



Beneath the Shell

The future of food safety for farmed shellfish

By Brian Kingzett

"He was a bold man who first ate an oyster."

Attributed to (among others)
James I, 1660

For much of the general public, illnesses associated with eating shellfish have become part of the mythology of eating them. Historically this reputation was often well earned. However, in the changing landscape of modern food production it is no longer tolerated and for the future of shellfish producers in Canada it is important to gaze into the crystal ball of food safety and predict what the future will bring.

Consider first that a single case of BSE in a Canadian cow with no associated illnesses has cost the Canadian Beef industry over a billion dollars

and counting. Farmed salmon have recently been embroiled in another debate about trace levels of contaminants from feeds while the countering argument that the health benefits of eating salmon far exceed the risks of trace contaminants has been largely ignored. In California this year, the state banned the summertime sale of oysters from the Gulf of Mexico, citing 48 deaths since 1993 related to *Vibrio vulnificus*. Increasingly food safety issues make the front page; the public is confused and our largest export market is litigious.

Fortunately for Canadian farmed shellfish there is an excellent track record of safety related in great part to clean waters and the Canadian Food Inspection Agency oversight of harvesting and processing. The world landscape is changing, however,

and existing programs will not be adequate for much longer. In order to continue in the marketplace, the future of the industry will mean that producers will take more responsibility for food safety. This future may be rosy, but it is also bar-coded and part of a HACCP program.

If you don't know the following terms start getting used to them now because you are going to be hearing more and more about them. *On Farm Food Safety* programs are where producers take control of ensuring and demonstrating that the food leaving the farm is wholesome and proving it all the way through the supply chain with *traceability* programs so that product can be tracked from "farm to fork." HACCP (Hazard Analysis of Critical Control Points) is a process-based system for designing facility food safety plans and it is actually a lot easier than the name may suggest.

Consumer-driven demand for food safety is being implemented by retailers and food service companies which are looking to minimize their liability from selling unwholesome products. Markets more than government are increasingly imposing requirements that exceed national standards.

In addition to market pressures new trade rules are also going to be important. The European Union general food law coming into effect in 2005 will demand "one-up/one down" traceability of all food products, and the US bio-security law and new Country of Origin Labelling (COOL) are requiring traceability for products entering the US.



Government departments, or at least the "proactive ones" are starting to change from "command and control" approaches for food safety management to becoming facilitators and auditors of

accommodate on-farm food safety. Already program delivery is constrained and in many cases inadequate for accommodating the increased needs of a growing aquaculture industry. The Canadian

Food Inspection Agency (CFIA) which has a more client-based approach to program delivery has so far been receptive to industry requirements when possible. Shellfish sanitary programs managed by Environment Canada however present greater

"Costco will only sell oysters that have been processed for safety purposes (supported by process validation data) and which is consistent with the standards of the Serving Safer Shellfish campaign."

– R. Craig Wilson, Director of Food Safety and Quality Assurance for Costco Wholesale, July 9th 2001.

market-driven food safety systems. In Canada, Agriculture and Agrifood Canada as part of the new Agriculture Policy Framework is sponsoring the "Food Safety and Food Quality Initiative" to promote these approaches and national industry initiatives such as the *Canadian On Farm Food Safety Program* (COFFS) and Canadian Traceability Initiative (CANTRACE).

The Canadian aquaculture industry, as the bastard child of Fisheries and Agriculture, has so far been exempt from much of the Ag-Policy Framework funding. Hopefully, lobbying from CAIA and changes with the new liberal government may alter this and these funds can be made available for aquaculture as well.

For shellfish farmed in Canada changes may be required to the way the Canadian Shellfish Sanitation Program (CSSP) is delivered to

challenges.

Suffice to say, in future there is going to be increasing pressure on the CSSP to accommodate On-Farm Food Safety and related requirements. This may require relinquishing aspects of monitoring and management to industry under government audit and oversight. If done properly, this may be able to strengthen quality assurance of farmed shellfish and help government provide better service delivery by entering into partnerships with industry. It may also require significant reform in how the federal government manages the CSSP with regards to aquaculture. Either way it's not going to be dull.

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