Salmon Virus Indicts Chile’s Fishing Methods

By ALEXEI BARRIONUEVO
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PUERTO MONTT, Chile — Looking out over the low green mountains jutting through miles of placid waterways here in southern Chile, it is hard to imagine that anything could be amiss. But beneath the rows of neatly laid netting around the fish farms just off the shore, the salmon are dying.

A virus called infectious salmon anemia, or I.S.A., is killing millions of salmon destined for export to Japan, Europe and the United States. The spreading plague has sent shivers through Chile’s third-largest export industry, which has left local people embittered by laying off more than
It has also opened the companies to fresh charges from biologists and environmentalists who say that the breeding of salmon in crowded underwater pens is contaminating once-pristine waters and producing potentially unhealthy fish.

Some say the industry is raising its fish in ways that court disaster, and producers are coming under new pressure to change their methods to preserve southern Chile’s cobalt blue waters for tourists and other marine life.

“All these problems are related to an underlying lack of sanitary controls,” said Dr. Felipe C. Cabello, a professor in the Department of Microbiology and Immunology at New York Medical College in Valhalla that has studied Chile’s fishing industry. “Parasitic infections, viral infections, fungal infections are all disseminated when the fish are stressed and the centers are too close together.”

Industry executives acknowledge some of the problems, but they reject the notion that their practices are unsafe for consumers.
American officials also say the new virus is not harmful to humans.

But the latest outbreak has occurred after a rash of nonviral illnesses in recent years that the companies acknowledge have led them to use high levels of antibiotics. Researchers say the practice is widespread in the Chilean industry, which is a mix of international and Chilean producers. Some of those antibiotics, they say, are prohibited for use on animals in the United States.

Many of those salmon still end up in American grocery stores, where about 29 percent of Chilean exports are destined. While fish from China have come under special scrutiny in recent months, here in Chile regulators have yet to form a registry that even tracks the use of the drugs, researchers said.

The new virus is spreading, but it has primarily affected the fish of Marine Harvest, a Norwegian company that is the world’s biggest producer of farm-raised salmon and exports about 20 percent of the salmon that come from Chile.

Salmon produced in Chile by Marine Harvest are sold in Costco and Safeway stores, among other major grocery retailers, said Torben Petersen, the managing director of Marine Harvest here.

Arne Hjeltnes, the main spokesman in Oslo for Marine Harvest, said that his company recognized that antibiotic use was too high in Chile and that fish pens too close together had contributed to the problems. He said Marine Harvest welcomed
tougher environmental regulations.

“Some people have advocated that this industry is too good to be true,” Mr. Hjeltnes said. “But as long as everybody has been making lots of money and it has been going very well, there has been no reason to take tough measures.”

He called the current crisis “eye-opening” to the different measures that are needed.

On a recent visit to the port of Castro, about 105 miles south of Puerto Montt, a warehouse contained hundreds of bags, some weighing as much as 2,750 pounds, filled with salmon food and medication.

The bags — many of which were labeled “Marine Harvest” and “medicated food” for the fish — contained antibiotics and pigment as well as hormones to make the fish grow faster, said Adolfo Flores, the port director.

Environmentalists say the salmon are being farmed for export at the expense of almost everything else around. The equivalent of 7 to 11 pounds of fresh fish are required to produce 2 pounds of farmed salmon, according to estimates.

Salmon feces and food pellets are stripping the water of oxygen, killing other marine life and spreading disease, biologists and environmentalists say. Escaped salmon are eating other fish species and have begun invading rivers and lakes as far away as
neighboring Argentina, researchers say.

*Pascale Bonnefoy contributed reporting from Santiago, Chile.*

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