

## Bigeye Tuna

*'Ahi, 'Ahi Po'onui, Asiasi, Toghu*

### Distribution

- Found in tropical and subtropical waters of all oceans.
- Highest biomass occurs in the Eastern Pacific Ocean (EPO).
- Tagging studies show regional fidelity and with most individual recaptures within 500 nautical miles of release.

### Stock Status

- Considered a single stock in the Pacific Ocean.
- Assessed separately in the EPO by the Inter-American Tropical Tuna Commission (IATTC) and in the Western and Central Pacific Ocean (WCPO) by the Western and Central Pacific Fisheries Commission (WCPFC).
- More is harvested in the WCPO than in the EPO.
- Overfishing is occurring in WCPO due to heavy fishing pressure in equatorial region between 10°N and 10°S, which accounts for 90 percent of the fishing mortality.
- The Hawai'i longline fishery operates predominately north of 15°N and in a region with negligible impact on bigeye stock status.

### Importance to the Western Pacific Region

- One of two species known in Hawai'i as 'ahi. The other species is yellowfin tuna. Bigeye is generally preferred over yellowfin for sashimi and has a longer shelf life.
- Holds significant cultural and economic value in Hawai'i.
- The Hawai'i longline fishery is the largest producer of bigeye in Hawai'i and in the United States.
- To target bigeye, the Hawai'i longline fishery operates in the US exclusive economic zone (EEZ) around Hawai'i and on the adjacent high seas.

- The Hawai'i longline fishery catches around 5,000 mt of bigeye per year, which is approximately 3 percent of Pacific-wide bigeye catches.
- Bigeye is also caught with handline and troll fishing gear.
- All bigeye landed in Hawai'i are landed fresh, not frozen.
- Most bigeye landed in Hawai'i is sold through the United Fishing Agency, whose fish auction has been operating since 1952 and is one of the nation's only fish auctions.



Honolulu Fish Auction

- Commands a high market value due to its demand as a premium sashimi product. Bigeye is why Honolulu consistently ranks among the top 10 US ports in landed value, e.g., approximately \$100 million in ex-vessel landed value in 2013.

### Markets

- Bigeye, which ranges from 20 to 200 lbs, is principally sold for sashimi markets globally.
- Larger fish are preferred for the sashimi market due to their deep red color, high fat content and greater yields.
- In Hawai'i, bigeye is sold locally for sashimi and poke (raw fish dish).
- Foreign caught bigeye is imported into Hawai'i and the continental US and competes directly with Hawai'i caught bigeye.

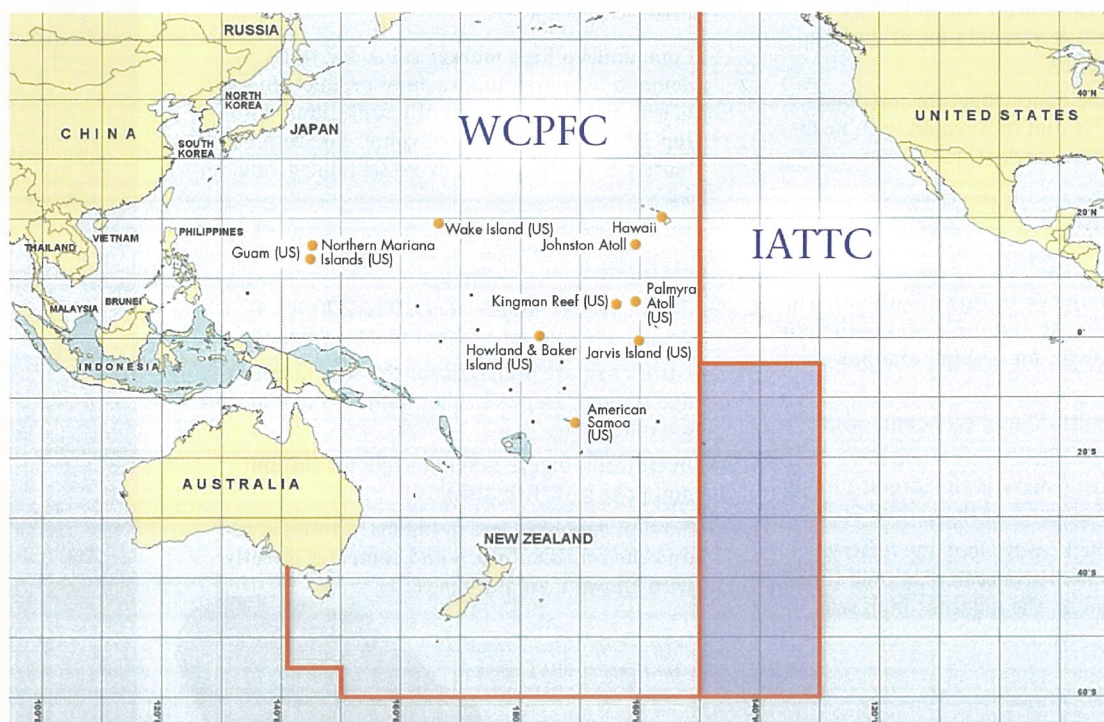
Bigeye fillet. Photo courtesy of The Honolulu Fish Company.





## Management

- Considered a highly migratory species, bigeye is managed internationally and domestically.
- Internationally in the Pacific, bigeye is managed through the WCPFC and IATTC, with 150° W being the general demarcation separating the WCPO and EPO and the respective management regimes.
- In both the WCPO and EPO, bigeye is harvested by purse-seine and longline gears.
- Since the advent of fishing on fish aggregation devices (FADs) by purse-seine vessels in the 1980s, purse-seine vessels have been increasingly harvesting juvenile bigeye tuna.
- In the WCPO and EPO, purse seiners targeting skipjack and yellowfin, incidentally harvest more bigeye than what is caught by longliners targeting adult bigeye.
- To address bigeye overfishing in the WCPO, the WCPFC has established a seasonal purse-seine FAD closure, national FAD set limits and national longline bigeye limits.
- The IATTC has in place a seasonal total purse-seine closure, a seasonal purse-seine area closure and national longline limits.
- The Hawai'i longline fishery is subject to a WCPO longline limit of 3,763 mt in 2014; 3,554 mt in 2015 and 2016; and 3,345 mt in 2017.
- In the EPO, the Hawai'i longline fishery is subject to an annual catch limit of 500 mt for vessels over 24 meters.
- Domestically in the Pacific, the Western Pacific Regional Fishery Management Council manages bigeye under its Fishery Ecosystem Plan (FEP) for Pacific Pelagic Fisheries.
- Pelagic FEP measures applicable to the Hawai'i longline fishery
  - Limited entry permit program capped at 164 permits;
  - Vessel length must be less than 101 feet (31 meters);
  - Logbooks for all days at sea;
  - Automated satellite-based vessel monitoring systems;
  - High levels of independent observer coverage (20% for tuna trips, 100% for swordfish trips)
  - Gear requirements to protect and mitigate interactions with sea turtles, seabirds, and marine mammals
  - Area closures around Main Hawaiian Islands to coastal artisanal fisheries
  - Closure of large portion of Federal waters in the Northwestern Hawaiian Islands, i.e., Papahānaumokuākea Marine National Monument
  - Annual workshops for captains and crew for protected species training
- The National Marine Fisheries Service monitors bigeye catches throughout the year and projects when the Hawai'i longline fishery will reach its limits.
- The Hawai'i longline fishery is an iconic, internationally recognized responsible managed fishery.
- An assessment of the Hawai'i longline fishery against the FAO Code of Conduct for Responsible Fishing resulted in a score of 94 percent consistent.



The darker blue area is under both WCPFC and IATTC jurisdiction. Orange dots represent jurisdiction of the Western Pacific Regional Fishery Management Council.