

# Sustainable seafood



Advanced fishing technology and increased take have led to the over-fishing in many poorly managed fisheries, which disrupts ecosystems and undermines economics. Poorly managed fisheries can also affect other species through habitat destruction and bycatch, the accidental catch of non-targeted species. Some fisheries are well managed to avoid over-fishing, habitat destruction, and bycatch. By supporting environmentally friendly and economically sustainable seafood, your purchasing decisions can have a positive impact on the environment and the health of your students.

**Environmental Benefits:** First, sustainable fisheries protect against over-fishing and the commercial extinction that often results. Second, well-managed fisheries avoid destructive fishing gear such as bottom trawlers, which contributed to the catastrophic collapse of Atlantic cod and major losses of other bottom dwelling species; hook-and-line fishing can reduce these detrimental effects. Third, sustainable fisheries avoid bycatch, such as the shrimp trawl netting that catches 2-10 pounds of unwanted fish per pound of shrimp caught; trap-caught shrimp avoid much of this bycatch. Finally, sustainable fisheries use nondestructive farming practices. For example, salmon farming is highly unsustainable: pens located in the ocean cause pollution, disease spread to wild populations, and genetic deterioration of wild populations, while farming carnivorous species like salmon involves wasteful increases in fishing pressure on species caught for fishmeal. Inland farming of herbivorous species such as tilapia is much more environmentally friendly. [Source: Monterey Bay Aquarium, <http://www.mbayaq.org/cr/seafoodwatch.asp>]

**Health benefits:** Although sustainable seafood does not necessarily entail greater direct health benefits, the two areas often overlap. Much of this overlap occurs because wild-caught species that are higher on the food chain, such as sharks and swordfish, are both extremely difficult to fish sustainably and generally contain higher concentrations of bio-accumulating toxins like mercury compared to more eco-friendly herbivores, such as catfish.

**Resources:** Below is a guide to sustainable fisheries (Enjoy vs. Avoid list) with an indication of which species contain elevated levels of toxins (highlighted in red). On the reverse are sample recipes for sustainable seafood. Attached is a sample of pricing and sources for sustainable fisheries from EcoFish (<http://www.ecofish.com/>). Many sustainable seafood replacements, such as U.S. farmed tilapia, farmed catfish, and farmed shellfish, will likely be easily met by your current seafood vendor without any additional cost. Please use these resources to support sustainable seafood, and do not hesitate to contact Greening Princeton ([greening@princeton.edu](mailto:greening@princeton.edu)) with any questions.

The Fish List: a guide to sustainable seafood from <http://www.thefishlist.org>; © Seafood Choices Alliance

ENJOY!	AVOID!
<p>These seafood choices are better for ocean ecosystems.</p> <ul style="list-style-type: none"> <li>Catfish (farmed)</li> <li>Caviar (farmed)</li> <li>Clams (farmed)</li> <li>Crab: Dungeness, Snow (Canada), Stone</li> <li>Halibut: Pacific</li> <li>Mussels (farmed)</li> <li>Oysters (farmed)</li> <li>Sablefish/Black Cod (Alaska)</li> <li>Salmon (wild from Alaska)*</li> <li>Sardines</li> <li>Scallops: Bay</li> <li>Striped bass (farmed and wild)</li> <li>Sturgeon (farmed)</li> <li>Tilapia (US farmed)</li> </ul> <p><small>* Fresh or canned, including chinook (king), coho, sockeye, pink, and chum salmon.</small></p> <p><small>● Elevated levels of mercury, PCBs, dioxins, or pesticides spur health concerns. Learn more at <a href="http://www.thefishlist.org">www.thefishlist.org</a></small></p>	<p>These seafood choices are associated with ecological harm to our oceans.</p> <ul style="list-style-type: none"> <li>Caviar (wild)</li> <li>Chilean Sea Bass/Toothfish</li> <li>Cod: Atlantic</li> <li>Grouper</li> <li>Halibut: Atlantic</li> <li>Monkfish/Goosefish</li> <li>Orange Roughy</li> <li>Rock cod/Pacific rockfish</li> <li>Salmon (farmed or Atlantic)</li> <li>Shark</li> <li>Shrimp (imported, farmed and wild)</li> <li>Snapper</li> <li>Sturgeon (wild)</li> <li>Tuna: Bluefin</li> </ul> <p><small>● Elevated levels of mercury, PCBs, dioxins, or pesticides spur health concerns. Learn more at <a href="http://www.thefishlist.org">www.thefishlist.org</a></small></p>

## How to use this Guide

Your seafood choices can make a difference. Not all seafood is equal. Make better seafood choices—choose seafood caught or farmed in a way that minimizes harm to ocean creatures or the environment.

Visit [www.thefishlist.org](http://www.thefishlist.org) to learn more about the partnership that created this list, other related products produced by these organizations, and how to get involved with organizations that will help you make better seafood choices.