## "The Industrial Fishing Hole" by Jon C. Malinowski, Ph.D.

If you or one of your friends orders a shrimp cocktail at a restaurant, do you ever stop to think about where the shrimp came from? How about salmon, tilapia, or catfish? In our not-too-distant past, the average American knew exactly where their food came from, but now refrigerated ships and trucks connect our restaurants and refrigerators to every corner of the world.

Aquaculture refers to the cultivation of produce in water. In addition to fish, the raising of turtles, alligators, mollusks, and even algae in controlled "farms" is common.

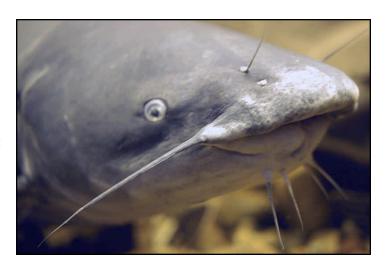
In the United States, the value of aquaculture production increased by 400 percent between 1980 and 1998. Catfish dominates the American aquaculture industry, with an estimate of over 650 million pounds sold in 2003. The industry currently has over 170,000 acres in production in the U.S. Most of the farms are found in the South, particularly Mississippi, Alabama, Louisiana, and Arkansas.

In addition to catfish, the United States produces salmon, trout, tilapia, striped bass, sturgeon, and ornamental fish. Bait fish are also included in the industry. Non-fish species include crawfish, grown primarily in Louisiana, and shrimp ponds in South Carolina, Texas, and Hawaii.

The United States, despite be-

ing a significant exporter of seafood, is also the world's second largest importer. About 429 million pounds of shrimp were imported in the first six months of 2003 alone! Thailand dominates shrimp exports to the United States, having shipped 60 million pounds of frozen shrimp in the first half of 2003 and 50 million pounds of processed shrimp products. Imports from China and Indonesia are on the rise. China also supplies a growing quantity of tilapia. The Philippines and Bangladesh are also large suppliers of shrimp.

Salmon imports to the United States total over 400 million pounds each year. Unlike the complex geography of shrimp production, most U.S. imports of salmon come from Canada and Chile.



While some see aquaculture as a great way to reduce the strain on our oceans, the industry also has its critics. Traditional fisherman are often hurt by falling prices from farm-raised fish. In addition, some worry that pesticides or hormones could harm the environment. Others worry

about farm-raised fish harming wild fish if they are mixed together.

While aquaculture is not without its problems, there can be little doubt that its importance for the American diet is increasing.

## Links:

World Aquaculture Society

Briefing Room: Aquaculture

• Northern Aquaculture

http://www.was.org/

http://www.ers.usda.gov/briefing/aquaculture/

http://www.naqua.com/

• The State of the World's Fisheries 2002

http://www.fao.org/docrep/005/y7300e/y7300e00.htm

• "Fish as Food"

http://www.nature.com/cgi-taf/DynaPage.taf?file=/embor/journal/v2/n11/full/embor285.html

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