MARKET DEVELOPMENT
Aussies stick to the fish they know

CONSUMER RESEARCH
BRANDING WILL BOOST BARRA SALES

No-Risk Aussie Prawns
There is quite a bit of talk around the industry at present about funds for seafood marketing. It’s a perennial debate and the leaders of the industry will no doubt resolve the way forward during 2012.

Where does the Seafood CRC (SCRC) fit in the debate?

Much of our research is aimed at market development. Whether it is research into new products, packaging, consumer research, quality standards, improved shelf-life or access to international markets, it is all ultimately about improving demand for Australian seafood.

If the industry does elect to provide more funds for marketing it will need to establish a core capacity of professional marketing staff, as a new body or part of an existing body. It will probably take several years for this to happen, by which time the SCRC will be finished. But if a decision was made now to establish an expert marketing body, by committing funding to begin on a specified date in future, the SCRC could provide significant support.

For example, we could work with our industry participants to conduct the R&D needed to give the new marketing venture a head start. If the SCRC closes down as scheduled in June 2014, all our marketing R&D results could be handed over to the new body.

This process has already begun with the prawn fishing and farming sectors working together with the SCRC to develop a national prawn marketing plan. If these industries endorse new funds for marketing, this plan will spearhead their activities.

The Australian government is due to decide in 2012 if the FRDC R&D levy collection arrangements should be changed to enable collection of levies for marketing. If you would like to know more about this or have a view on the subject, I would love to hear from you.

Len Stephens
Managing Director
Seafood CRC
Clearly ‘Australian seaFOOD’ is reaching places other media don’t, with a positive commercial response to the article “Crab Cakes a Fast Track Success” in the previous edition. Blue Swimmer Crab Cakes manufacturer Peter Jecks of Abacus Fisheries received 26 enquiries by early December, with 8 converting to firm orders before year end. It is certainly a good indicator of the demand in the retail and food service sector for innovative consumer friendly Australian seafood products.

Don’t have the time to read the numerous reports funded by the Seafood CRC on consumer behaviour and preferences for seafood products? Why not visit the website (seafoodcrc.com - click on ‘Resources’ then ‘Consumer research insights’) and browse through Fishbites. These short 2-6 minute presentations summarise many of the issues that have been assessed through the CRC’s various surveys and studies. And if you want the whole report, that’s still on the website too - but only for members of the CRC. If you don’t have your log in details contact Chelsey Parish at chelsey.parish@seafoodcrc.com to get access.

At the Seafood CRC we would love your feedback on our new magazine. Please complete our short online questionnaire and go into the draw to win an iPad2!
Looking to the next generation

Only a few decades ago the Victorian abalone industry was a pretty ramshackle affair, with just enough margin to attract a large number of nomadic divers seeking adventure in a virgin and virtually unregulated fishery, eager to turn their recreational sport into a paying profession – and one of them was me!

Since then it has turned into a profitable, well organised fishery, divided into three fishing zones, each with its own diver association. Abalone fishermen have also successfully integrated downstream, establishing collectively owned processing and marketing facilities boasting well established brand names.

But what of the future? If the abalone fisheries, along with the other sectors of the Australian seafood industry, are to survive and thrive in the future, I believe we have to work harder at identifying the next generation of divers, fishermen, fish farmers, processors and marketers.

Once identified, this future lifeblood of the industry will need to be supported and encouraged with education and training.

This concern about skilling our future fishermen and women and supporting the development of leadership abilities has been recognised by the Seafood CRC, with its distinct Communications and Education Program.

Highlights have included a series of master classes in specific skills such as ‘Using consumer research in your business’, held during 2011 – there is no denying that the majority of participants in the seafood industry are past the first bloom of youth!

Long term sustainability of the industry clearly depends critically on the husbanding of resources, but that means more than managing the fishery biomass, improving technology and handling practices – I believe it must include a strong focus on enhancing the skills and encouraging the commitment of the next generation of men and women who make up the lifeblood of our industry.

Len McCall has actively participated in the abalone industry for over 45 years, as a diver and a driving force in establishing the Western District Divers Cooperative. As Chair of the Victorian Fishing Industry Federation he led the transition of that organisation into Seafood Industry Victoria. His active participation in industry organisations at zone, state and national levels, protecting industry interests, has led to him being recognised as a Seafood Icon at both Victorian (May 2011) and National (October 2011) levels.
CRC Industry Bursary funds available to support personal national and international travel, research, prototype development and training.

The Australian Seafood CRC offers industry bursaries year round up to the value of $10,000 per bursary (unless a good case is presented). CRC funds for these bursaries must be allocated to deliver specific Seafood CRC projects and the CRC will need to see some contributing funds provided by bursary recipients; either from their own or from other sources.
No-Risk Aussie Prawns

The positive findings of a Seafood CRC risk assessment report will safeguard the $60 million Australian prawn export industry.

Despite generations of Australians believing a “feed of prawns” is their birth right, there has always been a nagging question about the risks associated with enjoying our most famous crustacean.

Even seafood professionals who firmly believe they’re a healthy and delicious source of protein and Omega 3, are sometimes unsure if there is indeed a microbiological or chemical food safety risk that is peculiar to prawns.

However, a recent risk assessment study, 'Food Safety Risks Associated with Prawns Consumed in Australia', funded by the Seafood CRC, has shown categorically that Australian prawns don’t make you sick.

Risk assessment is a complex process (see Figure 1) which must work through a whole range of potential hazards before assessing the exposure and dose response. The study worked methodically through all of the recognised crustacean hazards such as viruses, vibrios and salmonella as well as chemicals such as nitrofurans, sulphites, and chloramphenicol and found that these hazards are virtually unknown in Australian prawns.

The sole detected hazard is cadmium, and that is only perceived as significant by the European Union food authorities whereas the CRC Seafood study characterises the risk as ‘Low’.

Overall, the report indicates a Very Low risk of human illness associated with consumption of domestically produced prawns, although there is evidence of minimal occurrences of some microbiological and chemical hazards in imported products but this is also at a Very Low risk level.

The Seafood CRC report will have significant implications in national and international trade, providing a strong case for Australian producers to negotiate more appropriate testing requirements with domestic regulators and retailers. It will also assist in the future government negotiations for improved market access, particularly with European authorities in light of the decline in EU sales of Australian prawns from $40 million in 2005-06 to $2 million in 2009-10. This decline was largely due to the EU setting an unrealistically low residue limit for cadmium.

The existence of such a credible and comprehensive report will prove helpful to the industry and trade negotiators in the event of any other overseas market introducing access constraints on the basis of microbiological or chemical testing and threatening the $61 million export trade (2009-10).

Further details of hazards, exposure assessments and risk characterisation can be obtained by CRC participants from the Food Safety team at SARDI. Not sure if you are a CRC participant? Contact Emily.mantilla@seafoodcrc.com to determine your eligibility!
A recent risk assessment study, ‘Food Safety Risks Associated with Prawns Consumed in Australia’, funded by the Seafood CRC, has shown categorically that Australian prawns don’t make you sick.
High yield. Low cost.

A ground-breaking Seafood CRC trial project has transformed an undervalued fishing product - school prawns - into a consumer friendly Asian food ingredient.

Like the work being undertaken by the CRC on processing Sardines (which are currently used as fresh or frozen feed for ranched tuna) into a valued ingredient, converting school prawns from bait status to the table will make an important contribution to improving the bottom line of fishermen.

The key to this crustacean alchemy is a meat/shell separator on loan from the Sydney Fish Market, which achieved a meat recovery of around 80% with no residual shell detritus.

The combination of this high yield factor with the relatively low raw material cost gives a strong boost to the commercial economics of any potential added value products.

Following consultation with chefs the extracted meat was developed into Dim Sum pieces as a trial product and the taste ‘test drive’ resulted in very positive feedback from chefs and consumers.

The Seafood CRC is now funding the development of a commercial product, in the same way that it supported the success of the Blue Swimmer Crab Cakes, reported in both our last issue and in ‘News’ in this Issue.
Your challenge: Prawns for dessert

One dish you are unlikely to ever find on a MasterChef challenge is a prawn dessert. But the innovative minds in the Seafood CRC came up with just such a creation in September 2011, and according to the taste testers, it was a sensation.

Every year the CRC brings its PhD and ‘Masters by Research’ students as well as its Post Doctoral Research Scientists together to experience “the pointy end” of the industry in either a retail or processing setting.

This year, as part of their industry readiness training, these career scientists and their seafood sector mentors visited the Sydney Fish Market, with the goal of exploring different aspects of the industry. The theme for this year’s retreat was firmly placed in the post-harvest camp. Five innovative chefs were recruited for a consumer driven Seafood Innovation Challenge.

Chef Adriano Zumbo developed the spectacular prawn dessert from Australian Tiger Prawns cooked in passionfruit curd served with coconut gel, grapefruit foam, salted licorice ice cream and edible flowers.

Will it take off? The jury is still out on that, but the Challenge did prove that by thinking outside the square seafood products can be a lot more versatile than anyone thinks.

If any industry person is interested in taking part in the 2012 retreat initiative as a mentor for CRC early career scientists, please contact Emily Mantilla at emily.mantilla@seafoodcrc.com.
Introducing a new species to the market can therefore be difficult, however a recent Seafood CRC funded study suggests that consumers might take the plunge if advertising compares the novel species to one they know, for example - “tastes like Flathead”.

The study conducted by the Ehrenberg Bass Institute for Marketing Science investigated the potential for increasing the range of Australian seafood products offered to domestic consumers and found that ‘unfamiliarity’ is a significant issue, with less than 5% of consumers likely to try a new species, even though it was cheaper.

Using a technique called ‘Discrete Choice Experiments’, realistic photographs of six unfamiliar species with different price levels were presented to survey participants who were asked to select a preference for a meal with family and friends, see Figure 1. To provide helpful product benchmarks to participants, the process also included familiar species such as Vannamei Prawns and Atlantic Salmon for comparison.

“The objectives were to investigate initial consumer preferences and secondly to assess whether sales could be influenced by the additional information and shelf claims,” explained Dawn Birch of the University of the Sunshine Coast, who analysed the results of the research for the final Seafood CRC report.

Four of the six unfamiliar species (School Prawns, Australian Salmon, Latchet and Sardines) were presented with an information article, designed to appear like an editorial from a food magazine with accompanying recipes.

Australian Salmon, Silver Warehou and Sardines had another layer of information provided, with specific shelf claims about flavour and quality.

Figure 1. Discrete Choice Experiments chart.
“The loyalty of Australian consumers to ‘tried and true’ seafood favourites was confirmed, with around 30% of respondents initially rejecting all the unfamiliar species. Even when a preference was indicated it was generally very low, at around 3% – 4%.

“The only exceptions were School Prawns and Australian Salmon, with preferences of 22% and 16% respectively, although the latter may reflect some confusion over the identity of the fish, i.e. Australian sourced Atlantic Salmon rather than the distinct species.”

Dawn said overall the inclusion of additional information did not appear to be very effective in changing consumer behaviour, although there were two exceptions to this lack of reaction, see Figure 2.

“Triggers that did lead to a change in purchasing behaviour were claims of sustainability (Australian Salmon) and substitution (Latchet) where a cheaper species was compared to a more familiar fish (Flathead),” she said. “In the latter case the preference level rose significantly, from 3% to 16%.”

However, if this was simply a substitution effect, with an increase in Latchet sales at the expense of Flathead volumes, it would have a limited impact on the expansion of the overall market for seafood, at least in the short term.

“The aim should be to emphasise the similarities of an unfamiliar species to a known fish without creating a ‘cheaper version’ perception.

“The driver of affordability reinforces previous survey results that the perceived expense of fish is a major constraint on increasing seafood sales,” Dawn said.

Two of the shelf claims resulted in increased preferences, with the claims of ‘Peak Season’ and ‘Market Expert Choice’ being successful when applied to relatively familiar species (Sardines and Australian Salmon respectively) and less effective when associated with an unknown fish (‘Snap frozen at sea’ applied to Silver Warehou).

“Overall, these results indicate that changing consumer behaviour to promote acceptance of new species will require a lot of work. This could involve information provision, in particular highlighting similarities with familiar species, and innovative serving suggestions - for example, one of the more successful results in raising consumer interest in an unfamiliar species from another research project came from a ‘Sardine spring roll’ recipe. This could be combined with promotion through tasting events and the use of a variety of messages and different images and supported with greater availability in the market.”

Anyone thinking of introducing a new species is welcome to contact the Seafood CRC for support.

### Figure 2. Share of choice. Comparing choice triggers

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<th>Health recipe</th>
<th>Celebrity recipe</th>
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### Table: Share %

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The aim should be to emphasise the similarities of an unfamiliar species to a known fish without creating a ‘cheaper version’ perception.
Most people say they would pay a premium for Australian Barramundi, according to a Seafood CRC survey of 3,600 consumers.

But, less than 10% of those consumers choose to buy Barramundi more than once a month.

The market opportunity is substantial with more than 90% of respondents considering Australian Barramundi better quality than the imported variety.

According to the research project leader Associate Professor Meredith Lawley from the University of the Sunshine Coast, there are some clear market opportunities for the farmed Barramundi sector but growth will depend on better packaging and branding.

“Convenience is important” Meredith said. The study found that a range of fresh/chilled pre-packaged Australian Barramundi should be investigated, as there is a potential market opportunity for such products in the growing fresh/chilled section of supermarkets.

“These products should be kept simple and natural looking with branding and packaging ‘simple and classy’

“Consumers are looking for information on labelling including the country of origin, the use by date, the portion size and price per portion, serving suggestions and recipes and the suitability for freezing.”

“Trust is an important issue and consumers must be assured that the product they are purchasing is actually Australian Barramundi and is fresh and never frozen.”

Meredith said consumer habits were investigated by revealing the purchasing patterns of ‘regular’, ‘light’ and ‘very light’ consumers of finfish.

Findings included:

• At home, 8% consume Barramundi more than once per month, while one fifth consume the fish at least once every 3 months. Almost half never consume Barramundi, reflecting a perceived lack of availability compounded by an absence of knowledge about how to cook this relatively expensive product.

• Out-of-home, 5% consume Barramundi more than once per month, while half eat the fish less than once every 3 months. However 29% never order Barramundi.

• There is a strong preference for Australian versus imported Barramundi, with almost 90% considering it to be better quality. Indeed, many respondents were unaware of the imported product, assuming all Barramundi was Australian!

• Most of these consumers would be prepared to pay extra, with an estimated premium of around 10%.

• Consumers appreciate Barramundi for its taste and texture. It is perceived as an extremely high quality fish, particularly when it is fresh and Australian in origin.

• Almost two thirds considered Barramundi to be a healthy option in comparison to other fish, perceived as lower in fat and higher in Omega 3.

“We found that the primary driver of Barramundi consumption is taste,” Meredith said.

“If producers and marketers can focus on Barramundi’s ability to deliver an enjoyable, satisfying experience it will compel more consumers to switch.”

The survey was part of the research conducted for the Australian Barramundi Farmers Association to guide development of strategies for repositioning farmed Barramundi in the retail market. More details will appear in the next Issue of ‘Australian seaFOOD’.
Consumers are looking for information on labelling including the country of origin, the use by date, the portion size and price per portion, serving suggestions and recipes and the suitability for freezing.
Improving market access after a disaster

Oyster producers and public health regulators will soon have more accurate guidance as to when harvesting can resume following a pollution event such as an overflow from a water treatment plant.

SafeFish, a Seafood CRC funded partnership between scientists, regulators and technical experts aiming to improve trade access, is currently working on a project to provide an improved risk assessment approach to re-opening closed growing areas.

Shorter periods of closure will clearly benefit the industry and the guidelines will also provide greater assurance to the community that they are safe from pollution related viruses.

The project, which is co-funded through the New Zealand Seafood Industry Council, brings together stakeholders and research scientists from both Australia and New Zealand.

Another SafeFish project is focussing on the maintenance and improvement of market access for exports, including the development of a risk profile on the distribution of parasites in Australian seafood (mainly finfish products).

The partnership is also reviewing proposals to amend international regulations on marine biotoxins, following a year of provision of expert input to the international Codex process of global standards on viruses and vibrios, successfully protecting the Australian industry position.

New projects in 2012 will include revising public health advisories and regulatory limits for certain heavy metals, along with a validation of an established risk management system for ciguatoxin.

These projects will promote increased consumption of Australian seafood at home and overseas whilst reducing any potential business risk for the industry.

Expanding national capability

A SafeFish report in 2011 demonstrated that there was a viable business case for a single laboratory to undertake all Australian testing for marine biotoxins (currently samples are sent to New Zealand for analysis). Subsequently the Seafood CRC and government and industry organisations from SA, Tasmania and NSW formed the ‘Australian Marine Biotoxin Partnership’, which has recently released an ‘Invitation to Offer’ to interested laboratories. This significant expansion of national analytical capability will benefit industry from both a reduced turnaround and development of broader technical expertise to support trade and market access.
But is sustainable seafood just another hackneyed cliché, being exploited by those wanting to get on – or perhaps make sure they are seen to be on – the green bus? Certainly not when both major retailers in Australia, Woolworths and Coles, announce their intentions to range only seafood that carries third party sustainable certification, and major foodservice distributors say they are soon to follow.

It is no longer OK to take just an “ethical stance” on sustainability now that consumers are only 2 clicks away from finding out what sustainability means...and checking your credentials.

It is therefore timely that Spencer Gulf King Prawn, as the third largest prawn fishery in Australia, has decided to seek third party sustainability certification as one element of a Seafood CRC funded “premiumisation” project.

Cynics might say that Marine Stewardship Council certification merely validates what existing science and the Spencer Gulf “prawnies” themselves have been saying and practicing for years. However, third party certification removes any subjectivity in the debate and provides a clear guide to buyers through the global supply chain.

At the official launch of Premium Spencer Gulf Prawns on the banks of the River Torrens on a sunny November afternoon late last year, the mood was bullish for the future and what the sustainability marque means for the industry.

Chef Neil Perry spoke passionately of his love of the culinary aspects of the Spencer Gulf King Prawn while leading buyers from the East Coast agreed that the message from their customers was clear: in seafood, it has to be sustainable to survive.

Concluding, Anthony Mercer, General Manager of Sydney seafood operation DeCosti summed up the feelings of the guests: “Sustainability is not just about the prawns – it’s about who wants to stay in business!”
CALENDAR 2012
UPCOMING INDUSTRY EVENTS

AQUACULTURE AMERICA 2012 – BRINGING ALL PLAYERS TO THE TABLE
29 February – 2 March 2012; Las Vegas, Nevada, USA.

INDIAN INTERNATIONAL SEAFOOD EXPO 2012
29 February – 2 March 2012; Chennai, India.

INTERNATIONAL BOSTON SEAFOOD SHOW
11 – 13 March 2012; Boston, USA.

18TH FOOD & HOTEL ASIA EXHIBITION
17 – 20 April 2012; Singapore.

EUROPEAN SEAFOOD EXPOSITION
24 – 26 April 2012; Brussels, Belgium.

AUSTRALASIAN AQUACULTURE 2012: THE NEXT TEN YEARS
1 – 4 May 2012, Melbourne, Victoria.

8TH INTERNATIONAL ABALONE SYMPOSIUM
6 – 11 May 2012, Hobart, Tasmania.

6TH WORLD FISHERIES CONGRESS
7 – 11 May 2012; Edinburgh, Scotland, UK.

AQUACULTURE UK 2012
23 – 24 May 2012; Aviemore, Scotland, UK.

AQUA 2012: GLOBAL AQUACULTURE – SECURING OUR FUTURE!
JOINT EAS/WAS EVENT, HELD EVERY 6 YEARS
1 – 5 September 2012; Prague, Czech Republic.

ASIAN SEAFOOD EXPOSITION
11 – 13 September 2012; Hong Kong.

The Australian Seafood CRC was established and supported under the Australian Cooperative Research Centre Programme. The Seafood CRC receives funding from the Australian Government’s CRC Program, the Fisheries R&D Corporation and other CRC Participants.