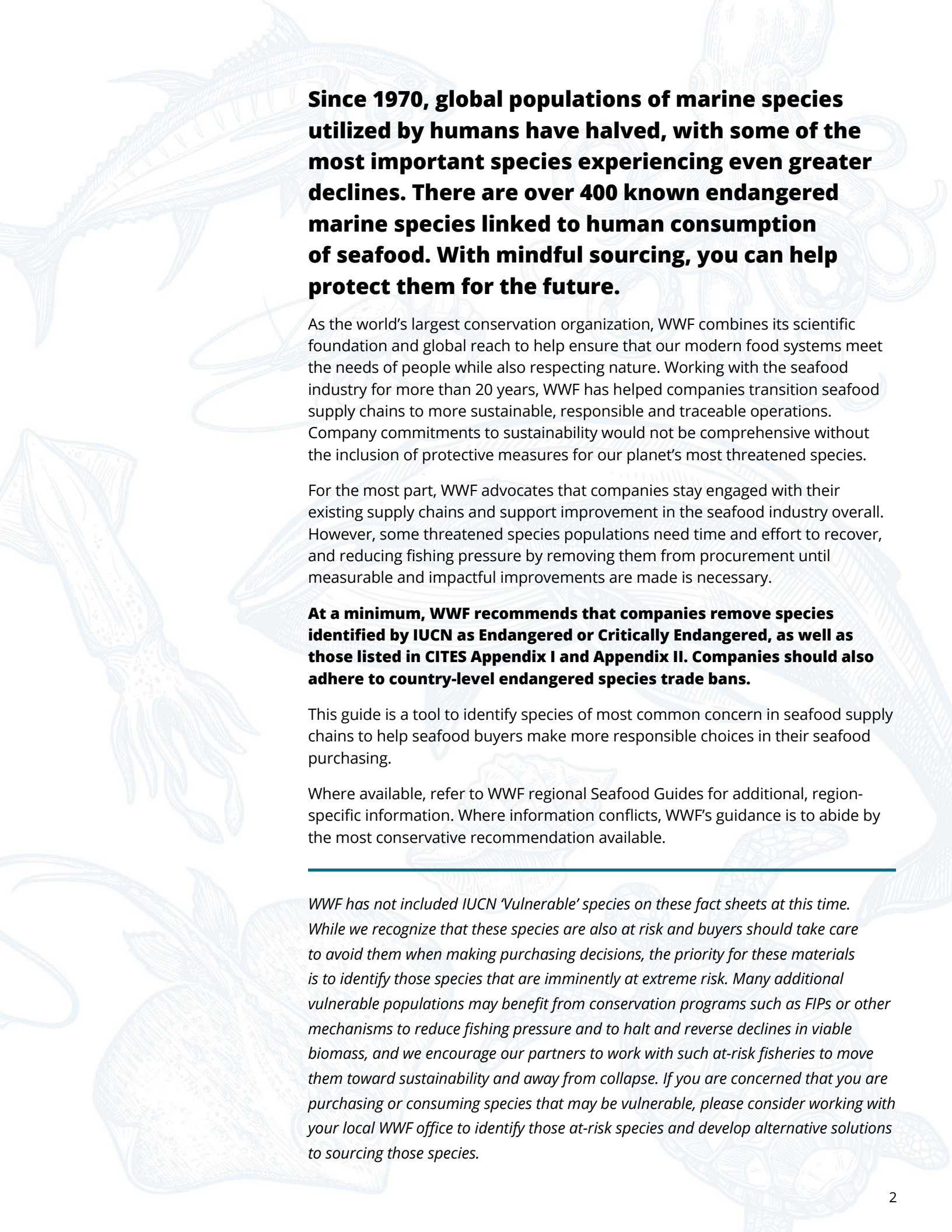




Endangered Marine Species Guide

WWF's recommendations for at-risk marine life in seafood supply chains – 2019





Since 1970, global populations of marine species utilized by humans have halved, with some of the most important species experiencing even greater declines. There are over 400 known endangered marine species linked to human consumption of seafood. With mindful sourcing, you can help protect them for the future.

As the world's largest conservation organization, WWF combines its scientific foundation and global reach to help ensure that our modern food systems meet the needs of people while also respecting nature. Working with the seafood industry for more than 20 years, WWF has helped companies transition seafood supply chains to more sustainable, responsible and traceable operations. Company commitments to sustainability would not be comprehensive without the inclusion of protective measures for our planet's most threatened species.

For the most part, WWF advocates that companies stay engaged with their existing supply chains and support improvement in the seafood industry overall. However, some threatened species populations need time and effort to recover, and reducing fishing pressure by removing them from procurement until measurable and impactful improvements are made is necessary.

At a minimum, WWF recommends that companies remove species identified by IUCN as Endangered or Critically Endangered, as well as those listed in CITES Appendix I and Appendix II. Companies should also adhere to country-level endangered species trade bans.

This guide is a tool to identify species of most common concern in seafood supply chains to help seafood buyers make more responsible choices in their seafood purchasing.

Where available, refer to WWF regional Seafood Guides for additional, region-specific information. Where information conflicts, WWF's guidance is to abide by the most conservative recommendation available.

WWF has not included IUCN 'Vulnerable' species on these fact sheets at this time. While we recognize that these species are also at risk and buyers should take care to avoid them when making purchasing decisions, the priority for these materials is to identify those species that are imminently at extreme risk. Many additional vulnerable populations may benefit from conservation programs such as FIPs or other mechanisms to reduce fishing pressure and to halt and reverse declines in viable biomass, and we encourage our partners to work with such at-risk fisheries to move them toward sustainability and away from collapse. If you are concerned that you are purchasing or consuming species that may be vulnerable, please consider working with your local WWF office to identify those at-risk species and develop alternative solutions to sourcing those species.

The **IUCN Red List of Threatened Species™** is the world's most comprehensive inventory of the global conservation status of biological species. Species are categorized from greatest extinction risk to least concern. There are a range of quantitative criteria for any given ranking, including **Critically Endangered** and **Endangered**; meeting any one of these criteria qualifies a species for a listing at that level of threat. To learn more, visit www.iucnredlist.org.

The **Convention on International Trade in Endangered Species of Flora and Fauna**, or **CITES**, is a global agreement between governments to follow rules to monitor, regulate or ban international trade in species under threat. Species listed under CITES are categorized into three different levels of protection. To learn more, visit www.cites.org, and to search CITES-listed species, visit www.speciesplus.net.

Appendix I includes the world's most endangered plants and animals. Commercial trade in these species, or products of these species, is banned.

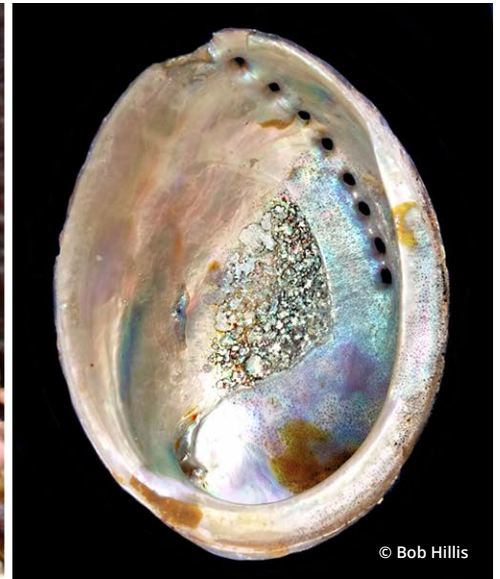
Appendix II includes plants and animals that are not yet threatened with extinction but could become threatened if trade were to continue without regulation. Commercial trade in these species, or products of these species, is allowed, but is subject to restriction.



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AT-RISK SPECIES TO AVOID:

Black abalone

Haliotis cracherodii

Northern abalone

Haliotis kamtschatkana

ABALONE

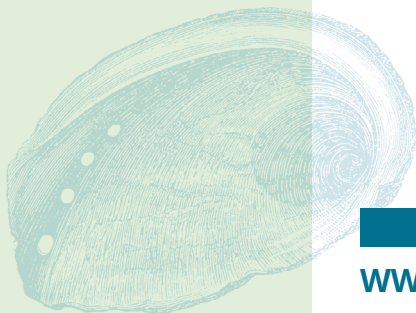
Why It's Endangered

Overfishing, disease, reduced kelp abundance, and competition with sea urchins are the main threats to wild abalone populations. Abalone are also targeted for their shells which are often sold as decorative items and as a source of mother of pearl.

Look Out For

In Chinese-speaking regions, abalone is commonly known as *bao yu*. China is currently the world's largest farmed abalone producing country; buyers who are purchasing abalone from China should encourage their producers to apply for ASC certification.

Studies suggest that without effective management, black abalone are likely to become effectively extinct within 30 years.



WWF Recommendation

Verify the origin of abalone products; avoid if you cannot verify the species. For wild-caught abalone, only source from MSC certified fisheries; for farm-raised abalone, only source from ASC certified farms.

For a list of MSC certified fisheries, visit <https://fisheries.msc.org>

For a list of ASC certified farms, visit <http://asc.force.com/Certificates>



AT-RISK SPECIES TO AVOID:

Atlantic bluefin tuna
Thunnus thynnus

Pacific bluefin tuna
Thunnus orientalis

Southern bluefin tuna
Thunnus maccoyii

BLUEFIN TUNA

Why It's Endangered

Overfishing is the primary threat to bluefin tuna populations. Effective conservation and management of highly migratory species like bluefin tuna require international cooperation as well as strong domestic management.

Look Out For

Other common names are: giant bluefin, northern bluefin tuna, tunny, and oriental tuna. When sold as sashimi, bluefin is commonly called *toro* or *otono*. In Spanish-speaking countries, bluefin is often known as *atún rojo*, translated to "red tuna" which can cause confusion. *The best way to verify the species that you are buying is to confirm the scientific name with your supplier.*

Spawning Stock Biomass (SBB) is the combined weight of all individuals in a fish stock that are capable of reproducing; bluefin's SBB is estimated to have declined by more than 80% globally since the 1970s. Stronger management measures are supporting the recovery of these stocks which remain at very depleted levels due to overfishing.

WWF Recommendation

Avoid all bluefin tuna products. While Pacific bluefin tuna is currently listed as Vulnerable by IUCN, populations are in steep decline and the current management program is not strong enough to support healthy population regrowth; the precautionary method should be applied. Farmed/ranched bluefin should also be avoided because most farms source juveniles from threatened stocks.





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AT-RISK SPECIES TO AVOID:

Queen conch
Strombus gigas

CONCH

CITES Status

Queen conch is listed on CITES Appendix II, meaning the commercial trade of the species is subject to trade restrictions. Queen conch can also be found on regional red lists, as well as being completely banned from being fished or sold in some regions.

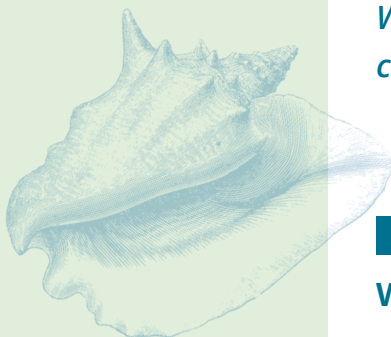
Why It's Endangered

While queen conch is not listed as Endangered by the IUCN, it is commercially threatened in numerous areas due to overexploitation for food and ornamentation. Rebuilding plans are in place, but populations continue to be threatened by illegal and unsustainable harvest.

Look Out For

In both English and Spanish-speaking regions, queen conch meat is known as *lambi*.

Queen conch was once prevalent in Florida, but populations were decimated by overfishing. Despite strict harvest controls put in place in the mid-1980s, stocks have not yet been able to fully recover. Without increased regulation and sustainable fishery management, conch in the Caribbean will likely see a similar decimation.



WWF Recommendation

Verify the origin of your conch products; avoid if you cannot verify the species to ensure you are not sourcing from at-risk populations.



AT-RISK SPECIES TO AVOID:

American eel
Anguilla rostrata

European eel
Anguilla anguilla

Japanese eel
Anguilla japonica

FRESHWATER EEL

CITES Status

European eel is listed on CITES Appendix II, meaning the commercial trade of the species is subject to trade restrictions.

Why It's Endangered

Wild populations of freshwater eel are primarily threatened by man-made barriers to upstream and downstream migration, which also includes mortality by turbines. Additional threats include, habitat loss, overfishing, disease and parasites, climate change, and pollution. Freshwater eels only breed once in their lifetime, requiring migration into marine waters to spawn, and do not reach sexual maturity until they are at least 12 or 13 years old.

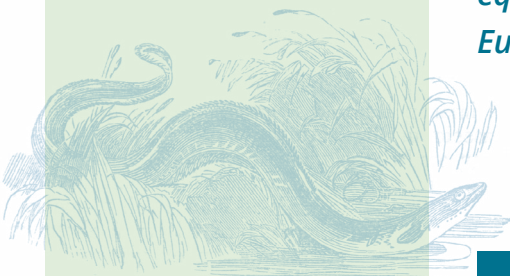
Look Out For

Freshwater eel is commonly found on sushi menus as *unagi*.

Europol estimates 100 metric tons of juvenile freshwater eels, equivalent to about 350 million fish, are illegally trafficked from Europe to Asia annually.

WWF Recommendation

Avoid all freshwater eel products until MSC or ASC certified options become available. Uncertified farmed eel should be avoided because many farms use endangered wild-caught juveniles.





AT-RISK SPECIES TO AVOID:

Atlantic goliath grouper
(Gulf of Mexico)
Epinephelus itajara

Dusky grouper
(Europe & Mediterranean)
Epinephelus marginatus

Giant sea bass
Stereolepis gigas

Gulf grouper
Mycteroperca jordani

Hong Kong grouper
Epinephelus akaara

Nassau grouper
Epinephelus striatus

GROUPER

Why It's Endangered

Overfishing, particularly when species aggregate in large numbers to spawn, is the primary threat to most grouper populations. Habitat degradation, climate change, and displacement by invasive species are also identified as significant threats.

Look Out For

In many parts of the world, such as Asia, there are currently few “good” options for wild-caught or farm-raised grouper. Where MSC certified product is not available, buyers should look to source more responsibly-produced grouper from credible FIPs or AIPs, and keep an eye on the developing ASC Tropical Marine Finfish standard.

In the Gulf of California, gulf grouper was once abundant and represented approximately 45% of the artisanal fishery in 1960; now, they make up less than 1%.

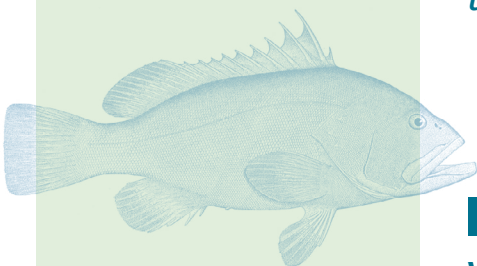
WWF Recommendation

Verify the origin of grouper products; only source MSC or ASC certified grouper, or grouper sourced from a comprehensive FIP or AIP with a workplan to reach the MSC or ASC standard.

For a list of MSC certified fisheries, visit <https://fisheries.msc.org>

For a list of ASC certified farms, visit <http://asc.force.com/Certificates>

For a list of FIPs, visit <https://fisheryprogress.org/directory>





AT-RISK SPECIES TO AVOID:

Black teatfish

Holothuria nobilis &
Holothuria whitmaei

Brown sea cucumber

Isostichopus fuscus

Golden sandfish

Holothuria lessona

Japanese spiky sea cucumber

Apostichopus japonicus

Prickly redfish

Thelenota ananas

Sandfish

Holothuria scabra

SEA CUCUMBER

Why It's Endangered

The rapid expansion of sea cucumber fisheries has caused overfishing to become the largest threat to sea cucumber populations. Low oxygen zones in coastal regions due to pollution run off and other factors also contributes to population loss.

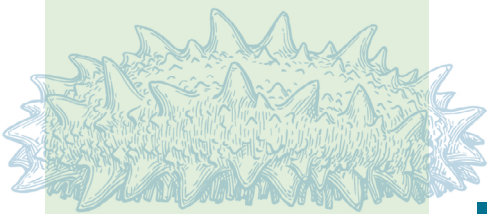
Look Out For

Sea cucumber products are primarily exported to Asia with the common names *bêche-de-mer*, *trepang*, or *iriko*. While there are currently no certified options for sea cucumber, not all species are threatened by overfishing. Refer to [IUCN's website](#) periodically to determine which species of sea cucumber are at risk and which are not, as these statuses may change over time. ASC is considering producing a standard for sea cucumber — keep an eye out for the development of this standard over the coming years.

In Fiji, over-fishing of sea cucumber (primarily driven by the China market) is leading, in-part, to the degradation of native coral reef systems; sea cucumber species can play an integral role as algae and detritus cleaners on the reef.

WWF Recommendation

Verify the origin of your sea cucumber products; avoid if you cannot verify the species to ensure you are not sourcing from at-risk populations.





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AT-RISK SPECIES TO AVOID:

Nearly 40 species of shark are currently in danger or threatened with extinction. Due to the high volume of at-risk species of shark, please see the appendix for a full list of species to avoid.

SHARK

CITES Status

Whale sharks, basking sharks, great white sharks, porbeagle sharks, thresher sharks, hammerhead sharks, silky sharks, and oceanic whitetip sharks are listed on CITES Appendix II, meaning the commercial trade of the species is subject to trade restrictions. Several countries and several states within the U.S. have prohibited the possession and/or sale of shark fins.

Why It's Endangered

Overfishing is the primary threat to shark populations. Bycatch (the incidental uptake of non-target species) of shark also contributes significantly to population loss.

Look Out For

Shark is typically served in Chinese and Vietnamese cuisine as shark fin soup. Shark meat is also consumed domestically in countries such as Japan, Korea, Singapore, Indonesia, Mexico, Ecuador, and others.

With tens of millions of sharks killed every year, they are among the marine species affected the most by overfishing; a landmark 2014 study finding that 25% (or 1 out of 4) of all species were threatened with extinction. Populations continue to decline over time.

WWF Recommendation

Do not source any shark products unless that product is from an MSC certified fishery. Currently, the only MSC certified fishery is **Atlantic spiny dogfish**. For a list of MSC certified fisheries, visit <https://fisheries.msc.org>.





AT-RISK SPECIES TO AVOID:

Nearly 40 species of skate and ray are currently in danger or threatened with extinction. Due to the high volume of at-risk species of skate and ray, please see the appendix for a full list of species to avoid.

SKATE & RAY

CITES Status

Most commercially available species of ray are listed on CITES Appendix II, meaning the commercial trade of the species is subject to trade restrictions.

Why It's Endangered

The largest threat to skates and rays is overfishing. Bycatch (the incidental uptake of non-target species) of skate and ray also contributes significantly to population loss.

Look Out For

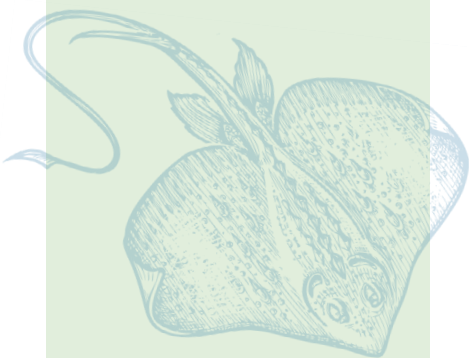
Skate meat is often sold as skate wing. Some skate, including sawfishes and guitarfishes, have fins that enter the shark fin trade. Manta rays and devil rays have gill rakers that are sold dry and used as a health tonic in Asia.

At least 20% of all species of skates and rays are in danger of extinction.

WWF Recommendation

Verify the origin of skate and ray products. Only source MSC certified skate; avoid all ray products until MSC certified options become available.

For a list of MSC certified fisheries, visit <https://fisheries.msc.org>.





AT-RISK SPECIES TO AVOID:

Nearly 20 species of sturgeon are currently in danger or threatened with extinction. Due to the high volume of at-risk species of sturgeon, please see the appendix for a full list of species to avoid.

STURGEON

CITES Status

Atlantic and shortnose sturgeon are listed on CITES Appendix I, meaning it is illegal to trade the species commercially. All Acipenser species of sturgeon are listed on CITES Appendix II, meaning the commercial trade of the species is subject to trade restrictions.

Why It's Endangered

Overfishing and regulation of river-flow are the main threats to wild sturgeon populations. Poaching, water pollution, and destruction of habitats are also identified as significant threats.

Look Out For

Sturgeon is most commonly exploited for its eggs. Sturgeon eggs, or *roe*, are processed, salted, and sold as caviar. Despite egg extraction or sturgeon harvest method, sturgeon is an extremely at-risk species; sturgeon and its eggs should be divested until stocks have stabilized.

It takes a female sturgeon about 20 years to start producing eggs. These eggs are critical to the species' future, but they are also considered a delicacy, fueling an illegal caviar market that drives poachers and traffickers around the world.

WWF Recommendation

Avoid all sturgeon products until MSC certified options become available. Farmed sturgeon should also be avoided because most farms use endangered, wild-caught juveniles.





AT-RISK SPECIES TO AVOID:

Totoaba
Totoaba macdonaldi

TOTOABA

CITES Status

Totoaba is listed on CITES Appendix I, meaning it is illegal to trade the species commercially.

Why It's Endangered

Overfishing initially caused the steep decline of wild totoaba populations. Now that all fisheries are closed, illegal poaching accounts for the continuous decline.

Look Out For

The swim bladder of the totoaba is a valuable commodity in Chinese cuisine. It is considered a delicacy and is commonly found in a soup called *fish maw*. Totoaba is endemic to Mexico's Gulf of California — any totoaba swim bladder found in China, or other countries where fish maw soup is consumed, would have been imported illegally from Mexico.

Illegal fishing for totoaba using gillnets is responsible for bycatch of the vaquita – the most critically endangered marine mammal on the planet. These fishing practices have led to significant population decline, leaving only about a dozen vaquita left in the wild.

WWF Recommendation

Avoid all totoaba products.



APPENDIX

ABALONE	Black abalone <i>Haliotis cracherodii</i> Critically endangered Northern (or Pinto) abalone <i>Haliotis kamtschatkana</i> Endangered
ARAPAIMA	Arapaima (or Pirarucu) <i>Arapaima gigas</i> Appendix II
BLUEFIN TUNA	Atlantic bluefin tuna <i>Thunnus thynnus</i> Endangered Pacific bluefin tuna <i>Thunnus orientalis</i> Vulnerable Southern bluefin tuna <i>Thunnus maccoyii</i> Critically endangered
CARP	Golden carp (or Seven-striped barb) <i>Probarbus jullieni</i> Endangered Appendix I
CONCH	Queen conch <i>Strombus gigas</i> Appendix II
FRESHWATER EEL	American eel <i>Anguilla rostrata</i> Endangered European eel <i>Anguilla Anguilla</i> Critically endangered Appendix II Japanese eel <i>Anguilla japonica</i> Endangered
GRENADIER	Roundnose (or Black or Rock) grenadier <i>Coryphaenoides rupestris</i> Critically endangered
GROUPE	*Atlantic goliath grouper (Gulf of Mexico) <i>Epinephelus itajara</i> Endangered *Dusky grouper (Europe & Mediterranean) <i>Epinephelus marginatus</i> Endangered Giant sea bass <i>Stereolepis gigas</i> Critically endangered Gulf grouper <i>Mycteroperca jordani</i> Endangered Hong Kong grouper <i>Epinephelus akaara</i> Endangered Nassau grouper <i>Epinephelus striatus</i> Critically endangered <i>*This species is not endangered throughout its range but is endangered in specific geographies</i>
GUITARFISH	Blackchin guitarfish <i>Glaucostegus cemiculus</i> Endangered Brazilian guitarfish <i>Pseudobatos horkelii</i> Critically endangered Common guitarfish <i>Rhinobatos rhinobatos</i> Endangered Stripenose guitarfish <i>Acroteriobatus variegatus</i> Critically endangered
HAKE	Senegalese hake <i>Merluccius senegalensis</i> Endangered
HALIBUT	Atlantic halibut <i>Hippoglossus hippoglossus</i> Endangered
PORGY	Threadfin porgy <i>Evynnis cardinalis</i> Endangered
PUFFERFISH	Chinese puffer <i>Takifugu chinensis</i> Critically endangered
RAY	Bentfin devil ray <i>Mobula thurstoni</i> Appendix II Brazilian cownose ray <i>Rhinoptera brasiliensis</i> Endangered Caribbean electric ray <i>Narcine bancroftii</i> Critically endangered Chilean devil ray <i>Mobula tarapacana</i> Appendix II Devil ray <i>Mobula japonica</i> Appendix II Eagle ray <i>Mobula eregoodootenkee</i> Appendix II Giant devil ray <i>Mobula mobular</i> Endangered Appendix II Lesser devil ray <i>Mobula hypostoma</i> Appendix II Lesser Guinean devil ray <i>Mobula rochebrunei</i> Appendix II Longhead eagle ray <i>Aetobatus flagellum</i> Endangered Manta ray <i>Manta birostris</i> Appendix II Monk's devil ray <i>Mobula munkiana</i> Appendix II Mottled eagle ray <i>Aetomylaeus maculatus</i> Endangered Ocellate eagle ray <i>Aetomylaeus milvus</i> Endangered Ornate sleeper ray <i>Electrolux addisoni</i> Critically endangered Ornate eagle ray <i>Aetomylaeus vespertilio</i> Endangered Pincushion ray <i>Fontitrygon ukpam</i> Endangered Reef manta ray <i>Manta alfredi</i> Appendix II Shortfin devil ray <i>Mobula kuhlii</i> Appendix II
REDFISH & ROCKFISH	Acadian (or Atlantic) redfish <i>Sebastes fasciatus</i> Endangered Bacaccio rockfish <i>Sebastes paucispinus</i> Critically endangered Shortspine thornyhead <i>Sebastolobus alascanus</i> Endangered

APPENDIX (continued)

SAWFISH	<p>Dwarf sawfish <i>Pristis clavata</i> Endangered Appendix I Green sawfish <i>Pristis zijsron</i> Critically endangered Appendix I Largetooth sawfish <i>Pristis pristis</i> Critically endangered Appendix I Narrow sawfish <i>Anoxypristis cuspidata</i> Endangered Appendix I Smalltooth sawfish <i>Pristis pectinata</i> Critically endangered Appendix I</p>
SEA CUCUMBER	<p>Black teatfish <i>Holothuria nobilis</i> Endangered Black teatfish <i>Holothuria whitmaei</i> Endangered Brown sea cucumber <i>Isostichopus fuscus</i> Endangered Appendix II Golden sandfish <i>Holothuria lessoni</i> Endangered Golden sandfish, Sandfish <i>Holothuria scabra</i> Endangered Japanese spiky sea cucumber <i>Apostichopus japonicus</i> Endangered Prickly redfish <i>Thelenota ananas</i> Endangered</p>
SEA HORSE	<p>Sea horse <i>Hippocampus</i> spp. Appendix II</p>
SEA TURTLE	<p>Atlantic hawksbill turtle <i>Eretmochelys imbricata imbricata</i> Critically endangered Appendix I Flatback turtle <i>Natator depressus</i> Appendix I Green turtle <i>Chelonia mydas</i> Endangered Appendix I Hawksbill turtle <i>Eretmochelys imbricata</i> Critically endangered Appendix I Kemp's ridley turtle <i>Lepidochelys kempii</i> Critically endangered Appendix I Leatherback turtle <i>Dermodochelys coriacea</i> Critically endangered Appendix I Loggerhead turtle <i>Caretta caretta</i> Appendix I Olive ridley turtle <i>Lepidochelys olivacea</i> Appendix I Pacific hawksbill turtle <i>Eretmochelys imbricata bisca</i> Critically endangered Appendix I</p>
SEABREAM	<p>Daggerhead seabream <i>Chrysoblephus cristiceps</i> Critically endangered Seventy-four seabream <i>Polysteganus undulosus</i> Critically endangered</p>
SHARK	<p>African spotted catshark <i>Haploblepharus kistnasamyi</i> Critically endangered Angular angelshark <i>Squatina punctate</i> Endangered Argentine angelshark <i>Squatina argentina</i> Endangered Basking shark <i>Cetorhinus maximus</i> Appendix II Borneo shark <i>Carcharhinus borneensis</i> Endangered Appendix II Broadfin shark <i>Lamiopsis temminckii</i> Endangered Daggernose shark <i>Isogomphodon oxyrhynchus</i> Critically endangered Ganges shark <i>Glyphis gangeticus</i> Critically endangered Great white shark <i>Carcharodon Carcharias</i> Appendix II Hammerhead shark <i>Sphyrna mokarran</i> Endangered Appendix II Harrison's dogfish <i>Centrophorus harrissoni</i> Endangered Hidden angelshark <i>Squatina occulta</i> Endangered Honeycomb izek <i>Holohalaelurus favus</i> Endangered Irrawaddy river shark <i>Glyphis siamensis</i> Critically endangered Long nosed shark <i>Carcharhinus hemiodon</i> Critically endangered Monkfish <i>Squatina aculeata</i> Critically endangered Monkfish, Angelshark <i>Squatina squatina</i> Critically endangered Narrownose smoothhound <i>Mustelus schmitti</i> Endangered New Guinea river shark <i>Glyphis garricki</i> Critically endangered Oceanic whitetip shark <i>Carcharhinus longimanus</i> Appendix II Porbeagle shark <i>Lamna nasus</i> Appendix II Scalloped hammerhead <i>Sphyrna lewini</i> Endangered Appendix II Sikly shark <i>Carcharhinus falciformis</i> Appendix II Slender hammerhead <i>Eusphyra blochii</i> Endangered Smooth hammerhead shark <i>Sphyrna zygaena</i> Appendix II Smoothback angelshark <i>Squatina oculata</i> Critically endangered Smoothtooth blacktip <i>Carcharhinus leiodon</i> Endangered Speartooth shark <i>Glyphis glyphis</i> Endangered Spiny angelshark <i>Squatina guggenheim</i> Endangered</p>

APPENDIX (continued)

<p>SHARK (continued)</p>	<p>Striped dogfish <i>Mustelus fasciatus</i> Critically endangered Taiwan angelshark <i>Squatina formosa</i> Endangered Thresher shark <i>Alopias</i> spp. Appendix II Tollo <i>Triakis acutipinna</i> Endangered Whale shark <i>Rhincodon typus</i> Endangered Appendix II Whitefin topeshark <i>Hemitriakis leucoperiptera</i> Endangered Whitespotted izak <i>Holohalaelurus punctatus</i> Endangered Zebra shark <i>Stegostoma fasciatum</i> Endangered</p>
<p>SKATE</p>	<p>Barndoor skate <i>Dipturus laevis</i> Endangered Common skate <i>Dipturus batis</i> Critically endangered Graytail skate <i>Bathyraja griseocauda</i> Endangered Grey skate <i>Dipturus canutus</i> Endangered Longnose skate <i>Dipturus confusus</i> Critically endangered Maltese skate <i>Leucoraja melitensis</i> Critically endangered Maugean skate <i>Zearaja maugeana</i> Endangered Rough skate <i>Raja radula</i> Endangered Sandy skate <i>Leucoraja circularis</i> Endangered Smooth skate <i>Malacoraja senta</i> Endangered Spotback skate <i>Atlantoraja castelnaui</i> Endangered Undulate skate <i>Raja undulata</i> Endangered White skate <i>Rostroraja alba</i> Endangered Winter skate <i>Leucoraja ocellata</i> Endangered</p>
<p>STURGEON</p>	<p>Adriatic sturgeon <i>Acipenser naccarii</i> Critically endangered Appendix II Alabama sturgeon <i>Scaphirhynchus suttkusi</i> Critically endangered Appendix II Amur sturgeon <i>Acipenser schrenckii</i> Critically endangered Appendix II Atlantic sturgeon <i>Acipenser sturio</i> Critically endangered Appendix I Beluga (or Giant and European) sturgeon <i>Huso huso</i> Critically endangered Chinese paddlefish <i>Psephurus gladius</i> Critically endangered Chinese sturgeon <i>Acipenser sinensis</i> Critically endangered Appendix II Dwarf sturgeon <i>Pseudoscaphirhynchus hermanni</i> Critically endangered Appendix II False shovelnose sturgeon <i>Pseudoscaphirhynchus kaufmanni</i> Critically endangered Appendix II Kaluga <i>Huso dauricus</i> Critically endangered Pallid sturgeon <i>Scaphirhynchus albus</i> Endangered Appendix II Persian sturgeon <i>Acipenser persicus</i> Critically endangered Appendix II Russian sturgeon <i>Acipenser gueldenstaedtii</i> Critically endangered Appendix II Sakhalin sturgeon <i>Acipenser mikadoi</i> Critically endangered Appendix II Ship sturgeon <i>Acipenser nudiventris</i> Critically endangered Appendix II Shortnose sturgeon <i>Acipenser brevirostrum</i> Appendix I Siberian sturgeon <i>Acipenser baerii</i> Endangered Appendix II Stellate sturgeon <i>Acipenser stellatus</i> Critically endangered Appendix II Yangtze sturgeon <i>Acipenser dabryanus</i> Critically endangered Appendix II</p>
<p>TILEFISH</p>	<p>Golden (or great northern) tilefish <i>Lopholatilus chamaeleonticeps</i> Endangered</p>
<p>TOTOABA</p>	<p>Totoaba, Drum <i>Totoaba macdonaldi</i> Critically endangered Appendix I</p>
<p>WHALE</p>	<p>Antarctic minke whale <i>Balaenoptera bonaerensis</i> Appendix I Arnoux's beaked whale <i>Berardius arnuxii</i> Appendix I Blue whale <i>Balaenoptera musculus</i> Endangered Appendix I Bottlenose whale <i>Hyperoodon planifrons</i> Appendix I Bowhead whale <i>Balaena mysticetus</i> Appendix I Bryde's whale <i>Balaenoptera edeni</i> Appendix I Fin whale <i>Balaenoptera physalus</i> Endangered Appendix I Giant beaked whale <i>Berardius bairdii</i> Appendix I Gray whale <i>Eschrichtius robustus</i> Appendix I</p>

APPENDIX (continued)

WHALE (continued)	Humpback whale <i>Megaptera novaeangliae</i> Appendix I Minke whale <i>Balaenoptera acutorostrata</i> Appendix I/II North Pacific right whale <i>Eubalaena japonica</i> Endangered Appendix I Northern Atlantic right whale <i>Eubalaena glacialis</i> Endangered Appendix I Northern bottlenose whale <i>Hyperoodon ampullatus</i> Appendix I Omura's whale <i>Balaenoptera omurai</i> Appendix I Pygmy right whale <i>Caperea marginata</i> Appendix I Sei whale <i>Balaenoptera borealis</i> Endangered Appendix I Southern right whale <i>Eubalaena australis</i> Appendix I Sperm whale <i>Physeter macrocephalus</i> Appendix I
WRASSE	Humphead wrasse <i>Cheilinus undulatus</i> Endangered Appendix II



For all other marine species such as dolphins, porpoises, and seals, please refer to IUCN and CITES assessments to identify threatened populations.