



aquaculture news

ISSUE 5 DECEMBER 2008

Oyster Industry Field Day 2008 – Hawkesbury River

Lyn Desoto, from Shoalhaven River Oysters Inc took out the 2008 NSW Oyster Industry Environmental Champion Individual Award before 120 people at what was another successful Oyster Industry Field Day in September.

The field day was a joint effort between NSW Farmers, OceanWatch Australia and NSW DPI. The theme 'Oyster Farming and the Environment' was reflected in the list of environmentally focussed speakers as well as the Environmental Champion Awards sponsored by the Fisheries Research and Development Corporation.

Lyn Desoto was recognised for her leadership in improving water quality in the Crookhaven/Shoalhaven estuaries. Equally recognised were Clyde River oyster farmers who won the 2008 NSW Oyster Industry Environmental Champion Group Award for their role in the development of the Clyde River Environmental Management System (EMS).

Recipients of the Highly Commended Awards were Brett Peterkin for the development and implementation of the CleanWater model in Wallis Lake, and the NSW Farmers' Association Hastings River Branch and Port Macquarie Council for acid sulphate soil and acid drainage remediation.



2008 Oyster Industry Environmental Champions

Commended Awards were presented to Brian and Barry Allen of Shoalhaven Oyster Service for developing an environmentally friendly farming system; NSW Farmers' Association Hastings River Branch for Clean-up Australia Day activities; Farquhar Inlet Management Group for fundraising and lobbying to have Farquhar Inlet opened in April 2008; and Rob Moxham for leading the Hawkesbury River Clean-up after the 2004/05 QX disease outbreak.

Additional awards presented were the 'Most Beautiful Oyster' category awards. The winners were: John Stubbs of Broken Bay Oysters - Single Seed Sydney Rock Oyster; Stefan Paschalidis of Pearly Oysters Clyde River – Angasi Oyster and Traditional Sydney Rock Oyster; Lionel Richardson of Port Stephens - Pacific Oyster Award.
Contact: Tim Gippel NSW DPI 4916 3823

Sydney Royal Aquaculture Competition

Organised by the Royal Agricultural Society of NSW and held in two stages during the year, the Sydney Royal Aquaculture Competition awards the best in Australian aquaculture. Entries for the Summer session of the Aquaculture Competition to be held on Thursday 26 February 2009 are now open! Summer session products judged are Sydney rock oysters, prawns, smoked salmon and trout products, and other aquaculture-based products. See www.sydneyroyalshows.com.au or contact the Coordinator on 9704 1199. Entries close on Friday 6 February 2009.

Draft NSW Land Based Sustainable Aquaculture Strategy (NSW LBSAS)

The draft NSW LBSAS was placed on public exhibition on 1 October 2008 for a 60 day period. Copies of the draft NSW LBSAS were sent to local government, catchment management authorities, government agencies and conservation groups. Letters were sent to land based permit holders informing them of the public exhibition process and the documents were also placed on the department's website for public viewing.

Comments will be incorporated into the documents and they will be sent to the NSW LBSAS taskforce for endorsement with gazettal anticipated by early - mid 2009.
Contact: Graeme Bowley NSW DPI 4916 3845

NSW LAND BASED Sustainable Aquaculture Strategy



NSW LAND BASED Sustainable Aquaculture Strategy



Review of Land Based Aquaculture Permit Conditions

Another outcome of the NSW LBSAS process is for the land based permit conditions to be reviewed. The Landbased Aquaculture Consultative Group will be contacted to assist in this process. Once finalised, the department will re-issue amended aquaculture permits to all land based aquaculture permit holders.

Contact: Graeme Bowley NSW DPI 4916 3845

Aquaculture Research Advisory Committee (ARAC)

ARAC met in Sydney on 2 October 2008. Professor Ian White introduced our new member, Mr Nick Arena, who will be representing land based aquaculture. Nick started his business Tailor Made Fish Farms ten years ago and farms barramundi in a land based facility at Port Stephens.

ARAC discussed the current budget and agreed there could be scope for a small land based research project up to \$20,000. If you are a land based farmer with ideas of small research projects that will have direct benefits for existing farmers – we would like to hear from you. The ARAC R&D Strategic Plan can be found at www.dpi.nsw.gov.au/fisheries/aquaculture/committees.

Have we captured your priorities? Please let us know if you have any other ideas.

The Committee discussed several other items including: a recent survey distributed by the Select Oyster Company to lease based farmers and a request to the Minister to support ongoing extension services. A full summary of outcomes are listed at the above website. Contact: Jo Pickles NSW DPI 4916 3901

History of the NSW Oyster Industry

Recording and preserving historical photos and items from the NSW oyster industry was raised at ARAC. ARAC agreed to investigate options to archive materials including contacting state and national institutions for assistance. Oyster farmers who have photos/items that would be willing to allow them to be copied are encouraged to contact the department.

Contact: Jo Pickles NSW DPI 4916 3901

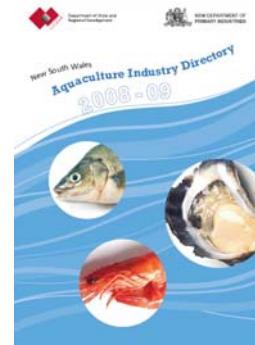


Aquaculture Industry Directory 2008-09

The fourth edition of the NSW Aquaculture Industry Trade Directory has been released. This is a joint publication of NSW DPI/Department of State and Regional Development and promotes producers and service providers to the

NSW aquaculture industry. It will be updated on the web regularly. Contact: Graeme Bowley NSW DPI 4916 3845 to advise of additions/amendments

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



Norovirus Keeps Kalang Closed

The Kalang River was closed to harvest in July 2008 following two reports of gastroenteritis suspected to be linked to oysters from the river and the detection of norovirus in local oysters.

A working group of NSW Government agencies, the Bellingen Shire Council and local oyster growers have been trying to identify the source of the contamination. Council has undertaken substantial investigations into on-site systems, the reticulated sewer and several private sewerage systems in the area without yet identifying the definitive source.

The lack of norovirus testing capacity in Australia has made it difficult to identify the source of the problem. The working group is contributing funds for a Seafood CRC project led by Dr Catherine McLeod (South Australian Research and Development Institute) to establish an Australian norovirus testing capability. All samples taken from December on will be analysed by Dr McLeod to save the cost and time delays associated with sending samples to New Zealand. Sampling in August found norovirus in oysters from all commercial leases with some improvement in the November tests which returned only one positive result. Contact: Tim Gippel NSW DPI 4916 3823

Hatchery Quality Assurance Scheme (HQAS)

There were 12 hatcheries accredited under the HQAS during 2007/08. One hatchery was accredited for aquaculture supply only and the other government and industry facilities are accredited for fish stocking programs. NSW DPI plans to review the effectiveness of the HQAS following this breeding season. Details of the HQAS were presented to the Australasian Aquaculture conference in Brisbane in August and to the Recreational Freshwater Fishing Trust Expenditure Committee in November. Hatcheries wishing to be accredited can find details on the HQAS on <http://www.dpi.nsw.gov.au/fisheries/aquaculture> Contact: Graeme Bowley NSW DPI 4916 3845



Fish Medicine

Minor Use Permit applications lodged by NSW DPI/NSW Silver Perch Growers Association for copper sulphate (PER9748), trichlorfon (PER9750) and potassium permanganate (PER9747) have been approved. Details on the product, directions and conditions for use can be accessed on the Australian Pesticides and Veterinary Medicines Authority website.

<http://www.apvma.gov.au/permits/permits.shtml>

Contact: Ian Lyall NSW DPI 4916 3856

Pacific Oysters on the South Coast

Wagonga Inlet and Clyde River oyster farmers have worked hard to manage Pacific oysters on oyster leases and non-lease areas in 2008. Industry took a lead role in coordinating works with the CMA, Koori work crews, conservation groups, dive clubs, NSW DPI and the Marine Parks Authority. While Section 213 - 'Notices to Destroy Noxious Fish' were issued to a number of Wagonga Inlet farmers in October/November the industry worked together to control Pacific oyster numbers on leases before the Pacific oyster breeding season. Local media has praised the oyster industry for their 'partnership approach' to this problem.

All involved recognise that control works are an ongoing issue but are keenly watching to see what spatfall may result this season on the south coast.

Pambula Lake oyster farmers also held a foreshore remediation/Pacific oyster control day with the Southern Rivers CMA, a commercial fisher and NSW DPI on Saturday 29 November 2008 with future works planned.

NSW DPI will hold meetings with Clyde River and Wagonga Inlet farmers in the first week of March 2009 to assess the work undertaken in 2008 and plan for the future, including providing input to the review of the Pacific Oyster Closure.

Contact: Ian Lyall NSW DPI 4916 3856



Helen Davies, SRCMA and oyster farmers at the work day for foreshore remediation and Pacific oyster control at Pambula Lake

Aquaculture Extension Update

Since September 2007 the aquaculture extension officer has dealt with over 270 aquaculture related enquiries. Of

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these enquiries 5% have been from existing land based permit holders, 18% from potential entrants to the land based industry, 26% were from existing lease based (oyster) permit holders, 7% from potential new entrants to the oyster industry, 20% were from other agencies, local government and consultants, and 24% were from the general public largely in regard to stocking fish in farm dams.

Of the 347 current oyster farming businesses in NSW, approximately 48% have entered the industry in the last 10 years. Priority is being given to conducting on-farm visits with the 28% of industry participants who have entered the industry in the last 5 years. To date 57 on-farm visits have been conducted in estuaries south of Tuross Lake and north of the Hastings River. In the near future on-farm visits are planned for estuaries in central NSW. Contact: Steve McOrrie NSW DPI 4916 3921

Recirculation Aquaculture Workshop

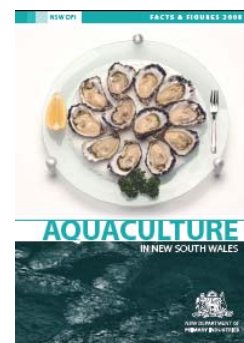
In conjunction with the Australasian Aquaculture Conference 2008, aquaculture extension assisted the facilitation of a Recirculating Aquaculture Technology Workshop at Bribie Island. The workshop was designed for a broad audience and provided up to date information regarding the management and the technology behind these productive recirculation systems. The two day workshop was presented by Professor Tom Losordo and Professor Ron Malone, international experts in this field. The workshop was attended by 33 Australian and international participants.

Contact: Steve McOrrie NSW DPI 4916 3921

Promoting the NSW Aquaculture Industry

This promotional booklet provides an overview of the types of aquaculture in NSW and their general locations, facts on production value and social and environmental benefits. The booklet is to be updated once the aquaculture production report for 2007/2008 is finalised. The booklet will then be available in a small pocket size hardcopy version and on the department's website.

Contact: Graeme Bowley NSW DPI 4916 3845



Australasian Aquaculture 2008

NSW DPI attended the Australasian Aquaculture 2008 international conference and tradeshow in Brisbane. NSW DPI inputs included: developing four conference sessions (Indigenous and Pacific Aquaculture, Inland Saline Aquaculture, Australian Native Freshwater Fish, Advancement in International Oyster Genetics), presenting

six talks and two posters and managing a trade stand to promote the NSW industry. NSW DPI also sponsored WWF to present a plenary presentation on "Innovation in Environmental Sustainability" and hosted delegations from France, USA, Spain and New Zealand following the conference. The next event is planned for Tasmania in 2010. **Contact: National Aquaculture Council nac@aquaculture.org.au**

Regulation Amendment for Ornamental Fish

Amendments have been proposed to exempt ornamental fish breeders who hold less than 10,000 litres of water from requiring an aquaculture permit. This is in line with the recommendations of the national management strategy for ornamental fish. Consultation with the ornamental fish industry regarding the proposed amendments is expected to be undertaken in early 2009.

Contact: Graeme Bowley NSW DPI 4916 3845

Illegal Aquaculture Prosecution

A person found to be undertaking aquaculture without an aquaculture permit at Wyong in August 2006 had their matter heard before Wyong Local Court on 20 November 2008. The person was convicted of an offence under the *Fisheries Management Act 1994* of undertaking aquaculture without a permit and was fined and ordered to pay Court costs. The ornamental fish seized during the initial investigations in 2006 were also forfeited.

Contact: Graeme Bowley NSW DPI 4916 3845

Land Based Aquaculture Consultative Group

A meeting of the NSW Land Based Aquaculture Consultative Group was held on the 14 July 2008 in Sydney. A full summary of outcomes can be found at www.dpi.nsw.gov.au/fisheries/aquaculture/committees.

The next meeting is scheduled for July 2009.

Contact: Graeme Bowley NSW DPI 4916 3845

Assistance when Transferring Oyster Leases

Aquaculture Administration staff can provide advice on lease transfer procedures. A transfer of an oyster lease must be endorsed by NSW DPI regardless of the exchange of any money between farmers. Until NSW DPI endorses the change in ownership the lease remains in the name of the existing lessee and they remain responsible for all matters concerning the lease. If the person purchasing the oyster lease is not a current permit holder they will need to apply for a Class A aquaculture permit or sublet the lease to a current permit holder.

Sale of a Land Based Aquaculture Farm

Aquaculture permits are not transferable. If a property (fish farm) is sold and the new owners intend to operate the aquaculture facilities within the existing terms of consent they will need to apply for an aquaculture permit. If they intend to operate the facility but wish to significantly change the operation they will be required to obtain consent from the relevant authority, usually local Council. For information regarding the transfer of oyster leases and applying for aquaculture permits, including all relevant

application forms see www.dpi.nsw.gov.au or **contact Aquaculture Administration NSW DPI 4982 1232**

Pacific Oyster Closure Review

The current Pacific oyster closure groups estuaries into 11 different categories and has some complex rules. NSW DPI is intending to review the closure and options for the management of Pacific oysters in NSW. Revision of the closure will be risk-based aimed at simplifying Pacific oyster management. The Pacific oyster closure will be renewed in its current form in May 2009 for 2 years to allow for consultation with industry, the Biosecurity Industry Consultation Group and the Peak Oyster Advisory Group (POAG).

Contact: Aquatic Biosecurity NSW DPI 4982 1232 or email aquatic.pests@dpi.nsw.gov.au

Implementation of QX Risk-Based Closure

A new risk-based approach to managing QX came into effect in NSW on 10 August 2008. The previous complex series of Section 8 fishing closures for QX have been replaced by one closure which ranks estuaries according to their QX risk. Estuaries with the same risk ranking can trade freely amongst themselves. Estuaries of lower risk can move product to higher risk estuaries, but higher risk estuaries cannot move product to lower risk estuaries.

Contact: Aquatic Biosecurity NSW DPI 4982 1232

Minister Inspects Hawkesbury River

Minister Macdonald visited the Hawkesbury River in September following the completion of the government's assistance and cleanup package from the 2004/05 QX disease outbreak. The Minister inspected leases (8,000t of waste removed) and met with growers to inspect new production technology, new disease resistant oysters and discuss the farmers marketing group 'Broken Bay Oysters' and their positive outlook for the future.



Hawkesbury River oyster farmers and NSW DPI staff

Oysters in the House a Winner

The NSW Farmers' Association Oysters in the House event held in October has been heralded as another winner for the NSW oyster industry. Conducted annually at Customs House Circular Quay, Oyster in the House

showcases oysters from estuaries across NSW. Oysters are matched to regional wines and served with recipes designed by local chefs. The event comprises three sessions; the Government and Industry session; the Restaurant session; and the Public session. Two of the three public sessions were completely booked out, with 370 people attending. This year the Peoples Choice Award was won by Hastings River Oysters, a combined effort by farmers in the Hastings River. The runner up was Graham Barclay Oysters of Forster.

Contact: Richard Widows NSW Farmers 8251 1808

Salamander Bay Spat Leases Still Available

Contact: Aquaculture Administration NSW DPI 4916 1232

Australian Shellfish Quality Assurance Advisory Committee

Aquaculture Management attended a meeting of the Australian Shellfish Quality Assurance Advisory Committee in Sydney 23 October 2008 to provide an overview of the NSW Oyster Industry Sustainable Aquaculture Strategy. The Strategy's focus on water quality protection was well received from the Australian and New Zealand delegates.

Contact: Tim Gippel NSW DPI 4916 3823

Wonboyn Lake Impacted by a Whale

NSW DPI worked with Wonboyn Lake oyster farmers, and the NSW Food Authority to manage a pollution event that closed the Lake to oyster harvest for a short period. A dead whale impacted water quality in the area. Arrangements were made under the *NSW Oyster Industry Incident Response Protocol* to coordinate a response from agencies. Luckily, before removal of the carcass was required the whale was carried by tidal movement from Wonboyn Lake entrance out to sea.

Contact: Ian Lyall NSW DPI 4916 3856

OISAS Referrals

A steady stream of applications for new developments that could impact the oyster industry are being processed by the Aquaculture/Conservation Management teams. Recently a two lot subdivision on a steep slope with poor soil was refused by a local Council on the basis that the on-site sewerage management system proposed was likely to have an adverse effect on oyster aquaculture and a priority oyster aquaculture area. A subsequent hearing before a Land and Environment Court Commissioner saw NSW DPI, NSW Food Authority, the Council and the proponent agree that the on-site system needed to be completely re-designed with the likely outcome being a membrane filtration system with double disinfection and a subsurface irrigation field.

Contact: Tim Gippel NSW DPI 4916 3823

Acid Sulfate Soils Assessments at Anna Bay

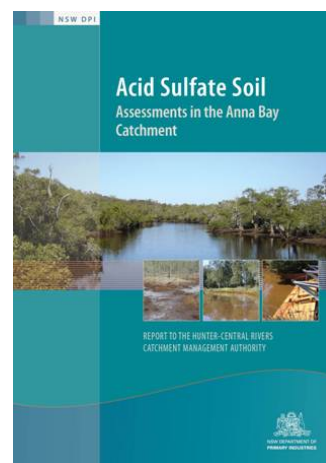
In recent years there has been increasing awareness of the impacts of acid sulfate soils in the Anna Bay sub-catchment, which discharges into the Port Stephens – Great Lakes Marine Park. Greater movement of acidic

groundwater has resulted in fish kills, poor water quality affecting oyster cultivation, reduced stock production and a deterioration in downstream environmental values.

In 2008, the Hunter-Central Rivers CMA provided funding for NSW DPI to assess acid sulfate soils in the catchment. These assessments identified the presence of acid sulfate soils across the catchment with two key 'hotspot' areas of soil acidity. The final report is now available and provides the results of detailed on-ground assessments of the distribution and impacts of acid sulfate soils.

The report also identifies on-ground works which will retain high groundwater levels to manage acid export, while ensuring better drainage of surface waters following floods and severe rain events. The report is now available on the DPI website at: <http://www.dpi.nsw.gov.au/fisheries/habitat>

Contact: Kylie Russell NSW DPI 4916 3817



Minimising Risks with Ornamental Fish

There is growing interest in the aquaculture of ornamental fish. As many of these species originate from overseas and will have been in contact with other fish that have been imported, there is a risk of spreading exotic aquatic diseases to our native species. An example of this occurred on a Victorian Murray cod farm in February 2003 where 90% of juvenile Murray cod died from a strain of iridovirus reported from ornamental fish but which had never before been reported from farmed or wild fish in Australia. It is very important to minimise such risks by adopting best biosecurity practice.

When setting up an ornamental fish aquaculture enterprise ensure that you start with locally bred stock. It is very important to ensure that ornamental fish and food fish species are not cultured in contact with each other. Ornamental fish and food fish MUST NOT be cultured in the same water source or otherwise be in contact. This means that separate equipment needs to be used between these two groups and that as much separation as possible is put in place between these two groups. Things you can do to minimise the risk include ensuring personal disinfection and disinfection of gear such as boots when working between the two groups of fish species. It is also very important that ornamental fish are never fed to

broodstock as this is another way that diseases can be spread. Minimise risks with ornamental fish and help safeguard the Australian aquaculture industry and the Australian environment!

Contact: Jeffrey Go NSW DPI 4640 6310

What's New

- Rumour has it that a new pre-assembled floating oyster basket suitable for floating longlines is about to hit our shores.
- A new relatively inexpensive longline basket is now on the market.
- A new flexible grooved spat collector (Venetian blind profile) that incorporates calcium carbonate to attract oyster settlement, is now on the market.

Contact: Steve McOrrie NSW DPI 4916 3921

POAG met on 13 November 2008 in Sydney

Key items on the agenda included:

Industry raised the issue of recreational take of oysters from NSW waters. NSW DPI will consult with Recreational Fishing and Compliance units within NSW DPI and the NSW Food Authority over this issue and report back to POAG.

POAG supported a policy to address relinquishing Priority Oyster Aquaculture Areas for public and private purposes. The policy details lease assessment and industry consultation processes to consider whether leases should be removed from the lease estate within an estuary.

Lands Department updated industry on the roll out of long term leases and associated rent review. Five year workplans associated with new leases were also discussed. Lands are still finalising a number of north coast land base surveys.

Industry raised concerns over the standards of auditing on-site waste water management systems across NSW. POAG recommended that the Minister be advised of this issue and to seek his support to raise the profile of this problem at a local government level.

NSW DPI Compliance reported on current lease inspections across the state. It was noted that there were a considerable number of leases that required works. Compliance advised that greater attention would be paid to aquaculture leases in the coming year.

The NSW Food Authority advised on poor water quality test results from the Manning and Richmond Rivers and potential long term implications. Problems associated with water quality in the Myall Lakes were also discussed with a meeting planned for farmers. POAG were advised that three harvest areas in the Hawkesbury were assessed as classified for direct harvest.

It was proposed that two oyster farming field days should be held in 2009.

Contact: Katie Sachs NSW DPI 4916 3913

Snapper Research Reports

NSW DPI and Aquafin CRC have just released a final report on the aquaculture of Australian snapper. The report is broken into 3 volumes. Volume 1 details research on nutrition and diet development. Volume 2 presents research on improving skin colour and volume 3 presents



research on fingerling production and health. Although snapper farming in Australia has contracted over recent years due to a switch to faster growing species such as yellowtail kingfish, much of the research detailed in this report is applicable to other finfish species.

Contact: Helena Heasman NSW DPI 49163912

Merry Christmas and Best Wishes to Permit Holders from all at NSW DPI



Aquaculture News is a newsletter for the aquaculture industry in NSW.

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www.dpi.nsw.gov.au/fisheries/aquaculture/publications/aquaculture-newsletter

ISSN 1835-2618 (print)

ISSN 1835-2626 (online)

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