

Sustainable Seaweed Management

Jill Bradley, Director, AgriSea New Zealand

Jill is a Director of AgriSea NZ Ltd, a family owned and operated company based in Paeroa, Waikato. Their family operates two companies, AgriSea NZ and Ocean Organics. They produce liquid seaweed concentrates for the home gardener, and pasture and animal health concentrates for agriculture and horticulture. Tim Haggitt, a seaweed expert, accompanied Jill to the hui and would be explaining the aquaculture research projects underway in the Bay of Plenty.

It was refreshing for both Jill and Tim to be at the hui and discussing seaweed in environmental, social and cultural terms. So often their discussions are around the commercial industry's effort to bulk-harvest for maximum economic benefit.

Jill's family companies only use beach-cast seaweed, never attached, living plants. The 20-year moratorium on issuing new permits to harvest living seaweed has restricted commercial extraction and potentially risky practices. Prior to the moratorium there were dealers who were the 'middle-men' between the harvesters and the commercial industries, with very little control over methods and sustainable management.

Jill advised their target species is the native *Ecklonia radiata*, which is prolific in the northern regions. Jill's son Tane travels the country collecting seaweed direct from the local people who harvest the seaweed off the beach. This helps to build relationships and ensure sustainable harvesting.

Seaweeds are the bottom of the marine trophic level.

"There is no other single fishery in this country that has the potential to negatively affect almost every other high-value inshore fishery." So when the Ministry of Fisheries talks about putting seaweed into the quota management system, as they had recently, that may not be the optimum management framework.

In the mid-1990s a group of seaweed experts gathered in Wellington to discuss the sustainability of seaweeds. These people were very conscious of the need for sustainable development of seaweeds. They formed the Seaweed Association of New Zealand (SANZ). The patron of SANZ is Jeanette Fitzsimons. Dr. Wendy Nelson (NIWA) and Dr. Lesley Rhodes from the Cawthron Institute are also involved in SANZ.

Jill brought along to the hui SANZ material and explained that they have a guiding principle and objectives which include:

- ⇒ To promote and ensure the ecological sustainability of seaweed in New Zealand; and
- ⇒ To build a long-term, sustainable seaweed industry for our country.

Organisations with similar environmental principles are welcome to join SANZ. Visit www.sanz.org.nz for more information.

New Zealand is a small country and SANZ appreciates the need to explore our resources and export goods to sustain our nation. SANZ agree with the quota management system overall. However, SANZ definitely disagrees with managing seaweeds within the quota management system, as it currently operates.

SANZ has made a point of getting to know each Minister of Fisheries and explaining the downsides of some management proposals and the multiple benefits of sustaining healthy seaweeds.

At this stage the potential exists for New Zealand to develop a local management system (LMS) for seaweeds whereby it is not sold off as a private property right through the quota management system. The local management system could be managed by ensuring:

- ⇒ Only licence holders commercially fish for seaweed;
- ⇒ One local commercial seaweed fisher per area;

Potential seaweed fishers research their local fisheries to determine –

- ⇒ When the seaweed spores
- ⇒ When the seaweed grows
- ⇒ When not to cut seaweed
- ⇒ How big (or limited) the seaweed cutting swathe should be.

Fishers submit an annual plan for their harvesting area as part of a longer, five-year plan. This plan could contain details such as –

- ⇒ How much harvesting the local area can sustain; and
- ⇒ Harvest area and biomass controls to ensure other species are not affected by widespread extraction i.e. trophic linkages are maintained.

AgriSea has committed to only gathering beach-cast seaweed until more is known about the potential effects of harvesting attached, living seaweeds.

Jill's family is currently funding Tim Haggitt's research into sustainable management of attached, living seaweeds because there is no government funding available. They are happy to fund the five-year research programme because it is vital for the long-term health of the future proposed seaweed industry and the coastal marine ecosystem.

It was encouraging that the Minister of Fisheries, Phil Heatley, recently agreed, in principle, that no other seaweeds will be introduced into the quota management system until at least 2011, when initial results from Tim's research will be available.