Talking Point: Secrecy just creates a fishy smell

IAN JOHNSTON: I have some tough questions for the Tasmanian fish farming industry.

WE must recognise that, at least in the foreseeable future, Tasmania will have a significant ocean farmed fish industry. This industry needs to remain profitable so that there is investment in continual improvement while maintaining employment numbers.

However, we must protect our Brand Tasmania. To do this it is critical the we can ensure that our salmon is sustainably produced and grown in a pristine environment. Our product should also have the health benefits of wild fish. At the moment I don't think it achieves this aim. There are solutions that are easily achievable, but first we must look at the problems.

There is widespread concern about ongoing management practises, particularly the effects of pollution on the surrounding environment.

I recently attended a talk by an Institute for Marine and Antarctic Studies scientist who is working full time on the local fish farm industry. One of his major points was in regard to the cloud of nitrogen-enriched, oxygen-poor water that the caged fish are inhabiting. These nutrients have a profound effect on surrounding waters. As nutrient levels rise, initially there is a significant increase in the growth rates of surrounding sea grass and kelp beds. But as this continues to increase, the algal slime begins to cover kelp and weed, restricting photosynthesis; eventually this causes a sudden catastrophic collapse in the ecosystem. All that is left is algal slime which does not support native fish communities.

This effect is easily observable in the Channel, Tasman Peninsula and in Macquarie Harbour. Kelp and other seaweeds form the "blue carbon" ecosystem that contributes greatly to absorbing CO2 which mitigates the effects of global warming.

Salmon living their entire lives within the fish pens must survive very high ammonia levels (a toxic chemical and very nutrient rich) in combination with low oxygen levels. This artificial environment cannot be good for their health.

The feed given to the salmon is high in protein, which promotes rapid growth rates but also increases nitrogenous waste. As much as 65 per cent of the protein content of the feed is excreted into the environment, mostly as ammonia excreted from fish gills. According to the industry, it takes 2kg of wild fish to grow 1kg of salmon.

I understand that there is a strong inducement to breed fish for rapid weight gain and high fat content (twice that of wild fish). Wild salmon meat has an approximately equal amount of omega 6 to omega 3 fatty acid content. In farmed salmon, however, the fatty acid ratio is skewed, with omega 6 much higher than omega 3 fatty acid levels. Omega 6 fatty acid is already overabundant in western diets, especially high in processed foods, and considered by some nutritionists to be unhealthy for humans. This information should be readily availability to the public.

Many of the current problems would be minimised if the industry were to significantly reduce the fish density in the shallow waters of the Channel, Macquarie Harbour and the

Peninsula until there is a demonstrable improvement in the health of the marine environment surrounding fish farms. This should include:

- REDUCING stocking densities in sheltered water cages by at least half, possibly by moving fish into deep water ocean pens. (At the moment the farms want to expand greatly into Storm Bay without reducing stocking densities).
- REDUCING the proportion of protein in the feed to reduce the growth rates and fat content of fish as well as reducing nitrogenous waste.
- FOCUSING husbandry practises and breeding on fish flavour, texture and nutritional value rather than fast growth rates.

The resulting product will be healthier, fitter fish that come closer to having the benefits of wild fish and that are produced in an ecologically sustainable manner. This should not result in a loss of jobs in the industry. Most importantly, the result will have the benefit of restoring the ecology and social license to the salmon farming industry.

Our fish farming industry could then rightfully claim that they are producing the best, healthiest, tastiest and most ecologically sustainable farmed fish grown in the cleanest waters in the world.

This is entirely in keeping with our vitally important Brand Tasmania image.

This product, considered as world best practice, would sell at a price premium. There are many profitable Tasmanian businesses which sell world class products at a price premium

We cannot afford to have another massive fish kill, of over 1 million fish, particularly if it next occurs in the D'Entrecasteaux Channel.

Some questions directed to the salmon industry:

- Do you concede that the algal slime found throughout the channel and Macquarie Harbour is a result of excess nutrient loading, primarily from fish farms?
- What is the omega 3 to omega 6 ratio in your product and how frequently is this monitored?
- Do current stocking densities compromise the immune functions of salmon and make them more susceptible to disease and parasite infection?
- Are there artificial flavours, colourants, antibiotics or other veterinary treatments or other modifications to salmon diets that are detectable in the water column and/or the product?

To counteract these concerns and criticisms, the industry needs greater transparency in their actions to redeem their social license so the community can allow them to borrow OUR environment for THEIR economic gain.

Ian Johnston is the author of The Shank. He is a founder of the Australian Wooden Boat Festival, a professional yachtsman, teacher and boat builder. He has worked on a fish farm in Macquarie Harbour.

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