

Fish farm problem? Salmon diseases evolving more virulently in farms

Fish farming is one of the fastest growing food production sectors in the world, but infections caused by bacteria, viruses, and parasites cost the industry billions of dollars in worldwide losses each year. Now, emerging research suggests that diseases of farmed fish may be evolving to become even more harmful to the animals.

Mathias Stølen Ugelvik at the University of Bergen, Norway, and colleagues found that Atlantic salmon infected with salmon lice derived from two Norwegian fish farms suffered more severe symptoms than those infected with lice from wild salmon. “Salmon lice from areas with fish farming appear to have evolved toward a higher virulence as compared to salmon lice from other areas,” [said] study co-author [Arne Skorping](#)....

Aquaculture involves rearing fish at densities many times higher than exist in the wild, and now [produces nearly half](#) of all the fish we eat. But the very characteristics that make aquaculture so productive may also favor the evolution of greater virulence. According to some ecologists, fish farming may have unintentionally created a global experiment on pathogen evolution.

“The environment of intensive culture—stressed, genetically homogenous animals packed in high-density conditions—is practically a recipe for cultivating highly virulent parasites,” [said] [Tommy Leung](#) from the University of New England....

[Read the full study [here](#) (behind paywall)]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Does Farming Drive Fish Disease?](#)

For more background on the Genetic Literacy Project, read [GLP on Wikipedia](#)