



FISH SPECIES GUIDE

A

Amberjack (*Seriola dumerili*)

Amberjack are a relative of tuna, and are a fast swimming fish caught in the Atlantic around wrecks or rocky reefs. Flesh is darker and can be prone to parasites, but when prepared properly is delicious. Large white flake and sweet flavor, is often compared to grouper. Because of problems associated with this species, we rarely carry this fish. Substitute grouper, wreckfish, striped bass.

Anchovy (*Engraulis mordax*)

Anchovies are tiny but delicious bait fish found throughout the world in temperate oceans. Most that reach the United States are caught off California. Although they are an incredibly important part of the diet for not only multitudes of marine fish, they are also marine mammals and seabirds. High in oil and considered a delicacy in many cultures, anchovies are traditionally gutted, salted and stored in oil or vinegar. Highly seasonal and always limited in supply. Substitute sardines.

Arctic Char (*Salvelinus alpinus*)

As the name would suggest, Arctic Char are a cold water member of the *Salmonidae* family, making them a relative of both salmon and trout. Like salmon, they migrate from fresh to salt water. Unlike Pacific salmon, they do not die after spawning. A species uniquely suited to aquaculture, arctic char have been farmed for decades and are a Monterey Bay Aquarium 'Best Choice' for sustainable species. The season for wild char lasts a mere two or three weeks during the summer and they tend to be very expensive. The flesh of the char is orange in color and the flavor is milder than salmon, but more flavorful than trout. Farmed product is readily available. Substitute salmon, ruby red trout.

B

Basa (*Pangasius bocourti*)

A member of the shark **catfish** family (*Pangasiidae*), basa were the subject of the 'catfish war' of 2002. The US government accused Viet Nam of dumping basa on the US market, creating unfair competition. Since then, basa cannot be marketed as catfish in the US, and must carry the name 'basa' or 'bocourti fish'. Basa are vegetarians, and have a very stout body with a blunt head and a white band on its muzzle. Sold primarily as frozen fillets, basa cooks up white with a mild flavor and delicate texture. Substitute swai, channel catfish.

Black Sea Bass (*Centropristis striata*)

Technically a small fish of the grouper family, the black sea bass is endemic to the Atlantic Coast of the United States. The fish are small, and are most common in the one to two pound range. They typically live in sounds and bays, and can be located close to the sea floor. Black sea bass are protogynous hermaphrodites, meaning they begin life as females, but some will change sex to male when they reach maturity. Black sea bass are delicious seared, grilled, baked or pan fried, with snow white flesh and a very delicate, sweet flavor. Black sea

bass are fairly easy to source, although the fishery is closely managed. Supplies can become limited depending on quotas. Substitute grouper, striped bass.

Chilean Sea Bass – also Patagonian Toothfish (*Dissostichus eleginoides*)

Chilean Sea Bass, although not a true bass, are a very popular fish caught in the extreme Southern oceans. They are slow to mature and the remote areas where they are caught make enforcement of catch restrictions nearly impossible. Add to this the high price these fish command at market, and you have the great potential for over-fishing. Indeed, the Chilean Sea Bass is on the avoid list for conservation groups world wide. MSC certified fish is an option, with chain of custody documentation providing some record for fish caught in sustainable areas. High in oil content, Chilean sea bass are nearly impossible to overcook, making them a chef's delight. Because of the remote areas where the fish are caught, they are typically frozen at sea and are sold as 'refreshed' product. Large white flake and a delicate, yet rich flavor. Substitute wild striped bass, black cod, barramundi.

Striped Bass - Wild (*Marone saxatilis*)

A large bass native to the US Atlantic coast, this large fish can live 30 years and grow to over 100lb, although most fish coming to market range from 2 – 25lb. Striped bass are anadromous, meaning that they migrate between salt and fresh water. They are extremely popular as a game fish and this popularity has caused them to be introduced far outside their natural range. As a commercial species, they are the poster child for effective fishery management. In the 1980s, their population was devastated by over-fishing. However, through strict multi-agency management practices, populations have rebounded to safe levels. As a food fish, striped bass are excellent, with a delicate flavor, medium firmness and large flake. Excellent baked or poached, but good on the grill if care is taken to keep the fish from drying out. Substitute grouper, drum, barramundi.

Striped Bass – Farmed Hybrid (*Morone saxatilis* x *Morone chrysop*)

Striped bass have been successfully adapted for aquaculture by cross breeding them with white bass (*Morone chrysop*). Hybrids can always be distinguished from non-hybrids because the lateral black stripes that run the length of their body are broken. The stripes on wild fish are solid. Farmed bass grow quickly and are a healthy and green choice for those concerned with conservation. Very adaptable for the kitchen, farmed bass are more delicately flavored than their wild cousins, but just as delicious. A favorite for sushi, in Japan, farmed bass are called Suzuki. Substitute wild striped bass, grouper, tilapia.

California White Seabass – also White Weakfish (*Atractoscion nobilis*)

This large predator from the Pacific is not a true seabass, but another member of the croaker family (*Sciaenidae*). Their range is from the Sea of Cortez to the Bay of Alaska. Large in size, these fish school in small numbers and are an important sport fish. No commercial fishery focuses on them, but they are an excellent by-catch. Typical market size is 12-20lb and although a rare offering at Seafood Merchants, they make an excellent catch of the day when available. Populations have rebounded and are now considered a 'Best Choice' by the Monterey Bay Aquarium. Large and very firm of flesh, the meat stands up well to broiling, grilling, searing or even simmering in olive oil. Substitute sturgeon, wreckfish, grouper, swordfish.

Barracuda (family *Sphyræna*)

Barracuda are a family of aggressive predator ocean fish which look similar to the freshwater pike. With a mouth chock full of razor sharp canine teeth, barracuda are feared (for good reason) by swimmers. Barracuda are found in temperate, tropical and subtropical waters throughout the world and are capable of growing to lengths exceeding five feet. Barracuda are not an important commercial species, although they occasionally come to market as by-catch. Flesh is dark and high in oil. Barracuda stands up well to smoking, and smoked barracuda compares well to tuna on a flavor profile. Can also be barbequed and roasted. Dark fillets can be rather soft in texture, smoking will give them some much needed body. Substitute keta salmon, eel, tuna.

Barramundi – also Asian Seabass (*Lates calcarifer*)

The name 'barramundi' comes from the aboriginal Australian meaning 'large scaled river fish'. Oddly, the fish the original Australians called barramundi was a Saratoga. In the 1980s, seafood marketing groups appropriated the name to improve sales of the Asian seabass. This might seem like an odd thing to do, but the

same was done for the Chilean sea bass (formerly Patagonian Toothfish) and the orange roughy (formerly 'slimehead'). Most barramundi coming to market in the US is the product of aquaculture, as the fish is hardy and adapts well to a farmed environment. Its natural range is the Indo-West Pacific region and it has been a popular fish in Asian cooking for many years. The fish have a unique hump-back shape, with large scales that range from silver to gold. The flesh is medium firm, high in oil and Omega-3 fatty acids and the flavor is sweet. Aquacultured product is readily available. Although more delicate than Chilean seabass, barramundi share many preparations. Substitute wild striped bass, Chilean seabass, cod.

Black Cod - also Sablefish (*Anoplopoma fimbria*)

A species of deep water fish found in the northern Pacific. Not a true cod, they are the only species of the family *Anoplopomatidae*. Black cod are extremely popular in Asian markets, and because of that, most of the catch from US waters is exported. The fish that remain for the US market are often very expensive and can be difficult to source. The flesh is soft and cooks up very white, with a texture similar to Chilean seabass. Popular as a smoked product, its high oil content makes it adaptable to baking, grilling, frying and even as sushi. Substitute Chilean seabass, barramundi.

Bluefish (*Pomatomus saltatrix*)

Bluefish are found throughout the world in temperate and tropical waters. They are a highly aggressive fish and when a school is feeding, they can churn the water to froth. Bluefish will continue killing even after they have eaten their fill and with a mouth full of razor sharp teeth, are quite formidable. Bluefish come to market in a range of sizes, from one to two pound 'snappers' to ten pound jumbos. Fish have been caught weighing up to 40lbs, but a fish that size is rare. Bluefish populations are cyclical, but have responded well to fishing regulations. For those who love full-flavored fish, the bluefish has few peers. Flesh is firm, meaty and flavorful, with high oil content and adaptable to many applications. Grilled bluefish are delicious, and a plate of pan fried 'snappers' are an East coast treat. Substitute Spanish mackerel, king mackerel.

Bluegill (*Lepomis macrochirus*)

A small freshwater species from North America, very popular for anglers as they are very easy to catch, and tasty when fried. No real commercial fishery exists for bluegill, but they occasionally come to market in frozen fillet form. Substitute lake perch, scup.

Branzino also Loup de Mer, European seabass (*Morone labrax*)

One of the most popular fish in Europe, the Branzino has as many names as countries in which it is served. Branzino have also been successfully aquacultured nearly as long as salmon, and their recent export to the United States has only increased their popularity. Supplies are typically good, but can be interrupted by the occasional glitches of international trade. Small fish by nature, branzino are usually harvested in the 1.25 – 1.5lb size and are served whole fish, in the European tradition. Light, flakey white flesh which falls off bone when grilled, pan fried, or baked in parchment paper. Substitute dorade, American red snapper, black bass.

Bream see *Porgy and Dorade*

Buffalo (family *Ictiobus*)

Often confused with carp, the buffalo can be distinguished by its lack of facial barbells. Large, bulky, sluggish fish, common to large river systems in the central US, some species can grow to over 70lbs. Considered a rough fish, buffalo are excessively bony and dark fleshed, with a very low yield. Properly prepared, the white flesh can be quite tasty smoked or barbequed. Seafood Merchants do not carry this species normally, but can source buffalo with a couple of days notice. Substitute carp, gar.

Butterfish (*Peprilus triacanthus*)

Butterfish are a small, bony silver dollar shaped fish from the Atlantic coast of the US. Typically measuring 6 inches or less, they can be difficult to work with from a culinary standpoint. Butterfish make up an important part of the diet for many larger species of fish, but as a human foodstuff are rarely sold away from the East coast. Rarely available. Substitute pompano, permit.

C

Carp (*Cyprinus carpio*)

Large fresh water fish, common to the United States but originally from Asia. Carp were transplanted to Europe in the 1200s and the Americas in the 1800s. In the rest of the world, carp are considered a delicacy but have never gained the same respect in America. Oily, dark flesh and problematic intramuscular bones make carp very difficult to prepare. However, when smoked or prepared by someone in the know, carp can be a delicious and low cost table fish. Seafood Merchants do not stock this species normally, but can source carp with a couple of days notice. Substitute buffalo, gar, bowfin.

Channel Catfish (*Ictalurus punctatus*)

A very popular freshwater fish, common to rivers, streams and lakes of North America. The popularity of channel catfish as both a food and sport fish have caused them to be introduced to Europe as well. Catfish draw their name from their distinctive 'whiskers', which are actually sensory organs that help catfish find food on murky river bottoms.

Channel catfish are a popular species for aquaculture and all catfish that come to market is result of aquaculture. Wild fish can have a 'muddy' taste, as they are primarily a bottom dwelling fish. Farmed fish are clean tasting and sweet, with a medium firm texture. Readily available. Substitute tilapia, bass, drum.

Atlantic Cod (*Gadus morhua*)

Perhaps the most important food fish in human history, the pursuit of the Atlantic cod has led to many innovations in navigation, fishing and food processing. The Atlantic cod were once extremely bountiful off the North American coast, but decades of over-fishing by factory trawlers have left several stocks decimated. Although moratoriums and restrictions have been attempted (and resisted), biologists suspect that the roles of top predator and prey may have been reversed permanently. Tiny capelin which were once the foodstock of cod, have experienced a tremendous population explosion and now prey on the eggs and young of the cod. In any case, the popularity of cod remains, and the fish is noted for its sweet taste, creamy texture and high oil content. Cod is delicious, versatile and still a highly prized fish. Substitute Pacific cod, hake, haddock.

Pacific Cod (*Gadus macrocephalus*)

Very similar in appearance to Atlantic cod, the Pacific cousin has three separate dorsal fins and does not grow as large. Pacific cod are a deep water fish and swim in enormous schools. As Atlantic cod populations have crashed, pressure has been moved to the Pacific species. In 1979, only 1,000 tons were being harvested by the US. By 1995, over 430,000 tons were taken. Fisheries are being tightly regulated and it is thought that the population of Pacific cod is in no danger of over-fishing. Monterey Bay Aquarium places Pacific Cod on its 'Best Choice' list for sustainability. Readily available as a refreshed item. Tender, translucent white flesh with a delicate, sweet flavor. Substitute pollock, hake, Atlantic cod.

Corvina (*Cynoscion acoupa*)

Corvina are a bass-like species caught in the sub-tropic areas of the Western Atlantic ocean. They are not bass, but are in the drum or croaker family (Sciaenidae). Fish come to market 8-12 lbs and are fairly reliable in availability. Thick skinned, with large flake, pinkish meat that cooks up white and has a sweet flavor. Can be baked, pan fried, grilled or used in stews or ceviche (which is their most common application in Central America). Substitute: bass, grouper, barramundi.

Cobia (*Rachycentron canadum*)

The sole members of the *Rachycentridae* family, cobia are most closely related to remora. Cobia can tolerate a wide range of temperatures, but are most commonly found in warm temperate to tropical waters. They have long, torpedo shaped bodies and flat heads. Cobia are firm-fleshed and delicious, and because they grow rapidly, are a popular fish for aquaculture. Cobia is excellent on the grill, but care must be taken so that their delicious flesh doesn't dry out. Availability is typically limited. Substitute marlin, mahi-mahi, wahoo.

D

Dorado also Gilt-head Sea Bream (*Sparus aurata*)

Dorado are an extremely popular food fish in Western Europe, and are a favorite fish for aquaculture. Although they can grow to over two feet in length and weigh over 30lb in the wild, aquacultured fish are typically pan-sized (1.25 – 1.5lb). Whole fish presentation is the most popular method of serving, and dorado are delicious when stuffed with lemon, herbs and garlic, then grilled. Delicate in flavor and small in flake, dorado are available all year. Substitute American red snapper, loup de mer, porgies.

Black Drum also Puppy Drum (*Pogonias cromis*)

Black Drum, the only member of the *Pogonia* genus, are native to Western Atlantic coastal areas. Drum derive their name from the drumming or croaking sound they make when distressed or mating. Black drum are the largest members of the drum family, and have been caught weighing over 100lb. Typically black drum come to market as smaller fish, and the smaller fish are known as 'puppy'drum. Puppy drum is commonly available, but can experience seasonal closures. Medium flavored, and not oily, the flesh of the larger fish can be nearly as firm as chicken. Substitute red drum, amberjack, corvina.

Red Drum also Redfish (*Sciaenops ocellatus*)

Red drum are the only species in the genus *Sciaenops*, and share territory with their black drum cousins. Both species can interbreed, but are distinct species. Commonly known as 'redfish', they became extremely popular in restaurants in the 1980s, and the most famous preparation was to serve them blackened. Gold in color with large scales and a distinctive black spot near their tails, red drum are a species that has taken well to aquaculture. Flavorful, firm, sweet but not oily, red drum is as popular a food fish as they are a sport fish. Tight fishing restrictions on wild fish have made them difficult to source, but aquacultured red drum can be acquired. Substitute puppy drum, amberjack, corvina.

E

Conger Eel (*Conger oceanicus*)

Conger eel is the eel most commonly found in US coastal waters, and is found on the eastern seaboard south to the northern Gulf of Mexico. There are more than 800 species of eel in the world, and many are popular in various cuisines. Eel are very snake-like in appearance, featuring an elongated body and dorsal and anal fins that fuse with the caudal (tail) fin. Although many species of eel can be found in fresh water, nearly all return to the sea to spawn. Many species have seen severe declines in population, and the European eel is now an endangered species. Post larval-stage eel are called 'glass eel' and are transparent. They are prized as a food stock and as the populations of European eel have plummeted, the prices of glass eel have skyrocketed. A kilogram of glass eel in Hong Kong recently sold for \$6,000 US. Eel are very boney, and their high oil content makes them uniquely suited to the smoking process. Conger eel come to market from one pound to over ten pounds. Not commonly stocked, availability improves closer to Christmas. Because of their uniqueness, there are no substitutions.

Escolar (*Lepidocybium flavobrunneum*)

A deep water fish found in the tropic regions of the world, escolar has been linked to the food poisoning known as keriorrhea. Escolar cannot digest wax esters in their diet, and instead store these in their flesh. Wax esters are similar to triglycerides, but are indigestible. Consuming escolar in sufficient quantities can result in severe intestinal distress. Although the condition is not fatal, it is unpleasant enough that regulatory agencies of many nations do not allow escolar to be imported or sold. Despite the warnings, chefs love escolar for its flavor and texture. Sushi restaurants will often sell escolar as 'super white tuna', albacore tuna or white tuna. Only available as a frozen saku block, it is not advised to eat more than one six ounce portion. Substitute Chilean seabass, black cod, orange roughy.

F

Fluke also Summer Flounder (*Paralichthys dentatus*)

A marine flatfish found on the Atlantic coast of North America, from South Carolina to Canada. Fluke belong to the left-eye flounder family *Paralichthyidae* and typically come to market between 1 and 3 pounds. Fluke lie on the bottom of the ocean and have the ability to change their color to mimic the pattern of their surroundings. Experiments have shown their talent is highly developed, and they can even mimic complex geometric shapes with impressive accuracy. This camouflage allows them to both avoid larger predators and ambush prey. Fluke are voracious feeders and are a prized fish for anglers. Populations had been in decline due to over fishing, but a very rigorous management system has rebuilt their populations to a healthy level. Firm white flesh with a mild flavor, fluke are a very popular commercial species. Substitute sole, halibut.

Flounder see *Fluke*

Flying Fish (*Exocoetidae*) – *roe only*

Although not a species commonly sought for its flesh, flying fish roe is extremely popular in Asian cuisine, and is commonly known as tobikko. Seafood Merchants carries eight varieties, in different colors and flavors. Tobikko makes an interesting and colorful substitute for other, more expensive caviars when using as a garnish. And since it is a frozen product, portion control is never an issue.

G

Black Grouper (*Mycteroperca bonari*)

A large ocean fish of the western Atlantic, found from Massachusetts to Brazil. Black grouper are solitary fish and most begin life as females, with some switching sex to male as they grow larger. Black grouper were once plentiful, but now are listed as on the IUCN Red List as nearly endangered, due to their slow breeding habits. Grouper have stout bodies and large heads, causing them to be a poor yielding fish, but their flesh is large in flake and very sweet. Rarely available, it is our recommendation to substitute the far more plentiful Red Grouper.

Red Grouper (*Epinephelus morio*)

Red grouper are a far more abundant fish than black grouper. They have a range similar to black grouper, but they are a smaller fish and occupy a different niche in the environment. Like all grouper, reds are voracious feeders, and tend to swallow their prey whole. They are also protogynous hermaphrodites, meaning that individual fish can change from female to male as they age. Outer skin is red to brown, but the flesh cooks up white with large flakes and a medium texture. Readily available. Substitute other grouper, wreckfish, striped bass.

H

Haddock (*Melanogrammus aeglefinus*)

Found on both sides of the North Atlantic, haddock are an important food fish. Similar to cod in appearance and at the table, haddock are deep water fish that have been victim to over fishing. Large dorsal and pectoral fins distinguish them from cod, and a black lateral line running the length of their body distinguishes them from pollock. Haddock can grow to over three feet in length, and a larger female can lay over three million eggs a year. Due to stringent fishing restrictions, stocks off the North American coast are recovering. Not typically stocked, but easy to source. Haddock have clean white, nearly translucent flesh and cook up sweet with a large flake. Substitute cod, hake, pollock.

Hake (*Merluccius albidus*)

Hake are another cod-like species with many commercial fisheries. Extremely popular in Europe, Spain is the largest market for the fish. Hake typically come to market smaller than their cousins, frequently 1-3 lb in size. In

the US, hake is often referred to as 'stock fish' and is popular in New England. White flesh, soft in texture, very sweet and versatile. A very popular species for fish and chips. Not commonly stocked, but easily sourced. Substitute cod, haddock, pollock.

Halibut (*Hippoglossus stenolepis*)

The largest of the flounder (right-eyed flatfish), the Pacific halibut is one of the top predators in its northern habitat. Halibut have been known to grow over 800lbs, but most fish coming to market range between ten and forty pounds. Like most flatfish, halibut spend most of their time on the ocean floor, but will rise in the water column to feed. Highly prized as a food source, the Alaskan halibut fishery is one of the tightest regulated fisheries anywhere. Because of this, halibut are on the Best Choice list from the Monterey Bay Aquarium and other organizations concerned with conservation. Wild Pacific fish are available spring through fall, but farmed Atlantic fish take up the slack when wild product is out of season. Flesh is pearly white, with large flake and a deliciously mild sweet flavor. Substitute flounder, Chilean seabass, grouper.

Hamachi also California Yellowtail Jack (*Seriola lalandi*)

Yellowtail Jacks are a widely distributed member of the jack family, and unlike other jacks (notably amberjack) are not prone to parasites. One can find Hamachi swimming in every tropical ocean in the world, and because they are so widespread, they have acquired many local names. Although widely distributed, in certain areas they have been over-fished and Japanese fleets in particular have increased pressure in areas where the fish are common, such as off the California and Mexico coast. Hamachi are torpedo shaped and fast swimming and their flesh is firm and sweet. The hamachi sold by Seafood Merchants are from the Sea of Cortez and are sushi grade. Firm flesh which cooks up white is delicious grilled, raw, pan seared or even used in ceviche. Substitute albacore tuna, Chilean seabass, halibut.

Atlantic Herring (*Clupea harengus*) prepared only

Herring are small forage fish found in the North Atlantic, but members of the herring family are distributed widely throughout the world. Atlantic herring are one of the most abundant species of fish on earth and serve as an important food stock for nearly every fish, mammal or bird that shares habitat with them. Popular in Europe, they are not available as a fresh product in the United States, due to health risks associated with their higher histamine content. Instead, herring are available typically as smoked, salted or brined product.

J

John Dory also St. Pierre or Peter's Fish (*Zeus faber*)

A strangely beautiful fish found in coastal waters of Africa, Southeast Asia, New Zealand, Japan and Europe. They are a smallish fish (7lb maximum) with a very large head and mouth. Their dorsal fins have long sharp spines and their scales are also sharp. Although John Dory can be a challenge to clean, their flesh is sweet and mild with a fine flake and firm texture. John Dory are solitary fish in the wild and because of this are never an abundant species at market. Their physiology also makes them a poor yielding fish, so they can be a rather expensive fillet. Typically a special order item. Substitute snapper.

K

Kampachi see *Hamachi*

L

Loup de Mer see *Branzino*

Lumpfish also Lump suckers (*Cyclopterus lumpus*) **roe only**

Typically small bottom dwelling marine fish which have specially adapted pectoral fins that allow them to adhere to substrate. Lumpfish are very ugly, and not much is known about their biology or habits. They are primarily sought for their roe, which is very popular in Scandinavian cooking. It is an inexpensive alternative to sturgeon caviar

M

Boston Mackerel also Atlantic Mackerel (*Scomber scombus*)

Frequently known as Boston Mackerel on this side of the Atlantic, the Atlantic mackerel is a small, open ocean, schooling fish that comes close to the coast during warmer weather. Mackerel is very high in oil, and is therefore a full-flavored fish, which may be too strong for some. It is commonly smoked, but is popular pan fried or grilled as well. The flesh is mostly reddish in color and for those who like a full-flavored fish, there are few better choices. Atlantic mackerel has an added health benefit of being high in Omega 3 fatty acids, vitamin B12 and is an excellent source for phosphatidylserine, which is thought to speed recovery, prevent muscle soreness and improve general well-being. Seasonal availability. Substitute Spanish mackerel, sardines, bluefish

King Mackerel also Kingfish (*Scomberomorus cavalla*)

Large members of the Mackerel family, typically running between 5 and 30lb, found in the subtropical Western Atlantic from South Carolina to Brazil. Very popular as a sport fish, king mackerel are fast swimmers that fight hard when hooked. Popularity as a food fish has waned, due in part to king mackerel being named as a species prone to high concentrations of methylmercury. Flesh of king mackerel is grey in color due to its high oil content. Like all mackerel, kings are very strongly flavored and firm in texture. Rarely available, substitute Spanish mackerel, bluefish, sardines.

Spanish Mackerel (*Scomberomorus maculatus*)

A migratory mackerel native to the North American Atlantic coast, Spanish mackerel are typically found in shallower waters. Prized as a food fish, Spanish mackerel are something of a regulatory success story. Whereas once populations were in decline, numbers have rebounded due to strict enforcement of commercial and sport fishing limits. Needless to say, availability is seasonal and extremely limited. Spanish Mackerel is a flavorful fish, high in oil and Omega 3. Flesh firms up nicely when cooked. Excellent smoked or stuffed and grilled. Substitute Boston mackerel, bluefish, sardines.

Atlantic Blue Marlin (*Makaira nircans*)

One of the most prestigious game fish in the world, the Atlantic blue marlin is a magnificent creature and a top predator in its environment. Easily recognizable due to its huge size and trademark bill, it is thought that Atlantic blue marlin inhabit both oceans and move between the Atlantic and Pacific. There is some debate as to whether the Indo-Pacific blue marlin (*Makaira mazara*) is a separate species. In either case, the fishery of blue marlin is far more healthy in the Pacific ocean than the Atlantic. Blue marlin are on the Greenpeace watch list for the Atlantic population, but fish caught in the Pacific have no such stigma. Marlin is frequently available at market, and the flesh is firm, pink and marbled, nearly the color of pork. It cooks up very succulent, but care must be given not to overcook. Substitute swordfish, tuna.

Striped Marlin (*Tetrapturus audax*)

A smaller marlin found in the tropical to temperate Indian and Pacific oceans near the top of the water column. Very similar to its Atlantic cousin on the plate (firm, succulent, steaky), but not as commercially viable. Striped marlin is typically more expensive and is also on the Greenpeace red list for seafood having a high risk of being sourced from unsustainable fisheries. Substitute blue marlin, swordfish, albacore tuna.

Mahi-mahi also Dorado or Dolphinfish (*Coryphaena hippurus*)

A beautiful and distinctive looking fish found in temperate, tropical and subtropical waters around the world. Male mahi-mahi have prominent foreheads, distinguishing them from females, but both sexes have amazingly

bright coloration. Mahi-mahi grow swiftly and because they are widely distributed and reach sexual maturity within their first year, are considered a 'Best Catch' by conservation groups. Generally available, but prices are better in winter months. Mahi-mahi flesh is a bright watermelon pink which cooks up white, with medium firmness, a mildly sweet flavor and large flake. Substitute wahoo, hamachi.

Milkfish (*Chanos chanos*)

Milkfish are common in the Indian ocean and across the Pacific, preferring warmer waters. They are an important food fish in Southeast Asia, and because they feed on algae and invertebrates and grow quickly, they are a very popular fish for aquaculture. Milkfish are not common in the US marketplace, but expect awareness to rise. The flesh is bony but firm, with a medium to high fat content. Can be tasty when fried, and is commonly smoked, steamed or grilled.

Monchong also Pomfret (*Eumegistus illustris*)

Monchong is a deep-water, exotic fish found in the southern Pacific, most commonly sourced from Hawaii or Fiji. It is a smallish fish, typically coming to market in the 5 – 10lb range. Monchong is primarily sourced as by-catch, so availability is never strong. The fish is silver dollar shaped, with large dorsal and anal fins and a deeply forked tail. Usually black or dark grey in color, with large scales and thick skin. The flesh of monchong is bright pink and firm, but cooks up snowy white. The flavor is very sweet with a medium oil content. Substitute snapper, grouper.

Monkfish also Goosefish or Anglerfish (*Lophius americanus*)

A widely distributed family (*Lophiidae*) of fish, the monkfish are mostly bottom dwelling, flattish fish with a very large mouth filled with sharp, curved teeth and a specially adapted dorsal fin. The first ray is specially adapted into an elongated whip with a small lure called an 'esca' on the end. Monkfish will bury themselves in the bottom sand or mud with only their heads and fishing pole exposed. The monk will wiggle the lure in front of their face until another fish takes the bait. The monk then swallow their prey whole. From a culinary standpoint, monkfish are sought for their tails, which have the firmness and flavor of lobster. Generally available. Substitute tilefish, grouper.

Gray Mullet also Jumping Mullet, Striped Mullet or Black Mullet (*Mugil cephalus*)

Mullet are a family of small bait fish common to the Southeast coast of the United States. They are known to be prolific breeders and highly sought after forage for larger sport fish, so many of the fish that are caught commercially are sold as baitfish. Another reason mullet are sought is for their roe, which after drying and curing, is made into a product called 'bottarga' which is a gourmet foodstuff. Although consumed locally, an effort has been made in recent years to introduce mullet as a food fish. Mild flavor and high in oil content, mullet is quite tasty when smoked or broiled. Seasonal availability only. Substitute sardines, anchovies.

Red Mullet also Red Goatfish or Rouget (*Mullus auratus*)

Very popular in Europe but only rarely available in the United States. Red Mullet are a small, magenta colored fish, often 4-6 per pound. Not true mullets, they are actually goatfish (family *Mullidae*). They have firm, sweet flavored flesh and although small, are easy to clean.

O

Ono see *Wahoo*

Opah also Moonfish (*Lampris guttatus*)

A large and unusual looking deep ocean species from the temperate and subtropical zones, opah are a prized food fish. Weighing up to 600lb, opah are most commonly caught as by-catch from long line tuna fisheries. They are rarely caught by recreational anglers. Their body shape is discoid, and they are very colorful, with green to bluish topsides and pink to cream colored bellies. Their flesh is pink to orange in color, but cooks up white. The flavor is mild and the texture is firm and succulent. Not commonly available, but always a good bet

for the 'catch of the day. Excellent on the grill or seared and is wonderful in sushi preparations. Substitute tuna, marlin, swordfish.

P

Paddlefish also Spoonbill (*Polyodon spathula*) **roe only**

An unusual and primitive fresh water fish of the family *Polyodontidae*, easily recognized by the large spoon-shaped rostrum (or snout). Paddlefish are filter feeders, and feed by moving through the water with their mouth gapped open. Populations have declined as a result of over-fishing and habitat loss. Fish ladders which are built alongside hydro electric dams actually repel paddlefish because the iron rebar disrupts the electromagnetic sensory organs in their rostrums. Because of this, they are unable to follow their natural spawning patterns. Paddlefish roe (sometimes called American sturgeon) is an inexpensive substitute for sturgeon roe. Small berries have a tangy, rich aroma and a rich, pungent flavor. Generally available.

Parrotfish (subfamily *Scarinae*)

Parrotfish are a group of fish that are a subfamily (*Scarinae*) of the wrasses (*Labridae*). They are a subtropical fish that are found living on and around coral reefs. One of the most beautiful fish in the sea, the parrotfish feed on algae that grow on the coral. Their feeding cleans the coral of the algae that chokes it, while biting off tiny mouthfuls of reef. They digest the algae and coral polyp and excrete the coral shell as sand. A single parrotfish can create 200lbs of sand in a year. Parrotfish are not a major commercial species, although they sometimes come to market in very limited quantities. Flavor is similar to grouper, but with a mild lobster finish. Substitute snapper, grouper, monchong.

Patagonian Toothfish see *Chilean Seabass*

Ocean Perch also Rose Fish (*Sebastes norvegicus*)

Most commonly known as 'ocean perch' the rose fish is actually a species of rockfish. These are a deep water, North Atlantic species and an important food fish. Ocean perch can reach three feet in length, but usually come to market at half that size. Typically, ocean perch are only available as a frozen fillet, as fleets that target them will stay at sea for weeks at a time. Fish are processed, packed and frozen while still at sea. Like many deep water species, ocean perch mature slowly and are thus at risk for over fishing. Strong in flavor and high in oil content, ocean perch have a fine flake. Substitute blue fish, pollock, hake.

Yellow Perch (*Perca flavescens*)

One of the most popular and widely distributed fresh water species in North America, the yellow perch is valued by both recreational and commercial fishermen. Yellow perch are a cousin of the European perch, but rarely grow beyond two pounds. Fillets from the Great Lakes ship between one and four ounces. Perch have rough scales that must be removed before cooking, but their flavor is very mild and sweet. A perfect fish to batter and fry. Generally available, but extreme weather on the Great Lakes can provide challenges. Substitute walleye, trout.

Pollock (*Pollachius pollachius*)

Another member of the cod family (*Gadidae*), the pollock was for years considered inferior eating, based solely on the darkness of its uncooked flesh. Fortunately, trends have reversed, and now pollock are a popular substitute for the over-fished Atlantic cod. Pollock are higher in oil content than other members of the cod family, and are flavorful and sweet. The flesh cooks up white and is wonderful for fish fries or baked in casseroles. Generally available as a frozen product, fresh can be easily sourced. Substitute cod, hake, haddock.

Pomfret see *Monchong*

Pompano (*Trachinotus carolinus*)

A small, disc shaped fish of the jack family, pompano are a fish prized by anglers and commercial fishermen alike. With their silvery skin, yellow fins and blood red eyes, pompano are ferocious fighters for their size. The demand for pompano always outpaces their availability, and this has encouraged their introduction into aquaculture. A popular preparation is to serve them 'en papillote' (baked in parchment paper). This preparation is said to enhance their natural sweetness. Limited availability makes pompano a sure fire 'fish of the day' when it arrives. Sweet white meat, with a firm texture and mild flavors. Substitute American red snapper, permit.

Permit (*Trachinotus falcatus*)

A game fish found in the Western Atlantic, small permit are often mistaken for pompano. Similar in appearance, the two can be distinguished by the elongated dorsal and anal fins of the permit. Permit can also grow to up to 70lb. When solitary, permit are very timid around humans, but when schooling, can be quite defensive and have been known to bite curious divers. Rarely seen outside Florida day catch piers, the permit is a tasty addition to any menu when available. Excellent baked, pan fried, sautéed or grilled. Substitute pompano, American red snapper.

Pufferfish (Family *Tetraodontidae*)

The pufferfish family of fish is a curious looking, but potentially dangerous species of fish found throughout the worlds oceans. Puffers are best known for their defensive strategy of quickly inflating their elastic stomachs with either water or air to greatly expand their size. When inflated, puffer skin is coated with sharp spines, making them a less than appealing mouthful to predators. They have actually been known to choke fish to death that attempt to swallow them. Pufferfish also contain a deadly toxin in their livers, ovaries and sometimes their skin. Despite the danger, they are considered a delicacy when prepared processed and prepared correctly. Tails are firm, boneless and (to risk sounding cliché) taste very similar to chicken. Not a commonly stocked item, puffer tails can be special ordered.

Porgy also Sea Bream, Silver Snapper (*Pagrus pagrus*)

An Atlantic fish of the family *Sparidae* (which also contains sheepshead and scup), Porgy are small snapper-like fish with rough scales. They are sold mainly in ethnic restaurants in the US, but are prized in Europe where they are commonly called sea bream. Seafood Merchants do not always stock porgy, but they are generally easy to source. Porgy are typically inexpensive and are usually served as whole fish, either baked or grilled. Substitute snapper, weakfish, grouper.

R

Orange Roughy also Deep Sea Perch, Slimehead (*Hoplostethus atlanticus*)

Re-named by the National Marine Fishery Service from 'slimehead' to the less innocuous 'Orange Roughy' in the late 1970s, this species soon fell prey to over fishing. Once plentiful, stocks are now at a mere 10% of where they stood in the 1970s. Roughy are very long lived (over 140 years), deep water fish that mature very slowly and reproduce infrequently. A roughy must live 25-30 years before reaching sexual maturity, and due to this, they are a very non-resilient species. Orange roughy are on many conservation groups 'avoid' lists for sustainable seafood. Available only as frozen fillets, orange roughy is a mild flavored and firm textured. Substitute American red snapper, grouper, Chilean seabass.

S

Sablefish see *Black Cod*

Atlantic Salmon (*Salmo salar*)

Probably the most commonly eaten salmon, the Atlantic species has been successfully aquacultured for many years. Like their Pacific cousins, Atlantic salmon spend most of their adult lives at sea, and return to freshwater rivers and streams to spawn. Unlike the various Pacific species, Atlantic salmon do not die after spawning.

Unfortunately, due to habitat destruction and over-fishing, wild Atlantic salmon have disappeared from many rivers. Today, only one half of one percent of the Atlantic salmon consumed are from wild stock. Salmon is one of the healthiest fish to eat, with high levels of fish oil and Omega-3 fatty acids. Although farmed fish are not as rich in nutrients as wild fish, aquacultured fish are still very healthy and generally available. Light orange flesh that cooks up darker, Atlantic salmon are milder flavored than their Pacific cousins. Substitute Pacific salmon.

Chum Salmon also Keta, Silverbrite (*Oncorhynchus keta*)

Chum are the most widely distributed of the Pacific species, and have the longest migration routes. Some populations swim to the headwaters of the Yukon River in Alaska, and into the deep Amur River basin in China. Chum are very high in oil content, but their flesh is considered softer than the other Pacific salmon, making them less desirable commercially. However, chums are the fish of choice for smoking. Only occasionally available as a fresh product, chums are the last Pacific salmon to spawn.

Coho Salmon also Silver (*Oncorhynchus kisutch*)

A very important commercial species of Pacific salmon. Coho are a medium sized salmon, typically coming to market between four and eight pounds. The flesh is firm and high in fat content, but not as high as king or sockeye salmon. Cohos are very fast swimmers and are prized by anglers for their fight as well as what they bring to the table. They have been introduced to non-native waters, including the Great Lakes. Typically spawning in late summer to early fall, coho are usually two to three years old before returning to fresh water for spawning. Wild fish are only available during spawning run, but coho are being aquacultured for yearly availability. Rich salmon flavor, and dark rose to red flesh, coho salmon are a delight to eat.

King Salmon also Chinook (*Oncorhynchus tshawytscha*)

The largest of the Pacific species, kings have been captured weighing over 120lb. It is rare to see a fish come to market over 40lb, but they commonly range from eleven to 18lbs. Like all Pacific species, the range of the king has been severely curtailed due to human activities, in particular building dams, diverting water for aquaculture and over-fishing. Very high fat content and rich in Omega 3 fatty acids, king salmon are a very healthy choice. Although wild stocks have been on the decline, kings have been successfully aquacultured and introduced as wild species far outside their natural range. Wild fish are available during their spawning run throughout the summer, but also as troll-caught ocean fish. Farmed fish are typically available when wild fish are scarce. Rich salmon flavor, wild fish can have a dark red meat. The occasional albinos that come to market are marketed as 'ivory kings'.

Sockeye Salmon (*Oncorhynchus nerka*)

A smaller Pacific species, the sockeye is a favorite of many fans of wild salmon. Sockeye are smaller than kings, but their flesh is a beautiful deep red. Lower fat content than the mighty king salmon, but firm and delicious when grilled, baked, seared or poached. Unlike other species of salmon, sockeye do not feed on other fish but instead are filter feeders, straining zooplankton through their gill-rakers. Because of this, sockeye are extremely low in methyl mercury and are the healthiest salmon to eat. Sockeye typically begin their runs in late spring, either at the same time or closely following the king salmon runs. Flesh is a beautiful dark pink to red with fine flake.

Steelhead Salmon see *Rainbow Trout*

Sardine (Family *Clupidae*)

'Sardine' is the common name given to a number small oily fish of the *Clupidae* family of herring. There are over twenty species of fish referred to as sardine, and they are small forage fish found throughout the world's oceans. Sardines make up an important foodstock of many species of fish, birds, and marine mammals, and are an important food fish for humans as well. Sardines are smoked, canned, dried, salted or reduced into fish meal or oil. Fish meal is used as animal feed and is an important food for carnivorous fish raised via aquaculture. Sardine (or 'pilchard' as larger fish are often called) fisheries have been greatly reduced by over-fishing, but conservation efforts are showing signs of success. Occasionally available. Flavorful, healthy and adaptable to many applications. Substitute anchovies, mackerel.

Shad (genus *Alosa*)

A small forage fish related to the herring family (*Clupidae*). Most are ocean dwelling (pelagic), but like salmon will enter fresh water to spawn. Some species are landlocked and spend their entire life cycle in fresh water. Shad are not a popular food fish outside the regions where they spawn, because they are small and bony. Females are harvested for their roe sacs however, and shad roe is considered a delicacy by many. Shad roe is typically available only late winter/ early spring.

Winter Skate (*Leucoraja ocellata*)

There are over 200 species in the ancient skate family (*Rajidae*), and skate are a popular food fish. Skate are cartilaginous fish, similar to sharks, meaning their skeletons are mostly cartilage. Skate are bottom-dwelling, carnivorous fish that feed on other bottom dwelling species of crustaceans, fish, and mollusks. Skate are typically caught by trawlers and although a very widespread family of fish, can be vulnerable to over-fishing. Skate are slow to reach sexual maturity and reproduce in smaller numbers. Fortunately, they have responded well to conservation efforts and populations are on the rebound on the Atlantic coast. Typically available all year, but skate caught in fall to winter are said to taste best. Only the 'wings' of the skate are utilized for food, and the flesh must be skinned before cooking. Skate flesh is pink and the flavor has been compared to that of scallops. Fillets are firm, with a high collagen content that adds to their delicious flavor. Substitute shark, monk.

Blacktip Shark (*Carcharhinus limbatus*)

A medium sized shark found in the coastal tropical and subtropical waters around the world. Blacktip are thought to be rather timid around humans, but can be aggressive when prey is in the water. A very fast swimmer, blacktips are sought as both a sport species and as a commercial fish for their meat, fins, skin and livers. Blacktip sharks bear their young live and females will give birth to one to ten pups every other year. In the absence of males, females can give birth asexually. Not commonly stocked at Seafood Merchants, blacktip can be sourced with advance notice. Flesh is firm and meaty, with a mild flavor. Lends itself well to grilling, broiling or baking. Substitute swordfish, marlin.

Cape Shark also Dogfish or Spiny Dogfish (*Squalus acanthias*)

A small, widely distributed member of the shark family, cape sharks are typically found in shallow waters. Once the most abundant shark in the world, these fish have seen populations decline precipitously in several areas, most notably in the Eastern Atlantic. On the US Atlantic coast, the NOAA has deemed their populations 'rebuilt' after suffering from decades of over-fishing. Not commonly sold at Seafood Merchants, cape shark can be sourced with advance notice. Like all shark, 'dogfish' are firm and meaty. Because they typically come to market as smaller fish than other species, they are considered easier to work with. Substitute swordfish, marlin.

Shortfin Mako Shark (*Isurus oxyrinchus*)

A large pelagic shark found in temperate to tropical seas worldwide. Mako are endothermic (warm-blooded) fish and it is thought that this characteristic allows them to attain their great speeds. Mako shark have been observed swimming over 60 mph and leaping 30 feet in the air. They are known to migrate hundreds of miles in search of prey or mates, and an individual tagged off California was caught by a Japanese research vessel over 1,700 miles away. Typical size for a mature adult is ten feet in length and 300lb, but the largest ever caught weighed over 2,000lb. Mako use their speed in hunting, and will rocket up from the depths to attack their prey. Mako are spectacular fighters for recreational anglers, but angry fish have been known to leap into boats. Commercial fishermen do not like mako shark because they scavenge long line and netted fish. Seafood Merchants do not carry mako shark regularly, but can occasionally source fish from Hawaii.

Sheepshead also Louisiana Bay Snapper, Convict Fish (*Archosargus probatocephalus*)

Ranging from the Gulf of Mexico to the mid-Atlantic coast, Sheepshead are a snapper-like fish of the Porgy family (*Sparidae*). Typically coming to market between one and four pounds, sheepshead have gained new popularity after being given the 'green' light by many conservation groups as a safe fish to source. As American red snapper populations have been adversely effected by over-fishing, alternate species have been targeted. Sheepshead live in deep water during the winter, but move to shallower waters in the late winter and early spring. They are typically found around rocky points and outcroppings, oyster beds and pilings. Not

commonly stocked at the Seafood Merchants, Sheepshead can be sourced seasonally. The flesh is firm and delicious and due to their diet of crustaceans and mollusks, have a decidedly shellfish flavor. Substitute snapper.

Rainbow Smelt (*Osmerus mordax*)

Smelt are a very small anadromous fish that can exist as a land-locked species. Measuring from 3 to 7 inches in length, smelt are an important forage fish in the Great Lakes, and are preyed upon by salmon, lake trout, walleye, and in turn will prey upon young cisco, alewives and compete with yellow perch and whitefish for food. Rainbow smelt were accidentally introduced into the Great Lakes and have spread throughout the region. As a commercial species, rainbow smelt are a local favorite and are typically served head off, gutted, battered and fried. Bones are so small that they are consumed. Typically available spring through fall. Substitute sardines, anchovies.

American Red Snapper (*Lutjanus campechanus*)

There are many species of snapper, but only one American red. Because they are highly sought after and command a high price, other species are often sold as American reds by disreputable dealers and restaurants. American red snapper have a beautiful red coloring which fades to silvery pink on their sides, and red eyes. Snapper are reef fish and are highly prized as game fish. American snapper can grow to over thirty pounds, but typically come to market between 2 and 8 pounds. Their flesh is firm and moist, with a sweet, almost nutty flavor. Commonly available, but smaller sized fish can be difficult to source. Substitute silky snapper, lane snapper, vermilion snapper.

Hognose Snapper also Hogfish (*Lachnolaimus maximus*)

Hognose snapper are actually a wrasse, not a snapper. They are easily recognizable by their elongated muzzle and mouth full of protruding canine teeth. They use this snout to probe sand for crustaceans which make up the majority of their diet. Hognose are sequential hermaphrodites, meaning that a portion of their population will change sex from female to male when they sexually mature. An important species for reef and spear fishing, hognose are vulnerable to over-fishing. Rarely seen at Seafood Merchants, hognose are delicious and versatile. Substitute American red snapper, silky snapper.

Lane Snapper (*Lutjanus synagris*)

Extremely similar in appearance to American red snapper, Lane snapper can be distinguished by the faint yellow lateral stripes they bear. Lanes are small fish, rarely coming to market above two pounds. They are usually taken by fishermen targeting grouper or other snapper species, and when caught on hook and line, are considered to be excellent sport fish. Flesh is tasty and similar to American reds, however, fillets tend to curl when seared. Not generally available at Seafood Merchants, but an excellent substitute for the more expensive American red when available. Substitute American red, yellowtail snapper, B-liner.

Mutton Snapper (*Lutjanus analis*)

Largely considered a Caribbean species, Mutton snapper can be found from North Carolina to South America. Muttons are known as the supreme fighters of the snapper family, and are highly prized by anglers. Their main color is pink, but they have an olive striping that overlays the pink, particularly over the top half of the fish. Typically coming to market as a by-catch from fishermen targeting grouper or other snapper species. Muttons are an inexpensive substitute for the more expensive American red. Another delicious snapper, with firm flesh and a mild flavor. Substitute Lane snapper, silky, or sheepshead.

Silky Snapper also Queen, Ballbat or Onaga (*Lutjanus vivanus*)

A beautiful red snapper, with a more elongated body than American reds. They also have yellow eyes, as opposed to the red eyes of American reds. Silky are a deep water snapper, and are typically found in waters 400-500 feet deep off the Western Atlantic coasts. Silky snappers feed mainly on crabs and other crustaceans. Often considered a 'good alternative' by environmental groups, silky snapper are usually by-catch fish and mature early. Both traits help them to overcome over-fishing. Silky are a less expensive and more sustainable substitute for American reds. Substitute lane, mutton snappers or sheepshead.

Silver Snapper see *Porgy*

Tai Snapper also Red Sea Bream (*Pagrus auratus*)

A beautiful fish of the Sea Bream family, the tai 'snapper' is a popular fish from the South Pacific in the area surrounding New Zealand and Australia. Their coloration could cause them to easily be mis-identified as a red snapper, but with a deeper head, and yellow fins, the Tai is a unique species. They are long lived, but unlike many fish with similar life spans, tais are quick to mature, thus making them resistant to over-fishing. The New Zealand government places strict catch limits on tai snapper and the fish populations are responding well. Not commonly sourced by Seafood Merchants, but readily available. Our tai snappers are sushi grade, and the firm flesh is succulent and sweet. Substitute American red snapper, porgy.

Vermilion Snapper also bee liner, B-Liner, Mingo (*Rhomboplites aurorubens*)

A small red snapper from the Western Atlantic, found from North Carolinas to Brazil. Vermilion are typically caught in water 80 to 300 feet deep. They feed on crustaceans, small fish, fish eggs and squid. Vermilion are very beautiful, with a deep crimson color with narrow, irregular yellow streaks below the lateral line. Although not commonly available, vermilion snapper make an affordable substitute for American reds.

Yellowtail Snapper (*Ocyurus chrysurus*)

A small, beautiful snapper common to the Western Atlantic, from North Carolina south to Brazil. In the water, the fish appear blue with a bright yellow streak down the lateral line, finishing in the trademark yellow tail. Exposed to air, the blue appears pink and the iridescent tail doesn't appear as vibrant. In the Florida Keys, yellowtail are often spotted by divers and snorklers. In other areas, yellowtail are typically very wary of humans and other large predators. Prized as a gamefish, yellowtail are also a popular commercial fish. Healthy populations have them classified as a 'best choice' by environmental groups. Typically available, but can be subject to seasonal outages. Substitute American red, vermilion, mutton snapper.

Dab Sole also American Plaice (*Hippoglossoides platessoides*)

There are hundreds of species of flounder and related flatfish, and many are highly prized foodstuffs. Dabs are a right handed sole, meaning that their eyes on mature fish have migrated to the right side of their head. They are thought to be the most abundant flatfish in the Northwest Atlantic and despite their abundance have seen populations plummet in the 1980s and 1990s. Scientists speculate that temperature and pollution may be to blame for these crashes. Although there have been no regulatory remedies enacted yet for the Dab sole fishery, it is thought by many that the species is being over-fished. Generally available at Seafood Merchants, although weather and spawning may interrupt supply. Sole is a delicately flavored, firm fleshed fish with fine flake. Excellent when pan fried, seared, stuffed or baked. Substitute other soles, halibut.

Dover Sole or Common Sole, Black Sole (*Solea solea*)

One of the most highly prized food fish of the Eastern Atlantic ocean, Dover sole are named for the fishing port in southern England which moved the most sole in the 1800s. Dover sole prefer shallow water with sandy or muddy bottoms, where they partially bury themselves to hide from predators and ambush prey. Seafood Merchants was built on the import of 'Dovers' and we are very proud of our reputation of serving the finest in the country. Dover sole have a mild, sweet, buttery flavor and a firm texture that allows for multiple applications. Dover sole are imported weekly, but only to order. To experience the finest fish in the sea, place your order on Thursday morning for delivery the following week. There are no substitutions.

Grey Sole also Witch or Torbay Sole (*Glyptocephalus cynoglossus*)

A right-eyed flatfish of the family *Pleuronectidae*, Grey Sole are found in the Western Atlantic. Grey Sole are recommended by Monterey Bay Aquarium as a best choice for sustainability. They are a small flounder, typically one to two pounds in size. Not typically stocked, but able to source year round. Grey sole are typically trawler caught fish and are a delicious flavor and firm texture. Substitute dab, summer flounder.

Petrale Sole (*Eopsetta jordani*)

A right-eyed flatfish of the family *Pleuronectidae*, the Petrale Sole inhabits the Eastern Pacific from Baja California to the Aleutian island chain. Petrale are an important food fish and although they are generally available, weather can impact catch. Like most flatfish, Petrale are caught by trawler. Delicately flavored and firm of flesh, Petrale are a delicious west coast fish. Excellent pan fried, seared, stuffed or baked. Substitute other soles, halibut.

Rex Sole also Witch or Threadfin Sole (*Glyptocephalus zachirus*)

A right-eyed flounder from the Eastern Pacific, Rex sole are a deep water species. They can be found 200 – 3,000 feet down and are commonly caught by trawler. Rex are a long, oval shaped flounder with a small mouth. They compose a major part of the flatfish trawl fishery from California north to the Bering Sea. Not commonly stocked, and subject to weather related outages, but can be specially ordered. Tasty and sweet with firm flesh that lend themselves to multiple applications. A good substitute for more expensive flounder. Substitute Petrale, winter flounder, Dab.

Shortbill Spearfish also Hebi (*Tetrapturus angustirostris*)

Smaller than marlin, the shortbill spearfish is another Hawaiian species of the billfish family. Spearfish have a much shorter bill and a shorter dorsal fin than other billfish, but are no less prized. They typically come to market in the 15-30lb range and ship as small loins. Peak landings are from June through October, but can be sourced year round. Flesh is white to pink and is softer than marlin. Excellent broiled, grilled or marinated and served as the famous Hawaiian dish poki. Substitute marlin, swordfish.

White Sturgeon also Pacific, Sacramento Sturgeon (*Acipenser transmontanus*)

The white sturgeon is the largest freshwater species in North America and the third largest sturgeon in the world (after beluga and kaluga). They are found in river and estuarine environments from California to British Columbia and are an important commercial and recreational species. Sturgeon do not have scales, instead having a series of bony plates called 'scutes' along their lateral line. They are a very primitive species and have changed little in 175 million years. Most species spend most of their adult lives in the ocean, only returning to fresh water to breed. Although white sturgeon do spend time in the ocean, most of their life is spent in fresh or estuarine habitats. As with many anadromous species, the building of dams has effected their natural life cycles and is partially responsible for decreasing populations throughout their range. Restrictions placed on fishing and conservation programs designed to enhance landlocked populations seem to be having a positive effect. Sturgeon are available nearly all year, but early winter spawning season is protected. Their flesh is firm, flavorful and high in oil. Very popular smoked, grilled, baked or barbequed. Substitute Chilean seabass, black cod.

Swai or Iridescent Shark (*Pangasius hypophthalmus*)

Another species from the shark **catfish** family (*Pangasiidae*), Swai are native to the Mekong Delta in Viet Nam. Swai are a migratory species that prefer warm, deep waters and migrate upstream during the rainy season (May to June) and return downstream to breed after the floods (September to December). Long an important staple in Southeast Asia where they have been widely distributed, Swai are growing in popularity with the rest of the world. The flesh is milder flavored than North American Channel catfish, and is typically available as a frozen product. Flesh is a dark pink which cooks up white. Great for fish fries. Substitute basa, channel catfish.

Swordfish (*Xiphias gladius*)

One of the top predators of the open ocean, swordfish have been hunted by humans for thousands of years. Known for their large size and impressive bill, the swordfish uses this specially adapted upper jaw in hunting and for defense against predators. Swordfish are excellent hunters and have a specially adapted organ in their skulls which warms their brain and eyes. It is a myth that swordfish spear their prey. In reality, swordfish make greater use of their amazing speed in hunting, racing through schools of smaller fish, stunning them with their bills. Dead shortfin mako sharks have been found with broken-off swordfish bills still embedded in their heads, which is testament to the ferocity of swordfish. Because of their status as a top predator, they have been found to contain higher than average levels of methylmercury. As such, they are not recommended for consumption by pregnant mothers and those with immunodeficiency diseases. Flesh is high in oil, but firm and delicious.

Sword fish typically come to Seafood Merchants as whole, head-off fish and are readily available. Substitute marlin, mahi-mahi, shark.

T

Tautog or Blackfish, Black Porgy (*Tautoga onitis*)

Tautog are members of the Wrasse (*Labridae*) family found in the Western Atlantic from Nova Scotia to Georgia. Often found inhabiting rocky seafloors or near wrecks, pilings or other uneven features. Tautog have plump and stout bodies, and can appear as small grouper. Their skin ranges from blotchy olive to black, and they have thick rubbery skin with a heavy coating of slime. These are thought to be adaptations to living amongst rocks. Although a highly sought-after fish by recreational fishermen, Tautog have a reputation as being difficult to catch. They use their environments to their advantage when hooked, and are famous for breaking lines. Not commonly available, they can typically be sourced as a day-boat or by-catch. Tautog are delicious, with a drier texture and a flavor often compared with lobster. Substitute monk, grouper, black seabass.

Tilapia

Tilapia is the common name for the Tilapiini tribe of the *Cichlidae* family of fish. There are over 200 species of fish commonly called Tilapia, nearly all are fresh water species, preferring warmer water. Tilapia have been an important food fish in Africa and the Middle East for thousands of years, and it was there where the fish were first aquacultured. Tilapia are highly adaptable fish and tolerate dense stocking conditions. They are efficient feeders and eat a wide variety of insect and vegetable matter. As an introduced aquaculture species, great care must be taken in keeping them out of the greater environment. Many governments consider them a problematic invasive species. Commonly available at Seafood Merchants, tilapia are nutritious and firm of flesh, with a mild flavor similar to perch. Substitute perch, channel catfish, swai.

Golden Tilefish (*Lopholatilus chamaeleonticeps*)

Golden tilefish are very colorful fish found in the deep Western Atlantic on the Continental shelf. Golden tilefish create cone-shaped burrows and live in small groups, or pods. They feed in the daytime on crustaceans, worms, starfish and sea cucumbers. Not always available, tilefish are a popular item in the winter and spring. Small tilefish sometimes come to market as 'kitten tile'. Tilefish are delicious, with firm flesh and a flavor similar to lobster. However, they are a species thought to be higher in methyl mercury and it is advised that pregnant women should avoid eating them. Substitute grey tilefish, monkfish, tautog.

Grey Tilefish also Blueline Tilefish (*Caulolatilus microps*)

Not as colorful as its larger cousin the golden tilefish, the grey is more of a blue to mottled olive color. They also lack the fleshy protuberance on its forehead the golden has. Greys inhabit similar habitat to goldens, both being bottom dwelling and burrow digging fish. They feed on crabs and a variety of small crustaceans. Not a commonly caught commercial species. Grey Tilefish only come to market as by-catch but is still highly prized as a food fish. Similar in flavor to the golden, the grey is slightly softer in texture. Substitute golden tilefish, monkfish, tautog.

Tripletail (*Lobetes surinamensis*)

There are two species of tripletail, an Atlantic and a Pacific. It is exceedingly rare to see the Pacific variety come to market, but the Atlantic has been growing in popularity as a food fish. Tripletail are the only species in the genus *Lobotidae*, and are found in tropical and subtropical waters. These fish have the odd habit of floating on their sides, just under the surface. It is from this position that they ambush their prey, typically small fish. Tripletail can grow to 40lb, but most average less than ten pounds. Adults are jet black in color and they resemble a large tilapia with rounded dorsal, anal and caudal fins that are similarly sized (hence 'triple tail'). Only a few tons of tripletail are harvested commercially, usually off the Florida coasts, but because of the Monterey Bay Aquarium's Sea Watch list, tripletail are becoming more sought after. Very grouper-like in taste and texture, but without the stigma of over-fishing. Extremely limited offerings. Substitute grouper, striped bass.

Lake Trout (*Salvelinus namaycush*)

Not a true trout, lake trout are actually a type of char. Lake trout have a rather small natural range, found only in the larger lakes of northern North America. They have been introduced into Europe, parts of Asia and South America. Although an important commercial fresh water species, they are subject to over fishing, due to their late maturation. A well developed commercial fishery in the Great Lakes was quickly decimated by the invasion a parasitic fish called sea lampreys. Only Lake Erie still supports a commercial trout industry, and availability is fairly consistent. Flesh is soft and mild flavored. Substitute whitefish, rainbow trout, steelhead.

Rainbow Trout (*Oncorhynchus mykiss*)

A small fish of the salmon family, rainbow trout are one of the most popular sport fish in the world. Originally from the streams and rivers that flow into the Pacific ocean from North America and Asia, rainbow trout have been distributed to every continent on Earth except Antarctica. Rainbow trout are voracious eaters and an extremely competitive species. Where they have been introduced, they frequently out-compete native species. The size of rainbow trout correlates to the environment where they live. Land-locked stream or pond fish are typically less than two pounds in weight, but the ocean going strain called steelhead can grow to 10 pounds or more.

Steelhead trout are often considered salmon but are actually ocean-going rainbow trout that return to their native streams to spawn. Unlike the true Pacific salmon species (king, coho, sockeye, chum), Steelhead trout do not die after spawning, and will return to the sea. Flesh is typically more orange/ red than fresh water rainbows, do to the astaxanthin in their diets. This is a naturally occurring coloring agent found in leaves, crustacean shells, and other plant and animal matter. It has been synthesized and is used as an additive in some aquaculture applications, but should not be considered in anyway dangerous or un-natural. Steelhead are far more flavorful than purely freshwater species of trout, but are not so strongly flavored as the wild Pacific salmon species.

Sea Trout also Speckled Sea Trout, Spotted Sea Trout (*Cynoscion nebulosus*)

Although the shape and coloration would fool anyone, Sea Trout are not a true trout, but are actually members of the drum family (*Sciaenidae*). Common to the waters off North America's Southeast coast (including the Gulf of Mexico), sea trout are a popular recreational species and a regionally important commercial species. Sea trout are a small fish, typically coming to market between one and four pounds. Not commonly carried at Seafood Merchants, but can be sourced. Their flesh is firm and white with the creamy consistency of lake whitefish. Excellent broiled, baked, sautéed or pan fried. Substitute rainbow trout, corvina.

Steelhead Trout see *Rainbow Trout*

Albacore Tuna (*Thunnus alalunga*)

A medium sized tuna, frequently coming to market in the 30-40lb size. Albacore can be distinguished by their elegant, long pectoral fins. Albacore are the only tuna allowed to be marketed as 'white meat' tuna in the US market. Albacore can be found in all the worlds oceans, and many conservation groups consider them a 'best choice' for sustainability. Their flesh can range from a dark pink to grey, and cooks up white. They were the choice of Japanese royalty, who traditionally favored them over the red fleshed tuna species. Steaky, succulent and firm of flesh, albacore is a delicious alternative to red fleshed tuna. Not commonly stocked at Seafood Merchants, we can generally source albacore from Hawaii with a few days notice. Substitute yellowfin, big eye or hamachi.

Bigeye Tuna (*Thunnus obesus*)

Bigeye are a very popular tuna species that is long lived and distributed widely. Bigeye, together with yellowfin, are the two species commonly lumped under the Hawaiian word 'ahi'. It should be noted that there is no species called 'ahi'. Bigeye are a larger tuna species that weigh up to 400lb when mature. Most that come to market at 50-100lb. Tuna are graded at auction based on their fat content. The higher the fat content, the higher the grade. Sushi grade tuna is commonly a 1 or 2 + +. Bigeye are a red fleshed tuna, and this rich color derives from myoglobin in their blood, which is an oxygen carrying molecule. Because of this, tuna are able to

maintain a higher temperature than the water in which they swim, aiding to their phenomenal speed. Bigeye have been subject to over-fishing by purse-seine nets. Only longline and tackle fishing are considered sustainable methods. Bigeye is a chefs dream, with gorgeous red loins similar in appearance to the finest beef. Served grilled, raw, seared or any other way, tuna is a delicious. Generally available. Substitute marlin, opah, swordfish.

Bonito (*Sardini* tribe of the *Scombridae* Family)

Bonito are not true tuna, but are so closely related that they are sometimes marketed as tuna. There are seven species of bonito and all have firm, darkish flesh. The younger fish can have lighter flesh. Not as highly regarded as true tuna, bonito provide a less expensive substitute. Special order only. Substitute yellowfin, bigeye, hebi.

Yellowfin Tuna (*Thunnus albacares*)

A larger sized tuna species with distinctive secondary dorsal and anal fins that can be extremely long in mature adults and are bright yellow (hence the name). Yellowfin are fast swimming deep water fish found throughout the worlds oceans. They are prized as both a game fish and commercial species, and yellowfin are one of the main species of tuna sought. Because tuna have been found to congregate around floating debris and structures, the commercial fishing industry has developed a purse-seine fishery using 'fish allocating devices' which are really just tethered platforms which attract baitfish and their predators, the tuna. This fishing method has proved to be so effective in catching juvenile (non-breeding age) yellowfin, that several environmental groups have put yellowfin on their red lists. Troll fishing generally receives approval as a sustainable harvest method. Yellowfin flesh is as red as freshly butchered beef, and is very popular for sushi applications. Generally available. Substitute marlin, opah, swordfish.

Turbot (*Scophthalmus maximus*)

Turbot are a large left-eyed flatfish of the family *Scophthalmidae*, native to shallow marine or brackish waters of the North Atlantic. They favor sandy bottoms and are typically found close to shore. Turbot can grow to three feet in length and weigh up to 50lb, although fish of this size are extremely rare. Turbot are valuable food fish and have been considered a luxury since Roman times. Although turbot have been successfully aquacultured in many places (Greenland, Chile, Spain, France, Romania, etc.), turbot from the North Sea are roundly considered to be a superior fish. Firm, delicate and sweet in flavor, the snow white meat can be poached, baked or pan-fried. Available only as a special order, Seafood Merchants place orders every Thursday for Monday delivery. Substitute Dover sole, brill, plaice.

W

Wahoo also Ono (*Acanthocybium solandri*)

A very fast swimming member of the mackerel family (*Scombridae*), the wahoo is a long, lean predator which bears a striking resemblance to the barracuda. They are a warm water fish that are distributed world wide in tropical and subtropical waters. Long prized by recreational fishermen, wahoo are known for their aggressive behavior and their lightning fast strikes. Wahoo are typically solitary fish, but are sometimes found in groups of three. Because of this, wahoo are not considered vulnerable to over-fishing. Wahoo are firm of flesh, with a mild, sweet flavor and large circular flake. Flesh is pink, but turns white when cooked. Due to its wide distribution, wahoo is frequently available. Substitute mahi-mahi, marlin, mackerel.

Walleye or Walleyed Pike, Perch Pike (*Sander vitreus*)

A freshwater predator fish, originally found in the northern reaches of North America, walleye have been introduced to many other areas because of their value as a sport fish. Walleye derive their name from the appearance of their eyes, which reflect white light. It is a misconception that walleye have poor vision. In reality, it is their excellent vision, particularly in low light or turbid or stained water conditions, that make them such effective predators. Walleye are caught commercially on the Canadian side of several of the Great Lakes, particularly Lake Erie. In the warmest summer months, walleye 'disappear' into the cold, dark depths, where their excellent vision allows them to hunt effectively and avoid the warmer surface waters (and the fishermen's

nets). Flesh is mild and sweet tasting, with a delicate flake. Excellent pan fried, baked, poached or steamed. Substitute perch, whitefish.

Whitebait

Not an actual species, but the immature fry of any of several dozen species of fish. These are typically caught close to the shore with purse nets and are typically cooked and served whole, with heads, fins and entrails intact. As whitebait is really just the young of many species, it is not considered an ecologically viable food product and harvesting is strictly regulated. It should be noted that the species that make up whitebait will vary greatly from place to place where they are harvested.

Whitefish also Lake Whitefish, Common Whitefish (*Coregous clupeaformis*)

A cool water fish native to northern North America, particularly the Great Lakes. Whitefish are classified in the subfamily *Coregoninae* which falls under the family *Salmonidae* (salmon). They are a smallish fish, coming to market from one to 5 pounds. Whitefish is a commercially important species and very popular in the Midwest because of its mild sweetness and relatively low cost. Whitefish flesh is rather soft, but lends itself to many different preparations. Seasonal outages can occur during spawning season (September through December), and fishing Lake Superior can be perilous at any time of the year. In recent decades, there has been a steady decline in the size and growing pattern of whitefish. Invasive species such as the zebra and quagga mussels are thought to be playing a part in this, but as yet, no one is certain. Generally available at Seafood Merchants. Substitute lake trout, walleye, perch.

Whiting see *Hake*

Wolffish also Atlantic Wolffish, Atlantic Catfish, Sea Wolf (*Anarhichas lupus*)

A very fearsome looking fish found on both sides of the Atlantic. Wolffish are very eel-like in appearance, with large heads, elongated bodies and dorsal and anal fins that run the length of the body and terminating just before the caudal (tail) fin. Wolffish have an impressive array of razor-sharp teeth (canine *and* molars), that start in their mouth and continue into their throats. These teeth allow them to not only snare squid and other bottom dwelling fish, but also process the sea urchins and green crabs which make up a large portion of their diet. Wolffish numbers have declined due to over-fishing and the habitat destruction caused by trawling. Wolffish are a cold water fish, and they have adapted to their rugged environment by evolving a specialized blood which contains a natural antifreeze. Rarely available at Seafood Merchants, there has been some push in the scientific community to consider the Atlantic Wolf fish a candidate for the Endangered Species list. Firm, white flesh, high in oil content. Substitute monk, sturgeon.

Wreckfish also Stone Bass (*Polyprion americanus*)

A large bottom-dwelling fish found on both sides of the Atlantic ocean, frequenting caves and shipwrecks. Adults tend to be solitary fish, but juveniles will school in groups of at least five fish. Wreckfish have been known to reach well over two hundred pounds and lengths of seven feet. Not a commonly available species, due to the fact that they don't school and their habits tend to make them more of a day boat catch. Excellent on the table, wreckfish are very grouper-like regarding preparation and flavor profile. Large flake, moist and mild flavor. Substitute grouper, wild striped bass, California white bass.

California Yellowtail Jack see *Hamachi*