

Sea Lice and Salmon Aquaculture in Maine, U.S.A.
Maine Department of Marine Resources
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Salmon aquaculture in Maine consists primarily of raising juvenile salmon from eggs to smolt stage in freshwater land-based hatcheries and then transfer to cages in the ocean to grow the salmon to market size (8-10 pounds). After smolt are transferred from the hatchery to marine cages they are carefully monitored for health issues, including sea lice infestations. Sea lice monitoring continues throughout their production lives.

Maine uses an integrated pest management program for sea lice. All farms are monitored and if any farms exceed a predetermined level of sea lice, that farm treats the fish with a sea lice control drug in their food. This treatment is administered under the direction of a veterinarian and under the supervision of the U.S. Food and Drug Administration and the U.S. Department of Agriculture. The program also requires that farms lie fallow between production crops in order to reduce any chance of lice transferring from one group of fish to the next. Because the farms lie fallow, and because they treat early before sea lice get to be a significant problem or move from farm to farm, use of the sea lice drug is minimal. Over the last three years, Maine's total use of the sea lice drug for all farms combined averaged 2.6 pounds per year. An information sheet about the use and quantity of veterinary medicines in salmon aquaculture in Maine can be found at <http://www.maine.gov/dmr/aquaculture/reports/TherapeutantUse.pdf>.

Wild salmon moving into and out of the rivers in Maine are monitored, and the vast majority of smolt caught in the Gulf of Maine have no sea lice. Mature fish moving into the rivers at spawning time are also monitored, and although sea lice have been detected on some of these fish, the majority have no sea lice, and any lice that are present will not survive long in fresh water. In Maine, sea lice from salmon farms are not currently believed to be a significant threat to wild salmon.

Maine's experience with sea lice control indicates that reports of problems in other countries with different species of salmon and different environmental conditions should not be automatically applied to the situation in Maine, which from available data appears to be well controlled. Sea lice management is an ongoing effort; to protect wild salmon, for crop protection, and for animal welfare. Maine will continue to maintain an integrated pest management program for the foreseeable future.