

Identification Guide for Toothfish

Dissostichus eleginoides (FAO¹ code: TOP)

(Common name: Patagonian toothfish)

Dissostichus mawsoni (FAO code: TOA)

(Common name: Antarctic toothfish)

Scientific name

Order Perciformes
Family Nototheniidae
Genus Dissostichus

Species eleginoides and mawsoni

Hong Kong Harmonized System (HKHS)

HKHS Code			
03028300			
03038300	Toothfish (<i>Dissostichus</i> spp.), frozen, excluding fillets and other fish meat, livers, roes, milt, fish fins, heads, tails, maws and other edible fish offal		
03044600	Fillets of toothfish (<i>Dissostichus</i> spp.), fresh or chilled		
03045500	Meat other than fillets, of toothfish (Dissostichus spp.), fresh or chilled		
03048500	Fillets of toothfish (<i>Dissostichus</i> spp.), frozen		
03049200	Meat other than fillets, of toothfish (<i>Dissostichus</i> spp.), frozen		

Biological Characteristics

There are two fish species under the genus *Dissostichus* (commonly known as toothfish), both belonging to the family Nototheniidae under the order Perciformes.

Toothfish has a fusiform body shape, protruding lower jaw and large lower lip, large eyes and large gill plates. Its body is uniformly brown to dark brown with two long lateral lines. The presence of biserial dentition in the upper jaw gives the common name of "toothfish" to *Dissostichus* species.

Toothfish are slow growing and long-lived fish, reaching maturity at about 8 to 10 years and living for up to 50 years. Toothfish caught in fisheries are typically 80 to 140 cm long and weighed 10 to 30 kg. Large individuals may grow up to 200 cm and 100 kg.

Toothfish has high fat content in muscle which gives it a rich, buttery and melt-in-mouth sensation when cooked. They are highly sought species in the world as table fish and as a result, toothfish resources have been experiencing significant levels of exploitation and illegal, unreported and unregulated ("IUU") fishing.

¹ Food and Agriculture Organization of the United Nations



Market Names and Common Names of Toothfish

Market names of toothfish include Patagonian toothfish, Antarctic toothfish, Seabass, White cod and Mero. Other common names include Sort patagonisk isfisk (Denmark), Legine australe (France), Schwarzer Seehecht (Austria and Germany), Ookuchi (Japan), Antar patagonski (Poland), Marlonga-negra (Portugal), Patagonskiy klykach (Russia), Austromerluza negra (Spain), Bacalao (Chile), Merluza negra (Argentina and Uruguay) and Tandnoting (Sweden).

Common Product Forms

Toothfish are normally processed and frozen on board a fishing vessel soon after caught and stored in forms of whole fish or headed, gutted and tail removed. Depending on the market, the fish may also be filleted or cut into steaks before landing.











Similar Species

Toothfish may be misreported as or mixed with other fish species, in particular after being headed and tailed or filleted. Examples of resembling species include Atlantic cod, Pacific cod, Haddock, Sablefish, Hake and Greenland halibut.



Hake / Merluccius australis



Pacific Cod / Gadus macrocephalus



Haddock / Melanogrammus aeglefinus



Atlantic cod / Gadus morhua



Sablefish / Anoplopoma fimbria

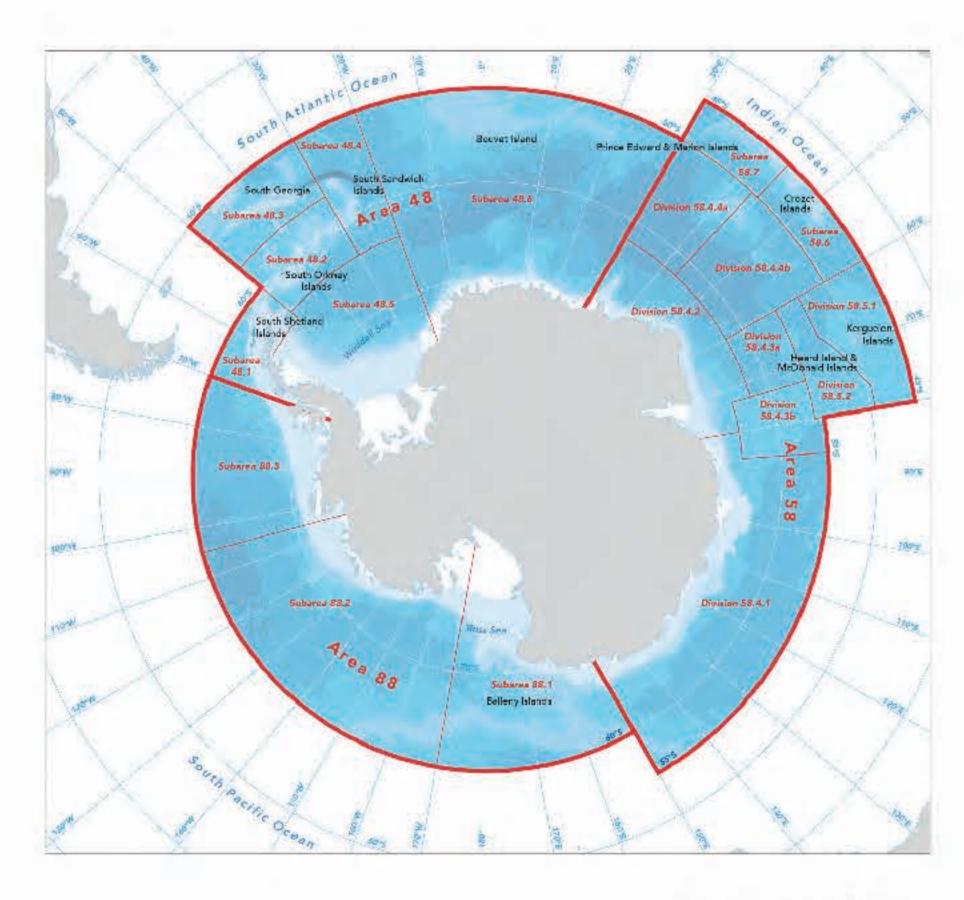


Greenland halibut / Reinhardtius hippoglossoides

Identification Method

Protein or DNA analysis is recognized as a reliable method for discriminating closely related fish species and is currently a commonly adopted method for identification of toothfish. DNA test results are also used worldwide for legal cases involving identification of fish products. Besides, photographs of toothfish products and packaging could also be taken to assist with identification.

CCAMLR



www.ccamlr.org

The Commission for the Conservation of Antarctic Marine Living Resources ("CCAMLR") has been established to give effect to the objectives and principles of the Convention on the Conservation of Antarctic Marine Living Resources ("CAMLR Convention"), an international convention with the objective to conserve Antarctic marine living resources including toothfish. Conservation Measures are adopted by CCAMLR to support the conservation of Antarctic marine living resources and the management of fisheries in the Convention Area.

Toothfish Fisheries

Patagonian Toothfish are caught off the coasts of Chile, Argentina, Peru, Uruguay, Patagonia, and around sub-Antarctic islands and seamounts. Antarctic toothfish are generally caught at latitudes higher than 55°S in the circumpolar waters adjacent to Antarctica. In addition, toothfish are caught outside the CCAMLR's Convention Area mostly at states' exclusive economic zones taken by domestic fisheries and landed in local ports.

Legally-caught toothfish is usually taken by bottom longlines deployed from fishing vessels of 50m to 60m in length. Some toothfish is also caught by trawl in the Western Indian Ocean and by pot in the Southwest Atlantic Ocean and off South America.

It is reported that IUU fishing vessels may practice longline or gillnet, the latter method considered particularly destructive to the Antarctic marine environment. IUU-caught toothfish is often transhipped at sea and landed in port by cargo vessels. CCAMLR maintains a list of IUU vessels which is available on its website (www.ccamlr.org/en/compliance/iuu).

Possible Sources of Toothfish

As required by the Conservation Measure entitled "Catch Documentation Scheme for *Dissostichus* spp." (CM 10-05)² under CCAMLR, each Contracting Party to the CAMLR Convention is required to identify the origin of any *Dissostichus* spp. landed in, imported into or exported from its territories in order to establish if it was caught in accordance with the Conservation Measures agreed by CCAMLR.

All toothfish caught in accordance with the requirements of CCAMLR would be accompanied by a *Dissostichus* catch document (DCD), *Dissostichus* export document (DED) and/or *Dissostichus* re-export document (DRED) issued using the electronic Catch Documentation Scheme (e-CDS) implemented by CCAMLR for tracking the movement of toothfish from the point of landing to the point of final consumption. Toothfish without valid documentation cannot be landed and transhipped in the port of any Contracting Parties or subsequently traded.

The list of Contracting Parties to the CAMLR Convention in which proper convention documents may be issued is shown below³.

Members			Acceding States
Argentina	India	Russian Federation	Bulgaria
Australia	Italy	South Africa	Canada
Belgium	Japan	Spain	Cook Islands
Brazil	Korea, Republic of	Sweden	Finland
Chile	Namibia	Ukraine	Greece
China	Netherlands, Kingdom of the	United Kingdom	Mauritius
European Union	New Zealand	United States of America	Pakistan, Islamic Republic of
France	Norway	Uruguay	Panama, Republic of
Germany	Poland		Peru
			Vanuatu

Agriculture, Fisheries and Conservation Department June 2020

² For more information about the Catch Documentation Scheme, please visit www.ccamlr.org

³The list is subject to update and provided in CCAMLR's website at https://www.ccamlr.org/en/organisation/who-involved-ccamlr.

