



shellfish culture

shellfish culture newsletter Spring 2011

Record stock on hand

A concentrated effort at Shellfish Culture over the last two years to build stock numbers has paid dividends. Kerry Wells, SCL's General Manager, says at the start of this financial year SCL had a record over-wintered stock on hand of 156 million.

"To achieve this, SCL implemented a number of risk mitigation strategies," says Mr Wells. "Initially there was a redistribution of the available employee expertise."

R&D Manager, Mr Michel Bermudes, was appointed to the role of Bicheno Area Manager, with responsibility for overseeing production at the hatchery. "Michel's expertise adds considerable depth of experience, and a valuable opportunity for mentoring the team at Bicheno.

"Consistent successful batch production from the Pipe Clay Lagoon R&D hatchery has also established the commercial viability of this facility which has been an important innovation in spreading SCL's production risks".

The third element of the long-term production consolidation process was the negotiation of an agreement with Spring Bay Seafoods to add additional redundancy to SCL's production targets.

SCL has also undertaken an extensive review of its standard operating procedures (SOPs). The company's SOP manual now incorporates quality management, OH&S requirements and maintenance schedules. This is a complete handbook that covers every aspect of the business from hatchery and nursery right through to administration and sales.

SCL's association with NSW Fisheries continues on a number of levels including training opportunities for SCL hatchery employees. Rosie Bennett and Elise Wilson have spent a week at the Port



Record over wintered stock at Shellfish Culture

Stephens Fisheries Research Centre observing hatchery practices at the facility. Both returned to their respective hatcheries where they introduced new equipment and improved processes. Employee training is ongoing as the Company progresses towards a versatile and multi skilled workforce.

- **An excellent start to production this season has added considerably to SCL's overwintered stock on hand numbers. Consequently SCL is now accepting additional orders, of standard, spawnless and thoroughbred stock, for delivery during January through to May.**
- **For the third season SCL has produced good numbers of ASI Line 8A; a known performing batch. This line has been achieving excellent results in Tasmania, South Australia and NSW for the last two years. SCL is now accepting additional orders for this first-rate ASI line.**



Kerry Wells: "we've implemented risk mitigation strategies"

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Water quality focus

Shellfish Culture's Bicheno hatchery is making big strides in water quality management as part of the company's overall risk management strategy.

The hatchery's water is sourced from the ocean at Bicheno on Tasmania's East Coast, in an area known as the Gulch, and the actions of sea swells, current patterns and weather can cause sudden and unpredictable changes in the quality of the water.

Michel Bermudes, SCL's area manager, says the company has put in place a strategy to manage water quality by better understanding the causes of variations in local water quality, and how to protect the larvae grown in SCL's Bicheno tanks.

"We've now adopted a wholistic approach to water quality management. We basically try to have as much control as we can over everything that goes into a larval tank from the seawater drawn at 15m depth to the algae that is being put in the tanks. We're also reducing or eliminating the use of chemicals.

"On the ground this means adhering to strict schedules and protocols when it comes to production and maintenance. The background work to this approach is a bit more in depth than this with a mix of common sense, consulting with experts in the field and our own research. A lot of the way we do things now is evidence based."

This evidence based approach is being applied to water quality management. "Of all the factors we are trying to control in the hatchery, water quality is the big black box. There is very little knowledge and expertise out there, so we're creating our



Bicheno tanks: big strides in water quality

own technology in this area. We monitor the state of the water off the Tasmanian East Coast very closely. Just a few miles apart, you can experience major variations in water temperature and levels of phytoplankton.

"Water quality can change overnight and so we now have a monitoring system in place to regularly sample the water we're taking from the ocean."

New filtration systems have been installed to remove wild plankton from the water used by SCL's hatchery. "Not only do we monitor changes in water quality to better understand the Bicheno site but we're also working on ways of improving

water quality. Algal cells can produce and contain all sorts of compounds and bacteria that we don't want getting into our tanks," says Michel.

In addition, water pumped into the hatchery settles in tanks for several days, which Michel says improves water quality considerably.

Within the hatchery, a strict maintenance regime ensures that pipes around the tanks are cleaned regularly, and the major intake pipe from the Gulch is cleaned out every three months.

"It's all about risk management through a rigorous monitoring and maintenance regime", says Michel.

New Purpose Statement

During the course of the year SCL staged Strategic Planning sessions. Central to the outcomes was a reassessment of the company's goals. Its new Purpose Statement says:

We will create value by producing premium quality oysters that meet customer needs.

Value means creating value for our customers, shareholders and employees.

Premium quality means adherence to the SCL SOP's and quality standards for all grades and sizes.

Customer needs means: those product and service attributes that the customer requests and is prepared to pay for.

An oyster, SCL's principal product, now features in the company's updated logo. The new image is a more accurate reflection of the objectives and direction of today's Shellfish Culture Limited.

Resurgence on the Hawkesbury

Hawkesbury oyster farmers are looking forward to a profitable Christmas based on a mix of Pacific spawnless oysters and some Sydney Rock Oysters just seven years after the QX parasite devastated oyster beds in the Hawkesbury River.

The Broken Bay Oyster Association, representing Hawkesbury River farmers, says the industry is back on its feet after “basically re-inventing itself” as fourth generation oyster farmer and President of the Association, John Stubbs, put it.

The Association is once again the major supplier of oysters to the insatiable Sydney oyster market, and has recently won a Sydney Fish Market Award for Excellence in Environmental Practice.

Following the QX event, the Association was given a Government grant and cleared some 8,000 tonnes of material from the Hawkesbury, mainly dead Sydney Rock oysters and derelict infrastructure. Then the Association restructured its operations to become a group of farmers of Pacific spawnless oysters, with a small blend of Sydney Rock Oysters, rather than attempting to re-establish as a wild oyster fishery.

“Now we’re mostly growing marketable size Pacific spawnless oysters in ten to 12 months, rather than the wild native oysters which took up to three and half to four years to grow,” says John.

“We’ve had enormous help throughout our recovery period from the state Government,

and we’ve also forged close links with our two neighbouring councils, Hornsby and Gosford. We now have what we believe is an industry first MOU with Hornsby Council to cover any downgrade in our harvest area classification and cements our close relationship into the future.

“The Association also takes its hat off to the support of Shellfish Culture in helping us to get back onto our feet so quickly. Even when SCL had its own production issues a couple of years ago it bent over backwards to keep us in the loop and used the Port Stephens hatchery under license to supply us with spat.”

This year will see Association members producing eight million oysters worth some \$4.5 million at the farm gate, compared to \$5 million in annual production before the QX parasite struck. “We’re almost back to where we were. It has happened faster than we originally thought, and our industry is now having far less impact on the river than before the QX outbreak.

“Through adversity we have had to open our eyes and adjust to change, we have looked over the fence into other states and even now grow a different species of oyster. I would encourage oyster farmers from New South Wales, Tasmania and South Australia to try and attend field days etc in the other states and I am sure that they will benefit from the experience.

“The long and the short of it is we all grow oysters and want more people to eat them,” says John.



Hawkesbury River farmer John Stubbs. The stock John is holding is from the spawnless batch which was delivered, at 2240 size, in August 2011. Much of the batch is already up to 6000 screen

Pacific Oyster Mortality Syndrome (POMS)

Good news for the Pacific oyster industry. All oysters tested under the national testing program for POMS have proven negative (apart from those from the Georges and Parramatta River systems).

Shellfish Culture is closely involved in the counter measures against POMS. In Australia, the virus is currently contained to parts of NSW, and Shellfish Culture is working cooperatively with the industry and authorities to make sure it doesn’t spread.

POMS first appeared in Europe about four years ago. The oyster harvest this year in Europe is down about 40% because of the virus. It spread

to New Zealand last year, and also to NSW where it appeared in two river systems.

“So far it is isolated to NSW, but we’re taking it seriously enough that we’re putting major resources into the fight against it,” said Scott Parkinson, SCL’s Breeding Manager.

Scott has visited New Zealand to gain an appreciation of what happened there, and what actions and precautions were put in place. He also attended an expert workshop on POMS in Cairns in July, and is a member of a national working group, run by Oysters Tasmania and funded through the FRDC.

As a result of its growing knowledge base of

POMS, SCL has set in place three priorities:

- to gain a full understanding of the virus
- to promote best practise bio security between the states, within Tasmania, and within SCL
- to implement a stringent testing program to monitor the health of SCL’s own oysters.

“It has been hypothesised that the international spread of POMS may have taken place in association with bio fouling – oysters attached to the hulls of ships. It’s a disease characterised by high mortality in Pacific oysters with no human health concerns.”



Staff Profile Jacqui Singleton

When customers phone Shellfish Culture, chances are the first person they talk to is Jacqui Singleton.

Jacqui joined Shellfish Culture in November last year as an Administration Assistant. With 25 years' experience in office administration, her work at Shellfish Culture provides her with plenty of variety.

"I'm the sort that likes to be doing different things," says Jacqui, whose duties range from customer liaison and invoicing to book keeping and paying the wages at Shellfish Culture.

Jacqui joined Shellfish Culture after moving from Launceston when her husband was transferred to Hobart. She had spent many years working with the Thoroughbred Racing Council in Launceston.

Her family has taken up residence at Sandford. "It's only a 15 minute drive to work at Pipe Clay Lagoon, so it's a great location for quickly getting to and from work," says Jacqui.

The Shellfish Culture Ltd. website has been improved

With the rebranding of Shellfish Culture Ltd, it was decided that the website needed to be updated.

It contains links to industry bodies, oyster farms and research and development organisations, and past editions of the Shellfish Culture Ltd newsletter can also be found.

Go to www.shellfishculture.com.au

Oyster Symposium



The 4th International Oyster Symposium held in September was a huge success and showcased the Australian industry.

The Symposium was organised by the World Oyster Society, Oysters Tasmania and NSW Industry Investment and carried the theme: Embracing the Future through Innovation.

SCL sponsored the Symposium dinner which was a great final event. Some 70 conference delegates attended a tour of SCL's Pipe Clay Lagoon hatchery on the afternoon following the dinner. Industry figures expressed gratitude to SCL for sharing tetraploid and triploid technology through presentations by guest speakers Stan Allen and Penny Miller.



Pipe Clay Lagoon hatchery tour

Translocation

New translocation protocols have come into force in NSW as of late August 2011.

All Pacific oysters now entering NSW from Tasmania require not only histological health certification, but certification free from OSHV-1. As part of stock movements into NSW

this financial year four batches of stock, both spawnless and standard, have all returned negative results. Another positive for the health of Shellfish Culture stock.

SCL staff are keeping in close contact with bio-security departments in Tasmania, South Australia and NSW and will continue to work with them in the development of any further amendments to translocation protocols.