

Fisheries Resources of Guam

Department of Agriculture Division of
Aquatic and Wildlife Resources
(DAWR)

Marine Resources of Guam

- Fishes-1019
- Echinoderms-196
- Crustaceans-663
- Bivalves-339
- Scleractinian Corals-377
- Macroalgae-237
- 228 km² of coral reef area (108 km² in Guam's EEZ, 110 km² in federal EEZ)

Island	Land Area (km ²)	Reef Area (km ²)	Population	Ratio (# of people/km ² reef)
Guam	550	228	163,000	714.9
CNMI	459	<50	72,000	1440
Palau	483	1150	19,000	16.5
FSM	701	4340	133,000	30.65
Marshalls	134	6110	68,000	11.1
American Samoa	187	220	65,000	295.4
Hawaii	16,759	1180	2,020,000	1711.8



Tracey Seamount

Hagåtña
Guam

Galvez Banks

Santa Rosa Reef

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Data LDEO-Columbia, NSF, NOAA

Google earth

13°06'46.93" N 144°45'37.83" E elev -6027 ft eye alt 123.09 mi

Fisheries on Guam

- Data has been collected since the 1960s.
- Standardized format since 1982 for boat based fishery and 1985 for shore based
- More than 400 species in the DAWR catch data base.

Fishing on Guam

- Fishing on Guam can be divided into two broad categories:
- Boat based- target pelagic species as well as coral reef and deep bottom species
- Shore based- Target coral reef species and a small component of freshwater species.
- 35% of residents consider themselves to be fishermen.

Boat Based Pelagic Fishery

- Primarily smaller than 34 feet.
- Trolling generally day trips, 6152 trips averaging around 5.5 hours in 2012
- An estimated 382 vessels landed 521,680 pounds of pelagic fishes. (31 year average approximately 590,000 pounds per year)
- Pelagic catch on Guam composed primarily of 5 species: Skipjack tuna, Mahi mahi, Wahoo, Marlin, and Yellow Fin Tuna.
- Usually around a dozen less common species as well e.g. sailfish, sharks, rainbow runner, other types of tuna

Boat Based Coral Reef Fishery

- Bottom fishing, jigging, surround net, and spear fishing, account for more than 90% of take.
- Jigging and surround nets used for atulai (Big eyed Scad)
- Emperors, snappers, groupers, jacks, surgeon fish, parrot fish, rabbit fish primary components of the bottom and spear fisheries
- Shallow bottom boat based fishing averages about 50,000 pounds annually
- In 2012, around 2000 bottom fishing trips were made, with an average length of about 6 hours



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Boat Based Deep Bottom Fishery

- Primarily at offshore banks
- Snappers, groupers are primary components of this fishery.
- Deep bottom fishery averages over 40,000 pounds annually.

Shore Based Fishery

- primarily hook and line fishing, talaya (throw net), tekin (gill net), spear fishing, other net types, and gleaning account for more than 90% of shore based catch.
- Acanthurids, Siganids, Mullids, Carangids (including atulai), Scarids, Lethrinids, and Mugilids account for nearly 90% of shore based catch in 2012.

Pelagic fisheries

- Costs
- Impacts from commercial fisheries
- Potential impacts from climate change and other meteorological phenomena
- Spawning data. Temporal/geographical

Coral Reef Fisheries

- Connectivity
- Increased fishing pressure
- Habitat loss and degradation.
- Climate change.