



## Aquaculture News

Issue 23 - December 2018

### Aquaculture production value

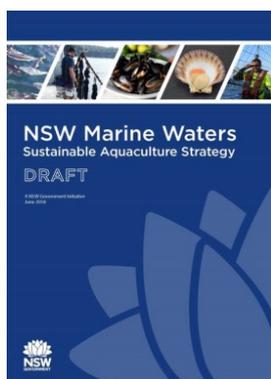
Preliminary aquaculture production data for 2017/18 shows a 12% increase over the last financial year to \$78.4m. The key increase comes from the resurgence of the Sydney Rock Oyster industry with increased prices arising from a focussed marketing effort and shortage of supply of Pacific Oysters from the southern states. On the land based side, Murray Cod is making significant gains as the industry expands. Moreton Bay Bugs and Yellowtail Kingfish production added to this year's total. The value of the industry is expected to rise again this financial year. Notwithstanding some Winter Mortality in Sydney Rock Oysters in the southern estuaries recent investment has seen a number of oyster businesses change hands and put underutilised lease area back into production. The other sector set to increase significantly in production this coming year is Murray Cod.

Contact Raelene Trenaman DPI 49163843

### New aquaculture strategy

The NSW Marine Waters Sustainable Aquaculture Strategy was approved 14 November by the Resources and Land Use Committee of NSW Cabinet. The Strategy outlines a regulatory and best practice framework for aquaculture developments in the offshore waters of NSW. It went on public exhibition 25 June to 3 August 2018 with 14 submissions received. Additional information on biosecurity separation distances between farms, navigational rules, impact of sea pen escapees and clarifying Marine Park zones have been added to the document. It will be gazetted as an Aquaculture Industry Development Plan similar to the NSW Land and Oyster Industry Sustainable Aquaculture Strategies.

Contact Graeme Bowley DPI 49163845



### NSW Shellfish Committee

NSW Shellfish Committee met 14 November 2018. Key matters included: Reviewing priorities progressed and outstanding in the NSW Oyster Industry Strategy 2015; the Oyster Extension Officer role; water quality including livestock in riparian areas and forestry activities; Shellfish Program reports; issues around commercial fishers harvesting shellfish and relay rules; a review of the commercialisation of the Sydney Rock Oyster breeding program; planned review of permit/leases/bond and lease tenure in 2019; proposal to review the Farm Innovation Fund to make it more accessible to commercial fishers and aquaculture businesses; and a report on derelict oyster lease clean up. There was also discussion about incorporating the Healthy Estuaries for Healthy Oysters Guidelines into the NSW Oyster Industry Sustainable Aquaculture Strategy.

Contact Phil Baker NSW Food Authority 65394804

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



Attendees at Shellfish Committee November 2018

### Production returns

A thank you to all permit holders for returning their annual returns promptly this year. The provisional 2017/18 report can be seen at -

[https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0020/844400/Provisional-Production-Report-2017-2018.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0020/844400/Provisional-Production-Report-2017-2018.pdf)

### Marine Aquaculture Research Lease

The sea pens and mooring grid from the Marine Aquaculture Research Lease are being refurbished by Huon Aquaculture following storms earlier this year. The second Annual Environmental Management Report has

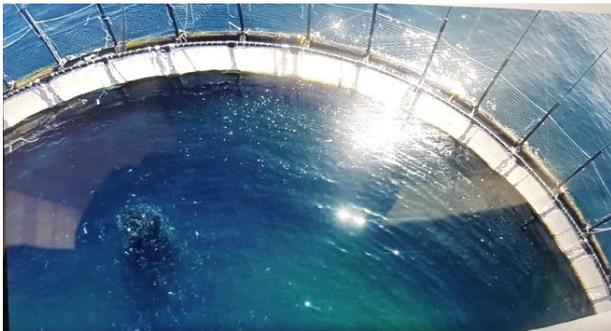
been submitted to the Compliance branch of NSW Department of Planning and Environment (NSW DPE). The report details the performance of the Marine Aquaculture Research Lease during the second year of operations. There were no significant impacts to water or sea floor quality detected in the monitoring program undertaken by the University of Newcastle during the year. The report highlights compliance with consent conditions and where standards were exceeded. The report also identifies one non-compliance incident relating to sea pen maintenance which led to the fish escaping in January. Once approved by NSW DPE the report will be loaded to the web.

In May, the Research Lease featured on ABC's Landline. See <https://www.abc.net.au/news/2018-06-02/future-fish:-commercial-trials-of-kingfish-farming/9828176>

A Frequently Asked Questions was prepared for the project. See

[https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0019/820315/OUT18-9408-MARL-FAQs-June-2018.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0019/820315/OUT18-9408-MARL-FAQs-June-2018.pdf)

Contact Ian Lyall DPI 49163856



Helicopter lift of fingerlings to the Research Lease

### Murray Cod industry development

Fisheries Research Development Corporation has approved funding for a project for Murray Cod - *Development of technical and extension material to support Murray Cod aquaculture industry expansion in Australia*. This follows a series of industry driven meetings to prioritise research issues.

Contact Ian Lyall DPI 49163856



### NSW Aquaculture Research Advisory Committee

ARAC last met in Sydney. Matters raised included: concern about the carp herpes virus project and potential impact on the ecology and the industry; White

Spot Disease research; risk analysis to import spat from Tasmania; Blacklip Oyster potential; Food Agility CRC sensor work; value adding urchins taken from 'barrens'; an update on the wild harvest shellfish toxin survey; Murray Cod RD&E and funding application; water quality analysis from recirculating tank and in-pond cage aquaculture farms; micro-plastics and aquaculture; and review of the ARAC RD&E Strategic Plan 2017-2022.

Contact Wayne O'Connor DPI 49163906

### NSW Coastal Conference 'Public Good' Award

The NSW oyster industry was presented with the Public Good Award at the NSW Coastal Conference held at Merimbula in November. Some 250 delegates attended the event including a significant number from state and local government. The award recognises the industry's credential as a leader in estuarine water quality protection and their capacity to work with a large range of stakeholders. Sapphire Coast Wilderness Oysters is to be congratulated representing the oyster industry with Sue McIntyre giving the acceptance speech for industry. Thanks also to Ana Rubio, Jillian Keating & Andy Myers.

Contact Sue McIntyre 0427824690

<https://www.sapphirecoastwildernessoysters.org.au/>



Sue McIntyre, Greg Carton and Brett Weingarh accepting the Public Good Award

### NSW Oyster Extension Officer

Shellfish Committee has supported funding expenditure from the Aquaculture Trust to continue the part-time Oyster Extension Officer position held by Andy Myers of OceanWatch. This will extend the position for another three years commencing May 2019. During this period the position will: continue with the [www.nswoysters.com](http://www.nswoysters.com) website and newsletter; extend research and selected breeding line information; support travelling workshops, beach and oyster lease clean ups; facilitate initiatives for farm-level biosecurity plans; and support EMS initiatives.

Contact Andy Myers OceanWatch 0488656366

### Aquaculture facility funding boost

As part of this year's budget, NSW Treasury has announced a \$50 million capital works program for NSW DPI research centres across the State. Port Stephens Fisheries Institute is slated to receive almost \$6 million for site upgrades, predominantly for its aquaculture facilities. A new fish hatchery and fish nutrition facility

will be built, while major refurbishments of the mollusc hatchery and site water storage facilities will take place.  
Contact Wayne O'Connor DPI 49163906

#### Hatchery Quality Assurance Scheme

Under the NSW Hatchery Quality Assurance Scheme the number of Golden Perch genetic zones has been reduced from three to one and Murray Cod genetic zones from four to two. This follows recent scientific advice on the status of stock genetics in the Murray Darling catchment.

Contact Michael Baer DPI 49163977

#### Prawn import protocols

The import protocols for prawn broodstock and post larvae have been reviewed and updated to accommodate hatchery production in NSW. This will support the demand from NSW and Qld prawn farms. Live feeds importation is also subject to a new protocol.

Contact Debra Doolan DPI 49163846

#### Aboriginal Fisheries Advisory Council

NSW DPI will meet with the Aboriginal Fisheries Advisory Council (AFAC) 6 December 2018 to develop an AFAC strategy to support business development in the aquaculture sector.

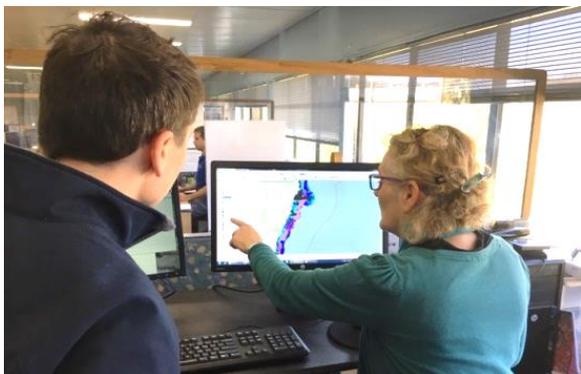
Contact Ian Lyall DPI 49163856

#### NSW DPI Fisheries Innovation Award

Antonia Creese (Aquaculture Administration) received an Innovation Award for her work developing a GIS site suitability tool for marine aquaculture leases and for developing the NSW DPI Spatial Data Portal for oyster leases with colleague Greg West. Congratulations Antonia!

Contact Antonia Creese DPI 49163810

<https://www.dpi.nsw.gov.au/about-us/science-and-research/spatial-data-portal>



Antonia demonstrating the site suitability tool

#### Crown Lands and Water

NSW DPI has been working with Crown Land and Water to improve the process for obtaining Land Owner's Consent for new oyster leases. Crown Lands and Water

are also preparing information fact sheets for industry on leases/licences and tenure.

#### Aquaculture policies updated

The Aquaculture Lease Allocation, Oyster Lease Clean Up and Broodstock Collection policies have been updated. A new policy *Waters to which an aquaculture permit may be applied*, has been approved. The policy outlines what freshwater resources can be utilised to culture fish under a land based aquaculture permit. See <https://www.dpi.nsw.gov.au/fishing/aquaculture/publications/general/management-policies>

Contact Graeme Bowley DPI 49163845

#### Yellowtail Kingfish research

A number of hatchery, indoor nursery and outdoor nursery experiments have been successfully completed at Port Stephens Fisheries Institute. A range of options for on-growing advanced juvenile Yellowtail Kingfish were trialled including recirculating aquaculture tanks and polyhouse-covered outdoor ponds. A University of NSW student Honours project has provided information about the gut microbial community of Yellowtail Kingfish and how it changes with different life stages. This research will support hatchery practices.

The advances in hatchery and nursery technology have contributed to the successful stocking of Yellowtail Kingfish to Botany Bay and Lake Macquarie as part of the departmental stock enhancement program for recreational fishers. This research stocking program is ongoing for three years.

Two long-term Yellowtail Kingfish broodstock feeding trials have been completed. The aim of these trials was to evaluate the effect of different diets and feeding regimes on the number and quality of eggs produced by female broodstock. A pond experiment has been completed at the Fisheries Institute to evaluate the performance of Yellowtail Kingfish fed a series of test diets that replace wild-captured fishmeal with by-products from fish processing. A second trial uses diets with a reduced fish meal content. The fish have grown extremely well on these diets with results to be finalised in December 2018\*.

Contact Stewart Fielder or Mark Booth 49821232



Yellowtail Kingfish feed trials PSFI

### Love Seafood Love Port Stephens

It was all things seafood during August for the Love Seafood festival in Port Stephens. Local product featured at the Gala Dinner hosted by Lyndey Milan, signature luncheon events, and a weekend of displays on the waterfront with oyster samples and sales, oyster farmer presentations and the celebrity and industry oyster shucking competition.



Dean Cole takes out the industry competition

### Are you connected?

The NSW Oysters website is an excellent initiative supported by OceanWatch Australia. The website is regularly logged-on to by oyster farmers throughout Australia and from overseas wishing to catch up with what is going on. If you haven't logged-on to the website yet it is available at [www.nswoysters.com](http://www.nswoysters.com). The Classified section of the website is growing quickly and is unique in the NSW oyster industry. If you want get up to date quickly, have a chuckle and maybe have a say on current issues and other "goings on" why not log-on to the *NSW Oysters Facebook Group* via the Discussion Board on the NSW Oysters website.

Contact Andy Myers OceanWatch 0488656366

### Oyster lease clean up

Oyster farmers and other interested parties are asked to register their expression of interest to be included on a Contractor Register to carry out work for the remediation and clean-up of oyster lease areas, or other work.

Contact Ryan Jefferson DPI 49163824

### Sydney Rock Oyster breeding update

The 2018 Sydney Rock Oyster family breeding run is underway with about 60 families now at the settlement stage. This breeding run is a component of the Future Oysters CRC-P research to accelerate gains in QX disease resistance and growth without impacting meat condition. Significant achievements of the CRC-P

research so far have been reducing the generation time for breeding resistance to QX disease to one year and making more than 320 families available for industry. Increasing winter mortality resistance still remains as a challenge for breeding due to minor outbreaks of this disease in previous seasons, however, more winter mortality resistance data will be collected in December 2018 from the Georges and Shoalhaven rivers for further assessment.

Contact Michael Dove DPI 49163807



Todd Graham with 12 month old Sydney Rock Oysters from the selected family lines

### Commercial trial of selected Sydney Rock Oysters

NSW DPI and Hawkesbury River oyster growers are undertaking a commercial trial of the latest QX resistant line of Sydney Rock Oysters. Work is also underway with Tasmanian hatcheries to import the latest in Pacific Oyster Mortality Syndrome resistant Pacific Oysters.

Contact Michael Dove DPI 49163807

### Food Agility CRC/The Yield

To access real time water quality data on your phone see <http://www.nswoysters.com.au/innovation.html>

### E-business

NSW DPI is embarking on an online e-business project to streamline administrative processes for permit holders. This involves establishing a similar platform to the FishOnline system used by commercial fishers that uses web based and a phone app for transactions.

Contact Raelene Trenaman DPI 49163843

### Replacing white pipe within oyster boundary marks

Dark grey and black PVC oyster pipe is now available commercially in various sizes for use as posts on oyster leases. The commercially available pipe meets the best practice requirements specified in Chapter 8 of the NSW Oyster Industry Sustainable Aquaculture Strategy (OISAS). Ben Ralston from the Clyde River is to be congratulated on his efforts to source commercial supplies of these products on behalf the NSW oyster industry. Farmers are reminded that the use of white

posts other than for lease marking is prohibited in OISAS. See the Classified Section at [www.nswoysters.com](http://www.nswoysters.com)

### Rock Steady

The Sydney Rock Oyster industry featured on ABC's Landline on 3 November 2018 – see <https://www.abc.net.au/news/2018-11-03/rock-steady:-sydney-rock-oysters-enjoy-a/10463346>



Mike Dove during filming of the Landline story

### Biosecurity Plans

The White Spot Disease outbreak on prawn farms in southern Queensland has highlighted the need to be prepared for potential biosecurity issues on your farm. Nationally, industry associations have prepared plans for the following aquaculture sectors: Barramundi; Prawns; Abalone; and oyster hatcheries. The federal government has developed information on preparing biosecurity plans. All new aquaculture permit applicants are now required to prepare a Biosecurity Plan. These plans are being assessed by the department's Aquatic Biosecurity Unit. The Oyster Extension Officer will support an initiative to develop oyster farm biosecurity plans. See <http://www.agriculture.gov.au/fisheries/aquaculture/farm-biosecurity-plan>

### Marine Estate Management Strategy 2018-2028

The Marine Estate Management Strategy sets out the vision and principles for the management of the marine estate (tidal rivers and estuaries, the shoreline, submerged lands, offshore islands, and the waters of the NSW coast) over the next ten years. The Strategy has nine management initiatives that address the priority threats to the marine estate. They include: improving water quality and reducing litter; delivering healthy coastal habitats with sustainable use and development; planning for climate change; protecting the Aboriginal cultural values of the marine estate; reducing impacts on threatened and protected species; ensuring sustainable

fishing and aquaculture; enabling safe and sustainable boating; enhancing social, cultural and economic benefits; and delivering effective governance.

<https://www.marine.nsw.gov.au/key-initiatives/marine-estate-management-strategy>

### NSW DPI prohibit large diameter lease marker posts

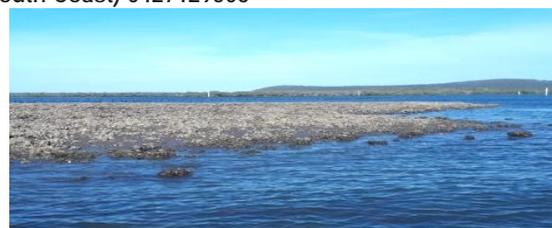
Oyster farmers are reminded that the use of vertical plastic pipe used for lease marking that is greater than 150 mm in diameter is now prohibited. This was agreed to by Shellfish Committee to protect fauna becoming trapped in large diameter hollow posts. The prohibition only applies to the installation of new lease marker posts and will not apply to plastic pipe lease marker post greater than 150 mm that are currently in use by the industry. Where plastic lease marker posts greater than 150 mm are already in use, DPI will require the leaseholder to either cap the pipe or place a device in the post to prevent fauna falling in to the hollow void in the post.

Contact Steve McOrrie DPI 49163921

### NSW DPI Oyster Reef Restoration Project

The Oyster Reef Restoration Project is a key management action under the NSW Government's Marine Estate Management Strategy and is now underway. Oyster reefs (or beds) are complex, intertidal or subtidal (up to depths of 30 m) three-dimensional structures which are formed largely from aggregations of living oysters and non-living shell. Oyster reefs are a distinct community which provides a wide range of ecological services to coastal communities including: the provision of habitat for many other marine creatures such as recreational and commercial fish species; shoreline protection; and water filtration services. Oyster reefs previously covered vast areas of many estuaries in NSW. It is estimated that 99% of oyster reefs in Australia are functionally extinct - no longer helping to maintain the ecological health of estuaries. The project team are keen to work closely with the NSW oyster industry to document observations of remnant reefs, to identify any knowledge gaps in relation to oyster reefs and oyster reef restoration and address any industry-specific concerns in relation to oyster reef restoration. A survey is currently being developed which will form the first stage of consultation with the NSW oyster industry.

Contact DPI, Charlotte Jenkins (North Coast) 0407154320, Kirk Dahle (Central Coast) 0468416101 or Jillian Keating (South Coast) 0427129506



### Narrabri Fish Farm Field Day

The NSW Aquaculture Association is hosting this event 6 April 2019. Narrabri Fish Farm is one of the largest hatchery based aquaculture farms in NSW breeding Golden Perch, Murray Cod, Eel-Tailed Catfish, Silver Perch and Yabbies. Located just 10km out of Narrabri, NSW, join the Association for the day to see what they do at the farm and how they do it.

### RAS and Aquaponics Workshop

Hosted by the NSW Aquaculture Association the event is planned for 18, 19, 20 May 2019 at Soldiers Point, Port Stephens. International speakers include Tom Losordo and Dennis Delong and from Victoria, Wilson Lennard. Join the Association to learn the latest in Recirculating Aquaculture Systems and Aquaponics methods and technology.

For further details and information, check the NSW Aquaculture Association website in the New Year 2019. [www.nswaqua.com.au](http://www.nswaqua.com.au)

### Breaking news!

Congratulations Murray Cod Australia winner of the 2018 NSW Business Chamber State Business Award for Excellence in Innovation. The State Business Awards gala event was held in Sydney 23 November and celebrated business excellence with 172 finalists across 16 regions.



*From all at NSW DPI  
Have a happy and healthy Christmas*

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

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