\ flavolineatus},$ 

ti'ao, satmoneti



Yellowstripe goatfish, known locally as ti'ao in its juvenile phase, and satmoneti when mature, is a highly desired food fish by the native Chamoru of Guam. Seasonal runs of ti'ao occur in the months from May through August, and again also in December. Juvenile yellowstripe goatfish caught in the December runs tend to be smaller and more silver in color, largely due to their transition from a deep to shallow water environment, and recent settlement onto the reef flats. Ti'ao are primarily harvested with cast nets from shore. The larger satmoneti are captured by spear, gill net, and hook and line fishing methods. The harvest of this key reef fish species throughout most of its life cycle significantly impacts the reproductive potential of the its populations on Guam.

#### **GUAM POPULAR NON-COMMERCIAL SPECIES**

Species/Local Names	Total Catch (lbs)	% Caught Inshore	% Caught Offshore
Skipjack Tuna Bonito, Kachu'	171,970	0%	100%
Yellowfin Tuna Ahi	25,480	0%	100%
Wahoo Toson	19,780	0%	100%
Dolphin Fish Mahimahi, Botague	16,630	0%	100%
Convict Tang Kichu	14,780	99%	1%
Trevally Bigeye, Bluefin Tarakitu (adult)	13,190	92%	8%
Unicorn Fish Bluespine, Orangespine Tátaga, Guåsa, Hangon	13,000	94%	6%
Scribbled Rabbitfish Mañåhak, Dagge' (juvenile) Sesyon (adult)	4,940	99%	1%
Emperors One-spot, Redgill, Yellowstripe Mafuti, Mafute'	4,700	12%	88%
Yellow-striped Goatfish Ti'ao (juvenile) Satmoneti (adult)	2,680	96%	4%
Bigeye Scad Atulai, Haiting	2,550	0%	100%

 $Source: Guam\ Department\ of\ Agriculture,\ Division\ of\ Aquatic\ \&\ Wildlife\ Resources,\ WPacFIN$ 

#### **LEARN MORE**

In the Western Pacific, NOAA Fisheries works closely with the Western Pacific Regional Fishery Management Council and government entities from the State of Hawai'i, territories, and U.S.- affiliated islands across the region.

For more information visit: <a href="https://www.fisheries.noaa.gov/region/pacific-islands">https://www.fisheries.noaa.gov/region/pacific-islands</a>

NOAA Fisheries' Western Pacific Fishery Information Network compiles fisheries data for the U.S. Western Pacific, including the data presented in this snapshot, in collaboration with local fisheries agencies. For more information visit:

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<sup>\*</sup>A portion of the catch is sold to defray trip costs.