

# MAIN HAWAIIAN ISLANDS HAWAIIAN MONK SEAL PREY CONSUMPTION



## THERE ARE MANY CONSUMERS OF FISH RESOURCES

Have you ever wondered how many fish monk seals eat? To better understand a monk seal's impact on the number of fish in the ocean, consider the resources available, and what *other* consumers are eating fish in addition to monk seals. These are just a few of the major consumers of marine fish resources in Hawaii's nearshore waters.



### ● HAWAIIAN MONK SEAL

Hawaiian monk seals have been living in the waters around Hawaii for millions of years and are found only in Hawaii. They are known to eat a diverse diet that includes reef fish as well as invertebrates like crabs, octopus and lobster. They seek out their prey on the ocean floor as deep as 1500 ft.



### ● APEX PREDATORY FISH

Apex predators are the top level predators in the food chain. In Hawaii the nearshore apex predatory fish community is dominated by ulua, sharks, uku, kaku, and hapuupuu.



### ● NEARSHORE COMMERCIAL FISHING

Fishermen who catch and sell nearshore fish and other marine resources.



### ● NEARSHORE NON-COMMERCIAL FISHING

Fishermen who primarily fish for sport or food, and may occasionally sell some of their catch.



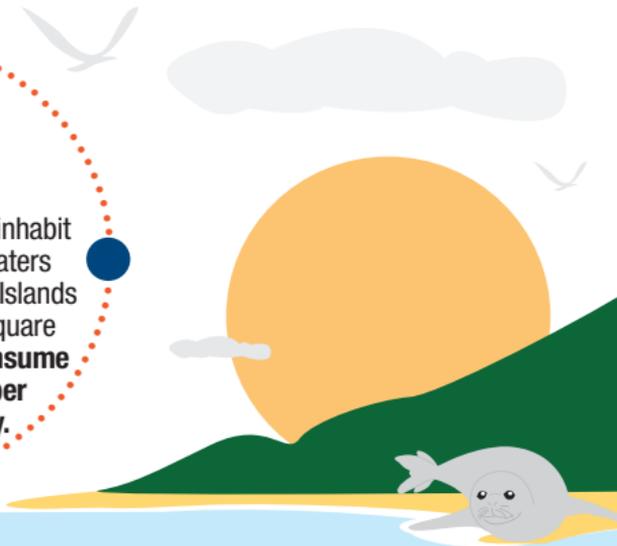
## DID YOU KNOW

Total minimum estimates of fish resources around the main Hawaiian Islands range from  
**36 million - 389 million lbs**

There are, at most,

**200**

monk seals that currently inhabit and feed in nearshore waters around the main Hawaiian Islands covering around 2,943 square miles. **Together, they consume just 1 pound of fish per square mile per day.**



## HOW MUCH DO FISH CONSUMERS EAT?

Looking at the entire Hawaiian ocean ecosystem, there is no evidence that monk seals eat any more fish than apex predatory fish or humans. This figure shows the estimated consumption, and the percent of the total amount of available fish resources consumed by monk seals, apex predatory fish, and fisheries.

At least **31.8 million lbs/day** of fish is available in nearshore waters around Hawaii.

**NEARSHORE  
NON-COMMERCIAL FISHING**  
AVERAGE 4,802 lbs /day

**0.015%**



**APEX PREDATORY FISH**  
MINIMUM 145,500 lbs/day

**0.46%**



**NEARSHORE  
COMMERCIAL FISHING**  
AVERAGE 3,969 lbs/day

**0.012%**



**HAWAIIAN MONK SEAL**  
MAXIMUM 2,900 lbs/day

**0.009%**



**NOAA FISHERIES**  
PACIFIC ISLANDS REGION

For more information please see the "NOAA Technical Memo-Estimation of Hawaiian monk seal consumption in relation to ecosystem biomass and overlap with fisheries in the main Hawaiian Islands" at <http://bit.ly/1f5Fm6c>.