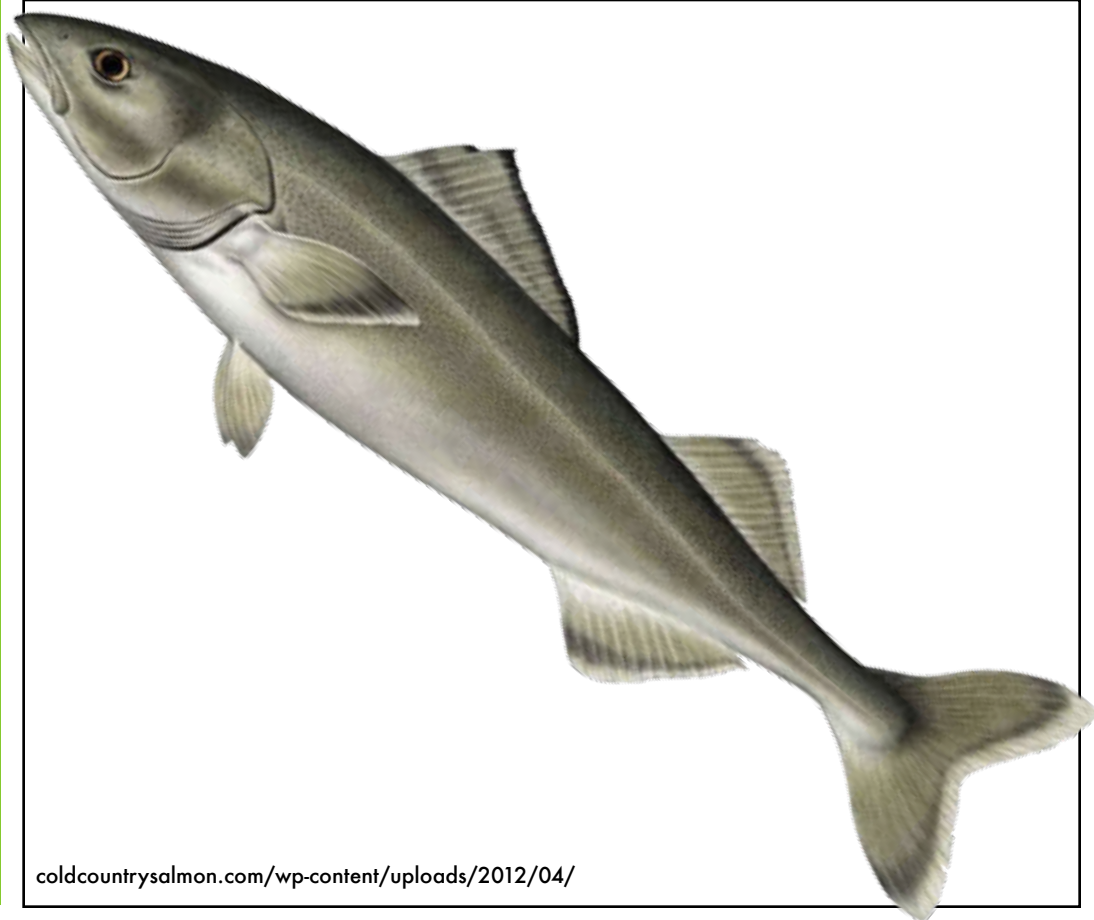


sablefish

BIOLOGY FACT SHEET

Anoplopoma fimbria



coldcountrysalmon.com/wp-content/uploads/2012/04/

San Diego seafood profiles

Taxonomic description

- Also known as black cod, butterfish.
- In the family Anoplopomatidae.
- Superficially resembles members of the cod family (Gadidae) but is not related.
- Long; dark gray to black on upper half of body, lighter gray on the lower half [1].
- Has separate dorsal fins; these are used to tell it apart from its relative skilfish [1]
- Can grow up to 1 m (3 ft) and weigh up to 25 kg (55 lb).

Distribution

- Found along the northeastern Pacific Ocean from northern Mexico to Alaska [1]
- Most commonly found in Alaska
- There are two populations in eastern Pacific, Northern and Southern [2]
- Also found in the western north Pacific.

Life history

- Long-lived species with 40 yr old fish commonly caught
- Some known to live 90 years or more [2]
- Reproduces March - April in Alaska; January - March in California to British Columbia [2]
- Spawning and early egg development occurs in deeper water
- Hatched larvae swim to surface waters to feed on small zooplankton
- Juveniles remain inshore until age 2 and begin to migrate to deeper water
- Fully mature around ages 5-7 yr [1,3]

Habitat

- Lives on the ocean bottom at depths 200 m (650) feet and deeper.
- Some found down to 3000 m (9800 ft) [2]
- Smaller juvenile fish live near the surface close to the coast.

- Generally found associated with soft substrates on the seafloor
- Feed on a variety of different organisms such as small invertebrates, fish, squid, and even jellyfish.
- Diet depends on multiple factors like life stage, location, season and year [1]

References

- [1] ADFG. Alaska Department of Fish and Game - Sablefish - Available: <http://www.adfg.alaska.gov/index.cfm?adfg=sablefish.main>
- [2] NOAA Fish Watch. Fish Watch and Seafood Profiles - Sablefish - Available: http://www.fishwatch.gov/seafood_profiles/species/cod/species_pages/sablefish.htm
- [3] California Dept. Fish & Wildlife, Status of the fishery - Sablefish - Available: <http://www.dfg.ca.gov/marine/status/>

Did you know?

Although commonly called "black cod", this fish is not related to cod family, it is one of only two species in its own family.



sablefish

FISHERY
FACT SHEET

Anoplopoma fimbria



Photo: seanag.com

San Diego seafood profiles

Seasonal availability

- Year-round with lower catch limits during the winter months (spawning season) [i]

Managing authority

- Managed jointly by the California Dept of Fish & Wildlife, NOAA Fisheries and the Pacific Fisheries Management Council [iv,v]
- Covered under the Pacific Coast Groundfish Fishery Management Plan, which defines coast-wide catch limits for fishing groups & gear types, daily trip limits, individual fishing quotas, & observer coverage amounts [ii, iv]

Gear type

- Primarily fixed gear (baited longlines & baited traps) [ii, iv], where traps are submerged ~0.5 mile deep and emptied after 3-4 days [iii]
- Occasionally bottom trawls [iv], which are used for various deepwater species [ii]

Status of the fishery

- NMFS Fish Stock Sustainability Index classifies the stock as a “4” out of 4, reflecting that the stock has known status, is not overfished or subject to overfishing, and maintains a biomass at or above maximum sustainable yield. [ii]
- Classified as a “Good Alternative” by Monterey Bay Aquarium’s “Fish Watch” (would be “Best Choice” if ranked using only fixed gear, not trawling) [vi]

Potential ecosystem impacts

- Impact of commercial fishing efforts on sablefish habitat are minimal & temporary [ii]
- Bottom trawls often catch unintended species, however many of these are collected for human consumption [ii]
- Bycatch is reduced across all gear types through catch reporting per the West Coast Groundfish Trawl Catch Share Program,

which requires a certified observer at all times on trawl vessels & part-time on fixed gear operations [ii].

References

- [i] Stewart, I.J., J.T. Thorson, C. Wetzel. 2011. Status of the U.S. Sablefish Resource in 2011. National Marine Fisheries Service, NOAA. 29 July 2013. www.pccouncil.org/wp-content/uploads/Sablefish_2011_Assessment.pdf.
- [ii] NOAA. 2013. Sablefish. FishWatch: U.S. Seafood Facts. NOAA, n.d. 29 July 2013. www.fishwatch.gov/seafood_profiles/species/cod/species_pages/sablefish.htm; www.fishwatch.gov/features/meet_phil_harris_black_cod_fisherman.htm
- [iii] "About Philip Harris." Sea Nag. Blogger, Aug. 2011. Web. 29 July 2013.
- [iv] McKnight, C. and R. Leos. 2008. Sablefish, *Anoplopoma fimbria*. 2008 Status of the Fisheries. California Dept of Fish & Wildlife, Web. 26 July 2013.
- [v] NMFS. 2008. 2008 Status of the Fisheries. National Marine Fisheries Service, NOAA. 26 July 2013. www.nmfs.noaa.gov/sfa/statusoffisheries/2008/StatusFisheries_2008.pdf
- [vi] Monterey Bay Aquarium. Seafood Watch: West Coast Consumer Guide Fall/Winter 2013. Print.

Did you know?

While only recently gaining popularity, U.S. and Canadian fishermen have been harvesting this sablefish since the late 1800's [ii]



sablefish

Anoplopoma fimbria

NUTRITION FACT SHEET



Sautéed sablefish with ginger-soy glaze from NourishNetwork.com, Photo by Alison Ashton

San Diego seafood profiles

Edible portions

- Also known as black cod or butterfish
- Sold headed and gutted, as fillets or steaks

Description of meat

- Commonly known as the “butterfish” because of its rich, mild flavor and velvety texture [2,3]
- Meat consists of large, delicate flakes that melt in your mouth

Culinary uses

- To fillet, check out eHow food (www.eHow.com) [4]
- Common preparations include baked, broiled, grilled, sautéed, smoked, steamed, sushi
- The fat makes it difficult to overcook the fish
- Key Preparation Note: Has large pin bones that run along the center of the fish, so make sure to remove these before preparing
- Some popular recipes include miso-glazed black cod, black cod in tomato stew, olive oil poached black cod with lemons and capers, pan-roasted fish with Thai curry sauce, glazed

cod with asparagus and mushrooms, and Miso seafood stew [5]

Nutritional information

- Cooked dry heat, ½ fillet (5.3 oz) [1]

Nutrition Facts	
Serving Size 151 g	
Amount Per Serving	
Calories 377	Calories from Fat 267
% Daily Value*	
Total Fat 30g	46%
Saturated Fat 6g	31%
Trans Fat	
Cholesterol 95mg	32%
Sodium 109mg	5%
Total Carbohydrate 0g	0%
Dietary Fiber 0g	0%
Sugars 0g	
Protein 26g	
Vitamin A 10%	Vitamin C 0%
Calcium 7%	Iron 14%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

NutritionData.com

Toxicity report

- There are no known contaminants

Seasonal availability

- Available year-round in San Diego

References

- [1] SELF nutrition data. 2013. “Fish, sablefish, cooked, dry heat”. <http://nutritiondata.self.com/facts/finfish-and-shellfish-products/4230/2>
- [2] “Sablefish.” FishWatch: U.S. Seafood Facts. National Oceanic and Atmospheric Administration, 20 May 2013. Web. 10 Aug 2013. www.fishwatch.gov/seafood_profiles/species/cod/species_pages/sablefish.htm
- [3] “Sablefish.” Seafood Watch. Monterey Bay Aquarium, n.d. Web. 10 Aug 2013. www.montereybayaquarium.org/cr/seafoodwatch/web/sfw_factsheet.aspx?gid=48
- [4] eHow food. 2013. How to fillet sablefish. www.ehow.com/how_8652544_fillet-sablefish.html
- [5] “Black Cod Sablefish Recipes.” Yummly. www.yummly.com/recipes/black-cod-sablefish
- [6] Wikipedia. 2013. <http://en.wikipedia.org/wiki/Sablefish>

Did you know?

Sablefish was an ingredient in the “Larry David Sandwich” in an episode of the HBO comedy series *Curb Your Enthusiasm* (Season 5, Episode 1) [6]



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CULINARY
INFO SHEET

Anoplopoma fimbria

STEP 1: CLEAN

Tools:

- Cutting Board
- Sharp Knife
- Fork OR Pair of Tweezers



Photo Credit: Kathryn Hill; thekitchn.com [2]

Method [1]:

1. **CLEAN** Rinse fish under cold water.
2. **TRIM** Use a knife to remove the head from the gills forward.
3. **CUT** Hold the tail and cut just above the fish's ribs, down the length of the fish.
4. **BUTTERFLY** Open both sides of the fish to make a fillet.
5. **DEBONE** Use a fork or pair of tweezers to remove remaining bones*.
**Look closely, sablefish have small pin bones!*
6. **SCALE** Use a knife to slice away the skin from the fillet, removing as little meat as possible*.
**If desired, skip this step and leave skin intact.*

San Diego seafood profiles

STEP 2: PREPARE

TIP: For a richer flavor, fillets may be marinated for up to 3 days prior to serving.

Entree | Olive Oil Poached Sablefish with Citrus and Thyme

Adapted from gildedfork.com [3]

Ingredients (serves 4):

- 2 lbs. sablefish fillets (~ 4 fillets)
- 3 tsp. sea salt
- 1/2 tsp. black pepper
- 2 large lemons, thinly sliced
- 1/4 c. fresh thyme
- 1/2 c. almonds, roughly chopped
- 2 c. extra virgin olive oil



Photo Credit: Mark Tafoya; gildedfork.com [3]

Method:

1. Preheat oven to 350° F.
2. Season fish with salt and pepper and allow to marinate for a few minutes at room temperature.
3. Place the slices from one lemon in an 8-inch glass baking dish and sprinkle with 1/8 cup fresh thyme. Place the fillets on top.
4. Cover fillets with remaining lemon slices, 1/8 cup fresh thyme, almonds and olive oil. Cook for 1 hour to 1 hour 15 mins.
5. Serve fillets with top layer of lemons and a drizzle of poaching oil.

Entree | Miso Glazed Sablefish

Adapted from thekitchn.com [4]

Ingredients (serves 4):

- 2 lbs. sablefish (~ 4 fillets)
 - 1/2 c. sugar
 - 1 c. miso, preferably dark
 - 1/2 c. mirin, sake or white wine*
- *Non-alcoholic substitution: 1/4 c. sugar dissolved in 1/4 c. vinegar*



Photo Credit: Anjali Prasertong; thekitchn.com [4]

Method:

1. Set rack 3-4 inches from heat source and turn on broiler.
2. In a small saucepan over low heat, warm sugar, miso and mirin to a near boil, stirring to blend.
3. Place fillets in a skillet or baking dish. Pour half mixture on top.
4. Broil fillets for ~ 10 minutes, until sauce is brown and bubbling.
5. Continue to broil ~ 3 minutes more, or until cooked through.

TIP: Sablefish is done cooking when it is opaque and the thickest part flakes easily with the tip of a knife.

SERVING SUGGESTIONS:

Sablefish is best served raw, grilled, pan roasted, smoked, or poached.

OTHER RECIPE IDEAS:

Curried sablefish; faux-nagi; sablefish poached in cream sauce; escabeche; sablefish broiled with teriyaki sauce; herb crusted sablefish.



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References

- [1] Davidson, Amy. 2013. How to Filet a Black Cod Fish. eHow. www.ehow.com/how_6458217_fillet-black-cod-fish.html
- [2] theKitchn. 2010. From the Fishmonger: Black Cod. hwww.thekitchn.com/from-the-fishmonger-black-cod-116568
- [3] Di Capua, Sandra. 2013. Sablefish Recipe. Gilded Fork. www.gildedfork.com/olive-oil-poached-fish/
- [4] Hill, Kathryn. 2010. Sablefish Recipe. theKitchn. www.thekitchn.com/recipe-nobu-miso-marinated-black-cod-117238