

Is the Pacific salmon fishery collapsing or sustainable?

BY PAOLO PIETROPAOLO, SPECIAL TO THE SUN SEPTEMBER 30, 2009

One of my favourite British Columbia rituals is a Sunday dinner honouring one of our most valued natural treasures -- wild Pacific sockeye salmon.

In the summer, I grill it on a charcoal barbecue. In the winter, I bake it with herbs and butter. In either season, it's a delicate process. It requires attention and care and a little guesswork to nail the perfect amount of seasoning and the perfect cooking time.

I've always felt good about the environmental choice I'm making by buying only wild salmon.

But now I'm wondering whether the ritual is a sustainable one, given this summer's widely reported sockeye collapse.

As a consumer, it's hard to know what to do. On the one hand, we're told the U.K.-based Marine Stewardship Council may soon bestow its coveted international certification declaring that wild BC sockeye salmon is a sustainable source of seafood.

But it's been a disastrous summer, especially for Fraser River sockeye. The fishery was closed due to the low number of returning fish, and a Toronto newspaper ran an alarming front page headline: "Salmon Run Disaster: 10.6 million sockeye expected . . . only 1.7 million came."

How can the Pacific salmon fishery be collapsing and sustainable at the same time?

You'd think someone must be getting their numbers wrong, except all the numbers are coming from one source, the Pacific Salmon Commission (PSC). Mandated by both the Canadian and U.S. governments to monitor salmon numbers, the PSC has test fisheries set up in the mouth of the Fraser River and in the Pacific Ocean straits north and south of Vancouver Island.

Each test fishery catches a sample of fish using traditional methods such as gill nets and seine boats. They also use Sonar, sending out sonic pulses from a boat that patrols the mouth of the Fraser River 24 hours a day. These pulses can be used to count the number of fish of a certain size that have swum by.

Based on these measurements, using consistent techniques year to year, scientists can estimate how many salmon they expect to return each year, says Barry Rosenberger, area director for the Department of Fisheries and Oceans in Victoria and chair of the Fraser River Panel.

However, actual salmon run numbers are affected by so many variables that the margin of error is quite wide. So, the DFO releases a range of forecasts based on a comparison to historical data and

conditions. These are expressed as numbers ranging from 10 to 90 per cent probability.

Rosenberger takes pains to point out the number reported by the Globe and Mail expresses a 50-per-cent probability that more than 10.6 million sockeye were expected and an equal probability that fewer would have come.

Those are pretty good odds, and therefore, technically, it's not correct to say that nine million fish have disappeared.

"But the single numbers make the headlines look good," says Rosenberger.

Unfortunately, the second number in the Globe's headline is not an estimated forecast. It's a shockingly low in-season count, the stark reality that has everybody worried. Rosenberger says DFO scientists are trying to figure out what happened to the fish at sea. There are a number of possible culprits, but it's uncertain when we'll have any answers.

Jeffery Young, aquatic biologist with the David Suzuki Foundation, says that aggressive promotion of the 50 per cent forecast level at the start of the season is part of the problem. "It creates a large amount of expectation in the [salmon] industry," he says.

For example, this season, DFO scientists were 90-per-cent sure there would be at least 3.5 million sockeye -- a much lower number. Young says that going into every season with a precautionary approach, by promoting the 90 per cent forecast, would lead to better management of the sockeye salmon fishery in the long run.

With so many different numbers at play, it's no surprise there were mixed messages about sustainability and danger prior to this season's Fraser sockeye collapse.

Balancing all those numbers is a tricky thing indeed. Whether you're the DFO, the salmon industry, or the media, it requires attention, care and a little guesswork.

If only there were as little at stake as the outcome of a Sunday dinner.

Where does this leave the average sockeye-loving British Columbian?

I'd rather err on the side of the salmon, so I'm going to cut back on our Sunday sockeye ritual, and follow Young's advice: "We suggest salmon is a special fish, for a special occasion."

It's the best way to continue honouring this noble creature that has given us so much.

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