

# Hawaii Swordfish

swordfish (*Xiphias gladius*)



**Swordfish** is also known as **broadbill**, *mekajiki* or *shutome* in Hawaii. There is only one species of true swordfish in the world. It is the most widely distributed of all billfish in the Pacific Ocean.

## Seasonality & How They Are Caught.

### Availability and Seasonality:

The swordfish fishery is relatively new in Hawaii. Exploratory fishing in 1989 found strong concentrations of swordfish within the range of Hawaii's longline fleet. The Hawaii swordfish season begins in January far to the north of the islands and generally continues until mid-summer. As the season progresses, the fish move south closer to the islands. The availability of swordfish in this region may be related to the migration patterns of squid, known to be a major component of the swordfish diet.

### Distribution:

All of Hawaii's swordfish are landed

and marketed fresh. Much of the catch is shipped to the U.S. east coast, where domestic, high-quality swordfish can bring a premium price. Hawaii produces a major share of domestic swordfish caught by American fishermen. The majority of the landings are sold at the Honolulu fish auction.

### Fishing Methods:

Swordfish are targeted by longline boats when they swim near the surface at night. Monofilament longline gear with circle hooks baited with mackerel-type bait and illuminated with chemical lightsticks are set overnight.

The gear is set shallow in the water column in contrast to tuna longline gear which is typically much deeper. Swordfish make vertical migrations through the water column, rising near to the surface at night from deep waters. Swordfish are also occasionally caught at night by small-boat fishermen who are handlining or trolling with lights.

Swordfish are caught in association

with frontal zones where ocean currents or water masses meet to create turbulence and sharp gradients of temperature and salinity. Swordfish caught around Hawaii are from stocks which migrate throughout the North Pacific.

## Quality

Swordfish has an excellent shelf life as a fresh product, lasting up to 3 weeks after capture with proper handling. To ensure good quality and prices for their catch, most Hawaii swordfish longliners take extra precautions. These include dressing the fish, removing the kidneys, cleaning the belly cavity, and storing the fish in ice. After this initial processing, the fish is often bagged before being stored in ice. Saltwater ice is used by some boats. The highest quality dressed swordfish is firm and retains rough, grooved skin (sandpaper texture) and metallic silver in its skin color. Flesh exposed along the collar and tail will have red blood lines.



### Product Forms and Yields:

All sizes of swordfish (25 to 600 pounds) are captured on longline gear. Most of the Hawaii swordfish catch is shipped by air to secondary processors as a fresh, dressed (headed & gutted) product. Domestic swordfish marketers recognize price differentials for five size classes:

- Over 300+ pounds dressed weight (known as “triple markers”);
- Over 200-299 pounds dressed weight (“double markers”);
- 100-199 pounds dressed weight (“markers”) – this size is strongly preferred by restaurants because uniform-sized dinner portions can be cut – the center sections of large loins are the premium cuts;
- 50-99 pounds dressed weight (“pups”) – this size is less expensive than markers and the yield of uniformly-sized portions is smaller;
- 25-49 pounds dressed weight (“rats”) – this size is the least expensive but is generally not used by food service or retail buyers who require large portions of uniform size.

Secondary processors provide restaurants and food service distributors with loins or “wheels” (large bone-in sections cut through the swordfish body). They also custom-pack loin sections for retail and food service chains. “Wheels” have a longer shelf life than loins.

### Color, Taste, Texture:

The flesh of swordfish may vary from pale to pink. In either case, good quality is indicated by red blood lines bordering the loin or fillet. Swordfish has a firm texture. When cooked, the flesh turns white, and is tender and very mild in taste. Swordfish can vary greatly in fat content: fish landed in Hawaii are considered to be comparable in fat content to swordfish from the middle Atlantic region of the U.S., the other major domestic source.

Fat content is an important determinant of swordfish quality and market value.

### Preparations:

Swordfish is the premier grilling fish and is very versatile in cooked and smoked preparations. Swordfish is in great demand in restaurants and retail markets across the U.S.A., especially along the east coast. Swordfish is one of many species prepared as *sashimi* in Japan although it is not popular as *sashimi* in Hawaii.

### Historical Note

Because of the long, distinctive bills which they use to slash prey, swordfish have a well-deserved reputation for ferocity. Several Hawaii fishermen bear scars from landing struggling swordfish. The ancient Hawaiians feared swordfish because they would strike and sometimes pierce fishing canoes.



## Hawaii Seafood Council

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