



Aquaculture News  
Issue 22 May 2018

### 2016/17 Annual Aquaculture Production Report

The 2016/17 NSW Aquaculture Production Report highlights an 8% increase in value from 2015/16 with increases in the volume (a three year trend) and value (a five year trend) of oysters. Farmed Black Tiger Prawns again had a very productive season. Murray Cod is the most valuable freshwater species cultured in NSW by value and volume. In 2017/18 farmed Yellowtail Kingfish, Akoya pearls and Moreton Bay Bugs will likely add to the value of the NSW aquaculture industry. We would like to thank the industry for their assistance in providing data that is used to measure industry growth.

Contact Aquaculture Administration DPI 4982 1232

[https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/7507/26/Aquaculture-Production-Report-2016-2017.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0009/7507/26/Aquaculture-Production-Report-2016-2017.pdf)

### NSW Marine Waters Sustainable Aquaculture Strategy (MWSAS)

The final draft of the MWSAS was approved by the NSW government's Aquaculture Steering Committee for public distribution. This followed early consultation with some key stakeholders (Water Police, Port Authorities, NSW Aboriginal Land Council, NTS Corp, Yachting NSW, Boating Industry Association, Nature Conservation Council, Institute for Marine and Antarctic Studies, and key marine aquaculture ventures). It is hoped the Strategy will go on public exhibition in May-June 2018. Legislative amendments, including the roll-over of the *State Environmental Planning Policy 62 – Sustainable Aquaculture* into a *Primary Production and Rural Development SEPP* are underway.

Contact Graeme Bowley DPI 4916 3845

### Marine Estate Management Strategy

The Marine Estate Management Strategy was approved May 2018. The draft MWSAS is aligned with the Strategy which sets the over-arching plan for the State government to co-ordinate the management of the marine estate over the next 10 years. The Marine Estate Management Strategy is underpinned by a state wide Threat and Risk Assessment. Aquaculture in its various forms was assessed as part of this process and generally deemed a minimal or low risk to the assets or benefits derived from the marine estate. Seagrass was deemed at moderate risk from oyster aquaculture infrastructure. Mitigation strategies to protect seagrass

are detailed in the NSW Oyster Industry Sustainable Aquaculture Strategy and the draft MWSAS.

### NSW DPI/ Huon Marine Aquaculture Research Lease

The first sea pen stocked with Yellowtail Kingfish from Port Stephens Fisheries Institute in October 2016 has been harvested. Fish averaging 5kg were marketed state wide. Market acceptance has been very good.

The farm suffered damage during a four day severe weather event (11m waves) in January 2018. One sea pen suffered net damage causing 20,000 fish to escape. This was due to barnacles compromising the integrity of ropes that attached the net to the sea pen, and a delay in maintenance to remove biofouling from the outer predator net. A post incident review has highlighted a number of areas to improve operations. Maintenance plans and emergency response protocols have now been updated.

Huon currently employs eight full time and two part time staff to manage the Research Lease. DPI has 10 employees working on this project. Water quality and sea floor sampling is undertaken independently by the University of Newcastle. Regular stakeholder updates and the monitoring results for marine fauna, water, benthos, and video transects from the sea floor are available on the web. The 2017 Annual Environment Management Report was approved by the Department of Planning and Environment and is also available.

See <http://www.dpi.nsw.gov.au/fishing/aquaculture/starting-up/finfish-aquaculture-lease-modification-application>



Market ready Yellowtail Kingfish

### Healthy Estuaries for Healthy Oysters Guidelines

The objective of the guidelines is to provide local Council, State government agencies, private landowners and developers with advice on how to ensure development in close proximity to estuaries is compatible with the requirements for oyster aquaculture. It has been promoted via a Department of Planning and Environment roadshow, Local Government NSW and by DPI Aquatic Ecosystems staff. Once the new *Primary Production and Rural Development SEPP* is gazetted, DPI will amend the document, print it in hardcopy format and distribute to all coastal councils.

[http://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/738972/Healthy-Estuaries-for-Healthy-Oysters-Guidelines.pdf](http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0009/738972/Healthy-Estuaries-for-Healthy-Oysters-Guidelines.pdf)

### NSW Oyster Strategic Plan 2015

The Industry Implementation Group provided a report to the Shellfish Committee on activities completed. The Shellfish Committee will now pick up on priorities identified in the strategy that require further action. The Implementation Group deserve high praise for their commitment to progress initiatives in the NSW Oyster Industry Strategy for the benefit of all permit holders. See the report at:

[http://www.foodauthority.nsw.gov.au/Documents/industry/progress\\_report\\_Oyster\\_strategic\\_implemetation.pdf](http://www.foodauthority.nsw.gov.au/Documents/industry/progress_report_Oyster_strategic_implemetation.pdf)

### National Aquaculture Strategy

The Australian Government has prepared a National Aquaculture Strategy with a goal of increasing the value of aquaculture from \$1 billion to \$2 billion by 2026. In relation to planning for aquaculture it identifies that:

- Individual jurisdictions, where appropriate, will investigate potential areas for prescribed aquaculture zones and, as appropriate, establish streamlined approval processes for new aquaculture development in these areas; and
- Amendment of the Commonwealth *Fisheries Management Act 1991* to allow individual jurisdictions to extend their existing aquaculture regulations to cover adjoining Commonwealth waters.

<http://www.agriculture.gov.au/fisheries/aquaculture/national-aquaculture-strategy>

### Boater, fishers and oyster leases

Jim Harnwell (DPI Recreational and Aboriginal Fishing) presented a series of videos at Shellfish Committee. This work was progressed by a group of industry, DPI, OceanWatch and RMS to promote best practice when navigating and fishing near oyster leases. This work was supported with a grant from the Recreational Fishing Trust. During Christmas there were some 141,000 hits which highlights an outstanding project success. Four mini-videos have now been produced for use in social media with plans to develop more in late 2018. To compliment this project, stickers and signs have been

produced by OceanWatch for lease holders promoting: safety in the work environment; reporting theft; and avoiding damage from tying up to leases.

### 'Adopt a beach'

Following complaints about catching slats breaking away and ending up outside lease areas in the Salamander Bay spat precinct, the Port Stephens industry are working together to 'adopt a beach' to monitor the area for debris. The area is adjacent to the contentious Mambo Wetlands and is in a Sanctuary Zone of the Marine Park. Industry, Ocean Watch, DPI and LLS removed 200kg of rubbish, including a kitchen sink, from the area in a recent clean up.

Contact Dean Cole 0410 318 479



Adopt a beach crew and some of the rubbish collected

### Seafood Directions 2017–Sydney Convention Centre

Three aquaculture industry representatives were supported to attend the event by the conference organisers. They included Emma Wilkie (Select Oyster Company), Todd Graham (North Coast oyster farmer) and Lisa Ryan (Murray Cod producer and Secretary Native Fish Growers Association). The conference was much more inclusive of aquaculture than in previous years and was very well run.

### Blacklip Oyster

DPI is investigating the opportunity for Black-lip Oyster production in northern NSW. This species appears very similar to the Sydney Rock Oyster. It is well adapted to warmer waters and may also exhibit QX oyster disease resistance. Contact Wayne O'Connor DPI 4916 3906

### Proposed Aquatic Deed

Australia has two long-standing joint Industry–Government formal agreements in place for responses to livestock emergency diseases (the Emergency Animal Disease Response Agreement) and emergency plant pests (the Emergency Plant Pest Response Deed), but there is nothing similar in place for responding to emergency disease outbreaks affecting aquatic animals.

Industry-Government agreements detail roles and responsibilities for all participants, including who should contribute and an agreed formulae for calculating how much that contribution should be.

Work towards the development of an Aquatic Deed commenced in late 2014 in consultation with all major aquaculture sectors and capture fisheries representatives.

The goal of the Aquatic Deed is to facilitate rapid and effective responses to emergency aquatic animal diseases. More information is available on Animal Health Australia's website:

<https://www.animalhealthaustralia.com.au/what-we-do/emergency-animal-disease/development-emergency-aquatic-animal-disease-response-arrangements/>

### **Murray Cod RD+E priorities**

Australian Murray Cod industry representatives met last year to build on the 2016 Riverina Aquaculture Conference and the 2017 FRDC project 'A Review of Research and Development Needs for Murray Cod Aquaculture in Australia'. The meeting was coordinated by the Freshwater Native Fish Association with the NSW Aquaculture Association, FRDC and NSW DPI in attendance. Five priorities were identified including: development of an up to date farm management manual; reviewing "off-flavour" research; addressing health management strategies for Murray Cod aquaculture; and longer term issues of a breeding plan, and nutrition and feeds. DPI is working with the Victorian Fisheries Authority that has undertaken much of the previous research, to progress these priorities under an FRDC funding application.

Contact Ian Lyall DPI 4916 3856

### **Sydney Rock Oyster breeding update**

The 2017 Sydney Rock Oyster family breeding run produced 78 families. This run was a component of Future Oysters CRC-P research to accelerate the Sydney Rock Oyster breeding program and was the most successful to date. Families were produced to increase QX disease resistance and growth without loss in condition. Spat were exposed to QX disease in the Georges River in February 2018 and will be used to produce the 2018 year class reducing the generation time for QX resistance breeding to one year. Sydney Rock Oyster CRC-P research focussed on rapid broodstock conditioning protocols and spawning inducers (The University of the Sunshine Coast) as well as bench-top gamete storage (University of Newcastle) is in progress.

Contact Michael Dove DPI 02 4916 3807

### **E-business**

DPI has secured funding to develop an e-business platform for aquaculture lease and permit holders and

new entrants. This will be developed in 2018 and will be based on the Commercial Fisheries *Fish Online* model. DPI will also work with the Food Authority to discuss streamlining data collection for oyster sales.

With a focus on e-business we ask all permit holders to ensure business email addresses are up to date with the records held by DPI. DPI encourages those without an email address to set one up by mid-2018. DPI is also progressively digitising hardcopy files. Land based and oyster permit files have been completed and DPI is now working on scanning 3,000 lease files.

Contact Raelene Trenaman DPI 4916 3843

### **NSW DPI account billing & debt recovery**

All reminder and overdue notices relating to your aquaculture account are now sent from our accounts department in Orange. If you are uncertain about any account notices you receive, please contact Aquaculture Administration on 4982 1232.

Should you be experiencing financial difficulties, we urge you to contact Aquaculture Administration to discuss your payment options. Please do not ignore any overdue notice you receive, as this may lead to permit cancellation.

Contact Raelene Trenaman DPI 4916 3843

### **Expiry of an oyster lease**

Please be reminded that you have 30 days from the date of expiry in which to renew an oyster lease. After this 30-day period, a renewal application for the lease cannot be accepted by NSW DPI. A Section 171 Notice is also issued to the former lessee, advising them to remove all improvements (including cultivation material, lease markings and structures) from the lease area within a given time frame. Please note that the former lessee is no longer able to reapply (by way of new lease application/tender) for an expired lease, until all work outlined in the S.171 Notice has been completed.

Contact Raelene Trenaman DPI 4916 3843

### **Aquaculture Research Advisory Committee**

At the highly successful Oyster Conference held at Merimbula last year Professor Ian White, Chair of ARAC, was presented with an Outstanding Service Award to acknowledge his long running contribution to the NSW oyster industry. ARAC met in Sydney on 18 April 2018.

For a summary of the meeting see:

<https://www.dpi.nsw.gov.au/fishing/aquaculture/committees/arac>

A review of the ARAC Strategic RD&E Plan 2017-2022 is underway and all permit holders have an opportunity to comment on priorities before 5 July 2018. See [https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0008/719108/ARAC-RD-and-E-Plan-2017-2022-Final.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/719108/ARAC-RD-and-E-Plan-2017-2022-Final.pdf)

Contact Wayne O'Connor DPI 4916 3906

## NSW Biosecurity Act 2015

The *NSW Biosecurity Act 2015* and associated Regulations came into force on 1 July 2017. On this date, the pest and disease provisions that were included under the *Fisheries Management Act 1994* were repealed and are now found in the new Act.

Aquatic pests and diseases are listed as either a 'prohibited matter' or 'notifiable matter'. There is a mandatory reporting requirement for all listed pests and diseases, and they are not permitted to be moved, sold or possessed.

The new biosecurity legislation places an expectation on all people to have a basic level of knowledge about the biosecurity risks they might encounter in their normal work and recreational activities. All reasonable and practical measures must be taken to prevent or minimise the potential impact.

There are no significant changes to the QX or POMS management outcomes under the new legislation. The QX estuary risk-based classifications are now captured in the Biosecurity Regulation 2017 under QX disease biosecurity zones, with continued rankings of high, medium and low risk areas. POMS is now managed under the Biosecurity Regulation 2017 as a POMS biosecurity zone located in (a) Georges River and Botany Bay, (b) Hawkesbury River, (c) Brisbane Water. Permit Conditions for all land based, estuarine and marine permit holders are being amended following the implementation of the new Act and Regulations. This will also involve reinstating a condition that bans the importation of fish/spat from interstate unless the permit holder has a special permit condition attached to the permit. The special permit condition will comprise an Import Protocol to cover the species and location from where the stock will be imported from.

See <https://www.dpi.nsw.gov.au/biosecurity/biosecurity-legislation>.

## Updated aquaculture permit application form

New industry entrants or people reapplying for aquaculture permits will now be required to complete a Biosecurity Risk Management Plan. For lease holders, a Lease Maintenance and Development Plan must also be prepared. This follows a national push to better manage biosecurity risks and industry initiatives to roll out biosecurity plans for their sectors. In line with the NSW Oyster Industry Strategic Plan 2015, new entrants will also be required to develop a lease maintenance plan to comply with an industry desire to see all leases being used productively and also move to prevent derelict leases impacting the industry and the community.

Contact Ian Lyall DPI 4916 3856

## The Importance of Oyster Aggregations

Interest is growing rapidly both internationally and in Australia regarding the role that aggregations of oysters

(including oyster leases and reefs) play in maintaining the ecological health of estuaries and coastal environments. Oysters are now ranked as one of the most important "keystone species" in the marine environment. NSW DPI is currently assisting researchers from Macquarie University and James Cook University to investigate the role played by oyster aggregations as habitat for a wide range of marine and estuarine species of fish and invertebrates. There is now also considerable interest in the role played by oysters in the cycling and possible reduction of nitrogen and phosphorous present in estuarine environments as a result of human activities. The research currently underway in NSW will provide baseline information that will greatly assist our understanding of these issues and assist the future management of estuarine and coastal environments.

Contact: Steve McOrrie DPI 4916 3921

## Yabby Field Day

In late 2017, the NSW Aquaculture Association held a yabby farming field day at the "Yabby Dabba Doo" Yabby Farm. The 60 attendees learnt about the commercial aquaculture of the yabby in purpose built earthen ponds. Items discussed included: pond construction; water quality; health management; nutrition, shelter, stocking densities, netting, fencing, grading, and purging facility construction. Another informative day held by the NSW Aquaculture Association. <http://nswaquaculture.com.au/>



Yabby farming field day at "Yabby Dabba Doo"

## Food Agility CRC Environmental Sensor Project

The remote sensing project is being funded under the newly formed Food Agility CRC. Partners in the project include the NSW Food Authority, DPI, University of Technology Sydney, Hunter Local Lands Services and the yield Technology Solutions. The project aims to undertake research and development in 12 estuaries into the following areas:

1. research and development to establish salinity models to improve the precision of harvest area management plans

2. modelling to predict the prevalence and intensity of harmful algal blooms and key oyster diseases including QX and Winter Mortality
3. assessing the business case to use real time salinity monitoring to manage harvest area openings and closures.

A series of workshops are being held along the coast to get industry feedback on priorities and to introduce the research team.

Contact Wayne O'Connor DPI 4916 3906

### Prawn farmers and risk mitigation

DPI met with NSW prawn farmers and the Australian Prawn Farmers Association (APFA) 1 March 2018 to discuss: testing and translocation protocols for the 2018 season; recent storm damage; the temporary fishing closure established around prawn farm water inlets in December; and the introduction of a Biosecurity Plan for each farm. The APFA has developed a draft Biosecurity Plan and this will be rolled out nationwide with the assistance of a consultant Veterinarian. DPI will not be extending the fishing closure when it finishes in June given the industry's push to better manage on-farm risks.

DPI has also promoted a campaign to highlight protecting NSW from White Spot. This includes not using prawns intended for human consumption for bait. NSW remains White Spot free. See <https://www.dpi.nsw.gov.au/fishing/pests-diseases/animal-health/aquaculture/white-spot-disease>

### Complying with legislation

DPI and the Food Authority have sent notices to non-producers in the oyster industry and those not holding Seafood Licences to show cause why further action should not be taken against their permit.

Starting this year, permit holders who fail to submit an annual production return will be issued with a 'show cause' letter instead of a reminder. This follows many years of frustration and wasted funds trying to encourage permit holders to comply with the request for data.

Contact Raelene Trenaman DPI 4916 3843

### Crown Lands leases vs licences

An advisory flyer will be prepared by Crown Lands to explain the current status of leases and licences and how this affects oyster permit holders.

### NSW Hatchery Quality Assurance Scheme

The genetic boundaries for Golden Perch broodstock in NSW used in 'Dollar for Dollar' stocking events have been consolidated following recent research. Previously, NSW river systems were broken into three distinct areas defining Golden Perch broodstock genetic zones. This has now been consolidated to one zone. Murray Cod zones are also under review with four zones in place at present.

Contact Graeme Bowley DPI 4916 3845

### Regional Jobs and Investment Packages grants

Aquaculture on the South Coast received a boost with \$3.7 million worth of grants for: a new oyster hatchery/nursery, packing and export facility at Moruya; mussel culture in Jervis Bay; algae production in Nowra and intensive recirculation system at Yatte Yattah.

Aquaculture News is a newsletter from the industry



© State of New South Wales through the Department of Trade and Investment, Regional Infrastructure and Services, 2018. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (May 2018). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser. Published by the Department of Primary Industries. OUT18/8003