



Aquaculture

News

Issue 17 December 2014

Congratulations NSW Permit Holders

The value and volume of aquaculture production for 2013/2014 has risen from \$50.1 to \$53.3 million. This is due to an increase in production of 7% for Sydney Rock Oysters (SRO) and 29% for the land based sector.

SRO growers increased production by 111,032 dozen worth \$2 million. There has also been a 2.4% rise in the average farm gate price of SRO over the three oyster grades. This is an outstanding result and reflects the hard work and initiatives of growers in recent years to adopt new technology, develop Environmental Management Systems (EMS), fight for water quality protection and work collectively to promote what is a unique seafood product.

Murray Cod production was the standout in the land based sector increasing in value by \$1 million. Farmed Black Tiger Prawns had a 29% increase in volume with a stable farm gate price. Mulloway, Silver Perch and Barramundi all had increases in volume and farm gate price, while Rainbow Trout and Yabbies had increased production but a slight decline in price.

This year there was an improvement in the number of production forms being returned by the due date. This positive response may have been assisted by a simplification of the forms, as well as the SMS reminders. This is appreciated and allows us to provide the Provisional Aquaculture Production Report promptly.
Contact: Sheree Livingstone DPI 4916 3808

Community engagement and aquaculture

At the World Aquaculture Conference in Adelaide in June one of the key areas of discussion was that of community perception of aquaculture and how industry interacts with stakeholders. This is often referred to as 'Social Licence to Operate'.

The NSW oyster industry has taken on a number of initiatives to raise the profile of its contribution to coastal communities. Some examples include: supporting estuary clean up days; developing EMS; releasing promotional videos; developing Oyster Trails; conducting

estuary tours and educating students through school programs. On the inland, land based farmers are also promoting sustainable aquaculture and its contribution to regional economies.

Narrabri Fish Farm (NFF) has shown how public involvement in local events that showcase their activities can create acceptance and a greater understanding of aquaculture in the community. NFF, a newly owned native fish hatchery and farm, held the inaugural "Biggest Fish Release" at Narrabri this year. The event attracted hundreds of locals and visitors. A total of 65,000 Murray Cod and Golden Perch were stocked into local waterways. There was also an educational stall, a colouring competition, Yabby races, casting competition and a fake carp throwing competition. Surrounding schools regularly have excursions to the farm and are taught about aquaculture and the local fish stocking program for the Namoi River system. Social media is a big component to promote the farm. Facebook, Trip Advisor and Twitter are used as key tools for educating the public. NFF takes part in many community events including the monthly markets and Christmas parade. NFF also attends agricultural field days to display products and raise the profile of aquaculture. NFF is fast becoming a major tourist attraction allowing people to catch and release fish and Yabbies.

Contact: Rick Cunningham NFF 6792 2217



A future Narrabri fish farmer? (Courtesy V Rendulic)

Record keeping saves oyster farmer

In October 2013 food borne illness outbreaks from two Queensland restaurants were initially linked to oysters from a NSW business. Shellfish harvest areas must be closed if they are confirmed as the source of an illness outbreak. Once implemented, a closure is likely to be in place for several months at least. As the main harvest period for the area was about to commence, such a closure would have devastated the local oyster industry impacting some 20 oyster farming businesses.

The NSW Food Authority investigated the implicated oyster farmer. He was proven to have well maintained records. The batch of oysters sold to the Queensland processor could be quickly traced back to a single oyster lease. This lease had recently been sampled under testing conducted by the Local Shellfish Program with excellent water and shellfish results. Oysters from the same batch harvested by the oyster farmer were also shipped to three other processors. That week four other batches from the same lease were supplied to a total of seven businesses. Records were very thorough with a separate product record book page used for each harvest occasion and salinity was recorded for each harvest. The other buyers were surveyed with none reporting illnesses associated with oysters harvested from this lease during the period that the implicated batch was harvested. This information was supplied to the local public health service in Queensland who agreed that there was sufficient evidence to eliminate the harvest area as the source of the outbreak. It is possible that a sick food handler at the processing plant or restaurant level was responsible. This demonstrates the importance of good record keeping and product traceability in protecting food businesses from activities that are beyond their control.

Contact: Anthony Zammit NSWFA 9741 4749

Aquaculture Research oyster breeding update

Current research for SRO is focused on improving the methods used for selective breeding. For Pacific Oysters the focus is on developing resistance to POMS (Pacific Oyster Mortality Syndrome) in collaboration with CSIRO, Australian Seafood Industries (ASI) and Elizabeth Macarthur Agricultural Institute (EMAI). POMS quarantine closures in the Georges and Hawkesbury Rivers remain in force and restrict access to winter mortality and QX disease exposed SRO broodstock. To manage this impact SRO broodstock, that have never been in these estuaries, have been distributed to Merimbula Lake and Clarence River for exposure to winter mortality disease and QX disease, respectively, to enable selection and breeding from disease survivors. These broodstock will be used to supply hatcheries and industry while improved breeding techniques for SRO are developed. This will involve changing over from a

mass selection program to family-based breeding to enable multiple trait selection (e.g. disease resistance, fast growth and condition). The heritability for meat condition and QX disease have been calculated and production of single pair mated families required for this new program is planned to occur at Port Stephens Fisheries Institute (PSFI) in January.

A temporary hatchery was set up at Mooney Mooney on the Hawkesbury River to produce Pacific Oysters for a commercial experiment to examine gains made through selective breeding for resistance to POMS. Three different lines were produced for this work: an ASI family line using disease exposed broodstock; an ASI family line using non-exposed broodstock; and a wild Pacific Oyster line that used POMS survivors as broodstock. Spat for the trial has been obtained for each line and are presently being managed in a way to reduce the risk of exposure to the virus before the commercial trial begins in the Hawkesbury River and Georges River. Additionally, 80 ASI Pacific Oyster family lines were placed into Georges River in November for a POMS field challenge to collect further data on breeding for resistance to this disease.

Contact: Michael Dove DPI 4916 3807

SMS service

To improve communication with the aquaculture industry, NSW DPI has implemented a SMS notification service. This service provides permit holders with quick and easy access to important industry alerts or reminders. Feedback from industry on this service has been very positive. Currently, we are reaching 82% of our permit holders through this SMS service. If you have a mobile number and are not receiving these SMS alerts please contact us.

Contact: Aquaculture Administration DPI 4982 1232

Aquaculture Committees Updates

Single page meeting summaries are placed on the website for the:

Ministerial Fisheries Advisory Council

<http://www.dpi.nsw.gov.au/fisheries/consultation>

Shellfish Committee

<http://www.foodauthority.nsw.gov.au/industry/industry-sector-requirements/shellfish/nsw-shellfish-committee>

Aquaculture Research Advisory Committee

<http://www.dpi.nsw.gov.au/fisheries/aquaculture/committees/arac>

Land Based Aquaculture Consultative Group

<http://www.dpi.nsw.gov.au/fisheries/aquaculture/committees/land-based>

Marine Aquaculture Research Lease

Since the granting of the development consent for the lease in 2013, DPI has run an "Expression of Interest" process to secure a suitable research partner. Work is underway to have sea pens in the water in 2015 to focus on Yellowtail Kingfish culture. The information obtained from the research activities on the lease will be used to develop a NSW Marine Waters Sustainable Aquaculture Strategy.

Contact: Ian Lyall DPI 4916 3856

State Aquaculture Steering Committee

The Committee was first established in the mid-1990s to identify and resolve constraints to aquaculture industry development in this state. It brings relevant agencies together to progress commercial aquaculture in NSW. The Committee has assisted with the development and implementation of Oyster and Land Based Sustainable Aquaculture Strategies and most recently it assisted with the State Significant Infrastructure applications for the Marine Aquaculture Research Lease (2012) and Commercial Shellfish Leases in Jervis Bay (2013).

Scott Hansen, DG DPI, chaired a meeting of the Committee on 7 November. Outcomes of the meeting included: support for the development of a new strategy for marine waters in NSW; the development of guidelines called 'Healthy Estuaries for Healthy Oysters' to further protect oyster harvest water quality; revising the 'Incident Response Protocol: Aquaculture Estuaries in NSW'; and identifying and addressing key impediments to aquaculture investment in NSW.

Contact: Ian Lyall NSW DPI 4916 3856

Sydney Royal Aquaculture Competition



Oyster Judges at work

The Sydney Royal Fine Food Show has evolved as new classes and competitions are added to reflect changing trends in the Australian food industry and in consumer tastes. Since 2001 the Sydney Royal Aquaculture Competition has attracted some of the best farmed seafood across Australia. The competition has provided the Australian aquaculture industry the opportunity to promote quality standards and benchmark their products

against other growers. This has led to some interesting interstate rivalry and bragging rights. The key advantage of being involved in the Sydney Royal Aquaculture Competition is the marketing support medal winners are offered. Gold, Silver and Bronze medal winners receive a certificate and a medal marketing toolkit. Medal-winning products are used for functions and related events, and media and chefs are invited to participate at the event to learn about aquaculture and the judging process. A revised judging format that combines the summer and spring competitions will be offered to Australian producers in 2015 with entries closing 7 January 2015.

Contact: Katie O'Farrell RAS 9704 1351

www.sydneyroyal.com.au/finefood

North Coast aquaculture meeting

Nortec, a north coast recruitment and training group, organised a meeting with Clarence Valley aquaculture businesses to look at industry development issues in September. Issues raised in discussions included: land use planning and residential/business encroachment on existing farms; cost of electricity; marketing certification; managing predation; and EPA discharge licences. These issues were also discussed with the Land Based Aquaculture Consultative Group. Representation was made to: local Council and the Department of Planning and Environment on land use planning; NSW Farmers Association for advice on how their chicken industry members collectively bargained for an electricity discount; and EPA, to contribute to a simplification of the discharge licence conditions. Information on motion sensor sprinklers and laser bird scarers was also provided. There are multiple marketing certification schemes for aquaculture products in Australia depending upon the market where product is destined.

Contact: Ian Lyall DPI 4916 3856

E-business

DPI is looking to improve its online services for the aquaculture industry by developing a webpage that will allow permit holders to: submit application forms; access their permit / lease / farm holdings; submit their aquaculture production returns. Development of these online services will start in 2015.

Contact: Raelene Trenaman DPI 4916 3843

Permit Holder information on the web

The following resources have been compiled on the website specifically for current permit holders: Latest News; Port Stephens Updates; Aquaculture Newsletters; Aquaculture Industry Directory; Committees Updates; Forms & Fees; Oyster Shipment Information; Videos; Sustainable Aquaculture Strategies; Best Practice Guidelines and Grant Funding.

<http://www.fisheries.nsw.gov.au/aquaculture>

Breeding fish, do we just add water?

Riverina residents interested in native fish attended a community seminar in December at Narrandera Fisheries Centre to learn more about the departments fish breeding and stocking program. The seminar was presented by Matthew McLellan, DPI Hatchery Manager, at the Narrandera Fisheries Centre (NFC). The seminar explained the history of fish production at NFC over the past 50 years and the current inland fish stocking program of native species to enhance recreational fishing opportunities for the one million recreational fishers in NSW. Participants toured the facilities at the John Lake Centre, including the native fish aquarium.

Contact: Matt McLellan NFC 6958 8200



Murray Cod, a favourite of fishers

Oyster economic development strategy

Developing a priority list of actions to improve the profitability of oyster farming businesses is a key action agreed upon at the NSW Shellfish Committee. Industry representatives Ian Crisp, Kel Henry, Kevin McAsh, Tony Troup, and Noel Baggaley are developing this project. The group have received in-principle support from the Aquaculture Research Advisory Committee for funding to get expertise to assist develop the strategy.

Contact: Ian Crisp 0427 394 388

Congratulations OceanWatch 25 Years

OceanWatch celebrated 25 years of work with the Australian seafood industry on World Fisheries Day, 21 November. OceanWatch was created in 1989 to address issues of contamination in fish around Sydney's old cliff face sewage outfalls. At the time Peter Doyle pushed for the seafood industry to become more closely involved in environmental management issues. He convinced the then Fish Marketing Authority, professional fishermen and the Master Fish Merchants Association to establish and fund a body to promote the industry's needs for good environmental management. This work also supports the NSW oyster industry.

Brisbane Water Oyster farmers launched their EMS on 9 November with Member for Gosford Chris Holstein MP.

On 26 November, a workshop was held in Sydney to encourage the exchange of ideas about natural resource management initiatives for the NSW oyster industry. The workshop was attended by 25 participants with representation from industry, Hunter Local Land Services, Greater Sydney Local Land Services, South East Local Land Services, OceanWatch, DPI, Sapphire Coast Wilderness Oysters, Australia's Oyster Coast, Hornsby Shire Council, Oysters Australia, NSW Food Authority and NSW Farmers Association. The Tilligerry Port Stephens EMS is due for release shortly.

Contact: Andy Myers 0488 656 366

Oyster farm profiles

Joe Thompson and Brian Hughes of the Hunter Local Lands Services (HLLS) organised a workshop at XL Oysters at Lemon Tree Passage on 28 November to develop profiles on oyster farmers businesses. The aim is to use the information to better target services and grant funding to improve the performance and profitability of oyster businesses. Don Burgoyne and Mark Salm began the afternoon with an outline of their business and how by trial, error and innovation they have built up their oyster farm. Over 30 farmers from across Port Stephens attended the event. This followed a similar event in Wallis Lake earlier in the month. HLLS are also working with Wallis Lake growers to develop oyster farm profiles and discuss grower ideas about how they want to improve their operations. HLLS are looking to work with DPI and industry to run an oyster field day in the Manning in 2015.

Contact: Joe Thompson HLLS 0429 669632



Don Burgoyne at XL Oysters shed and Port Stephens growers

New policies

DPI is preparing an artificial oyster reef policy and a new policy for managing Pacific Oysters on leases after discussions at the Shellfish Committee meeting 19 November. Site inspections for oyster reefs and drafting will commence in the New Year.

Contact: Tim Gippel DPI 4916 3823

Permit Condition Review

Simplified Aquaculture Permit Conditions were agreed to at the Shellfish Committee and the Land Based Aquaculture Consultative Group meetings. New Aquaculture Permits and Conditions will be issued in the New Year.

Contact: Raelene Trenaman DPI 4916 3843

Yabby Field Day

The NSW Aquaculture Association is holding a Yabby farming field day at Griffith NSW on 13th March 2015. The field day will cover general information on farming. See <http://nswaqua.com.au/yabby-farming-field-day-griffith-nsw-13th-march-2015/>

Contact: Rob McCormack NSWAA
secretary@nswaqua.com.au

Port Stephens Pacific Oyster mortality investigation

The Aquatic Biosecurity unit has completed its investigation into unexplained mortality in Pacific Oysters in Port Stephens. The involvement of a transmissible infectious disease agent as a cause of mortality has been ruled out. In response to an invitation by south-coast oyster growers, Aquatic Biosecurity and EMAI staff travelled to the NSW south coast in September to deliver two oyster industry health workshops in Batemans Bay and Merimbula. A third workshop was delivered in Port Stephens in October.

Contact: Aquatic Biosecurity 4982 1232

NSW Farmers representing members

NSW Farmers are proactively involved in representing member's interests in reviewing the Aquaculture Award for employees. Last year, the Association along with Oysters Australia successfully lobbied for the reinstatement of the junior rates into the award. Industrial relations and legal advice are just some of the services NSW Farmers members enjoy. Contact the Member Service Centre on 1300 794 000 or <http://www.nswfarmers.org.au/>

Contact: Jennifer Brown NSW Farmers 9478 1008

Healthy Oysters for Healthy Estuaries

DPI is preparing a publication for estuary managers, Councils and developers to provide guidelines on minimizing risks to water quality for the NSW oyster industry. The guidelines will draw on existing publications and on DPI's experience in dealing with SEPP62 referrals. It is also planned to include a revised 'Incident Response Protocol: Aquaculture Estuaries in NSW' to deal with imminent or actual harvest area closures caused by pollution incidents. The new publication is being prepared under the auspices of the State Aquaculture Steering Committee and Shellfish Committee and is expected to be available mid 2015.

Contact: Tim Gippel DPI 4916 3823.

Australia's Oyster Coast Inc.

Congratulations to Stacey Loftus (Wonboyn Lake) for taking the reins as President of Australia's Oyster Coast (AOC). Stacey is also the recent recipient of a Nuffield Scholarship and will be travelling through Europe and Asia in early 2015 to learn about marketing techniques used by other oyster industries. Key AOC initiatives for 2015 include the rollout and expansion of the South Coast Oyster Trail and investigations into exporting AOC oysters.

Contact: AOC info@oystercoast.com.au

NSW Aquaculture Industry Directory

The NSW Aquaculture Industry Directory is due for an update two years after publication. The directory has provided a valuable tool for connecting stakeholders with industry. Please complete the form enclosed to be included in this free service.

Contact: Graeme Bowley DPI 4916 3845

Select Oyster Company

Two hatcheries are currently doing runs of selected lines of SRO: Southern Cross Shellfish Hatchery and Camden Haven Oyster Supply. Victorian Shellfish Hatchery is also starting a run in January 2015. The dual resistant QX and Winter Mortality line is currently available. The broodstock used for current commercial hatchery production are held in five estuaries including Nambucca, Camden Haven, Wallis Lake, Wagonga and Merimbula. In March 2014 a \$50,000 NSW Government subsidy was launched to rebate part of the costs of selected lines of SRO spat. A second round of rebates has been launched and the quota for rebates per grower has increased from \$600 to \$800. If you have purchased spat produced from September 2013 onward, or intend future purchases, you may be eligible to apply for a rebate. For SOCo's customer-feedback survey, testimonials, comments and photos see www.selectoysterco.com.au

Contact: Emma Wilkie 0402 677 534



NSW Hatchery Quality Assurance Scheme

This year the Minister for Primary Industries approved an assessment on the activity of marine fish stocking. Marine fish stocking can now be lawfully undertaken under a marine stocking program. The NSW Hatchery Quality Assurance Scheme will be amended to incorporate marine finfish and crustacean species. A small scale marine stocking program is to commence in December 2014 with the stocking of Eastern King Prawns in a number of selected estuaries. In the future, stocking of estuaries with Mulloway, Dusky Flathead, Sand Whiting, Yellowfin Bream, Blue Swimmer Crab, Giant Mud Crab and Eastern King Prawn may become more common.

2013/14 was a successful year for all commercial and government hatcheries. A total of 731,821 Golden Perch and 314,200 Murray Cod were produced by six commercial hatcheries and 108,355 Australian Bass by three commercial hatcheries for stocking into public waterways under the Recreational Fishing Trust funded dollar-for-dollar native fish stocking program. NFC produced and stocked 653,000 Golden Perch and 526,500 Murray Cod into 42 impoundments and the PSFI produced and stocked 413,000 Australian Bass into 22 impoundments which was a record since production of the species commenced in 1980.

Contact: Graeme Bowley DPI 4916 3845

Oysters Australia

In response to significant stock losses that were not linked to any disease, growers are focussing the investment of their R&D funds into projects that allow for 'prediction' of poor growing conditions to reduce losses and improve growth rates. Growers also wanted continued focus on breeding better oysters, shellfish safety related market access, and market development. In 2015 Oysters Australia will look for funding approval from FRDC and the Australian Government on the following projects: 1) A biosensor project for both SRO and Pacific Oysters which aims to measure oyster stress; 2) Resolving the last gaps in POMS proofing which aims to provide an integrated disease control strategy based using genetically resistant oysters and husbandry methods; 3) Support for 'Safefish', that deals with seafood safety, emergency response and trade and market access; and 4) Continuation of national R&D co-ordination and communication. The oyster retail experiment is in the final stages of testing point of sale material amongst national seafood retailers.

Contact: Rachel King oystersaustralia@gmail.com

Operation Trident targets oyster theft this Christmas
Illegal seafood traders are on the menu for law enforcement agencies this Christmas, with a crackdown designed to deter oyster theft during the festive season.

1000 Operation Trident wall posters have been provided to permit holders, clubs, pubs and retailers with media planned for the pre-Christmas shopping spree. To report oyster theft or suspicious oyster sales ring Crime Stoppers on 1800 333 000

Contact: Lee Burdett DPI 552 0600

Oyster Cultivation Best Practice Guidelines

Raft Construction, Floating Basket Long Line, Risk Management, and Keeping Leases Neat and Tidy Guidelines are available on the web. Lease Security Guidelines will be uploaded shortly. These documents have been prepared with industry and Shellfish Committee input. See

<http://www.dpi.nsw.gov.au/fisheries/aquaculture/permit-holder-information>

Season Greetings from all the staff at DPI



Aquaculture News is a newsletter from the industry team at NSW DPI.

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