



Factory Seafood Production

For millennia, fish have been taken from the world's oceans, lakes, and rivers and killed by humans for food. In recent decades, consumer demand for seafood has increased in the U.S., while new technologies have improved our ability to find and catch fish. Over the latter half of the 20th century, wild catches have increased by approximately 500% to nearly 100 million tons per year.

As a result, wild fish populations have been decimated. In addition to fish who are caught by factory trawling vessels, other — economically useless — sea life are caught and killed in the nets. Called 'by-catch,' these animals — including non-target fish, sea turtles, sea lions, and even dolphins — are thrown back into the water dead or dying. The U.S. government estimates more than 100, 000 marine mammals are killed every year by the U.S. commercial fishing industry, and worldwide, it is thought that approximately 8 percent (or 7 million metric tons) of wild-caught fish are considered 'by-catch.'

One agribusiness publication, *Feedstuffs*, states that:

[u]nder current management strategies of commercial harvests in open-access fisheries, such as oceans or Great Lakes commercial fisheries, increased production is possible only in the shortest runs. Every new seafood fad leads to the decimation of another species of fish... Any major increase in seafood consumption can be sustained only if the seafood is grown on farms or in other managed environments.

In a subsequent *Feedstuffs* article, agribusiness profiteers appeared undaunted by the tragic loss of sea life and proclaim that the situation "may offer opportunities for aquaculturalists to profitably produce farm-raised fish."

The quantity of farm-raised fish has doubled over the past decade and is "one of the fastest growing food producing sectors," according to the United Nations' Food and Agriculture Organization (FAO). Today, approximately one in five fish consumed worldwide is raised in captivity.

The life of a farm-raised fish begins in temperature-controlled hatching tanks. From here, small fish (called "fry") are transferred to rearing areas where they grow to maturity. The fish may be raised in highly- controlled tanks or raceways (rectangular concrete enclosures up to 20 acres in size) constructed inland, or they may be raised in artificial enclosures in coastal estuaries. Fish crowded into small areas are susceptible to disease and suffocation, as exemplified by an article from the *Cornell Countryman*, which states, "...growing 2,500 pounds of fish in 2,500 gallons of water doesn't give the fish much room to breathe..."

Raising fish in crowded, excrement-laden water necessitates the broad use of agrichemicals. An *FDA Veterinarian* article explains that fish farmers "use chemicals as disinfectants and to kill bacteria; herbicides to prevent the overgrowth of vegetation in ponds; vaccines to fight certain diseases; and drugs - usually combined in the feed - to treat diseases and parasites."

In addition, the fish industry insists that "access to spawning and production hormones is one of the 'essential and critical' needs of the U.S. aquaculture industry," as described in *Food Chemical News*. When aquaculture operates in coastal estuaries, the chemicals and waste products it generates pollute and destroy vast expanses of valuable and increasingly rare estuaries every year.

When they reach market weight, aquaculture fish are loaded into oxygenated tanker trucks bound for the kill plant. Needless to say, this is a very stressful process. *Feedstuffs* comments, "Conventional pond harvest methods, such as pond draw-down or seining (the use of nets), often severely stress or damage fish."

Upon arriving at the processing plant, the tanker trucks pour their cargo — water and fish — into large, metal, mesh cages. As the water pours through, fish who have survived the ordeal of "harvest" and transportation die of suffocation.

The ability of fish to feel pain and distress is given so little consideration that in some restaurants, fish are actually eaten alive — eviscerated, filleted, and delivered to the serving table. The eyes are covered so that the fishes will not see and react to diners reaching for parts of their bodies.

One article, written by Hodding Carter IV, describes eating a live fish in gruesome detail: "We each reached in with our chopsticks. The fish buckled... Now, as it slowly died, would it feel each piece of its body lifted away and hungrily masticated?"