# FSHANIAN SEAFOOD INDUSTRY NEWS

**New TRLPA Board** Page 3

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#### Advertising deadline for the next issue: 10 September 2014

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# From the PRESIDENT

In late June 2014, our Chief Executive and I attended our first meeting with the new Primary Industry Minister and Deputy Premier, Jeremy Rockliff.

The meeting was very productive with a range of issues discussed. The Minister has taken TSIC's position on board, and we look forward to positive and productive outcomes moving forward.

The budget deliberations, and how they will affect the fishing industry in Tasmania in general, are obviously a major concern. As already stated, we will have a much clearer understanding of where we are positioned once this is delivered in August 2014.

Our Chief Executive Neil Stump and the TRLFA Executive Officer John Sansom have also met with our Minister for Infrastructure Rene Hidding. Once again, issues that are causing major concerns, including the ongoing AMSA issue, were highlighted.

A genuine effort in collating the Oral History of our Tasmanian seafood industry has finally seen our first edition launched and distributed. This has been in no small part due to the efforts of our Project Manager, Julian Harrington.

We congratulate all involved in this project in capturing the hardships and stories of our fishers and fisheries in North Eastern Tasmania. The anecdotal and factual information captured details of challenges that our Tasmanian industry and characters have overcome. I encourage everyone to read these editions which are presented in an easy readable format. Our Project Manager's interview recently on the ABC Country Hour highlighted how this project has created significant interest from the wider fishing fraternity.



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Lindsay Newman

Our Minister Jeremy Rockliff recently announced the formation of Agri-growth Tasmania. The concept of this group is shifting the focus of Government from regulatory and compliance activities to include a concentrated effort on development and growth opportunities for the food industry.

Core groups, including TSIC, have been identified as the organisations best placed to provide advice to Government in relation to opportunities for growth in their respective sectors.

Our Tasmanian seafood products continue to drive positive growth and employment opportunities and we are encouraged by this initiative.

Lindsay Newman TSIC President

#### www.tsic.org.au

## New TRLPA BOARD by Mary Brewer

If Peter James takes on his new role as the President of the Tasmanian Rock Lobster Processors Association (TRLPA) with the same energy and enthusiasm that he has approached his career, then the profile of the organisation is sure to change in the future. Also elected at the May AGM, were Michael Blake as Vice President and Emily Osborne as Secretary/ Treasurer.

Peter is the General Manager of the Foods Division at Craig Mostyn Group (CMG). Peter's career has been one where from an early age he put in considerable hard work which is now paying off. Peter grew up in the Wheatbelt of Western Australia, then from the age of 14 attended high school in Perth. After that he gained a Bachelor of Business at the Churchlands College of Advanced Education, which later became the Edith Cowan University.

Peter had worked part-time at Woolworths from the age of 15, so when he completed his studies they took him into their Management Training course. This ended up being a 12 hour a day commitment, so the sports he had enjoyed playing, such as hockey, soccer and footy, went by the board.

However, this commitment enabled him to pursue a sales career with companies such as Colgate Palmolive, Uncle Tobys, Goodman Fielder, Glaxo Smith Kline, Boots Health and then McCain Foods, where he became the sales director for Australia and New Zealand.

This role saw Peter based in Sydney and travelling 100 nights a year on company business. He realised he couldn't raise a young family that way, so returned to Perth in 2011, to the grandparents' delight, and began working with the Craig Mostyn Group (CMG).

Headquartered in WA, CMG was established in 1923 and has grown into a diversified food and agribusiness, operating in the meat protein, tallow and oils, food services and retail markets. It is a market leader in the domestic pork and rendering sectors, exporting 25% of Australia's pork to Singapore and it has the only abattoir in WA. CMG employs 350 people and in the 2012 financial year achieved revenues in excess of \$310 million.

CMG operates under a 'family ownership' structure where all current shareholders are second or third generation family members. CMG's forward strategy looks to:

- geographic diversification of production capabilities into the Eastern seaboard
- product diversification, to become a significant producer of a protein other than pork
- continue seeking operational efficiencies whilst growing the business' earnings via acquisitions and organic growth
- value adding of products for retail distribution through proprietary brands.

Peter's role is to lead the Food Division in the continued implementation of the growth agenda. "As a company we are committed to building on the brand's enviable reputation through strategic capital investment, a renewed marketing focus and our knowledge of Asian markets," Peter said.

CMG operates the former fishermen's cooperative, Stanley Fish, which began in 1945 and has since positioned itself as a premium supplier of live fish such as rock lobster, giant crab and scallops to the major markets around the world.

To assist their strategic position, CMG recently acquired two more lobster and abalone processing facilities in Tasmania— Australia Seafood Export in Bicheno and the former Dover Fisheries, located in Dover—resulting in a \$5 million investment in the local economy.

Not only has this improved their storage capacity to collect, store and transfer rock lobster, it also allowed CMG to enter the abalone export market for the first time. The majority of produce from the Bicheno and Dover premises will be exported to longstanding customers in Asia, mostly Singapore, Japan, Hong Kong and mainland China.

The processing facilities will continue to operate independently and as the facilities expand, more Tasmanians will be employed at the two centres. CMG has continued its expansion with the acquisition of Jade Tiger Abalone (JTA) from Great Southern Waters, Indented Head, Victoria on 1 July 2014. "As a company we are committed to building on the brand's enviable reputation through strategic capital investment, a renewed marketing focus and our knowledge of Asian markets," Peter said. "We will not be making any immediate changes to the current operations of JTA, which includes staffing levels, client and supplier relationships. It is business as usual. The daily operation of JTA will continue to be delivered by the company's experienced management and operations team, supported by CMG's executive and board."

Peter believes that the JTA purchase gives a CMG another advantage as they won't have to worry about quota or seasonal issues.

The motivation for Peter to become president of TRLPA is that he feels industry is misaligned and is consequently wasting resources". It should work closer together, and this includes everyone in the supply chain from fishers, quota holders and processors etc. Making it stronger benefits everyone in export.

"There is unlimited potential for Tasmanian product from a limited supply, so TRLPA should be looking at growing the value of industry overall by working with processors and fishers. Improving relationships with decisions-makers including scientists and department managers is essential as you cannot base management decisions without a scientific foundation."

Peter has a very positive outlook for the future. He believes he can bring a 'new eyes' perspective to TRLPA and hopes to offer a calendar of events that everyone in the industry can share. He sees Emily Osborne's role as TRLPA Secretary to be the key to communicating to processors in Tasmania.

Peter can be contacted on phone 0419 414 967 or by email pjames@craigmostyn.com.au

### C H I E F Executive's Report



#### Harmful algal bloom on the East Coast

Elevated levels of saxitoxins associated with harmful algal blooms were detected in meat samples of farmed shellfish from the East Coast in late June. Further tests conducted in the first week of July confirmed there had been an exceedance in the maximum permissible level of saxitoxins in meat samples taken from Great Oyster Bay. As per the requirements of the Biotoxin Management Plan, Great Oyster Bay was closed on 4 July. During the same testing period elevated levels of saxitoxins were detected in meat samples from Greater Swanport and Eaglehawk Bay. Detected levels were just below the maximum permissible level, therefore closures were not put in place for Greater Swanport and Norfolk Bay.

Due to the exceedance in shellfish being detected in waters adjacent to rock lobster fishing grounds, and in accordance with the Rock Lobster Biotoxin Management Plan, the lobster fishery was closed on 13 July between Wineglass Bay and Marion Bay while sentinel species were tested for the presence of saxitoxins. Saxitoxin results from these samples were in the very low category and the commercial rock lobster fishery was subsequently reopened on 19 July.

In accordance with the testing procedures for scallop, scallop meat samples from the White Rock and Circular Head open areas was also tested at the commencement of the scallop season (1 July). Results from both regions returned clear results.

What are the implications for industry from the closures? For the two farmers required to suspend harvesting operations in Great Oyster Bay, the marketing of their product and cash flows will be impacted. The rock lobster fishers who traditionally work the Wineglass Bay to Marion Bay area of the East Coast this time of year are still able to fish outside the closed area on the East Coast. Scallop fishers were fortunate enough to have a second area open to commercial harvesting on the NW Coast.

What this scenario also indicates is that, following the review of biotoxin management arrangements in 2013, the changes made to the management plan have provided industry with a more robust management system. The end result should be that consumers can be confident that all domestically produced seafood is safe to eat.

#### TSIC associate membership

TSIC has been approached by a number of individuals over the last few years enquiring how they could become a TSIC member given that they do not hold a fishing licence personal, a marine farming licence or a fish processing licence. The revised TSIC constitution, which was passed at the 2013 AGM, allows for a new membership category to be established, that of a non-voting associate member. The new membership category will entitle associate members to a copy of each issue of Fishing Today, newsletters and other information from TSIC. The annual fee for an associate member has been set at \$75. Contact the TSIC Office if interested in becoming an associate member.

#### World Aquaculture Adelaide 2014

In my role as a Director of the National Aquaculture Council and as a member of the organising committee, I attended World Aquaculture 2014, which was held in Adelaide between 7 and 11 July. As there is a more detailed report on the conference provided on page 10 of the magazine, I will provide some brief observations from a whole of industry perspective. As always, one of the primary benefits of conferences is meeting with likeminded people who provide a different perspective on common issues. Whether in relation to a technical issue or how to navigate through an increasingly complex regulatory maze, there were animated conversations being conducted throughout the conference venue and in nearby hotels and restaurants.

Two of the key theme areas from a whole of industry perspective were on "social licence" (or, as Richard Stoklosa from TSGA informed me, building "social capital") and "certification". One of the keynote speakers at the conference, Charlie Arnot from the US-based Centre for Food Integrity, presented a compelling case for the need to build and maintain community acceptance. As Charlie succinctly stated, if you can build and maintain your social licence then the primary benefit is that you should be able to operate with a minimum of formalised restrictions. The flip side to this benefit is that if you don't have community acceptance, you face the prospect of being forced out of business by an increasingly restrictive regulatory system.

The session on certification was the one I found most disturbing, but at the same time one of the most valuable. It quickly became apparent that a number of the presentations were solely about selling the need for a business to seek and maintain "certification". And the story gets better, you need multiple certifications because a label that is accepted in one market may not be accepted in another market.

Only one speaker, Dos O'Sullivan, who is well known to many within the Australian seafood industry, posed the question, "How do we reduce the costs to the producers associated with meeting certification requirements?" Dos stated that the focus should be on reducing duplication and hence the time auditors need to be onsite and reducing the amount of time staff need to spend meeting audit requirements.

The cost of meeting certification and the associated auditing requirements was reinforced by the manager of a Tasmanian producer who had recently been through the accreditation process. The benefits were identified as a tightening up of internal processes where there were gaps, but the associated monitoring and reporting had increased the time spent on these activities by employees four-fold.

On the day after the conference I attended a spatial planning workshop. The workshop was attended by industry, researchers and managers from across Australia and New Zealand. The cross flow of information sparked a number of conversations around how to develop a planning system that is transparent, robust, provides the opportunity for stakeholder input, in the broader sense, but does not allow ongoing vexatious objections to aquaculture development.

One of the key learnings for me was that although we can learn many things from our neighbours across the Tasman Sea, designing a planning system for marine farming is not one of them. In New Zealand, local councils are responsible for approving marine farming proposals. The system presently in place involves policy that is broadly set by the Government but is subject to different interpretation at a local council level. Representatives from both the New Zealand industry and Government that attended the workshop agreed the present system is overly litigious, takes too long and leads to unsatisfactory outcomes.

#### Primary Produce Safety (Seafood) Regulations 2014 – Update

Since the last issue of *Fishing Today* where I provided a brief update on the regulations, TSIC has been advised that the regulations have been through State Parliament and took effect from 1 April. This is despite industry advising DPIPWE that we continue to have concerns with the proposed schedule of fees and that we are still waiting on clarification in relation to the activities the Department will be required to undertake in administering the regulations.

As the regulations are a subordinate legislation and are reviewed by the Parliamentary Standing Committee on Subordinate Legislation, I contacted the Committee Chair, Tania Rattray MLC seeking clarification on the process. Tania advised the fact sheet provided by DPIPWE that accompanied the regulations, indicated that the regulations had been developed with input from industry (true). However, the information provided by DPIPWE contained one glaring omission. There was no mention of our ongoing concerns around the schedule of fees. TSIC will be providing the Subordinate Legislation Committee with a submission in relation to our concerns.

#### AMSA update

In June, holders of pre-USL Certificate of Competency (pre 1984), mostly Skippers 1s and 2s, received a letter from AMSA advising them that their certificates had expired. However, they had been granted an exemption "...to continue operating as though you held a pre-USL code Certificate(s) of Competency. This is effective until 30 June 2018." The letters provided no additional information in relation to the expired certificates nor the status of those who had been granted an exemption to operate a vessel in accordance with the specific limits prescribed in their original or amended pre-USL certificates post 2018.

In response to my enquiry as to the fate of holders of pre-USL Certificates of Competency after 2018, I received the following advice from AMSA:"...AMSA will not interfere with an existing holder's capacity to generate an income, so while the Exemption expires in 2018 the capacity to be able to work will continue in some form or another. We have been in discussions with MAST about how best to do that but for the time being MAST and AMSA have opted for an arrangement that is of least inconvenience to holders."



#### TSIC News

### Tasmania's Seafood Trail 2014-2015

As advised in the last issue of *Fishing Today*, TSIC has commenced the process for developing the next edition of Tasmania's Seafood Trail. Thank you to those who have already expressed an interest in supporting the next brochure.

For more information about the Seafood Trail, including information on advertising rates, a Seafood Trail Prospectus and Booking Form is available from the TSIC office or can be downloaded from the TSIC website.

#### Tasmanian Wine Routes 2015: A further advertising opportunity

We are also able to confirm an advertising partnership between TSIC and Wine Tasmania, with the new edition of the Tasmanian Wine Routes 2015 to contain a Tasmania's Seafood Trail section. This joint venture provides another very exciting advertising opportunity for seafood businesses, and will ensure maximum exposure to locals and tourists alike.

The advertising prospectus "Tasmania's Wine Routes 2015 incorporating Tasmania's Seafood Trail" is available from the TSIC office or via the TSIC website.

By producing a brochure that focuses solely on the Tasmanian seafood businesses and eating opportunities, and by partnering with Wine Tasmania's 2015 Wine Routes Guide, your business will be gaining even greater exposure, with a combined circulation of over 300,000 hard copies and electronic copies available from the TSIC and Wine Tasmania websites.

For more information on both advertising opportunities contact Neil Stump in the TSIC office.

## What's happening at TSICP

#### Tasmanian Seafood Industry Council Facebook page

Historically, TSIC has utilised its bimonthly *Fishing Today* magazine to communicate and promote news and stories to its members and broader seafood industry community. Although *Fishing Today* will remain an exceptionally important forum for the transfer of information to the seafood industry community, TSIC understands that news and stories could be, and in many instances should be, transferred in real time.

Subsequently, TSIC has committed to better maintain its webpage, with content of interest and relevance to be uploaded at the very least on a weekly basis. The majority of the website content will be placed in the 'News' menu option at the top of the home page (www.tsic.org.au). Content will include the transfer of important management information, seafood-related stories from close and abroad and any other content of potential interest.

It must also be recognised that communications have surpassed webpage technology, with social media forums the new communication norm among old and young alike. And with the capacity to send and receive news and stories in virtual real time via mobile phones, communication with people is quick, effective and relatively simple.

Accordingly, TSIC has developed a Tasmanian Seafood Industry Council Facebook page. The Facebook forum will be used to direct people to stories on the TSIC webpage, promote seafood-related media articles and news, and to transfer important information to the seafood community, all in a timely manner.

So to keep up-to-date with all the Tasmanian seafood news, look up the Tasmanian Seafood Industry Council Facebook page to become a follower. And don't forget to check out the TSIC webpage for even more news and information (www.tsic.org.au).

If you happen to stumble across a story you think may be of interest to the broader seafood community then send it into tsic@tsic.org.au and request that it goes onto the TSIC Facebook and/or webpage.

#### Devonport Harbour dredging project raises concerns over scallop bed

Tasports has commenced a project for major maintenance dredging within Devonport Harbour. The project will involve the removal of approximately 320,000 cubic metres of sand and fine silt for dumping offshore. The need for dredging has resulted from the gradual build-up of sediments to a level that will soon impact the ability for larger vessels, such as the Spirit of Tasmania, to enter and/or berth within Devonport Harbour. To commence the dredging project, Tasports must obtain Commonwealth Permit approval under the Environment Protection (Sea Dumping) Act 1981.

As part of the dredging project, Tasports has established the Port of Devonport Major Maintenance Dredging: Technical Advisory Consultative Committee (TACC). At a meeting held in Devonport on 1 July 2014, TSIC was informed that the proposed dumping grounds, which are referred to as a 'spoil ground', was approximately 3.5km off the Devonport channel entrance.

Although the seafood industry is supportive of continued access into Devonport Harbour, there is one catch! There is a significant bed of scallops located in close proximity to the proposed spoil ground. Despite a Tasports consultant assuring the TACC members that the dumping of sediments posed no threat to the scallop bed, the Tasmanian scallop industry holds several concerns about the project and its potential impact on a profitable scallop season out of Devonport. Of particular concern, is that the area of the Devonport

#### > TSIC NEWS

scallop bed has not been fully defined and scallop industry representatives believe that the bed more than likely extends westward, which takes it even closer to the proposed spoil ground.

As observed in previous scallop seasons, scallop beds can die 'en masse' from undetectable impacts and/or reasons. Subsequently, there are significant concerns around the impact of fine silt build-up and the ongoing health of the scallop bed.

The preliminary solution from Tasports was to delay dredging activity until March 2015, however the scallops may still not be of legal size and will almost certainly not be in a harvestable condition at this time of year. The scallop industry solution is an alternative spoil ground location, which will not impact the scallop bed, however this location is further offshore and will increase the cost of the project.

TSIC and scallop industry representatives will continue to work with Tasports to find a solution to the issue. Although industry does not want to hinder such an important project, we most definitely do not want to jeopardise what will most likely be a seven million dollar plus scallop fishery close to Devonport.

#### Seafood Industry Workforce Plan: The next steps

The Tasmanian Seafood Industry Workforce Plan was reviewed and modified in March 2014. Since this time, TSIC has submitted several applications to fund the implementation of the workforce plan project to Skills Tasmania. Unfortunately, Ministerial directives under the new Government have changed the mechanisms and protocols for funding projects under the Skills Tasmania banner, and we have been caught in the middle of the changes.

At the time of writing this article, TSIC was close to securing a grant that will allow the Workforce Plan Reference Group to complete the first action identified in the Plan: 'Develop a detailed seafood industry workforce profile, inclusive of a 5 to 10 year strategic profile'.

The workforce profile will identify industry skill and training needs and the context within which they are required. The information gained can then be used to enable industry to identify the key training and skill issues that need to be resolved for the industry and to clearly articulate its current and future workforce development needs to training providers and funding bodies.

Into the future, TSIC will continue to acquire funding to allow the implementation of the remainder of the workforce plan.

#### Australian Wooden Boat Festival

The Australian Wooden Boat Festival organising committee is ramping up their plans for the next Australian Wooden Boat Festival, which will run between 6 – 9 February 2015. The Festival management committee has approached TSIC to be involved with the 2015 event, with the offer of a space in the Hunter Street exhibition area similar to that provided in 2013. For the 2015 festival, the theme for the Hunter Street display is 'As once we were'. The plan is for the entire Hunter Street area to be a living display of how the Hobart waterfront would have been like 'in times gone by'.

TSIC's involvement will be a historical fishing display. The current proposal is to display some of the banners and material produced for the 2013 event, with TV monitors displaying historical fishing interviews and footage. It is also anticipated that a new component of the display will be produced, featuring photos and descriptions of fishing activities in and around the Hobart waterfront. In the theme of the event, it would ideal to have people making craypots and slinging nets within the display. The festival management committee would also like to have prizes for the best presented fishing boat, and a handicap style wooden fishing boat race, complete with its own trophy. Further details to come.

If you are interested in being involved with the historical display, please contact the TSIC offices.

Another concept being floated around TSIC is the promotion of our current seafood industry and its sustainability (i.e. management, science, operations and product). This modern fishing space would consist of information, taste testing of product and discussions with real marine farmers and wild catch fishers. What better way to promote a sustainable Tasmanian seafood industry than in front of the 200,000 plus people expected to attend the 2015 event.

The success of this seafood display will depend on financial sponsorship and the participation of different sector groups and seafood businesses. So if you want to contribute to the display and promote your sector group and/or business then contact the TSIC office.

#### Working on the Water – Career pathway program

TSIC is once again gearing up for the annual 'Working on the Water' career promotions program. Running since 2008, the program introduces about 50 Year 9 and 10 students from a range of private and public schools in southern Tasmania to the diverse range of career opportunities available on and around the water. The three day program has been designed to get kids out of the classroom and into the real working environment, learning about career opportunities and pathways from people in real jobs.

The very successful program is made possible through the generous involvement and financial sponsorship of a range of industry program partners.

The program has taken a number of financial setbacks this year, so if you are interested in learning more about the program or, even more importantly, about how to become a financial sponsor, then please contact the TSIC Project Manager, Julian Harrington on Phone (03) 6224 2332.

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#### **DPIPWE** News

### Tasmanian Gould's Squid Fishery Illustration by Peter Gouldthorpe **RECEIVES APPROVAL TO EXPO**

The Tasmanian Gould's Squid Fishery has received export approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) for a period of five years—until 19 June 2019—after completing a six month assessment process with the Australian Department of the Environment.

The Tasmanian application was assessed for the purposes of the wildlife trade provisions of Part 13A of the EPBC Actwhich means that any Gould's squid taken in Tasmanian State waters has now been assessed as sustainable and can be exported overseas, as is currently the case for squid taken in adjacent Commonwealth waters. Tasmania has agreed to five recommendations, which focus on ensuring the continuation of good management practices.

The Tasmanian Gould's Squid Fishery complements the Commonwealth Southern Squid Jig Fishery, with annual total catch fluctuating in each jurisdiction. Due to the cyclical nature of these two fisheries the bulk of the catch is taken

wherever the squid appear, whether in Commonwealth or State waters, and many State licence holders also hold Commonwealth concessions to maximise their opportunities to target this species.

© DPIPWF

If you would like to read more on this process, the Tasmanian DPIPWE's application and assessment report (including the five recommendations) are available on the Department of the Environment's website at: http://www. environment.gov.au/topics/marine/ fisheries/tas/goulds-squid

### Tasmanian commercial scallop season update

#### The Tasmanian commercial scallop season opened on 1 July and will remain open until the end of the year.

Statewide surveys commenced at the beginning of April with six vessels participating in searching for scallops during the survey period. Thanks must be given to these vessels who take upon themselves the risk of searching for scallops with no guarantee of a return.

Fortunately these survey vessels located what turned out to be commercially viable beds in similar areas to where fishing was opened and concentrated in 2013. Interestingly, at the end of the 2013 season, these areas were not yielding commercial volumes of scallops.

The Scallop Fishery Advisory Committee (ScFAC) met in early June and made

recommendations to the Minister on the areas to open, season start date and the Total Allowable Catch (TAC). The Minister supported the ScFAC on all of these recommendations, approving two areas to be opened for 2014, one in the State's North West off Circular Head and the second in the waters around White Rock on the State's East Coast.

A TAC of 620 tonnes was set with the knowledge that if this tonnage is being approached and catch rates have remained high or another scallop bed is located, the TAC can be readily increased.

Early reports are of good quality scallops from moderate catch rates in the North West, with slightly reduced catch rates and scallop condition around White Rock—this can however change reasonably quickly.

The White Rock Scallop Area has already been subject to some modified fishing effort with the recent detection of paralytic shellfish toxin in the northern end of Great Oyster Bay. Great Oyster Bay was already closed to scallop fishing as it is a protected area, but industry has taken the sensible step in voluntarily moving fishing operations well to the south of this area. This area will continue to be closely monitored with any action quickly taken to ensure the continued high reputation of this quality product.

Fresh Tassie scallops have been available in small volumes since around the start of the survey period, but with the season officially underway now, a more regular supply should be available for everyone to enjoy.

### CONVICTIONS

#### Recreational rock lobster fisher convicted

On 12 June 2013, Mr John Robert Forbes was convicted in the Hobart Magistrates court of taking and possessing undersized rock lobster.

On 4 November 2012, Tasmania Police conducted a routine inspection of a non commercial vessel at Blackman Bay near Dunalley. Mr Forbes was found to be in possession of one female rock lobster that was below the prescribed minimum length.

Mr Forbes received fines and special penalties totalling \$380.

#### Recreational rock lobster fisher convicted

On 6 September 2013, Mr Danny John White was convicted in the Hobart Magistrates court of possessing undersized male rock lobster and possessing rock lobster which were not marked or tagged as required under the rules.

At 3:15am on 11 March 2013 Tasmania Police conducted a routine inspection of a vehicle driven by Mr White which had been travelling north along Brooker Avenue at Hobart towing a non commercial fishing vessel.

Mr White was found to be in possession of six live rock lobster, two of which were measured at below the prescribed minimum length. None of the six rock lobster, which had been caught under recreational licences, had their tails clipped or punched. The rock lobster were seized and, after the initial investigation was completed, all were released by police back into the wild.

Mr White received fines and special penalties totalling \$2000.

Steve Withers Manager Fisheries Compliance and Licensing

#### > TASPORTS

## **REMEDIATION WORKS** underway at Stanley Wharf

Outside Tasmania's major ports, Tasports owns a number of community waterfront assets around the State which are highly used and valued by the local communities and businesses.

In 2014 Tasports expanded its maintenance and renewal program to focus on a priority list of high use community-based assets. Tasports wants to ensure these assets are able to be enjoyed well into the future.



One of the focus sites for remediation

is the Stanley waterfront. Stanley has established itself as one of the State's premier commercial and recreational fishing hubs, with local anglers often rising early to secure a much coveted spot on the wharf. The Stanley Wharf remains one of the few waterfront locations in Tasmania within an operating port zone, which anglers can freely access.

Today, the port plays host to a fleet of commercial fishing vessels and a regular shipping service to and from King Island, which provides a vital means for the transportation of livestock from the Island to market on mainland Tasmania. The port is also home to local ship builders and a unit of the Tasmanian water police.

The Port is in need of remediation to ensure it can continue to be used by the local community and businesses, well into the future. Tasports has recently commenced work to remediate a number of key waterfront assets in Stanley. A steel walkway which was no longer utilised was recently removed from the port operations area, as it had the potential to pose a public safety issue in the future.

The repair of the finger piers is also partially complete at Fisherman's Wharf. Further work will focus on strengthening the piers and extending their lifespan whilst maintaining their original character.

Small works such as maintenance of fendering structures and ladders will continue over the next six to 12 months. The most significant project will be the removal of the redundant roll-on roll-off ramp towers located within the operational zone of the port. The towers have not been used for some time and if left unmaintained could pose a safety hazard to the general public which enjoy access to the area. The ramp itself will remain and be pinned in a fixed position.

These projects form part of a larger program of work being undertaken by Tasports to remediate significant high-use community waterfront assets around Tasmania. A number of similar projects are taking place at Inspection Head in the State's North, at Strahan in the State's West, and Sullivan's Cove on Hobart's iconic waterfront.

Further information regarding Tasports' remediation program in Stanley, please visit www.tasports.com.au.

## World Aquaculture Adelaide 2014 Conference by Mary Brewer

From 7 to 12 June 2014 the World Aquaculture Society conducted its annual conference and exposition in Adelaide, in conjunction with the biennial Australasian Aquaculture event. Hosted at the Adelaide Convention Centre, this was the largest primary industries conference and trade show to be held in the Asia Pacific region for some years.

2108 delegates from 66 countries attended the 81 sessions. Topics varied widely and included Environment, Biodiversity and Climate Change, Post Harvest Technologies, Genetics, Finfish Nutrition, Health and Disease, Husbandry, Sustainable Development, Aquaculture Standards and Offshore Aquaculture.

Parliamentary Secretary to the Minister for Agriculture, Senator Richard Colbeck launched the National Aquaculture Statement when he opened the Conference, saying:

"The National Aquaculture Statement demonstrates commitment from the Australian Government along with state and territory governments and industry, for the growth of an efficient, innovative and sustainable domestic aquaculture industry. I would like to acknowledge state and territory governments for their active engagement in this process.

"Australian aquaculture is open for business and this is an invitation to join us as we continue to supply high quality, sustainably sourced seafood now and into the future. The way forward is to make sure we continue to work together to provide an effective and efficient regulatory environment that supports industry growth, encourages investment, maintains performance and manages biosecurity risk." As part of this strategy the Department of Agriculture will examine the existing marine pest biosecurity arrangements, assess the cost effectiveness of preventing and eradicating marine pests and seek expert recommendations to improve the current monitoring framework.

The commercial fishing and aquaculture industries are vital to Australia's economy, generating over A\$2 billion annually and employing around 10,600 people (7000 directly and 3600 indirectly). The growing importance of aquaculture to Australia cannot be underestimated. In 2011-2012, aguaculture comprised 45% of the gross value and 36% of the volume of Australian fisheries production. Farmed salmonids were the largest aquaculture species group produced, and also the most valuable fisheries product in Australia. In the last decade, the value of Australian aquaculture production has grown by 44%, while the volume has risen by over 90%.

This growth in Australia's aquaculture industry has been strongly supported by research and development. This has seen sectors develop and adopt world's best practice around husbandry, genetics, improving feed and feeding techniques, health and disease control and environmental management.

The Conference keynote speaker was José Villalón, Corporate Sustainability Director at Nutreco in the Netherlands. Nutreco is the parent company of Skretting, the leading supplier of aquaculture feeds in Australia and New Zealand, and the naming rights sponsor for WAA14.

"With global population expected to grow from 7 billion to 9.3 billion by 2050 and the affluent middle class expected to grow by 3 billion by 2030, food production will need to double to meet surging demands" Mr Villalón said. "It is estimated that more food will be required to be produced in the next 36 years than has been produced in the preceding 8000 years. So we must double food production while simultaneously reducing by half the environmental/social impacts in any food production system."

Explaining that fish convert a greater proportion of the food they eat into body mass than livestock, Mr Villalón added that the environmental demands per unit biomass or protein produced are therefore lower. It takes nearly 3 x more protein to produce 1 kg of pork protein and 4.5 x more protein to produce 1 kg of beef protein than it takes to produce 1 kg of finfish protein.

Mr Villalón continued: "However, although farmed fish may convert food more efficiently than livestock, we are still dependent on the global management of common natural resources, the small pelagic fisheries for fish meal and oil, as a component of feed. This is the most obvious dependence on natural resource sustainability for the success of aquaculture. However, like other food systems, water quality, climate stability, soil vitality and other environmental resources must be managed better by humans to meet our future needs in a way that allows the true renewability of the earth's resources to be used responsibly."

#### Trade show

Over 136 companies took this opportunity to market new products and to showcase their wares at the trade show including Tasmanian companies, Cameron of Tasmania, Marine Solutions, AQI Systems, AKVA Group, Imbros, Marine Lighting Technologies, the PFG Group's Seafarm Systems, Scielex Pty Ltd and Shellfish Culture.

#### Blue Thumb Awards

The Blue Thumb Awards were held as part of the Conference. Two Tasmanian based companies, Marine Solutions and Aquenal were co-winners with Aquasonic, Wauchope NSW of the Service Provider Award. The Award recognised "demonstrated innovation; excellence



Sean Riley (Aquenal), Sam Ibbott (Marine Solutions), Sue Carson (Aquasonic) and Neil Stump (TSIC)

in product/service delivery; customer service; as well as consistent business growth through sustainable practices that is considered will have an impact and contribute to Australasian aquaculture for 'The Next Ten Years'".

Marine Solutions is a small, flexible company offering specifically tailored solutions to complex environmental and social challenges. Sam Ibbott was very pleased and surprised to win the Award. He said Marine Solutions offers a broad base of highly skilled contractors to deliver innovative, rigorous and affordable outcomes in each challenge it accepts.

A Special Award was made to Tim Walker and the team at Austasia Aquaculture Magazine for their years of service to the industry.

#### Social Licence

A very robust session was held about social licence. Each speaker emphasised the need for every organisation, no matter how large or small, to operate with some level of social licence, which was defined as the privilege of operating with minimal formalised restrictions based on maintaining public trust by doing what's right.

Charlie Arnot, CEO of Centre for Food Integrity, maintained that "you are granted a social licence when you operate in a way that is consistent with the ethics, values and expectations of your stakeholders. Your stakeholders include customers, employees, the local community, regulators, legislators and the media. Once lost, either through a single event or a series of events that reduce or eliminate public trust, social licence is replaced with social control. Social control is regulation, legislation, litigation or market action designed to compel you to perform to the expectations of your stakeholders."

"Operating with a social licence is flexible and low cost. Operating with a high degree of social control increases costs, reduces operational flexibility and increases bureaucratic compliance," he said.

In today's age of unbridled social media, food system stakeholders have to develop new models for authentic engagement. Growing scepticism about food safety and the use of technology fuel online communities that are raising issues and making their voices heard with increasing volume and frequency. In this dynamic new environment producers, processors and distributors are inextricably linked to their customers and NGOs interested in food issues. The question for food companies is no longer "will you be transparent?" but rather, "how will you protect your social licence in an age of radical transparency?" "If food system practices are not ethically grounded they will not achieve broad-based societal acceptance and support", Mr Arnot continued. "If they are not scientifically verified there is no way to evaluate and validate the claims of sustainability, and if they are not economically viable they

cannot be commercially sustained. For a system to be truly sustainable, it has to be ethically grounded, scientifically verified and economically viable."

This model was examined in some detail. Dr Kate Brooks, Director of KAL Analysis and Program Manager at FRDC concurred with much of this but added that a company's social licence can be affected if other businesses in your industry fail to fully appreciate the obligations and responsibilities in maintaining a social licence. "To optimise a company's social licence to operate with its broader community, it is in its, and every other company's interest in the industry, to work together to optimise its social licence to operate," she said.

Other speakers spoke about their individual experiences in developing community awareness and engagement around specific fisheries such as that of the salmon industry in Tasmania, the southern bluefin tuna industry in the Lower Eyre Peninsular in South Australia and the partnership approach taken by New Zealand's fisheries.

The ultimate word probably came from Louise Shaw from Sydney Fish Market. "With 2.5 million visitors annually it is recognised that it is simply not enough to go about our business of selling fish, we need to operate in a socially responsible way, otherwise for us the risks are great."

The message from all the speakers appeared to be that the seafood industry is now well aware of its responsibilities and is actively engaging the consumer in its processes. However, it may be noted that social licence goes both ways and that perhaps some ENGOs should take responsibility for the damage that is done to the community by some of their campaigns.

#### Personal stories of the Captains of Industry

Five of Australia's top aquaculture "captains" came together to present how they see aquaculture in Australia at present, and the challenges fish farming will face in the future. Professor Mehdi Doroudi, Executive Director of Fisheries and Aquaculture at the South Australian Department of Primary Industries and Regions, highlighted the importance of maintaining and supporting the industry's growth, given aquaculture's significant and positive impact on regional economies and communities. In South Australia, for example, 81% of the industry's regional workforce is employed in Eyre Peninsula alone.

Frances Bender, Director of the Huon Aquaculture Group said that the Australian aquaculture industry is well placed to accept the challenge of contributing to feeding nine billion people. "Our industry may be small in global terms, but our ability to innovate positions us at the forefront of future aquaculture developments."

Dr Nigel Preston, Acting Director Food Futures Flagship, CSIRO commented that Australia has successfully combined research with high performing aquaculture sectors, which will help us unlock the huge potential for sustainable expansion. He outlined how aquaculture research has helped create some of the major aquaculture industries in Australia and helped underpin most of the rest.

Dr Geoff Allan, Executive Director, Fisheries New South Wales, agreed and highlighted that "the focus of research has shifted from researcherled projects, usually based on developing hatchery and husbandry technology for individual species, to larger programs usually involving partnerships between researchers and industry."

"While this evolution was gradual and reflected the growing global knowledge base for fish farming, the aquaculture industry action plan in 2000 can be seen as a turning point when industry more clearly articulated a set of developmental priorities and worked more closely with researchers."

"R&D for aquaculture in Australia has progressed to become a series of collaborative research partnerships between industry and research agencies. This positive development has contributed to better outcomes. Further advances in improving effectiveness of the research investment are needed to meet increasing demand for aquaculture products", Dr Allan said. Dr Craig Foster, Chief Executive Officer of Clean Seas, has been closely involved with many species but in particular yellowtail kingfish, mulloway and both the propagation and ranching of southern bluefin tuna. He outlined the three key risks for companies which are people, entering new regions and developing new species. He warned that before proceeding, consider how to reduce risks in your business when growing a new species.

#### Climate change

Another of the central topics addressed at the Conference was the issue of climate change. Primary industries have been historically exposed to climate variation, leading to attitudes that coping is "business as usual". Both climate change related trends and recent extreme events have shown that coping is becoming more difficult, and directed adaptation to climate change is required. While awareness around the need for adaptation to climate related changes is growing, the timescales for different actions vary considerably between industries, and near term planning is considered a priority by many. Building skills for long-term decision making is also important.

CSIRO's Dr Alistair Hobday said: "We have found that seasonal time scales represent an intermediate step between reactive responses to weather events and proactive planning for long-term climate change. To support such medium-term decision making we have developed and implemented seasonal forecasts for a range of Australian fisheries and aquaculture industries. We have used the Australian Bureau of Meteorology's seasonal forecast model POAMA, which forecasts sea and air temperature and rainfall for Australia at lead times of up to nine months. Our experience with a range of seafood sectors has allowed development of a general engagement strategy that we believe increases the likelihood of a useful forecast system for the end user. Critical steps in the first phase include partnering with the end user to understand the need and critical time scales for the forecast system. The second phase involves traditional scientific problem solving, while the third phase, like the first, involves engagement to road test and refine the forecast system. Without the first and third phases, the forecast system is unlikely to deliver maximum benefit to the target users."

Dr Hobday then gave examples of this process from the salmon aquaculture industry in Tasmania and prawn aquaculture in Queensland.

Given the disturbing patterns of water temperature and guality and severe weather events over the last two years. the oyster industry had sessions that examined climate change and survival. Speakers discussed ocean acidification, which results in carbonate ion concentration reductions leaving bivalve molluscs particularly susceptible due to their reliance on calcium carbonate for shell formation and integrity. Environmental stressors associated with climate change have also been shown to have negative impacts on the metabolism, calcification, immune responses, reproduction, development and growth rate of oysters. However, these impacts can vary depending on the species, and even between populations within species. For instance, the deleterious effects of climate change have been shown to be far less severe in Sydney rock oyster Saccostrea glomerata produced through selective breeding than in wild type oysters.

The session topic then moved to 'Survival in risky times'. With incidents of Pacific oyster mortality syndrome (POMS) over the last four years, Australian growers are being forced to rethink how they proof themselves against significant business loss. The session examined the business model of a US grower, his response, species diversification options, real time oyster stress monitors for the field, and growing methods for better survival rates.

Another session looked at effective production and husbandry, which is significantly impacted by the growing environment and animal genetics. This session focused on the impact of bacteria and algae on larval survival, the oyster's antiviral reaction and the potential to 'immunise' oysters at hatchery stage, the genetic diversity of Sydney rock oyster breeding lines and the effect of culture system on oysters.

## industry wide...

#### Tasmanian Rock Lobster Fishermen's Association

At the time of writing we have just dealt with an outbreak of the toxic algal bloom Alexandrium tamarense. High readings of concentrations in shellfish forced the closure of an area between Wineglass Bay and Marion Bay for the taking of lobsters both commercially and recreationally while testing took place. This is in line with the protocols developed to protect consumers and export markets. While these types of closures are inconvenient it is far better than risking a market recall and the subsequent damage to our reputation for quality and food safety overseas and locally. My thanks go to those who helped in the collection of samples of shellfish and lobsters for testing, namely Simon Willey, Chris Bailey and Ross Parker. The results of mussel tests from Eaglehawk Neck and Bicheno were negative and very low respectively and testing for lobsters in those areas was not required. Tests on lobsters from Maria Island have proven to be in the "very low" category and therefore the closed area was reopened next day for fishing. My thanks to DPIPWE staff who worked extremely late on a Friday night to enable the fishery to be open on Saturday.

The Minister Jeremy Rockliff has made his decision for the season opening dates for September and November. The season will be open betweem 1–30 September from Sandy Cape north and eastwards to Point Sorell including King Island. The boundary at Sandy Cape has been moved further south from last year to Latitude 41 degrees 29 minutes south. No other area will be open. If travelling to the open area after 31 August you are not permitted to bait pots until you enter the open area.

In November the Western region from Whale Head west and north to Point Sorell will open from 00:01am on 15 November. The Eastern region from Whale Head east and north to Point Sorell will open from 00:01am on 24 November. Travelling with pots is allowed up to 60 hours before the opening without a permit. Should you require anything different you will need to contact DPIPWE licensing staff for a permit. Pots can be set from 1pm on the day before opening. It is permitted to bait pots in the 60 hour period before the opening.

Together with TSIC we are attempting to get some sense and meaning from AMSA about our concerns over the new National Standards. We recently met with Rene Hidding the Minister for Infrastructure and expressed our concerns over the botched process being used to implement the regulations. He did state that if he was not fully satisfied with AMSA then Tasmania could withdraw, however it would be a major step he was unwilling to pursue at this time. He urged us to keep working with MAST to resolve issues. Those of you with pre USL tickets will have recently received a letter informing you that your expired ticket will again expire in 2018. Apparently expired doesn't mean expired but it does. These tickets are not valid under the new rules however. all holders have been "grandfathered" and are permitted to operate under the provisions held under those tickets until 2018. After that date they will need to be renewed in the same fashion as in 2013. At this stage there appears to be no intent to change the renewal process. Providing you complete the medical selfassessment and have a valid first aid certificate there should be no problem. Suffice to say we will be keeping a very close eye on the situation as our trust and confidence in these people is very limited.

The TRLFA and DPIPWE staff have recently completed a draft set of guide lines and terms of reference for the carry-over of quota in exceptional circumstances. Providing the Minister approves the draft, it will be possible for fishers who find that because of exceptional circumstances they are unable to catch their quota to apply for a carryover of a maximum of 500kg. There are strict and prescriptive requirements in the guidelines and only cases of genuine hardship will be assessed. Once the Minister approves the guidelines, details will be published in the next TRLFA newsletter and next edition of *Fishing Today*.

A reminder to all those fishers who have permits for two extra research pots that the permits are to be renewed annually. IMAS has apparently failed to send reminder notices to permit holders and some operators have missed renewing by the due date. This is understandable, however it is the responsibility of the permit holder to renew.

The statewide catch as at 16 July was 277 tonnes. At the same time last year the catch was 243 tonnes. In the catch cap area of the East Coast the catch as at 16 July was 23.5 tonnes leaving 95.5 tonnes to be caught before the cap is triggered and fishing ceases. (PS Sentinel species have since tested positive to PST in the Great Oyster Bay area. Testing will commence as per management plans in adjacent areas.)

#### John Sansom

Tasmanian Rock Lobster Fishermen's Association

#### Tasmanian Salmonid Growers Association

#### New Fish Health Centre to help grow State's salmon industry

A new research facility will help grow the value of Tasmania's salmon industry to as much as \$1 billion a year by 2030.

Funded through a partnership between the State Government, the Federal Government's Fisheries Research and Development Corporation and the Tasmanian Salmonid Growers Association, the Fish Health Centre of Excellence will be established at the Department of Primary Industries, Parks, Water and Environment's Animal Health Laboratories in Launceston.

The value of this \$1 million project goes beyond the research infrastructure and

#### > INDUSTRY WIDE



Bass MP Andrew Nikolic joins Minister Rockliff (right), Dr Main (far right) and Dr Carson (left) on a tour of the construction site



Minister Rockliff announces the \$1M expansion of the Fish Health Unit, joined by Dr Main (left), Dr Klumpp (right) and Dr Carson (far right)

expertise that will be showcased on the site; it will play a key role in helping to grow the local industry.

The Liberal Government's vision is to double the value of the Tasmanian salmon industry by 2030.

To achieve this, we must maintain the high quality for which Tasmanian salmon has won international renown.

This Fish Health Centre will provide a facility for diagnosis and research into potential and real disease threats facing the industry, and will partner with industry to develop tools for reducing disease threat and improving overall fish health.

#### Keeping an election promise

"We will provide \$500,000 to the Department of Primary Industries, Parks, Water and Environment budget towards the project to construct the Fish Health Unit Centre of Excellence project at Mount Pleasant Animal Health Laboratories in Launceston." (Supporting a world class Tasmanian fisheries and seafood sector— Tasmanian Liberals)

The Tasmanian Salmonid Growers Association (TSGA) will work with the Government elected on 15 March to implement plans for sensible and sustainable future industry growth.

"We both recognise that there are significant growth opportunities available in our

industry, which alongside other primary industries, has the potential to significantly power the State's economic growth."

"Our strategy for the next five years is to establish a pathway in partnership with the Government to enable the aquaculture sector to grow, be it through the development of new farming space, better use of existing space or getting better value from existing production."

TSGA chief executive officer Dr Adam Main said the organisation has a long and productive history of working in partnership with the Government in Tasmania and in 2015 the focus will be put on aquatic animal health and biosecurity.

For further information: Dr Adam Main Phone: 6214 0550 or 0459 065 595

#### Scallop Fishermen's Association of Tasmania

#### Tasmanian State Scallop Fishery

Following research surveys around the North and East Coasts of Tasmania in April and May, a ScFAC meeting was held in Campbell Town on 6 June to consider the IMAS biomass assessments.

It was agreed that there were two prospective areas available and the Minister subsequently approved the opening of the season from 1000 hours on 1 July in both the Circular Head and the White Rock scallop areas.

Seven vessels initially applied to participate and the TAC was set at 620 tonnes or 15% of the value of all quota units which equates to 60kg per quota unit. Circular Head scallops size limit was agreed as 85mm and for White Rock the size limit is 90mm.

Only one vessel harvested in the White Rock open area in the opening week and the processor reported that meats and roe were in poor condition. Catches varied significantly with the lower catch rates resulting in better quality meats. This is similar to the results last season at this time of the year but is a little puzzling as meat condition should be improving.

As a result of the poor meat condition this area was abandoned and all vessels moved to the Circular Head area. The open area NW of Stanley has proven to be a good prospect and over the first two weeks has produced catch rates of about a bin an hour of 80 to 85 meats per kilogram and with an average recovery around 15%.

To date only five vessels have participated but are reporting a reasonably good start to the season.

Our industry food safety test results were as good as we could have hoped for. Samples for both White Rock and Circular Head returned results showing that there was no *E.coli* or paralytic shellfish toxin detected in any sample.

The SFAT subsequently issued a media release highlighting the availability of new season Tassie scallops and to confirm that harvesting was now only occurring near Stanley. We emphasised that Circular Head scallops had been tested for food safety purposes and were very definitely fit for human consumption.

So at the moment this fishery is moving along with good returns and an increase in the TAC is probably the next step to be negotiated.

#### Bass Strait Central Zone Scallop Fishery

Following exploratory surveys in Bass Strait this fishery opened on 9 June with an initial 150 tonne TAC and with a 85mm size limit.

Fishermen then actively started looking throughout the fishery for beds of scallops to harvest however the TAC conversion factor of 0.3375 kilograms per SFR unit restricted most operators.

To increase the TAC above 150 tonnes to either the Tier 1 (1000 tonnes) or Tier 2 level (2000 tonnes) a bed/s containing a biomass estimate of at least 1500 or up to 3000 tonnes needed to be identified by transect surveys. The bed/s would then be closed to harvesting for the season with an increased TAC permitting harvesting throughout the remaining area of the fishery.

Allan Barnett on Insta-gator subsequently located two beds of scallops that should contain the required first level 1500 tonne biomass. These beds were located close to last years closed Area 1 (Western Protected Zone) approx. 25 to 30nm NE of the northern most point of Flinders Island. To comply with AFMA's harvest strategy requirements a transect survey of the identified area was to be undertaken but was delayed due to terrible weather in Bass Strait. This survey with an AFMA observer on board was eventually carried out by John Cull on the *Rachel Maree* and an assessment of the data obtained is now being undertaken by IMAS.

If the 1500 tonnes or more has been identified and the area is to be closed, with support from ScRAG and ScMAC the next move is for AFMA management to consider an increase in the TAC enabling harvesting to be undertaken throughout the rest of the fishery. Unfortunately any increase in the TAC will incur significantly increased management costs.

It's probably worth restating that the AFMA harvest strategy requirements for this fishery are hopelessly out of step with the real world and despite industry objections and considerable consultation we have been burdened with a totally unsatisfactory management plan for this year.

Certainly industry is persisting and attempting to right the wrongs but it is very difficult dealing with a longwinded bureaucratic process that restricts harvesting and the TAC at every step.

Bob Lister Scallop Fishermen's Association of Tasmania

#### MAST

## Certificate of **OPERATION** By Gwyn Alway

The new National System for Domestic Commercial Vessel Safety was introduced on 1 July 2013. The Australian Maritime Safety Authority (AMSA) is the national regulator for this new framework and is responsible for the National System. Marine and Safety Tasmania (MAST) is a delegate of AMSA and is responsible for the face-to-face operations of the National System in Tasmania.

The National System requires a person or business to apply for a Certificate of Operation when an existing survey or registration certificate expires, or earlier if a vessel is modified or significantly changes its operation.

For surveyed fishing vessels, a Certificate of Operation is now mandatory in addition to your Certificate of Survey. If you operate non-surveyed fishing vessels, a Certificate of Operation will be your only certificate. The certificate covers functions and conditions relating to the operation of a single vessel or multiple vessels.

For existing fishing vessels the application includes a declaration, attesting that the applicant has the capability and capacity to comply with the requirements of the national law and has a system for identifying hazards affecting the safety of the operations and to assess and reduce risk.

For new fishing vessels, compliance with the national operating standard is a condition of the Certificate of Operation.

If your existing certificate has become due for renewal since 1 July 2013 and you haven't applied for a Certificate of Operation, you may be contravening the law. Exceptions will be vessels with existing two year certificates where the trigger to apply for a Certificate of Operation will become due over the next twelve months.

If you have not yet applied for a Certificate of Operation or are unsure of your obligations to apply, please contact Julie Gathercole on phone 6235 8819 or Gwyn Alway on phone 6235 8826 at MAST.

For further information regarding the National System, please visit the AMSA website: www.amsa.gov.au/domestic/



## Fishing the Tasman Peninsula in the 1930s **AN ODE TO ROY PARKER**

Roy Parker was born in the Parker family home at Eaglehawk Neck in 1921. The son of a commercial scalefish fishermen, it was inevitable that Roy would venture out on commercial fishing boats from a young age.

"We used to get in the dinghy just out the front of our house and row down as far as Taranna," remembered Roy. "We'd work all night, no gumboots, nothing. The only trouble was there was Ken and Bernard [Roy's brothers] and I was the younger one. They'd take it in turns pulling the seine net and that would keep them warm. And I'd be sitting in the bow of the dinghy, as cold as a frog."



Roy Parker and Alan Way measuring crayfish in a shed at Dunalley in 1965, when Roy was a Fisheries Inspector.

After a night's fishing the catch would be loaded onto a Connelly's service truck and sent to Hobart. They'd pick the fish up in boxes, just put them on the roof racks and take them up to Casimaty's fish shop in Hobart. You could only send so many fish because there were other fishermen seining too and there wasn't the population like there is now. If you sent too many he [Casimaty] would send a message to Eaglehawk Neck: 'Don't send any more fish for a week''' said Roy.

With the untimely drowning of his father, Roy's mother was forced to sell the family fishing boat, the *Gladys*. So it was about 1937, at the age of just 15, that Roy started working with his Uncle Harry. They operated out of the little sandy beach near Clyde Island, on the open east coast side of Eaglehawk Neck. Harry was the first to build a little shack there, a shack which he called home. Roy explained their fishing operations: "You know where Clyde Island is? That's where we used to pull the boat up.

On the little sandy beach there. We only had a 12 foot clinker dinghy that my uncle had. We'd row up as far as The Sisters or down to Yellow Bluff to get the nets in the water before it broke daylight. There was plenty of fish to catch too. You'd only have the one shot."

Roy also recalled some of his catches during the late 1930s. "For three mornings running, we left at 12 o'clock in the night and rowed up to Sisters Bay. We only set two graball nets. And each morning we got 17 dozen [bastard] trumpeter. We'd row back to the little beach and pull the dinghy up and put them in a couple of bags. Then we'd have to sit there until the Connelly's service came along at 9 o'clock in the morning to take them to Hobart." Not long after starting with his uncle, Harry put a little mast in the fishing dinghy. "If there was a westerly out of The Neck and we wanted to go down to The Thumbs or Yellow Bluff, we'd just sit the oars in the rowlocks. As soon as we ran out of wind we used to pull the sail down and row. That wasn't bad because you'd keep yourself warm." A few years later, local Dunalley boat builder Spencer Harrison built Harry a 14 foot Huon pine dinghy with a five horsepower Invincible engine. "That was a real leg up," remembered Roy.

When Roy was 17, he moved to Dunalley and started cravfishing with Jack Young on board the fishing vessel Doreen. They would fish the East Coast as far down as Fortescue Bay and as far north as Maria Island, occasionally around Schouten Island. "After I fished with Jack for about eight months I think I got 20 pounds wages. He was a mean old cow. But I didn't care. I'd sneak into the pub underage and have a beer or two." After fishing with Jack for about 10 months Rov returned home to Eaglehawk Neck to fish from the new Parker family fishing vessel. "After mum got the money for the Gladys she bought a smaller boat, a 26 foot Huon pine petrol. We caught scalefish out of her. We had her for some time," said Roy.

#### There was that many crayfish about, the pots would be full up and they would be hanging on the outside.'

It was around 1942 that Roy returned to Dunalley to work on the fishing vessel CLW with Dick Button. "There was two fellas that built her in the first place, so they christened her the CLW - Clint and Lesley Williams. I used to set the 30 pots from a small 16 foot motor boat. You'd get 10 pots in her then go and set them. And the old fella [Dick] would be baiting the next 10 up and I'd put them in the dinghy and go set them along the end of the first 10. Then a third 10. We never had any breakfast until we got all the pots in the water" remembered Roy. "We'd have a cup of tea and something to eat, then it would be straight on the first pots. If you took too long you'd get odd ones in the pots. The other cray would be in there, eat the bait and be out the neck and gone."

"There was that many crayfish about, the pots would be full up and they would be hanging on the outside". The most cray I got was down at Tasman Island, we shot our pots on the west side there. [Because it was so deep] we had to have three lines on them, so we could only set about 20 pots. We set 10 pots, counted the fish and chucked them in the well. Then we set 20 pots. It was 30 pots total and we had 29 score of big crays, white ones. You had a job getting your hand over them." In Tasmania a score was 24 crayfish, meaning that Roy had caught about 700 cray and given they were big fish, it would have amounted to over one tonne of crayfish from the 30 pots.

In the early 1940s the CLW was commandeered by the Australian navy to help with the war effort. This meant that Dick and Roy were out of work. "They took the CLW, but they never took the Legara. Old Peter Hindrum (Snr) had the Legara and he was married to Dick's daughter. So Dick and myself went fishing with Peter. A three handed vessel, less work and less money. We had an 18 foot motor boat on the Legara, a beautiful dinghy. One trip we started setting our pots where the landing is, on the north side of Tasman [Island], out in the deeper stuff. We finished up with about 90 score of crays, in two and a half days I think it was. Then back to Dunalley to unload."

In 1942 a group of fishermen built a Fishermen's Co-Op Cannery at Dunalley to supply food to Australia's overseas troops. "For years the couta were so thick, so the cannery was a big thing" recalled Roy. 'Before the cannery we had freezers to put them in, but a lot of the fish they had to lorry up to Jones and Co [in Hobart]. Otherwise we'd have to knock off fishing. The cannery employed about 40 people. And old Teddy Dransfield, he went home of a night to Copping. He used to take the lorry with him. Quite a number of girls working in the cannery lived around Copping, so he'd pick them up of a morning and bring them to the cannery and take them home at night, in the back of the lorry. That's the way they worked it. It was quite good."

In 1942 Roy worked on the *Greta H*, catching couta for the cannery at Dunalley.



The Katrina Maree. Built by James and David Jones Triabunna for Roy and Marie Parker in 1955. She was named Katrina Maree after their only daughter. The deck, topside and well were made of Huon Pine and she had a 90 score well capacity.

As was the seasonal nature of scalefish, Roy remembered a period when the couta stopped running, so they put the cray pots back on the boat and headed to Cape Raoul to fish. "We only had 17 or 18 pots, and we had 18 score of thumping cravs when we hauled them. So we went into Port Arthur in the evening time to unload. And the whole of Port Arthur bay was full of couta. There was only one reason they were there: the feed was there, little sardine type things. So we took the pots off so we could get into the couta. We used couta sticks back then, the ones you dig down into the water. We went off the Dead Island. I put my stick in and I've got one on coming out of the water and there was a dozen I reckon jumped over the top of the one that was already on. In nine days fishing there was 90 tonne put into the Dunalley freezer." On the tenth day, Roy recalled heading back out to the Isle of Dead. "There wasn't much wind or anything. We went here, there and everywhere. Tried the sticks, tried the tow lines. There wasn't a couta to be seen. Not one. They had all disappeared like that. The feed had gone, so when the feed went out of Port Arthur, the couta went. It was as simple as that."

During the next few years, Roy had the *Katrina Maree*, which was built at Triabunna by Jim Jones. Roy operated her out of Dunalley, fishing both the East and West Coasts. He later upgraded to the *Sueandra*, which he purchased from fisherman Bob Bone of Dunalley and operated along the West Coast. Roy clearly remembers Bob telling him when he found what is now known as Bone's Patch off South West Cape. "You didn't need a [cray] measure and 60 score days were had. You'd leave Dunalley on Monday and be back on Friday with a load of crays".

In the late 1960s Roy sold the *Sueandra* and went to work with the Department of Primary Industries as a Fisheries Inspector. After some 10 years in this position and nearing retirement, Roy purchased his last boat, the *Alma 4*. Roy fished the East Coast in her right up until he retired.

This oral history interview/story was completed as part of the TSIC project "Oral history of the Tasmanian seafood industry". If you and/or your family would like to be interviewed or contribute photos or other memorabilia to the project, please contact the TSIC Project Manager, Julian Harrington, in the TSIC office on phone (03) 6224 2332.

## By Catch

#### Something's fishy - what seafood are you actually eating?

In July, the *Sunday Tasmanian* newspaper ran an article highlighting how seafood lovers are sometimes being conned into thinking that the fish on menus in Tasmanian cafes and restaurants is sourced locally. The article posed the question: 'Tasmania has some of the best seafood in the world ... so why are we forced to buy flathead from Argentina?' Regardless of the multitude of reasons why you may not be able to source local Tasmanian seafood, the consumer does deserve to know the country of origin of the product they are ordering. This is particularly pertinent when the common names of species are the same or very similar worldwide.

Take the example of the exceptionally tasty Tasmanian flathead. If you were in a Tasmanian restaurant and saw flathead on the menu, you might assume the product was caught locally, not imported from Argentina. Similarly, when people see calamari on the menu, they may be surprised to know that the product being sold is often not locally caught arrow squid or southern calamari, but instead frozen squid imported from overseas. No, it is not false advertising because the definition of calamari is 'squid prepared as food'. The same problem applies for scallops and a range of other seafood product.

If you want to be assured you are ordering and eating superior locally caught seafood (and yes many people are prepared to pay more for the best) then you should always ask questions about the origin of the seafood product being advertised on menus. If you don't, you may be getting inferior imported product.

The simple solution to the issue is for 'country of origin' labelling rules for fish to be extended to the restaurant industry. It is only with this strategy that customers will know whether they are buying local Australian or imported seafood.

#### Seafood labelling inquiry

At the request of the Australian Government Senate, the Rural and Regional Affairs and Transport References Committee will conduct an inquiry and report into the current requirements for labelling of seafood and seafood products. Particular reference will be made to: (a) whether the current requirements provide consumers with sufficient information to make informed choices, including choices based on sustainability and provenance preferences, regarding their purchases; (b) whether the current requirements allow for bestpractice traceability of product chain-of-custody; (c) the regulations in other jurisdictions, with particular reference to the standards in the European Union (EU) under the common market regulation (EU) No 1379/2013 Article 35; (d) the need for consistent definitions and use of terms in product labelling, including catch area, species names, production method (including gear category), and taking into account Food and Agriculture Organisation guidelines; (e) the need for labelling for cooked or pre-prepared seafood products with reference to the Northern Territory's seafood country of origin regulation; (f) recommendations for the provision of consumer information as determined through the Common Language Group process conducted by the Fisheries Research and Development Corporation; (g) whether current labelling laws allow domestic seafood producers to compete on even terms with imported seafood products; and (h) any related matters.

The closing date for submissions to the enquiry was 1 August 2014. Outcomes will be published in future editions of *Fishing Today*.

#### Government boost to agriculture in schools

Learning about Australia's primary industries will get a boost with the Australian Government announcing \$2 million in funding to develop classroom and career resources. The Primary Industries Education Foundation (PIEF) will use their portion of the funding to produce 17 units of study, from Kindergarten to Year 10, integrating primary industries into all areas of the Australian curriculum.

Ben Stockwin, Chief Executive Officer of PIEF, has indicated that the science and innovation being produced and used in the Tasmanian salmon industry may be incorporated within the resources. He has plans to talk with the Tasmanian salmon industry in the near future.

#### Responding to biosecurity concerns

The Australian Government has announced it is acting on issues raised during the Biosecurity Senate inquiry conducted prior to the 2013 election. The Parliamentary Secretary to the Minister for Agriculture, Senator Richard Colbeck said, "I am particularly pleased action has been taken to recognise the unique circumstances of various parts of Australia. The Biosecurity Bill will recognise different parts of Australia have different biosecurity requirements dependent on the primary production activities taking place in that region."

Some of the Bills' improvements include:

- a reduction of more than \$6.9 million a year in business compliance costs because of clearer, easier to use legislation and improved processes it will enable
- new powers to allow the Commonwealth to respond to biosecurity risks within Australia and help state and territory governments manage a nationally significant pest or disease outbreak—including in our marine environment

 allowing the general compliance history of a business or individual to be considered when deciding whether to let them import a good, or undertake biosecurity activities - whereas the current Quarantine Act only allows for assessments of the risks associated with the goods themselves.

"These changes mean Australia's quarantine system will continue to provide protection vital to Australia's agricultural, fisheries and forestry sectors" Senator Colbeck said.

#### CSIRO job cuts to hit marine research

The CSIRO has announced job cuts to its marine research division, with up to 30 jobs to be cut from their Marine and Atmospheric Research (CMAR) division, many of which are based in Hobart.

The staff association's acting secretary, Dr Michael Borgas said the cuts put the longterm assessment of the sustainability of Australia's oceans, atmosphere and climate at risk. "As much as possible, CSIRO managers are trying to hold on to capabilities so it can be restarted at some point in the future, so some of the work won't be lost completely," he said. "But nonetheless, there is less science and knowledge gathering that informs decisions around our climate. our atmospheric environment and our fish stocks and marine reserves. So the lack of information could lead to severe (poor) judgements being made on development."

A CSIRO spokesperson said the organisation will continue to support the management of Australia's ocean territories and coasts and continue to deliver 'excellence in science', especially in coordination with its partners in fisheries.

#### New AFMA Commission

From 1 July, a newly appointed AFMA Commission will be in place. The newly appointed Chair is the Hon Norman Moore, while Ms Catherine Cooper and Mr David Hall are the new commissioners. The reappointed commissioners are Professor Keith Sainsbury, Mr Richard Stevens OAM and Mr Ian Cartwright.

In an address by the new Chair, the Hon Norman Moore said, "I would like to thank the outgoing Chair, the Hon Michael Egan AO for his dedicated service to AFMA over the last five years. I look forward to working with the Commission, industry and other stakeholders to deliver more profitable and sustainable fisheries and going forward assisting the industry to address current and future challenges."

#### Oyster farmers helping Japan recover from Tsunami

In June, a group of Japanese oyster farmers visited Tasmania to learn how Australian farmers farm Japanese oysters. The oyster farmers from across Japan were travelling as part of an Australian Trade Commission and oyster industry venture that was set up in the aftermath of the Japanese Tsunami in 2011. The tidal wave wiped out 98% of the oyster farms in certain regions of Japan.

As a part of the collaboration, the Japanese farmers visited Tasmania to study Australia's oyster farming systems. The delegation was particularly keen to learn about increasing the efficiency of production with modern technology to produce live oysters.

#### Seafood consumption in China

Tasmanian fishers are all too familiar with the Chinese government crackdown on official waste, which hurt the earnings of luxury restaurants in China and local Tasmanian seafood producers alike. But the good news is that the corruption clamp down does not appear to have dented seafood consumption in restaurants targeting the middle classes and privately wealthy. Instead, new openings of highend hotels and restaurants continue to drive consumption of seafood in China, and seafood is prominently used in the advertising of dining options at these highend restaurants.

#### 10 million orange roughy found off eastern Tasmania

If you were to believe the many reports, arguments and statements put forward by a number of conservation groups, you would be under the impression that orange roughy are nearly extinct in Tasmanian waters. However, the preliminary results from a July 2013 South East Trawl Fishing Industry Association (SETFIA) stock survey paints a different picture. The CSIRO results estimated 15.000 tonnes, or about 10 million orange roughy, were on two spawning aggregation features (St Patricks and St Helens Hill) off eastern Tasmania. And given that previous surveys show that only 52–70% of roughy spawn each year, there could actually be 1.4 to 1.9 more fish in the zone than surveyed!

In the absence of a commercial fishery, the size of Australia's stocks is uncertain, but is somewhere in the vicinity of 21,000–48,000 tonnes in the east alone (allowing for fish not spawning) and an unknown quantity of fish in Australia's four other roughy zones.

A SETFIA media release stated: "To give readers some context about these numbers, 40,000 horses weigh about 20,000 tonnes. Interestingly there are about 30,000 registered race horses in Australia. It is fair to say that roughy inside the eastern zone weigh more than all Australian race horses combined! Neither roughy nor race horses are going extinct any time soon."

#### Sense-T secures Federal funding

Sense-T, a partnership between UTAS, the CSIRO, the Tasmanian Government and IBM, recently secured \$13 million in Federal Government funding to take its program to a new level. Sense-T involves powerful computers transforming the vast quantities of data provided by environmental sensors into usable knowledge. Sense-T director Ros Harvey said the extra funding over three years would spawn many new projects, mostly involving agriculture and aquaculture, plus projects involving freight and logistics, health and finance. Ms Harvey said Sense-T also would upgrade its information technology platform from a research grade to a commercial grade to enable the fruits of its research to be put directly into the hands of end users.

#### Calls for urgent action on freight

In May 2014, producers from a number of agricultural and aquaculture industries met with the Tasmania Premier Will Hodgman, to ask for urgent action on freight problems in the State. The meeting followed the Government decision to not go ahead with the purchase of two freight ferries for Bass Strait. Industry members attending the meeting emphasised the need for bigger freight capacity, as a number of industries in the rural sector expand at a great rate, including fruit, dairy and salmon.

The meeting came as Searoad Holdings confirmed a new and bigger freight ship for Bass Strait. Chas Kelly from Searoad, said the 182 metre vessel will be built in Germany and will run on LPG when it comes into service, in late 2016 or early 2017. The new vessel will increase the freight capacity of the company by 50%, but the new ship will not be able to dock in King Island, unlike the current vessel.

Mr Kelly says they will work closely with the Government to organise a different service for King Island.

#### 140 Scholarships for Women

The Federal Government has announced that it will be offering 140 scholarships for women to attend board training delivered by the Australian Institute of Company Directors (AICD).

The program will award scholarships to women through three core streams, two of which are still open.

- Board Ready Scholarships (applications open September 2014) - to provide 70 scholarships to women who are seeking to transition from their executive to a board career, or professional nonexecutive directors seeking to advance their board career. In this stream scholarships for the Company Directors Course and Mastering the Boardroom program will be awarded. To register your interest in the Board Ready Scholarships please email diversity.scholarships@ companydirectors.com.au
- Sector Development Scholarships (applications open February 2015) - to provide 40 scholarships to women currently working in executive roles in male dominated sectors aimed at supporting and developing their executive careers. In this stream scholarships for the Company Directors Course and for

the Foundations of Directorship program will be awarded. To register your interest in the Sector Development Scholarships please email diversity.scholarships@ companydirectors.com.au

More information on the program is also available here: http://www.news. com.au/ national/federal-governmentto-boostfunding-for-a-scholarshipschemeto-get-more-women-on-boards/ storyfncynjr2-1226983441693

#### New CSIRO ship tied up in port

Mystery surrounds the delayed arrival of CSIRO's new \$120 million research vessel Investigator. CSIRO chief executive Megan Clark said the ship, scheduled to arrive in Hobart in January, was still on its way, but refused to be drawn on further detail.

The \$120 million Investigator is understood to be tied up in Singapore after sea trials that began in early December to test the ship's engines, propulsion and safety features. The Marine National Facility's Future Research Vessel Project executive director Toni Moate said on December 9 the ship would be on its way to Hobart upon the successful completion of those trials, and that it could arrive as soon as January.

In April, a series of "small, incremental delays" were blamed for the continuing delay, which had caused the postponement of the ship's scientific program. The ship is currently on its way to Hobart. "We are just really looking forward to seeing the vessel pull up at the dock," Ms Clark said.

#### PWS changes east coast management zones

The Parks and Wildlife Service has recently reviewed its operational boundaries following the addition of reserved land through the Tasmanian Forest Agreement (TFA) process.

The boundary between the Southern and Northern PWS Regions along the East Coast has been changed to reflect operational efficiencies with the establishment of the new PWS field centre based at Triabunna.

The change came into effect on 1 July 2014.

Reserved land north of Swansea will remain under the management of the Northern Region. Contact Donna Stanley. Reserved land south of Dolphin Sands (Swansea and all coastal reserves including Little Swanport) will now be managed through the Southern Region via the Triabunna Field Centre. Contact details for the Triabunna Field Centre will be circulated once finalised (unfortunately there are delays with phone/ IT connections). In the interim contact the Seven Mile Beach Field Centre at 293 Surf Road Seven Mile Beach 7170 or phone 6214 8100 and/or established PWS contacts.

While the Little Swanport stakeholder group has not met for many months, the PWS continues to be committed to working through issues with the group as required. The key contact for the Little Swanport group will initially be:

Grant Hall Parks and Reserves Manager South East Coast P: 6214 8101 E: Grant.Hall@parks.tas.gov.au

The PWS is committed to ensuring the transfer of responsibility is smooth and has little impact on stakeholders however there may be occasions when the transfer of resources/knowledge may take time.

#### Oyster growers in the media!

Insurance company CGU has used Max Cunningham from Marion Bay Oysters as the face of their latest TV and webpage ad campaigns.

The MEET MAX campaign has the introduction: *Max Cunningham has done so much to see it through, CGU thought he deserved to see it for himself.* 

To see the series of videos that feature Max jump onto the CGU website.

#### In June, Mark Burnell from

D'Entrecausteaux Oysters was featured in an article in *The Mercury* newspaper shucking oysters for the reopening of Australia's oldest hotel, the Hope and Anchor. And it is only relatively recently that Mark opened his new retail venture, D'Entrecausteax Oysters Bruny Island on Barrack Street in Hobart. His new business offers fresh oysters and even a mobile oyster bar service.

#### shellfish futures 2014

The Circular Head Shellfish Growers Association has announced that the 2014 shellfish futures industry conference will be held over 17 and 18 October 2014 at the Tall Timbers in Smithton. The theme of the event will be 'Surviving in Risky Times". The program includes an interesting array of presentations and a multitude of social events. For more information jump on the Oysters Tasmania webpage.

## **NEW ANTI-BULLYING LAWS**

#### Effective from 1 January 2014 - Is your business prepared?

New Federal legislation regarding anti-bullying laws under the Fair Work Act 2009 came into effect on 1 January 2014.

This means that employees can now make application to the Fair Work Commission to deal with bullying in the workplace, without having to first raise the issue internally. As such, employers need to protect themselves before any complaint is made as there could be little (if any) warning prior to the Fair Work Commission becoming involved.

What is workplace bullying? Workplace bullying is verbal, physical, social or psychological abuse by your employer (or manager), another person or group of people at work. Bullying can happen to volunteers, work experience students, interns, apprentices, casual and permanent employees.

Some types of workplace bullying are criminal offences. If you have experienced violence, assault and stalking you can report it directly to the police. Other forms can include:

- repeated hurtful remarks or attacks, or making fun of your work or you as a person (including your family, sex, sexuality, gender identity, race or culture, education or economic background)
- sexual harassment, particularly stuff like unwelcome touching and sexually explicit comments and requests that make you uncomfortable
- excluding you or stopping you from working with people or taking part in activities that relates to your work
- playing mind games, ganging up on you, or other types of psychological harassment
- intimidation (making you feel less important and undervalued)
- giving you pointless tasks that have nothing to do with your job

- giving you impossible jobs that can't be done in the given time or with the resources provided
- deliberately changing your work hours or schedule to make it difficult for you
- deliberately holding back information you need for getting your work done properly
- pushing, shoving, tripping, grabbing you in the workplace
- attacking or threatening with equipment, knives, guns, clubs or any other type of object that can be turned into a weapon
- initiation or hazing where you are made to do humiliating or inappropriate things in order to be accepted as part of the team.

Some practices in the workplace may not seem fair but are not bullying. Your employer is allowed to transfer, demote, discipline, counsel, retrench or sack you (as long as they are acting reasonably).

When you are being bullied it's important that you know there are things you can do and people who can help. You have the right to be in a safe workplace free from violence, harassment and bullying.

An employer has a legal responsibility under Occupational Health and Safety and anti-discrimination law to provide a safe workplace as they have a duty of care for worker's health and wellbeing whilst at work. An employer that allows bullying to occur in the workplace is not meeting this responsibility.

We all have a moral responsibility to help create a positive, safe workplace. If someone in your workplace is experiencing harassment or bullying, you can tell them about the steps they can take to solve it. If you have made a complaint to your manager or others in your workplace and there have not been adequate steps taken to stop the bullying there are a number of options that you can take to get help.

Using the links below you can contact your workplace health and safety authority to get advice and report bullying incidents or the Australian Human Rights Commission to get advice, or to make a complaint about discrimination, harassment and bullying covered by anti-discrimination law http://www.humanrights.gov.au/ complaints\_information/young\_people. html

The Commonwealth Fairwork Ombudsman can provide information and advice about Australia's workplace rights and rules and the protection you have against harassment and discrimination. Call 131 394

http://www.fairwork.gov.au/resources/bestpractice-guides/Pages/a-guide-for-youngworkers.aspx

Report bullying to your local work health and safety authority. W: www.wst.tas.gov.au E: wstinfo@justice.tas.gov.au P: 03 6233 7657 (outside Tasmania) or 1300 366 322 (inside Tasmania)



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## Packaging - Modified Atmosphere Packing (MAP)

Packaging has a key role to play in seafood preservation and shelf life. The primary aim of packaging is to protect products from physical damage and prevent microbial contamination between processing and consumption. It is recognised that chilled seafood is more perishable and has a shorter shelf life than terrestrial meat products. This shortened shelf life puts seafood at a disadvantage over other meat products in the retail market.

The shelf life of perishable products such as chilled fish and seafood is limited primarily by microbial spoilage. Microbes and to a lesser extent enzymes are responsible for changes in odour, flavour, colour and texture, leading over time to a deterioration of quality. Chilled storage slows down microbial and enzymatic degradation but will not necessarily extend the shelf life sufficiently for retail distribution and display purposes.

#### History of modified atmosphere packing

The use of atmospheres containing carbon dioxide to extend shelf life was first commercially used in the 1930's on fruit, meat and fish. Coyne in 1932 and 1933 determined that the shelf life of whole fish and fillets could be doubled when held in an atmosphere containing a minimum of 25% carbon dioxide. However this knowledge was not extended to retail products until the early 1970's. In the UK, Marks and Spencer introduced modified atmosphere packed meat in 1979 followed two years later by bacon, fish, sliced cooked meats and cooked shellfish.

In the Australian retail seafood sector the Atlantic salmon processors have been the main group to use this technology. Today the majority of farmed Atlantic salmon and trout portions for retail sale in the large supermarkets are packed, transported and stored in MAP. This has been largely driven by economics associated with the length of the supply chain, the desire for national distribution and the preference of consumers for chilled products.

#### Principle of MAP

The process of modified atmosphere packaging involves the replacement of air in the package with mixes of carbon dioxide, nitrogen and oxygen. Carbon dioxide  $(CO_{2})$ is the most important gas used in modified atmosphere food preservation. It has bacteriostatic and fungi static properties and inhibits the growth of a wide variety of microorganisms. The full preservation effect of  $CO_2$  will only be achieved if the gas in the pack headspace is sufficient to saturate the flesh.

Seafood in modified atmospheres is typically packed in rigid trays with a plastic laminate film or in sealed plastic laminate pouches. The mix of gases used in the pack is dependent on the product and application. Initially all the air is removed from the pack before the desired gas mix is introduced. The pack containing the gas mix is heat sealed before removal from the machine.

Nitrogen is inert and has no influence on microbial growth and is included to prevent pack shrinkage. Oxygen is generally added to alter the microbial flora of products by preventing the growth of anaerobic bacteria. In addition oxygen can be beneficial in preventing the reduction of flavour related compounds in the flesh of some species.

After the package is initially flushed,  $CO_2$  starts to be absorbed into the flesh and fat. This process depletes the gas in the package headspace. The process of absorption generally lasts between two to four days when the flesh is saturated and equilibrium has been reached. The concentration of  $CO_2$  in the flesh determines the level of microbial growth inhibition in a modified atmosphere.

#### Critical aspects

Packing seafood in a modified atmosphere containing carbon dioxide does not guarantee shelf life extension. There are a number of factors that impact on its effectiveness. These include:

- partial pressure and gas/product volume ratio (2:1), meaning there has to be sufficient gas in the pack or microbes won't be inhibited
- target temperatures of 0°C are required throughout the supply chain as at temperatures of 5°C the benefit from MAP is largely lost
- initial quality and associated microbial counts of less than 104 CFU/g (colony



Figure 1: Growth curves of total bacteria on skinless Atlantic salmon fillets packed in 100%  $CO_2$  and air, stored at 0°C and 5°C. ICMSF (1986) standard of 107 CFU/g is indicated by the pale blue line.

forming units per gram) as studies suggest counts in excess of 104 CFU/g offer little or no shelf life extension

 pack permeability is important with packs being specifically designed for MAP to prevent the escape of gas to the external atmosphere; these films are typically multilayer laminates.

In summary, the inhibitory effect is seen to slow microbial growth and generation times. This reduction of growth means a corresponding decrease in the production of undesirable characteristics associated with microbial spoilage.

#### Conclusion

The level of shelf life extension reported between modified atmosphere packs and standard packs containing only air typically ranges from 50 to 100%. The degree of extension is variable and dependant on initial microbial levels, contamination during storage and handling, temperature control at or near 0°C and effective cleaning and hygiene practices throughout the supply chain. Under optimum conditions a shelf life of 20 days for Atlantic salmon, flathead, abalone and Southern calamari can be achieved.



Figure 2: Typical modified atmosphere packed retail fish products found in European supermarkets.

For further information please contact: David Milne Lecturer, National Centre Marine Conservation and Resource Sustainability AMC UTAS P: 03 6324 3896 E: dmilne@amc.edu.au





#### STT is inviting applications for the 2014 Keith Cripps Scholarships

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#### IMAS News



# Current state of research to combat the negative effects of the long-spined sea urchin *Centrostephanus rodgersii* on the East Coast of Tasmania By Emma Flukes and Sean Tracey

An FRDC-funded workshop was held recently in Hobart to showcase and discuss some of the recent research projects on controlling grazing by the long-spined sea urchin, Centrostephanus rodgersii, in Tasmania. This urchin feeds on seaweed and can strip kelp beds from reefs to form a bare 'barrens' habitat which is thought to have contributed to the collapse of several reef-associated fisheries in NSW, and currently threatening the Victorian Eastern Zone Abalone fishery. Changes in ocean currents have transported urchin larvae to Tasmanian waters where it has established on the East Coast and begun forming patches of barrens from St Helens to Tasman Island. In the north of the State some of the barren patches are guite extensive while for most of the East Coast they are still patchy (incipient), the challenge we face in Tasmania is to try and reduce the spread of extensive barrens by controlling the effects of overgrazing in the incipient barren areas. The continued formation of extensive urchin barrens in Tasmania poses the single largest ecological threat to the integrity of rocky reefs, and their associated abalone and rock lobster fisheries.

The workshop had representatives from a number of stakeholder groups; spanning research, management, commercial fishing, recreational fishing, and conservation. Valuable contributions were heard from our Victorian EZAIA neighbours who are currently trialling a small-scale culling program to combat their urchin grazing program. A wide range of research was presented and discussed, with the four main research areas for controlling urchins on Tasmania's East Coast: (1) dedicated culling of urchins by divers; (2) culling of urchins by abalone divers as they fish abalone; (3) establishing a viable fishery for urchins; and (4) enhancing population stocks of large predatory rock lobsters.

Some of the results presented at the workshop indicated that urchin culling is a viable option to remove urchins from reefs at a local scale, but that the cost and time required to extend this over a large spatial scale were prohibitive. Ways in which to support and expand a small existing *Centrostephanus* fishery currently operating out of St Helens area were also discussed, and it was identified that spatial targeting of the fishery to "at risk" areas could be an effective way to reduce the risk of further barrens formation.



A diver investigates the long-spined sea urchins and associated barren habitat in Wineglass Bay, Tasmania. Photo: Emma Flukes.



Commercial divers working along an area of coastline to systematically cull the long-spined sea urchins on the East Coast of Tasmania. Photo: Craig Mundy.

#### >IMAS NEWS

While both culling and harvesting urchins have proven to be effective at reducing urchin densities at local scales, the most effective tool in the management armoury is rebuilding rock lobster stocks to increase natural predation as this method has an effect at a much broader spatial scale. Substantial change in management of rock lobsters on the East Coast occurred recently with the introduction of a 200 t cap on catch from both sectors. Ecosystem modelling has indicated that this makes a large contribution to reducing the risk of formation of future extensive barrens on the East Coast.

The underlying message from the workshop was that the recovery of kelp beds is difficult and expensive once extensive barrens have formed, and that a 'prevention is better than cure' approach is going to be the most effective management strategy. The problem is a multifaceted one, and the participation and cooperation of all stakeholder groups will be required in order to achieve the shared objective of protecting Tasmanian reefs from destructive grazing by *Centrostephanus* urchins.



A commercial diver smashing long-spined sea urchins. Photo: Craig Mundy.



A long-spined sea urchin after being spiked by a commercial diver as part of a culling project on the East Coast of Tasmania. Photo: Craig Mundy

## Winter tag lotto

With the arrival of the colder months and less tag reports, now is a great time to report lobster for an increased chance to win a fantastic prize! Please report the size, sex, and location of your tagged rock lobster by one of the methods below. Remember all tags reported receive an entry into the lotto, and every entry received over the year is eligible for the annual grand prize of \$400 from Sunderland Marine Mutual Insurance.

Phone: 03 6227 7280 Post: Private Bag 49, Hobart, Tas, 7001 Email: fishtag@utas.edu.au

#### Congratulations to the winners of this seasons draw:

**Mr Clive Perryman of Kingston** - \$100 cash proudly donated by Sunderland Marine Mutual Insurance Company, Melbourne.

**Mr Allan Perkins of Sandfly** – Brass boat clock and barometer, binoculars and boat buoy proudly donated by Tasmanian Marine Distributors, Kingston.

**Mr Brody Phillips of North Hobart** – \$20 Mures meal voucher, proudly donated by Mures, Hobart, and 2 boat buoys proudly donated by Tasmanian Marine Distributors, Kingston.



## **Denny Mechanical**

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#### IMAS News

## What's been spotted on Redmap lately? By Yvette Barry

Tasmanian fishers and divers are helping *Redmap.org.au* to track marine species that may be shifting their geographic ranges in Tassie seas. Tasmanians have shared over 500 sightings on Redmap, many of which were spotted away from their usual marine postcodes. Here are some of the latest sightings logged on the Redmap website and App.

We knew MONA was attracting visitors to Tasmania from around the country, but this may be going too far. Thousands of threadfin leatherjackets, up to 150mm in length, were reported washed up on East Coast beaches in May.

Apart from on a BBQ, the eastern king prawn (*Melicertus plebejus*) is more at home off the coast of Queensland and New South Wales; although its range does extend as far south as Georges Bay. It was a surprise, then, to receive this sighting near Hobart in April of this year. Redmap needs more of these sightings over time to indicate if this prawn is shifting its distributions south – or if it's just a temporary visitor who hitched a ride south on a strengthening East Australian Current. One to look out for in the future.

Redmap recently received sightings of threadfin leatherjacket (*Arotrolepis filicauda*). These leatherjacket species are usually found in tropical waters in northern Australia and places like Papua New Guinea. The sightings are also noteworthy because thousands of threadfin leatherjackets washed up on beaches along the East Coast of Tasmania in May.

It's believed the fish deaths were related to water temperature. Dr Neville Barrett from IMAS told ABC radio it was very unusual to see so many fish washed up on Tassie beaches. He said Tasmanian seas can get quite warm around Easter, up to 18 to 19 degrees even, which may have attracted the leatherjackets. But it's likely the species were killed as storms pushed cold, sub-Antarctic waters up the East Coast.

"The species that are hanging out in that warm water don't like it, and tend to wash up onshore," Dr Barrett told the ABC. "But usually in the hundreds, not in the tens of thousands that has happened this time with this particular species."

Let the Redmap Team know if you have any other ideas why such large numbers of this tropical fish are washing up on Tassie beaches.

Redmap's most frequently sighted "out-ofrange" species in Tasmania is the eastern rock lobster (*Sagmariasus verreauxi*), a species more common along the coast of NSW. Although it's not rare to spot the green rock lobster in North East Tasmania, relatively large groups of individuals were reported recently ( $\rightarrow$ 30 individuals) along the East Coast. Redmap tracks sightings in all Tasmanian waters to better map its distribution; and to gauge, over time, if this lobster is more frequently settling further south.

What is Redmap? The 'Range Extension Database and Mapping' project invites you to log marine species not usually found in your local seas. Waters off the East Coast of Tasmania are warming almost four times faster than the global average. Your sightings help scientists track marine life that may be moving into new areas, a.k.a extending their range, potentially in response to changes such as ocean warming. Or as Redmap likes to coin it: "moving south when things get too hot at home". Redmap taps into the knowledge that Tasmanian fishers have reeled in over many years on the sea. Visit www.redmap.org.au or download the Redmap App to share your uncommon sightings and photos! Redmap is hosted by the Institute for Marine and Antarctic Studies at the University of Tasmania.



Above: an eastern king prawn spotted near Hobart (Photo: Redmap member 'Andy').



Redmap sightings, top: Richard Dakin, Wineglass Bay; middle: George Cresswell, near St Helens; bottom: Adam Duraj, Bicheno



Above: Redmap member Danny Lee took a colourful shot of this eastern rock lobster near St Helens.



#### OR DOWNLOAD THE REDMAP APP:



## **KINDERGARTEN FOR TOP-PREDATORS:** Investigating nursery areas for sevengill sharks



Australia is a hotspot for shark diversity. There are approximately 541 shark species worldwide, with an estimated 180 species found in Australia, 70 of which are thought to be unique to these waters.

Similar to lions on the African plains, sharks are the top-predators of the oceans and thus are vital for maintaining healthy and stable ecosystems. However, human pressures like fishing, habitat destruction and pollution, have lead to a dramatic decline of shark populations worldwide, with one guarter of shark and ray species listed as "Threatened" on the IUCN Red List (A list evaluating the global conservation status of plant and animal species). Research and well-informed fisheries managers has resulted in the recovery and sustainable fisheries of some shark species. Still, further ecological and biological information is needed for many shark species to develop effective sustainable management plans.

Studying sharks is a challenging task, as they tend to be quite elusive and often migratory. This is especially true for large highly mobile species, such as white sharks, blue sharks, and tiger sharks. However, the development of technology over the past decades now allows marine researchers to tag and track animals across hundreds of kilometres over extended periods of time (up to 10 years). This electronic data on the movement and distribution of sharks has provided invaluable information on their migration patterns, behaviour and identification of critical habitats such as feeding, mating, and nursery areas.

Alicia Schmidt-Roach is an enthusiastic scientist working on shark ecology. Originally from the beautiful Caribbean Islands of Trinidad and Tobago, she is

currently undertaking her PhD at the University of Tasmania, Institute for Marine and Antarctic Studies (IMAS), Hobart. Working on Broadnose sevengill sharks (*Notorynchus cepedianus*) in south-eastern Australia, Alicia's project focuses on investigating the young of this species with particular interest in their movement, habitat use and diet.

Sevengill sharks are large (up to 3m) coastal-associated top-predators with a wide temperate distribution, ranging from the south Atlantic. Pacific and Indian Oceans. In Australia this species is common in coastal areas around Tasmania, South Australia, Victoria and New South Wales. They are considered to be a common predator in shallow coastal areas, especially during the summer months and feed on multiple organisms, including marine mammals, other sharks and a variety of fish species. Sevengill sharks are currently listed as 'Data deficient' (IUCN Red List), with limited information available on the biology and ecology of this species, especially on their young.

In the USA and Argentina, this species is suspected to use bays as nursery areas for their young. However, no scientific reports of nursery areas for sevengill sharks in Australia have been documented. Fishing accounts have indicated the presence of young sevengill sharks in Port Phillip Bay, Victoria. Nursery areas tend to provide protection from predation and an abundance of food for young sharks. They play an important role in these early life stages by facilitating the rapid growth and development of young sharks.

Alicia's study uses a range of techniques including acoustic telemetry, fin tagging, diet analysis and cutting edge genetic approaches to better understand this species and provide valuable information



Sevengill shark



Alicia Schmidt-Roach

toward sustainable and well-informed fisheries management.

A network of acoustic receivers and a tagging program has been set up in Port Phillip Bay to monitor the movement of sevengill sharks implanted with acoustic transmitters and fin tags. This will document the seasonal movement of this species within and out of the Bay. Additionally, fishing surveys and fin tagging will provide further information on the movement and population structure of this species in the Bay. A non-lethal stomach sampling method will be used to determine what young sevengill sharks are feeding on. Cutting edge genetic approaches will

#### > IMAS NEWS

also be used to determine the connectivity and relatedness of sevengill sharks in south-eastern Australia. Overall this project will provide novel information on the early life stages of sevengill sharks as well as determine whether Port Phillip Bay is an important nursery area for this species in Australia.

#### You can help!

If you catch a tagged sevengill shark, do not remove the tag. Please record the tag number, GPS location, total length (TL), date and time. Pictures of tagged sharks would be appreciated! Each tag reported will go into a random draw to WIN \$100 REWARD. There will be 3 Random Draws held between October 2014-2016. Report tags and your contact information to: Alicia Schmidt-Roach: Alicia.SchmidtRoach@utas.edu.au or Paul Hamer: paul.hamer@depi.vic.gov.au. If tag is removed please contact above for return information.

This project is supervised by and in collaboration with Dr Jayson Semmens (IMAS), Dr Adam Barnett (James Cook University), Dr Paul Hamer (DEPI Fisheries Victoria) and Dr Craig Sherman (Deakin University). This project is financially supported by the National Geographic Society, Sea World, and the Winifred Violet Scott Foundation.



#### Acoustic tag



Rototag



Dart tags

#### Sevengill Shark Tagging Program **REWARD** for reporting tagged sharks



If you catch a tagged Sevengill shark don't pull out the tag. Please quickly record the tag number, GPS location, total length (TL), date and time before releasing. Pictures of tagged sharks showing the tags would be appreciated!

Each tag reported will go into a random draw to WIN \$100 REWARD. There will be 3 Random Draws held between October 2014 - 2016.

Report tags and your contact information to: Paul Hamer: paul.hamer@depi.vic.gov.au Alicia Schmidt-Roach: Alicia.SchmidtRoach@utas.edu.au or SMS: 0404080023 If tag is removed please contact above for return information.



Project information: Tagging is an important tool used to understand behaviour, movement (habitat use and migration) and population dynamics (abundance, growth and mortality) of animals.

This program is part of the PhD thesis of Alicia Schmidt-Roach at the University of Tasmania (UTAS), Institute for Marine and Antarctic Studies (IMAS), in collaboration with James Cook University (JCU), Deakin University and Fisheries Victoria.

From October 2014 to June 2016 we will tag (dart tags, rototags and internal acoustic tags) Sevengill sharks in Port Phillip Bay, Victoria. This project focuses on the early life stages (newborns and juveniles) of this species.

The success of this project greatly relies on your support. The information from this program will be used to assess the population structure and movement of Sevengill sharks in Port Phillip Bay, Western Port and south-eastern Australia.

Thank you in advance for your assistance. If you would like further information on this project please contact: Alicia Schmidt-Roach, Alicia.SchmidtRoach@utas.edu.au, 0404080023 or visit http://www.imas.utas.edu.au/people/profiles/postgraduate/s/alicia-schmidt-roach2





18th Annual Tasmanian Seafarers' Memorial Service & Blessing of the Fleet Sunday 19th October 2014, 10.50 am for 11.00 am

Enquiries: Jenny Woods:					Charles St. Jetty
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F: (03) 6257 1669		Esplanade	e West		
E:kath_fergusson@bigpond.com	TRIA	BUNNA		$\supset$	Spring Bay Hotel

## *SV May Queen* – A grand survivor

As a small child I lived on the waterfront at Battery Point and was fascinated by the comings and goings at the Purdon and Featherstone slipyards below us. One of the regular visitors was the now venerable *May Queen*, who has touched the hearts of many a Tasmanian over her 147 years of service. Her history has been chronicled in a delightful and informative book called the *SV May Queen – A Grand Survivor*, by authors Richard Johnson and Rex Kerrison as part of a fundraising drive by the Maritime Museum of Tasmania.

*May Queen* is the oldest sail trading vessel afloat in Australia and the fourth oldest fore and aft sailing vessel of her type still afloat in the world. *The Mercury* of 6 June 1867 reported that:

"A fine new barge built by Mr. G. W. Thorpe, of the Franklin, has just been launched for the river coasting trade. The barge has been constructed at Franklin, is of 60 tons burden, with a keel of 60 feet, and is, we are informed, a very fine vessel. The craft has been named the *May Queen*."

Apparently William Thorp had built *May Queen* on speculation, for two days after she was registered in his name she was sold to John White, a tobacconist of Hobart. On 25 April 1870 William Bell became her new owner.

Many ketches were engaged in the timber trade between Hobart and the Huon and southern Channel districts in this era. Based on a wooden scale model by Alexander Lawson, *May Queen* had the very shallow draft and broad beam common to the trading ketches of the time to enable them to negotiate Tasmania's river systems. Built of stringy bark and blue gum, her planks were fastened with trunnels, which are credited for her longevity.

Henry Chesterman moved to Tasmania in 1854 founding a timber trading company Chesterman and Co. which owned, leased or otherwise controlled a number of sailing vessels over its 100 odd years in existence.

On 7 September 1873, *May Queen* was officially purchased by Henry Chesterman, although he was evidently the effective owner some time earlier as it was common practice for some vessels to be owned by their masters while under mortgage with Chestermans.

One of *May Queen's* routes was to Raminea to obtain timber from the mills there, but she also traded to and from Lune River, the Tasman Peninsula and East Coast (Rheban). Sawn timber, hardwood beams, piles, mill machinery, boilers, steam engines, iron rails, millstones, fruit, coal and other commodities were plied to Hobart for house building and industry. In calm conditions carrying 25,000 super feet of green hardwood (60 tons) the trip of 45 miles from Raminea took about 8 hours or if windy considerably less.

On her outbound journey from Hobart she carried supplies, including hay and oats for the bullock teams used in the forests to pull logs to the mills, steel railway lines, boilers and steam engines for use by the timber industry.

Skippers of the local trading vessels knew most of the property owners along their route, and they were often called upon to convey injured or sick individuals, or expectant mothers, to the nearest doctor or hospital.

Life onboard the early trading vessels was quite tough with the skippers and crew paid by the quantity of the load they were able to transport—a strong incentive to bend the rules in terms of load limits and to attempt as many trips as possible over the course of a month. Handling the green rough sawn timber with bare hands was hard labour. Once the hold was crammed full, wedges would be driven in between the top of the load and the deck beams. Additional timber would be loaded on deck.

The crew slept in rough bunks up forward while the skipper's cabin was aft. Cooking was done on an open firepot placed on a couple of lengths of railway iron.

The shallow-drafted ketches were quite prone to capsize if caught by a sudden squall of wind and *May Queen* sank on two known occasions during her long career as well as experiencing a number of accidents of varying severity.



May Queen 2014

One such incident occurred on 16 February 1888. May Queen had left Hobart early that morning carrying about 15 tons of ballast to proceed downriver where she was to load a cargo of piles for Bridgewater. At 2 pm, about a mile offshore between Police Point and Huon Island, she was struck by a squall, heeled over and sank rapidly in 17 fathoms of water. The crew of three escaped unharmed. The diver sent down to start recovery operations reported that she was lying slightly on her side with all sails still set on a sandy bottom in a light current. The slanting sunlight made her "the most beautiful sight he had ever seen". Recovery was successful and no damage was done.

Trading ketch races were a feature of many local regattas, particularly the Royal Hobart Regatta where the intensley competitive Cock of the Derwent Race was battled out.

May Queen raced with great success, winning her first Royal Hobart Regatta in 1868 and competing in the last trading ketch race in 1954, coming second to *SV Lenna*. During the first division races between 1882 and 1954, *May Queen* achieved a record nine firsts, eight seconds and two thirds.

#### > BOOK REVIEW

Between 1924 and 1940, the *May Queen* was owned by rival river traders, the Boxall family. During this period she carted coal to Hobart from Catamaran for Jones & Co. and other work for that firm was undertaken on a contract basis. Her first engine, a 63 Model International petrol-powered discarded lorry engine was installed by Boxall in 1924. In 1940 Chestermans installed a low horsepower Lister diesel engine. A few years later a 40 HP Gardner diesel engine was installed until she went out of service in 1973.

In February 1948, *May Queen* had an extensive overhaul at Purdon and Featherstone's slip. New frames were set up alongside the old ones and much of the planking replaced, the stringers and keelson were renewed together with the interior lining (ceiling). The false keel was also replaced. All the timber was cut at the Raminea Mill.

At the completion of her working life May Queen was passed from Chesterman & Co.to H. Jones and Co. (for six months) and then on to the Marine Board of Hobart via the State Government in 1975. The Marine Board undertook comprehensive refurbishment, restoring and remaking, where required many of the rigging components. The relatively modern motor and propeller were removed. The masts and bowsprit were repaired and the rigging replaced, bringing her back to her pre-1954 condition. A steel beam was placed under the keel to give the hull stability and prevent the bow or stern dropping. She was then placed in Waterman's Dock for permanent display.

Despite a regular slipping and painting program, inadequate ongoing maintenance of the hull and deck timbers allowed serious deterioration until, by 1999, there were grave fears for the vessel's ongoing survival.

May Queen is now owned by May Queen Pty Ltd, a not-for-profit organisation with the objective of the conservation, preservation, and interpretation of the vessel. The Maritime Museum of Tasmania leases her for a nominal sum.

If you would like to read more fascinating stories about the *May Queen's* life and the people involved in it, the book is available for purchase from the May Queen Trust, PO Box 1062, Sandy Bay, Tas 7006 or from good bookshops.

## **TRADE MEASUREMENT** and the sale of seafood

All businesses that sell goods by measurement or that manufacture, pack, import or sell pre-packaged product, are required to comply with Australian trade measurement laws, the *National Measurement Act 1960* and the *National Trade Measurement Regulations 2009*.

The laws apply to both wholesale and retail businesses. If your business is caught short-measuring its customers, you could be fined up to \$170,000 per offence as a company or up to \$34,000 per offence as an individual.

For example, if you use a measuring instrument such as a scale to sell goods, you must make sure it is: an approved type, that is suitable for its intended purpose, verified before use by a licensed technician or inspector, used in the correct manner (eg level and indicating zero before use), kept clean and in good working order and verified after each repair or adjustment.

The National Measurement Institute (NMI) recommends that all measuring instruments used for trade are checked regularly by a technician licensed by NMI (servicing licensee). You can get a list of servicing licensees by contacting NMI's Licensing Team on 1300 686 664 (option 2) or tmlicensees@measurement.gov.au.

Under trade measurement law all fish except for shellfish must be sold by weight.

While shellfish such as molluscs (e.g. mussels, oysters, octopus, scallops and squid) and crustaceans (e.g. crabs, lobsters, prawns and shrimps) do not have to be sold by weight, when they are sold by weight the relevant trade measurement laws apply.

Any product, including both fish and shellfish, that is pre-packed before it is offered for sale must be marked with the correct net weight.

The laws relating to the sale of seafood by weight can also be affected by whether it is frozen or preserved in brine.

For specific advice about these matters and for all other trade measurement enquiries, please contact NMI's trade measurement hotline on 1300 686 664 or infotm@measurement.gov.au.

NMI employs trade measurement inspectors who can visit a place of business 'at any reasonable time of day' in response to a complaint or enquiry from a consumer, or as part of a trade measurement compliance inspection program.

The NMI website contains further information on trade measurement laws and regulations, including a Guide to the Sale of Pre-packaged Goods, and a Guide to the Sale of Meat and Seafood:

www.measurement.gov.au/publications/trademeasurement.

The purpose of this communication is to provide you with general information only and should not be relied upon for any legal, business or personal purpose. Nothing in this communication shall be taken in any way to replace the provisions of the National Measurement Act 1960 (Cth), the National Trade Measurement Regulations 2009 (Cth) or any other legislative instruments made pursuant to the National Measurement Act 1960.

National Measurement Institute PO Box 264, Lindfield, NSW 2070 E: infotm@measurement.gov.au P: 1300 686 664 W: www.measurement.gov.au





The last few months have seen a busy time at STT, with expansions in facilities, recruitment of additional trainers, and signing up of a large number of trainees. Whilst all of this has been happening, STT has completed the re-registration process as an RTO and been renewed for another five years. STT also pursued the option of and has become a Skills Tasmania-endorsed RTO. The benefit for industry is that STT is eligible to apply for grants and funding, which means subsidised training is available.

#### Course calendar

Places are available for the courses below.

**Regional Coxswain Grade 2** St Helens 11 - 15/8/14 Smithton 8 - 12/09/14

MED 2 (Near Coastal) 11 - 29/08/2014

Master <24 metres (Near Coastal) (formerly Master 5) 13/10/14 to 14/11/14

#### Master <35 metres (Near Coastal) (formerly Master 4)

01/09/2014 to 24/10/2014



MED 3 students check machinery gauges and alarms during the July course.

#### Staff at STT

There are two new additions to the team of trainers at STT. Course participants will soon meet:

- Scott Strong, Coxswain, ESS, Master ٠ <24 and MED
- Brad Quinn, Coxswain Engineering and MED

Brad has a background as chief engineer on naval and Tasports vessels, and Scott is a Master 4 with extensive experience skippering aquaculture vessels.

#### STT expands facilities

In addition to the three larger training rooms, STT now has a second smaller multipurpose room. This will free up the Board Room to provide a more private and flexible space for people who are doing self-paced study and assessments, tutorials or readerwriter assisted assessments.

MED course participants now have access to a refrigeration unit that was generously donated

on experience

for students who are not familiar

with refrigeration

systems.



The refrigeration unit donated by Kibby and Cooper

#### Keith Cripps Scholarship applications invited

STT is inviting applications for the 2014 scholarship awarded in memory of former Chairman of STT, Keith Cripps.

Applications are open to individuals currently employed or wishing to work in the maritime or seafood industries.

The scholarship will provide training for Certificate 1 in Maritime Operations (Coxswain Grade 2 Near Coastal).

Applications close on 31 October. Contact Matt Jones at STT for selection criteria and details of how to apply, or check out the STT website.

#### Training for industry expansion

The Huon Aquaculture Group is undergoing a massive expansion at its Parramatta Creek processing plant. As part of their ongoing commitment to quality they have signed up 25 staff for a Certificate III in Seafood Processing. This will add to the numbers of workers who are already fully trained. When the new facility is operational it is likely that around 40 more people will be employed and they too will undertake similar training.

Enrolling at STT Phone, email or enrol online Phone us on 03 6233 6442, Email stt@seafoodtrainingtas.com.au or go to www.seafoodtrainingtas.com.au for the latest course information or online enrolment.

> In preparation for the salmon-farming expansions planned for Macquarie Harbour, Petuna Seafoods is working with STT to upskill farm-based staff. The training will recognise the current skills and experience of staff and so focus on aquaculture husbandry, workplace health and safety, and food safety, leading to a Certificate 3 in Aquaculture.

> The availability of traineeships for new and existing employees, and customised training programs, provide industry with opportunities for staff to undertake regionally-based and targeted training at times and locations that fit in with operational constraints. Contact STT for information about how traineeships and customised training can help to grow your business.

#### School-based industry training

The next generation of Tasmanian fish farm workers and researchers appear to be in good hands. STT Training Officer, Matt Jones, recently visited the school-based Trade Training Centres (TTC) in Smithton and Launceston. Through STT, the TTC's offer Certificates 1 and 2 in Aquaculture to students with an interest in oyster and finfish farming. The schools provide training using their own on-site recirculation systems supplemented by industry-based work placements.

In addition to the northern TTC's there are centres in St Helens and Huonville. This year, the four TTC's together have 38 students participating in the Certificate 1 course while 24 have progressed to Certificate 2. The availability of more than 60 people with basic qualifications and experience in aquaculture, not to mention being regionally based, will stand the industry in good stead as it prepares for expansion around the State.



Aquaculture facilities at St Patricks TTC in Launceston.



#### Bureau of Meteorology

I have heard from fishermen that HF reception around Tasmania, especially on the West Coast can be poor. The Bureau of Meteorology provides marine weather forecasts via HF for all Australian waters from its transmitters at Wiluna (VNW in WA) and Charleville (VMC in Qld). The forecasts are transmitted at a variety of times on a variety of frequencies.

The full list of products broadcast, times transmitted and frequencies transmitted on can be found at www.bom.gov.au/marine/ radio-sat/marine-weather-hf-radio.shtml

It is not widely known that the Bureau of Meteorology has a section that looks after space weather. Space weather is the change in the space environment, usually between the earth and the sun. Much of what causes "space weather" is due to huge releases of energy caused by solar flares and coronal mass ejections.

A large solar flare in 2003 released around 1025 Joules of radiant energy over a two hour period. This is over two thousand million megatons of TNT. The Hiroshima atomic bomb was about 5 megatons and Tsar Bomba which was the largest atomic bomb ever detonated was around 55-60 megatons.

Coronal mass ejections (CME) release vast amounts of matter and electromagnetic radiation from the sun. A large CME can contain a billion tons of matter accelerated to several million kilometres per hour.

Clouds of electrons, protons and some ions are released by solar flares and CMEs. These particles take between 17 and 50 hours to reach the ionosphere: 50 to 500 kilometres above the earth. However, X-rays from these events arrive in the ionosphere much quicker: after about 8 minutes. When they do arrive



## **Space weather**

they can severely disrupt HF radio communications.

As solar radiation reaches the ionosphere a process called ionisation occurs where atoms in the ionosphere become charged by gaining or losing electrons. From this process free electrons are released and these are what bend HF radio waves and eventually

reflect (bounce off the ionosphere) the HF radio waves back to earth; the more electrons the greater the effect. These "free" electrons have a life that varies with their height, ranging from a matter of seconds in the lower parts of the ionosphere to around 20 minutes in the higher parts.

There are three main "waves" of the HF radio signal. The ground wave has a range of 100 to 300 kilometres and travels along the ground, the direct wave which is line of sight and similar to VHF and the sky wave which is reflected (bounced) by the ionosphere and can have a range into the thousands of kilometres.

The ionosphere has complex layers of charged particles. A HF signal on a frequency that goes from point A to B on earth and is heard clearly may not be reciprocated. That is, the return signal from B to A on the same frequency may be reduced and refracted in a totally different way and the signal may not be as clear or strong. If a frequency is too high it may pass straight through the ionosphere and into deep space. The signal may be reflected from the ionosphere and "skip" an entire large area between the transmitter and the receiver.

There are four main zones in the ionosphere during the day;

D region - 50 to 90 km; E region - 90 to 140 km; F1 region - 140 to 210 km; F2 region - over 210 km.

The E, F1 and F2 regions refract the HF signal back to earth. However, to get to these regions the signal is reduced (attenuated) as it passes through the lower D region.

The D region has the strongest reduction of signal during the day at around noon during a summer day but has little effect at night. The number of "free" electrons in the D region is increased by the daily solar radiation, the longer the day the more radiation and the



more free electrons. Lower frequencies are attenuated in the D region more than the higher frequencies. In the case of a solar flare or CME the D region becomes much more ionised and the HF signal can be very much weakened by this layer.

How much a HF signal is absorbed and refracted varies with night and day, summer and winter, latitude, the solar cycle (9-14 years) and solar flare activity.

As a general rule of thumb higher frequencies work best during the day and lower frequencies at night. However, the Bureau of Meteorology provides a service to take some of the guesswork out of what frequency to use and when accessing the Bureau's HF forecast. The service is a graphical one and displayed below. The charts are called HAP charts (Hourly Area Prediction) and are available hourly on a daily or weekly basis for not just Australia but many parts of the world.

Below are two charts for the recommended frequency channels to receive the Charleville voice broadcasts for a date in July (these cannot be used now). The first is at 02 UTC (around noon) and you can see that in Tasmania frequencies 5 or 6 (12365 kHz or 16546 kHz) would be the best ones to try. However, by 14 UTC (12 midnight) the best frequencies for Tasmania are either 1 (2201 kHz) or 3 (6507 kHz).



The Bureau's space weather page can be found at http://www.ips.gov.au/ and there are many different links that are interesting once on this page. However, to access the HAP charts follow the links to HF Systems and then select from the left hand menu.

### D I R E C T O R Y

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#### Wild Fisheries

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#### Tasmanian Rock Lobster Fishermen's Association

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#### Tasmanian Shellfish Executive Council

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#### Tasmanian Abalone Growers Association

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Bruny Island Shellfish Growers Association President: Jeff Whayman P 0428 136 515

Tasmanian Oyster Research Council Chairman: Ian Duthie 0409 411 322 E ian-duthie@bigpond.com

#### **DPIPWE Marine Resources**

#### Scallops, Giant Crab, Octopus, or Rock Lobster Inquiries

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Abalone or Marine Plant Inquiries Matt Bradshaw P 03 6165 3033

Commercial Dive Inquiries or Inshore Clams Greg Ryan P 03 6165 3028

#### Scalefish Inquiries Frances Seaborn P 03 6165 3044

**Recreational Fishing Inquiries** Rod Pearn P 03 6165 3034

Licensing and Fisheries Monitoring Inquiries P 03 6165 3000

Marine Farm Planning/Operations Inquiries Tony Thomas P 03 6165 3121

Marine Farm Environment Inquiries Graham Woods P 03 6165 3124

Special Permits Grant Pullen P 03 6165 3032

#### Training

#### Seafood Training Tasmania

2a Gladstone Street, Battery Point 7004 Manager Rory Byrne P 03 6233 6442 F 03 6223 2780 E stt@seafoodtrainingtas.com.au

#### **Commonwealth Fisheries Association**

E0: Renee Vajtauer P0 Box 9022, Deakin, ACT 2600 P 0404 102 140 E ceoldcomfish.com.au

#### WEBSITE LINKS Australian Government

Australian Fisheries Management Authority (AFMA) www.afma.gov.au Australian Maritime Safety Authority www.amsa.gov.au

The Bureau of Meteorology www.bom.gov.au/marine

CSIRO – Marine and Atmospheric Research www.cmar.csiro.au

Department of Agriculture Fisheries and Forestry (DAFF) also includes:

Australian Bureau of Agricultural and Resource Economics (ABARE)

Australian Quarantine and Inspection Service (AQIS)

Biosecurity Australia (BA)

Bureau of Rural Sciences (BRS) www.daff.gov.au

Department of Environment and Water Resources (DEW) www.environment.gov.au

Fisheries Research and Development Corporation (FRDC) www.frdc.com.au

Food Standards Australia New Zealand (FSANZ) www.foodstandards.gov.au

OceanWatch www.oceanwatch.org.au

Seafood Training Australia (STA) www.seafoodtraining.com.au

Women's Industry Network Seafood Community (WINSC) www.winsc.org.au

#### State

Department of Primary Industries, Parks, Water and Environment www.dpipwe.tas.gov.au and/or www.fishing.tas.gov.au

Institute of Marine and Antarctic Studies (IMAS) www.imas.utas.edu.au

Marine and Safety Tasmania www.mast.tas.gov.au/domino/mast/newweb.nsf Natural Resource Management (NRM)

www.nrmtas.com.au Tasmanian Seafood Industry Council (TSIC)

#### Fisheries Wholesale

www.tsic.org.au

Master Fish Merchants Association www.mfma.com.au/

Melbourne Wholesale Fish Market www.chsmith.com.au/fish-prices/index.htm

Sydney Fish Market www.sydneyfishmarket.com.au



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