

Healthier Environment

The production of wild Pacific salmon at its essence costs nothing, and is a process that has been perfecting itself without human help over thousands of years. Not only do wild salmon support human diets and over 130 other species, but they are also a huge **key to the greater ecosystem**. Wild salmon bring vital nutrients from the ocean back to their natal streambeds, where - after mating and dying - their decomposing bodies release these nutrients into the water, soil, plants, and animals. Even forests grow bigger and stronger where the wild salmon still swim.

Farmed salmon cost substantially less than wild salmon and they are available year-round. But the market price does not factor in the many **“hidden” ecological costs** of salmon farms. Most are open, netted pens in coastal waters, allowing **hazardous chemicals and pesticides, waste and effluents** inside the pens to pass through the nets freely, contaminating local ecosystems. The waste settles and accumulates beneath and around the salmon farms, creating a dead, uninhabitable zone. Microscopic germs and diseases also pose big problems, infecting and weakening nearby wild salmon. **Sea lice outbreaks** in net pens are taking an especially heavy toll on wild salmon, since the sea lice can easily escape through the nets, contaminating young wild salmon as they migrate out to sea.

Non-native Atlantic salmon make up the vast majority of the output from Pacific salmon farms, and they often escape in large numbers such as when a pen is damaged by a storm or predator. Escapees pose direct threats to wild Pacific salmon by increasing competition for food and habitat, introducing diseases and pathogens originating

from the farms, and genetically degrading wild salmon stocks through interbreeding. Interbreeding threatens the **irreplaceable genetic integrity** of unique wild salmon stocks that have genetically adapted to survive and thrive in their specific streams and watersheds over thousands of years.

While salmon hatcheries are not as environmentally costly as salmon farms, improper hatchery management does add to the ecological toll on wild salmon. Since hatchery salmon are released into open waters as juveniles, they can interbreed with wild salmon and compete for food and space. Much **more careful management** of necessary hatcheries would almost certainly lead to fewer problems for wild stocks, and in certain cases could allow imperiled wild stocks to rebound to harvestable levels without the stressful influx of hatchery fish.



Rolf Sklar photo

SALMON FACTS

- > Number of Atlantic salmon escaping from a Washington state net pen in a single 1997 incident: **360,000**
- > Rivers in British Columbia in which Atlantic salmon farm escapees have been found: **80**
- > Number of pounds of fish required to produce **1** pound of farmed salmon: **3**