FISHERIES RESEARCH & DEVELOPMENT CORPORATION

Identification and development of the domestic and export market requirements for packaged pipis

(MAP, frozen and pasteurised)

Goolwa Pipi Harvesters Association Incorporated

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Acronyms and Terminology

ABS	Australian Bureau of Statistics
FRDC	Fisheries Research And Development Corporation
GPHA	Goolwa Pipi Harvesters Association
MAP	Modified Atmosphere Packaging/Pack
MSC	Marine Stewardship Council
PIRSA	Primary Industry & Resources South Australia
SARDI	South Australian Research And Development Institute
SFM	Sydney Fish Market
SFA	Southern Fishermens Association
TACC	Total Allowable Commercial Catch

Terminology

Clams unless otherwise indicated, the word clam is used in this report as a collective term encompassing all pipi, cockles, vongole and "baby clam" species; it does not include the giant clam or pearl clam species.

Food Retailers refers to specialist businesses that sell various food categories to consumers but do not rely on seafood as a large part of their revenue**.**

Marketing Chain refers to each and every business: distributors, agents, wholesalers, retailers and restaurateurs – the market intermediaries – that help transfer clams from fisher to the consumer.

Seafood Retailers refers to retail fish shops and market outlets that derive most of their income from the sale of fresh and frozen seafood (as distinct from supermarket stores, general food retail outlets and fish and chips shops).

Seafood Wholesalers refers to businesses that primarily sell seafood to retail or food service businesses rather than direct to the public for in-home consumption.

Non Technical Summary

Pipi fishers in the Lakes and Coorong Fishery, a Marine Stewardship Council certified sustainable fishery**, have a long history of hand harvesting pipis for bait and human consumption in the Australian domestic market. The Goolwa Pipi Harvesters Association and the Southern Fishermens Association, which represent all these fishers, initiated a preliminary marketing study in 2012. The aim of this study was to identify opportunities to develop new markets and products to increase the value of the total allowable annual catch allocated each year to commercial fishers.

***The Pipi fishery forms part of the larger Lakes and Coorong Fishery which has previously held MSC accreditation. The fishery is currently being reassessed and the Pipi component of the fishery has been approved. Other aspects of the Net fishery are still under review and are expected to be approved by March 2015. As a consequence of this delay, we are unable to use the MSC label on any of our Pipi packaging until the entire fishery is approved, which is disappointing given the importance of the label in Asian markets in particular. MSC are working closely with the fishery to try and fast track this process.*

The present project was initiated to identify the trade preferences for packaged pipi products, particularly chilled Modified Atmosphere Packs (MAP), trade and regulatory requirements, prospective demand and indicative prices to underpin the development of a market entry strategy for the selected products in domestic and overseas markets.

Trade interviews with a diverse selection of wholesale and retail seafood sellers, food retailers and supermarket chains, chefs and food writers in the mainland Australian capital cities, soon indicated that there was negligible demand for frozen or pasteurized pipis; the former faced formidable price competition from cheap but well regarded imports from New Zealand and the latter (pasteurized) were considered too soft and unpalatable and also unable to be price competitive with imports.

MAP pipis, with a proven 10 day refrigerated shelf life, however were welcomed by more than half of all Australian businesses consulted, strongly so by those with Italian and Spanish clientele or origins. Most expressed a preference for 1kg or 700g packs but smaller businesses and supermarkets were more interested in having an attractive pack with an affordable (low) retail selling point rather than a particular weight.

Field studies and desk research identified a widespread lack of understanding of pipis as a seafood category particularly as to how they should be stored and handled at home or in retail or food service businesses to maximize shelf life. Confusion and uncertainty about the various names on pipis and other bivalve molluscs referred to as vongole, cockles or clams were other market impediments that would need to be overcome with tailored messages on packaging and on promotion collaterals such as Point Of Sale leaflets and web sites.

After evaluation of all information from trade studies and desk research, the prospective demand for chilled MAP pipis within Australia was estimated at 30 to 40 tonnes in year one at an indicative price of $12.50 to $13 per kilogram in Store for Sydney wholesalers. These outcomes are likely with traditional selling practices and minimal investment in promotion, but likely sales would be about 50-60 tonnes or more with modest investment in market promotion.

A market entry strategy has been developed to build new marketing channels reaching new consumers, particularly specialist fine food stores, lapsed pipi users and people currently using chilled New Zealand clams. This strategy involves not just relying on sales through existing market channels to current retail, restaurant and home users of loose pipis. A reliance on the current (loose) pipi users should be avoided if the GPHA is to minimize cannibalization of sales from these traditional marketing channels, and the consequent reduced demand and lower prices in those channels.

The market entry strategy and prospective demand noted above are based on a quality assured Premium pack and an optional Standard pack meeting particular customer specifications. A modest investment in personal selling and other promotional activities to tell the great provenance story of the MSC certified, live packed, Australian pipis is strongly recommended to achieve the higher prospective sales forecast.

Limited field work and face to face discussions with prospective pipi importers and trade users in Hong Kong and Singapore indicated little interest in MAP pipis given Australian costs and the prevailing strong value of the Australian dollar but there is some encouraging interest in a bulk pack of frozen pipis, subject to meeting customer specifications and pricing requirements.

Desk research and telephone consultations on European Union (EU) markets particularly Italy and Spain, indicated that likely Australian costs to these areas are very high and not price competitive, but as noted in Asia there will probably be better opportunities for spot sales of frozen packs with a significant decline in the value of the Australian dollar.

The market entry strategy proposed for prospective overseas markets essentially follows the same themes and marketing principles outlined for domestic markets: quality assured products tailored to the needs of the particular customer's specifications for product quality and packing, at mutually agreeable prices and a promotional program for product launch and ongoing trade support.

The GPHA faces an exciting future with the MAP packs given their many competitive advantages but enduring long term success will require ongoing investment in promotion and Research & Development to produce new or improved products and to gain economy of scale in its production and marketing.

1. INTRODUCTION

1.1 Background And Need For The Project

The Coorong commercial pipi fishery has operated for many years with bags or styrene cases of loose pipis being sold for human consumption and bait, mostly into the south east mainland states from South Australia to northern New South Wales.

Hand harvesting, by members of the Goolwa Pipi Harvesters Association (GPHA) or the Southern Fishermen's Association (SFA) forms a part of the Lakes And Coorong Fishery which is managed by the South Australian government and was recently re-certified as sustainable by the Marine Stewardship Council (MSC)(pending).

The fishery operates within an annual Total Allowable Commercial Catch (TACC) framework with "fishery harvest strategy economic decision rules" that take account of market conditions in the annual economic assessments managed by PIRSA Fisheries, in consultation with industry, to maximize the prospective financial returns from the resource.

The GPHA and the SFA recognised the need to reduce reliance on low priced loose pipi sales, particularly those in the bait market, and to aim for higher returns from alternative higher priced products and markets that were proposed in an earlier marketing study (Ruello & Associates 2012).

More recently the GPHA identified a need to undertake new research to provide the market information necessary to support industry's submission to PIRSA Fisheries for the annual TACC decision making exercise in 2014 and to explore the market prospects and competitive challenges for packaged pipis in Australia and selected countries in Asia and Europe.

The GPHA fishers, like their fisher colleagues elsewhere, have very little experience in market development of packaged food items but they recognized benefit in investing further in Research & Development and developing a product that meets market wants and not just their own needs. They therefore sought funding assistance from the Fisheries R & D Corporation to help undertake R&D to provide reliable information on market preferences and requirements for packaged pipis, particularly for a long mooted Modified Atmosphere Pack of pipis.

1.2 Product Names, Standard Fish Names And Sales Labels

The name pipi is the Standard Fish Name of the Australian species known scientifically as ***Donax deltoides***, (family Donacidae) a bivalve harvested commercially in South Australia, Victoria and New South Wales. This name has long been the common name and the marketing name in NSW but the species is still commonly referred to as a cockle or the Goolwa cockle in South Australia. A New Zealand import ***Paphies donacina* (= *Paphies australis*)** is called a tua tua or pipi here in Australia and in its home country.

Pipis are just some of the bivalve molluscs in the large and varied group of bivalves commonly referred to as "baby clams" in the Anglophone world and ***vongole*** in the Italian language. Pipis were the first baby clam to be called vongole in Australia because of their similarity in taste and appearance to several vongole species consumed in Italy and because of their abundance and early sale in NSW.

Many other species of bivalve molluscs from various zoological families are also known and sold in Australia as vongole or clams. These include the ***Katelysia*** species (family Veneridae) from Tasmania and South Australia which were granted the Australian Standard Fish Name of vongole in 2009, a more attractive marketing name than sand cockle or mud cockle as they were, and still are, commonly known.

The determination of vongole as the Standard Fish Name for several Australian Katelysia species in 2009 to help differentiate them from pipis in a retail display created an unintended situation where many people are unaware that this Italian word covers a multitude of species including the Australian pipi. The Australian pipi resembles the Italian vongole species far more closely than the Australian Katelysia species and the Venerid clams granted this Standard Fish Name in 2009.

Table 1 lists the scientific and marketing names indicated on the packs of the more common imports into Australia, while Figure 1 shows a selection of the somewhat confounding labels noted around retail outlets in Australia this year.

There are many endemic and overseas species of bivalve molluscs, each with several names that are being consumed in various cooked dishes around Australia under the name of clams or vongole and occasionally pipis. This multitude of species and product names, coupled with place names like Coorong and Goolwa has generated considerable communication problems and confusion throughout the marketing chain from fishers, wholesalers, retailers and the consumer.

This is not unusual with seafood trade and consumption in Australia, however it is worse with these bivalves because most share a strong superficial resemblance with each other. Unless otherwise indicated, the word **clam** is used in this report as a general term encompassing all these small bivalve species.

Table 1. Names on clams sold in Australia

Origin	Names in use	Scientific name	Comment
S. Aust. NSW & Vic	Pipi Goolwa cockle Vongole	*Donax deltoides*	
S. Australia	Sand cockle SA vongole Live cockle Local cockle	**Three species** *Katelysia peronii* *K. phytiphora* *K. scalarina*	Three species sold as cockle or clam
Tasmania	Tasmanian Vongole Tas. Cockle Tas. Clam	*Katelysia peronii* *K. phytiphora* *K. scalarina* *Venerupis langillierti*	Mostly the Katelysia species
New Zealand	NZ pipi Tua tua	*Paphies donacina*	
New Zealand	Diamond clam Diamond shell Surf clam NZ clam	*Spisula aequilatera*	Blanched product
New Zealand	Littleneck clam Littleneck cockle Sand cockle Vongole	*Chione (Austrovenus) stutchburyi*	
New Zealand	Storm clam Storm shell clam Large trough shell	*Mactra murchisoni*	
Vietnam	Clam White clam Vietnamese clam	*Meretrix lyrata (Veneridae)*	
China	Baby Clam	*Venerupis variegata*	Pre-Cooked (boiled)
	Frozen clam	*Ruditapes philippinarum*	

Figure 1. Sample of some of the names on pipis and vongole on retail display in early 2014.

2. OBJECTIVES

1. Undertake desk research and trade interviews with pre-selected food service and retail users in selected domestic, Asian and EU markets to assess current and prospective demand and indicative prices for packaged pipis and the competitive environment for clam products.

2. Identify trade preferences regarding product form (MAP or frozen), pack size and type, and the desirable labeling requirements for target markets. Develop the necessary text and design combinations for packs, printed promotional collateral and web site content.

3. Identify and document regulatory requirements and test selected product packs and materials against identified food safety and trade specifications.

4. Draft a market entry strategy for selected markets and products.

3. METHODOLOGY

3.1 Market Research

Qualitative and semi-quantitative trade research was undertaken in Australia Singapore, Hong Kong (Asia), Italy and Spain (Europe) by N. Ruello, T. Robinson and J. Angas respectively, with selected clam buyers and sellers. Consumer insights were gained indirectly, through the trade studies and desk research.

Face to face and telephone interviews were conducted with pre-selected wholesalers, retailers, importers, food service companies and other trade buyers. In Australia, 51 interviews were completed with trade buyers and food media correspondents across all the mainland capital cities. Approximately a dozen importing and wholesale businesses were also consulted face to face, or by phone in both Asia and the European markets. Much overseas work was conducted by phone or email because of budget limitations.

Issues explored in the trade discussions undertaken by the researchers included:

- nature of demand: year round/ seasonal/holiday peaks
- indicative prices and volumes for prospective demand
- competitive products and their origin of production
- preferred product form: MAP or frozen
- preferred pack sizes
- mandatory and desirable information for packs, branding and logos, including the Marine Stewardship Council proprietary logo

Desk research of published materials and web sites was utilized by all three researchers to gain general insights on clam production, marketing and consumption for the three continental areas.

Information from "in country observations" on clam species sold in fish markets, seafood retail outlets and supermarkets, particularly on local species' marketing names and general price levels gathered on this project and earlier work by the researchers, was also utilized.

Additional insights on the 'Asia' market were gained by J. Reeves, a GPHA member, on a visit to the Singapore Food & Hotel Expo while added insights on 'European' markets for clams was gained at the Brussels Seafood Show by J Angas.

Market entry strategies were developed by N. Ruello in conjunction with the other two project market investigators after consideration of all the market research, in–house information, technical tests and scientific data gathered on pipi products and packaging.

3.2 Technical Research

1. Nutritional analyses on Coorong pipis and documentation of food safety and other regulatory requirements for product and packaging for AQIS and overseas agencies: J. Carragher, K Petherick and the SA Food Lab.

This part of the project was designed to ensure that the pipis being placed into MAP packaging met the regulatory and food safety requirements for domestic and export markets. The GPHA engaged Dr John Carragher of Logifish, to work alongside the QA manager responsible for developing the MAP product. The work involved trialing various gas mixtures and shelf life extenders (Zydox) as well as a number of different packing protocols. The final packing protocols used have been documented in a report to the FRDC. This document is under embargo until 1 June 2016.. Results using this methodology demonstrated a shelf life of at least 10 days from day of packing.

To validate these results the GPHA engaged SA Food Lab, who tested samples from the various packing and gas mix protocols developed by Logifish. These results were filed and form the basis of validation of the shelf life claim of ten days. (These results also form part of the confidential Logifish report).

Kylie Petherick of 'Six 1 Consulting' was engaged to develop a new Approved Arrangement for the packing of pipis, both loose and in modified atmosphere packaging. This document and the HACCP plan that underpins it, form the foundation of the Standard Operating Procedures for the packing of new pipi products from the Port Elliot facility.

2. Validation of pipi shelf life data. J. Carragher and the SA Food Lab

As noted above, the validation document behind the AQIS Approved Arrangement and are available for government agencies and for inspection by GPHA customers purchasing the MAP product.

3. *Technical trials on packaging film type, manufacture and sealing of selected*

Stuart Mead, General Manager of Butchers Machinery provided advice on the selection of the most appropriate materials for the packaging of MAP pipis and supplied the proof of concept MAP machine. For the initial print and test run a conservative approach to the substrate type was adopted to ensure that the likelihood of the bags becoming ripped through the cold chain process was minimised. A number of substrates (that prevented windows from frosting up) and various machine settings were tested before the most appropriate pack type selected. It may be possible to use a thinner material for future production after sufficient market feedback from the first year's production and sales.

4. Labelling and packaging design and communications collaterals: K Seja (KS Design Studio Pty Ltd (SA) researched and advised on design and information content for packages (brand labeling, nutrition table and marketing information), promotional leaflet and web site.

More than 30 iterations of the core design were reviewed by the GPHA MAP working group, incorporating feedback from customers in Europe, Asia and Australia.

These iterations and refinements included the following:

- Highlighting the fact that the product was "live", which differentiated it from other packaged clam product sold in Australia.
- The Australian origin of the product, and more specifically the fact that it was harvested from the pristine waters of the Coorong National Park.
- Experimenting with various types and arrangements of windows to show the product inside the pack.
- photography of the product in a cooked and non cooked form and consideration of a number of names including:
    - Goolwa Pipis
    - Pristine Pipis
    - Coorong Clams
    - Coorong Cockles
    - And a number of variations on these themes

- A nutritional panel was designed for the back of the packaging to meet Australian and export consumer labeling requirements and provide an attractive finish.

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3.3 Report Structure

This report's introduction chapter has a review of the species and product names in the marketplace as well as their Australian standard fish names, to facilitate clear discussion about these diverse but similar looking bivalve molluscs.

The middle chapters of the report (4 to 12) document the results from the various market and technical research sub projects conducted by different researchers.

The last part of the report has the market entry strategy. This includes a detailed discussion on the four elements of the market entry strategy (chapter 13) and the conclusions and recommendations from the entire R & D project (Chapter 14).

4. DISTRIBUTION & SALE OF CLAM PRODUCTS IN AUSTRALIA

4.1 Marketing Channels And Sales Volumes

Pipis have long been sold for human consumption around the eastern states and for bait around the southern half of Australia. Export sales have been more of an exploratory or trial nature and with very limited profit, principally because of the high value of the Australian dollar in recent years.

The chilled and frozen clam trade for food consumption in Australia currently consists of the sale of :

- Australian chilled loose pipis and vongole,
- Imported frozen Asian clams
- Imported chilled and frozen NZ clam and pipi products
- Australian chilled packaged vongole in the volume order shown below.

Table 2, below, shows the relative size of the pipi (food) market in recent years and the Goolwa (South Australian) dominance in the national clam supply, according to recent investigation and an earlier detailed supply chain study (Ruello & Associates 2012).

Product	Tonnage (approx.)	$/kg (approx.) FIS Sydney
Australian Pipi S. Australia Victoria NSW	350 total 300 30 20	$13.50 (SFM)
Vongole/cockle SA	60	$17
Vongole/cockle Tas	40	$17
NZ clams chilled	130	$11
Asian clams frozen	250	$3-4
New Zealand clams frozen	240	$8

The supply of all types of imported clams has grown noticeably (industry estimates of about 10-30%; New Zealand official export figures in Appendix 1) from those of recent years reported earlier by Ruello & Associates (2012) but the wholesale prices have not fallen according to industry sources.

Most seafood retailers and almost all restaurateurs consulted noted that pipis had become expensive in recent years and that they had fallen “off the menu” at home and in restaurants in the early 2000s. They were mostly unaware that supply had been stabilized and governed by catch quotas in all states over the past decade allowing for more predictable landings and prices. Moreover pipis were now desanded overcoming one of the great hindrances to consumption and enjoyment of pipis.

Industry sources and the South Australian Research & Development Institute data indicate that the human consumption market has accounted for about half to three quarters of the landings since 2008/09 (G. Ferguson 2012).

Goolwa pipis for human consumption (in loose bulk packs) are sold by fishers to selected wholesalers intrastate and interstate at agreed prices and they are also consigned to the Sydney Fish Market (SFM) for sale by auction or direct sale. The pipis are then bought by wholesalers, retail fishmongers or by restaurateurs on site at various wholesalers' premises, or at the SFM, or via telephone/fax/email order to selected wholesalers, and finally consumed at home or in restaurants. A secondary wholesaler may also operate in the marketing chain at times (as shown in Figure 2).

The NSW pipi harvesters and the South Australian and Tasmanian vongole fishers utilize the same marketing chains as Goolwa fishers (as shown in Figure 2). Imported clams also follow most of the distribution channels utilised by Australian product (Figure 2) with the notable exception of the Sydney Fish Market auction which typically does not handle frozen seafood. These frozen or fresh imports also end up in restaurants, retail outlets and homes. Many of the large retail fishmongers in Sydney and Melbourne sell a range of Australian and imported clam products side by side in their displays.

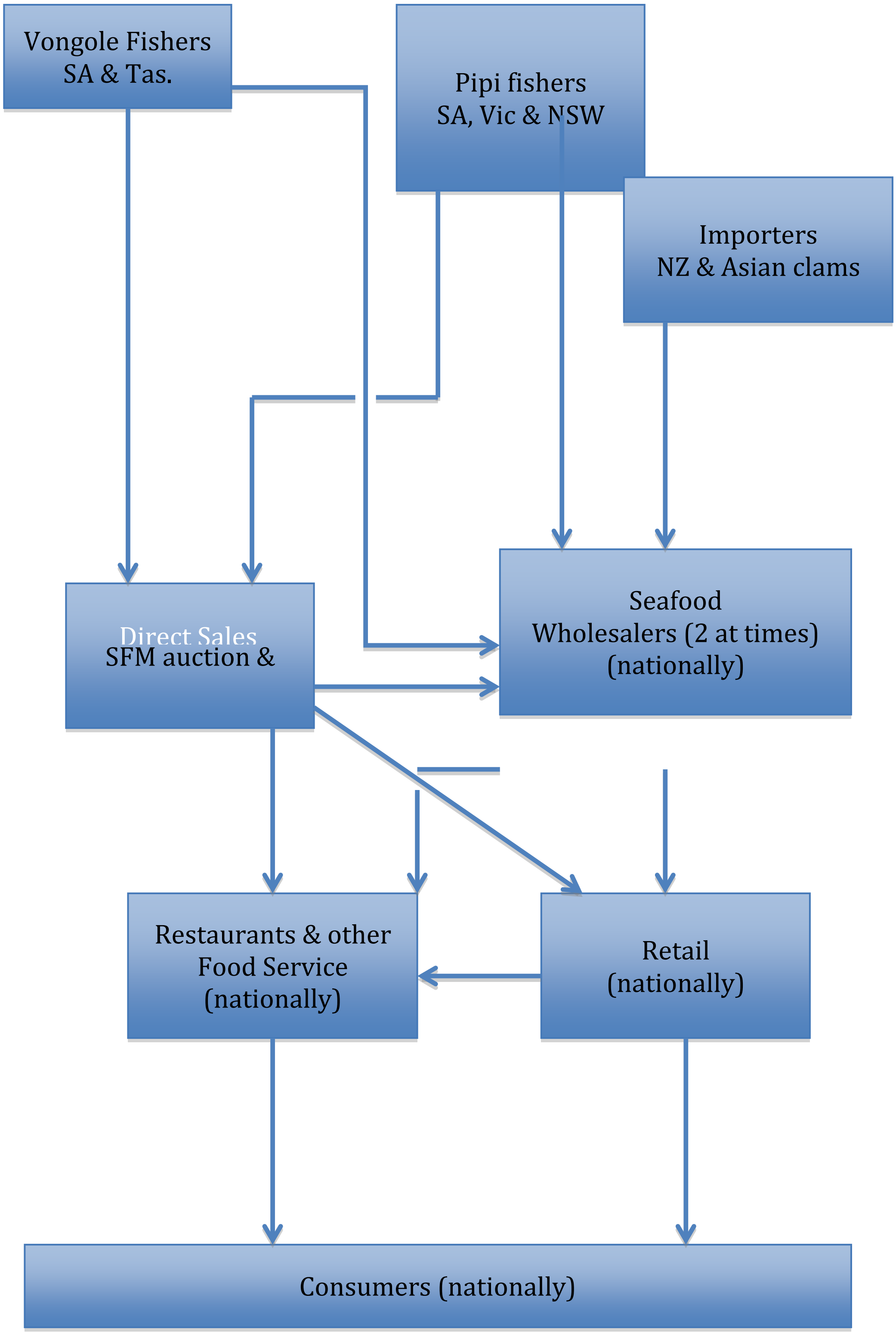
Most of the vongole from the South Australian and Tasmanian fisheries are also distributed loose in plastic bags inside styrene cases but a small volume of SA vongole are also packed in 1kg vacuum packs.

There is no quantitative information on what percentage of pipis are consumed in home and what is eaten out of home in restaurants or elsewhere in the food service trade. Goolwa fishers believe that the majority of consumption is "out of home" when prices are high and that "in home" consumption is greater when prices are at medium or low levels.

According to industry sources, Sydney accounts for about 50% of total consumption with Melbourne at about 30% and the balance going to other areas. Perth has the lowest per capita consumption of Australian pipis according to seafood distributors, while Cairns has a noticeable small sales volume given the large number of seafood and ethnic restaurants in that Queensland tourist town.

Price is a major factor influencing the type and number of buyers of pipi products be they fishmongers or food service outlets. The higher prices prevailing in the 2000's for Australian pipis has meant that they are typically now sought only by businesses with a clientele familiar with these shellfish and prepared to pay the higher price for the Australian product. Chinese, Vietnamese, Italian, Spanish and Portuguese are recognized as the major users of pipis according to industry sources.

Figure 2. Common marketing chains for pipis and other clams.



4.2 Seasonality Of Supply And Demand

The supply of pipis in Australia has traditionally been high in the warmer half of the year and declines in the winter when water temperatures are not so comfortable for hand harvesting; regulatory closures in most states including SA have also impacted on supply. Historically this has resulted in a noticeable seasonal fluctuation in supply and prices (Ruello & Associates 2012).

In the past couple of years the Goolwa fishers have been allowed to harvest all year round but cold air and sea temperatures typically lead to a cessation in July.

The demand for pipis is essentially all year round but with peaks noted at festive or holiday periods such as Mothers Day, Christmas, Easter, New Year and Chinese New Year when more seafood, including pipis, make it onto the menu at home and when dining out.

While this sales increase is expected, it sometimes results in a doubling in demand that leads to a large supply shortage and noticeably high prices that add to the "ordinary" volatility in retail pipi prices due to seasonality or supply disruptions due to inclement weather.

The demand for pipis also fluctuates throughout the week with most demand and consumption recorded around the weekend. Like most shellfish, lower demand is common early in the working week.

This seasonal and weekly change in demand noted with loose pipis are expected by retailers and food service business to persist with MAP pipis too, but many noted a need for less volatility in pipi prices (loose or packaged form) to boost sales.

5. COMPETITIVE PRODUCTS AND ORIGINS

Goolwa pipis currently face direct competition in the domestic clam marketplace from:

- interstate wild pipis
- two South Australian Katelysia vongole/cockle species
- Tasmanian venerid clams known as Tasmanian vongole or clams
- a New Zealand pipi species and three other NZ clam species
- several Asian clam species.

The competitive Australian products are all sold in a chilled form, loose bulk pack and in one kilogram packs; the Victorian and NSW pipis are only sold in the loose bulk form.

The imported products from New Zealand and Asia have all been blanched or boiled and/or frozen to enable them to meet quarantine restrictions on these products. New Zealand product comes in one kilogram packs as well as loose bulk packs of 10 kilograms while the Asian products are imported in one kilogram packs ready for retail display or restaurant use.

Interstate pipis do not represent a major marketing challenge for Goolwa fishers because the interstate fisheries both have TACC less than 60 tonnes pa and their supply is very erratic; the supply from these smaller fisheries do however have a negative impact on prices in the summer months if there are large landings.

The Asian imports come in attractive vacuum packaging with ample provenance, handling and cooking instructions but they too do not represent a major **direct** marketing challenge to Goolwa pipis: they typically are seen only in retail stores where there is a significant Asian clientele wanting clams for in-home and restaurant use, also they are so cheap that they are perceived by most other consumers as not as good as the more expensive Australian or New Zealand products and so they effectively operate in a different market segment.

The white Vietnamese *Meretrix* clams are so cheap that they are offered as bait in some stores throughout South East Australia. Further details on these Asian products and their sale are available in an earlier study (Ruello & Associates 2012). Nevertheless the sustained prices in the face of increasing sales volumes suggests that they are seen as offering good value for money by their users.

The New Zealand clams and the South Australian and Tasmanian species are more relevant to the present project because they are all relatively high priced, and widely perceived as high quality product i.e. the target market segment for packaged Goolwa pipis.

Tasmanian vongole/cockles are available only in a loose bulk pack while the South Australian vongole/cockle are available in a packaged form, but they all share several attributes that contribute to their competitive strength and market success :

- They are all large growing species with relatively large size product on offer.
- They share the Standard Fish Name vongole, the Italian name known from classic recipes and restaurant menus, that attracts attention and boosts sales (particularly in Sydney, the largest geographical market) where this fish name and retail label increases their demand from key trade buyers.
- Supply of each species is less than 50 tonnes per annum, (and TACC is unlikely to be raised to high levels) which delivers exclusivity/prestige value for both restaurateurs and home consumers alike which helps Tasmanian *Venerupis* vongole, typically the least abundant, achieve the highest prices of all clams on sale in Australia.

This niche market success has come about in the absence of any cash investment in product or industry promotion. This dearth of promotion investment is common to all Australian clam harvesters and contrasts with the situation for imported clam products.

The New Zealand industry has a portfolio of four species of clams ranging from the small littleneck clams *Chione stutchburyi* to the massive storm clam *Mactra murchisoni* (Table 1) and an equally broad price range reflecting the large species and size diversity. The New Zealand products too share a number of attributes that contribute to their market success as premium products despite the fact that they are par cooked (blanched) and/or frozen:

- The strong reputation of New Zealand fishers for caring for their catch.
- The NZ seafood processors' record for consistently high eating quality, conformance to product specifications (particularly size grades) and assured food safety.
- The marketing experience and skills of the half dozen or so Australian importing companies and their distributors.
- On going global generic promotion of NZ seafood products and industry to strengthen demand and prices.

The greatest challenge for market launch and acceptance of the packaged Goolwa pipis is the entrenched position of the chilled New Zealand diamond shell clam as the affordable best selling premier pack of clams in Australia.

This strong position has come about because of:

- The long shelf life (20 days) of the chilled pack.
- The medium to large size and almost barrel shape of these clean looking clams gives them great eye appeal.
- The relatively steady and competitive price for the one kg pack, always at least several dollars per kilogram cheaper than any Australian packaged clams.
- Reliable size grading and consistent eating quality of the product.

- Comprehensive distribution around fishmongers and other food sellers across all states and covering the needs of the key ethnic groups including Chinese, Vietnamese, Italian and Spanish.
- The steady stream of inexpensive or unpaid promotional activities and free publicity across multiple media.

Packaged mussels have established a firm place in the seafood product range with fishmongers, restaurants and even in many supermarket outlets. Spanish and Italian restaurants that were previously regular buyers of pipis have effectively replaced pipis with mussels on their menu; these lapsed pipi users stand out as easy targets for any market launch of MAP pipis.

The marketing challenge for MAP pipi sellers is to convince many of these mussel sellers and the home consumers that pipis are a worthwhile product to add to their seafood menu.

But bivalve shellfish aren't the only seafood or indeed only other goods and services competing for the consumers' dollar so a truly compelling offer and promotional program would need to be developed to get consumers to try the new MAP pipi pack in the face of the many temptations available in shops, restaurants and on line.

6. AUSTRALIAN CONSUMER AND TRADE UNDERSTANDING AND PERCEPTIONS OF CLAMS

Pipis, as indeed the entire category of clams, are not well known shellfish as they have only played a relatively small part in Australian seafood production and consumption. As indicated earlier, the aggregate consumption volume of all species and products in the past few years has been about 1000 tonnes pa or less. This is partly because they were widely seen as bait rather than food by Australians prior to the post war influx of migrants that led to a demand for clams at the dinner table.

Many trade sellers, restaurateurs and most consumers have little understanding on how to handle and refrigerate to maximize shelf life of pipis or how to cook pipis. The diversity of clam species and the confusion generated by the varying labels in stores (Figure 1) has not been helpful in this regard.

Most consumers and many trade buyers do not know that the pipis for human consumption today are desanded to provide a more enjoyable product. The sustainability status of the Goolwa pipis from the Coorong fishery, and its MSC certification is unknown to almost all people.

Clams, like mussels, suffer from the widespread perception that those that have not opened after cooking should be discarded. As with mussels there is confusing and mostly unfounded advice on various cooking blogs and on-line cooking sites suggesting that these shellfish need to be purged in a dish of fresh or salt water before cooking, and sometimes even the senseless suggestion that oats should be added to the water to facilitate self cleaning.

This poor understanding of clams has been an impediment to market development of pipis sales that has yet to be overcome and the remarkably good provenance of the desanded live Goolwa pipis from the Lakes and Coorong fishery remains one of the greatest stories never told (Ruello & Associates 2012).

Consumption has therefore mostly been dominated by people with southern European or Asian origins. These people with ethnic origins are generally familiar with cooking bivalves from past experience in their homeland.

Asian home and trade shoppers, predominantly Chinese and Vietnamese, mostly favour the larger pipis and the larger clams from New Zealand or Asia and apparently have shown little interest in the smaller pipis to date. Italian and Spanish shoppers however represent two ethnic groups that are familiar and receptive to a smaller size range of clams, such as the pipis proposed for sale as MAP product by the Goolwa Pipi Co members.

The majority of seafood merchants and retailers did not report any particular size preference, they are comfortable with a “run of catch” provided that they are not all at the large or small end of the size range and that the shellfish size composition does not change noticeably from week to week.

Other than the Italian favourite *Pasta Con Vongole* and the much loved Pipis With XO Sauce dishes, almost all pipi/clam dishes do not have the shellfish as the centre piece nor require a large weight of raw product per person. Interestingly, the recipes for these two well-known dishes, and for other dishes, available on the internet, suggest anything from 100 to 250 gram per person. Such divergent views on portion size just add to the difficulties in encouraging sales and enhancing prices for pipis.

Consumers of Japanese origin and Japanese restaurants typically buy clam species but they, like other users, “lost interest” in pipis in the early 2000’s because of high prevailing prices. These lapsed users make up a large part of the unmet latent demand of more than 700 tonnes per annum of pipis estimated in an earlier study (Ruello & Associates 2012). So prospective demand for pipis appears strong despite a poor understanding of clams generally.

6.1 Trade Perceptions And Attitudes On Packaged Pipis

Consultations with current and prospective users of pipis about their interest in packaged pipis and the likely demand for MAP packs of Goolwa pipis quickly indicated that there was essentially no trade interest in pasteurized pipis. This was because New Zealand pasteurized clams and mussels had generated a strong perception that pasteurized shellfish were overcooked, soft and generally unpalatable as a result of heat treatment; this strongly negative reputation plus the relatively high costs of production and packaging in Australia led to the conclusion that investment in this area would not be beneficial.

Trade consultations also soon indicated a very low interest in frozen Goolwa pipis because frozen clams were perceived as fragile/brittle and an inferior product to fresh/chilled product. This poor reputation and the high production costs in Australia meant that the likely selling costs of a frozen Goolwa pack would not compete successfully with a New Zealand pack let alone the even cheaper Asian imports (Table 2).

Moreover frozen pipis did not offer the unique selling proposition of being packed live with their natural juices. All of the above led to a conclusion that investment in developing a frozen pack for domestic markets was unlikely to be profitable in the near future. The MAP pack concept received widespread positive trade response and was therefore selected as the one for further product and market development.

6.1. 1 Trade Attitudes And Interest In MAP Pipis

Trade consultations on MAP pipis commonly started with some confusion and questions about what exactly MAP meant, particularly in relation to pipi shelf life and vitality in such a pack, but quickly elicited a positive response. These discussions led to a realisation that this poor understanding of MAP was an issue that would need to be overcome in launching this new type of product pack.

This poor understanding was surprising given that they were familiar with packaged chilled mussels and frozen food packs, and they would commonly mistakenly mention Cryovac or Vac Pacs (the former is a registered name for one vacuum packing equipment and supplies company) in place of MAP.

The attitude of interviewees re the concept of a chilled modified atmosphere pack of pipis was clearly positive and can be summarized in three broad categories:

1. Interested in it if the price is “right”; it’s modern, convenient and not wet
2. Not interested really, not likely to appeal to my existing customers or consumers, they like loose seafood, not packaged

3. Yes, interested, sounds good – no concerns or immediate questions about price.

The first category accounted for about half of the wholesale and retail seafood trade and the restaurant sector. Approximately one in four seafood and restaurant businesses fell into each of the other two categories.

The MAP product appealed more to owners of multiple businesses who experienced significant wastage through staff handling rather than to the single business operators who were better able to manage stock control and sales. Seafood retailers welcomed the savings that would arise because there would be no loss of weight (salt water natural juice drainage from the bivalves) from the packed pipis (experienced with loose shellfish) and the prospect of eliminating hassles with customers complaining about such weight loss after purchase.

Italian seafood merchants and restaurateurs were the most enthusiastic group, welcoming the prospect of having live/chilled pipis with natural juices – rather than blanched clam – in a convenient non drip pack; the Spanish restaurateurs were also very receptive to MAP pipis retaining their natural juices.

Chinese seafood distributors and restaurateurs were the least enthusiastic about packaged pipis because they mostly display pipis and other clams alive and loose in open baskets on ice or in marine tanks and because they have a preference for large sized pipis.

All three supermarket companies consulted were familiar with MAP products, (and the distinction with Cryovac) and all highlighted the need for strong packaging design with adequate consumer safety information and recipes for their possible use.

The two major national supermarket groups were essentially in category one (qualified positive interest), but price was just one of the many considerations they raised, because they have complex particular requirements for introducing new products including their own company quality assurance programs and promotional support policies. All three supermarket companies were more interested in the dollar sell price point for a particular pack rather than the actual pack weight or shellfish size.

A smaller supermarket group, with a strong reach in South Australia, showed far more positive interest than the qualified interest expressed by the major chains although it too had its unique requirements for introducing new products and would want to see and try samples of the actual packed products at next visit.

7. TRADE PREFERENCES ON MAP PACKS

Prospective seafood, food service, supermarket and fine food retail buyers were consulted for input on a preferred or ideal pack size for MAP Goolwa pipis and the type of information they thought their customers would require on packaging. The use and utility of logos, particularly the registered trade mark of the Marine Stewardship Council's MSC logo was also canvassed with interviewees.

Seafood wholesalers, retailers and restaurateurs mostly had few if any particular requirements regarding pack design and logos but they did offer some useful guidance on a preferred pack size and were ready to discuss alternatives in lieu of their first preference.

Information from these discussions (often perfunctory and sometimes contradictory) plus that gathered from detailed examination of competitive clam products and their related promotional leaflets and web sites was then considered in formulating the following requirements and specifications.

7.1 Pack Design

Commentary on pack design was rather uniform across all types of businesses with most suggesting the inclusion of some or all of the following:

- a few recipes and information on cooking
- information on how to store and prepare pipis at home
- use by date, preferably offering a long shelf life
- a good looking pack.

There was surprisingly little commentary on what is commonly regarded as the mandatory information on modern packaged food such as nutritional information and a bar code for easy sale at the check out, the latter was only cited by a couple of seafood merchants. These were considered as issues that the producer/packer should knowingly attend to.

The supermarket sector however, with more experience in buying and selling packaged food, had far more comment, with all expressing a need for:

- An eye catching design
- A full looking pack for ease and attractiveness of display
- Information on handling and cooking
- Information on how to store and prepare pipis at home
- A number of recipes
- Batch and traceability information
- All the mandatory food safety and corporate legislative requirements.

The supermarket chains clearly expect the prospective seller to be aware of the current food safety and ACCC requirements on packaging design and safety, and labeling claims, and to offer a professional looking, compliant pack.

7.2 MAP Pack Size Preferences

Discussion and suggestions on a preferred pack size however differed greatly between the different types of prospective buyers but showed much commonality within a particular group, as follows.

Seafood wholesalers generally thought that a one kilo pack would be the best size for market introduction as it is the norm with Australian and imported clams and mussels and would therefore be suitable for distribution and ready sale to both retail and food service organisations.

A four or five kilogram bag was also suggested by two wholesalers as probably a useful addition at a later date once demand for MAP pipis has been built up via a one kilogram pack. One wholesaler suggested a 1.5 kg pack as well as a 1 kg pack but most others had no interest in a pack larger than one kilogram. Wholesalers did not propose a smaller pack size but on probing in discussion, several recognized that perhaps a smaller pack would be useful for some of their retail customers.

Restaurateurs all suggested a 1kg pack as best suited for their needs because they would then not have many loose and losing natural juices at any one time; also this is the pack size for shellfish they have all become accustomed to with packaged mussels and clams.

About half of the seafood retailers overall simply suggested a one kilogram pack but other suggestions were 0. 5 kg, 0.6 kg, 0.7 kg, 0.75 kg, and a 1.2 kg pack with the smaller packs favoured in Brisbane and Perth. The 500 gram and 700 gram packs were suggested as being more useful because they would meet the needs of budget conscious shoppers and those shoppers wanting just a small volume. Two retailers suggested a twin size range, one proposing a half and a full kilogram pack while the other suggested the 0.6 and 1.2 kg packs as suiting the needs of consumers wanting just a small volume as well as those seeking a larger volume to feed several adults with a mains dish.

When discussing choice of a 0.5kg gram pack versus a 0.7kg pack if only one of these two were to be available the retailers proposing the smaller size pack acknowledged that, on reflection, the 700 gram pack would perhaps be the better for business overall and that that strategy still left open the possibility of introducing a 500gram pack at a later date as a replacement or addition to the range if proven worthwhile. It was also recognized that the introduction of just a 500 gm pack and then replacement with a larger pack at a later date would prove more difficult.

Food stores mostly favoured a sub kilo pack that could be retailed at a $19.99 price point rather than a 1kg pack that would need to be retailed at about $23 to $25 for a 1 kg pack; the actual weight in the pack was not as important an issue as an attractive looking pack that could be offered at an everyday price of $19.99 or less.

Supermarket buyers had their own particular company requirements on packaging and labeling information but all shared the same interest in a pack size that could be sold and promoted at an attractive price point rather than nominating a particular pack weight at this time.

7.3 MSC And Pack Logos

Almost all interviewees had little comment on logos as it was not a matter that they normally give much consideration to, but offered a simple general comment that an attractive colourful logo was necessary.

MSC Sustainability Certification

Most seafood merchants reported that they rarely have anyone asking about the sustainability of the seafood on offer and indeed the majority of wholesalers and retailers consulted did not know what the Marine Stewardship Council was, what it did nor aware of its logo on packaged seafood. Two wholesale companies dealing with up market restaurants were familiar with the MSC, and one of these had customers wanting sustainable seafood where/when available.

Most fishmongers were actually unaware and indifferent to the increasing level of consumer interest in sustainability in certain socio-economic demographics, and that such shoppers were reportedly prepared to pay more for foods that were certified as such by the MSC – the company with the strongest certification standards and reputation globally. Restaurateurs were more aware of sustainable seafood but not much more interested than their seafood suppliers.

This low awareness and interest was surprising considering the increasing media attention to sustainable seafood, particularly in the food media, and more and more restaurants claiming to only use seafood that is sustainably harvested.

Australian supermarket buyers though were all aware of the increasing publicity around sustainability with seafood, and that Australia's two largest national supermarket chains have already started to promote their own unique credentials in this regard.

These supermarket buyers were generally supportive of the concept of buying sustainable where available but the representative of one of the large national chains added that MSC certification would not be welcome at this time with his company because of the added cost that would be imposed on the seafood through the MSC's Chain of Custody royalties payment.

There is widespread belief throughout the seafood trade in Australia and many developed nations that while the MSC or other globally recognized certification may not help to get higher prices it can financially prove beneficial in some situations: It helps to open up new opportunities where it is demanded by trade buyers particularly the national or international grocery/supermarket /restaurant companies and to attract the home shopper wanting to eat "ethically" and prepared to pay a little extra to do so.

The MSC certification for the pipis from the Coorong fishery is a unique selling proposition that remains unmatched by any other clam product in Australia or New Zealand that have weaker sustainability claims or none at all.

8. INFORMATION NEEDS FOR PROMOTIONAL COLLATERALS AND COMMUNICATIONS

The findings on trade interviews along with information gathered from personal examination of various promotional materials, web sites and blogs were all utilized in assembling the following recommendations on information needs for various communication tools.

A coloured poster for display in retail outlets was also suggested by several interviewees to assist in sales promotion but there is a trend away from such collaterals as retail outlets get smaller and wall space decreases and landlords, as well as supermarket management, impose bans on wall posters, so they were not considered to be a good investment given limitations on promotional funds.

8.1 POS Leaflet

A Point Of Sale leaflet, (a 40 cm trifold sheet) was considered a necessary aid for launching the new product by almost all retailers. This should identify the species, describe the product and offer cooking suggestions to help raise consumer awareness of pipis as delicious versatile bivalve molluscs; encourage buying and help them get enjoyment, value and satisfaction from their purchase.

The leaflet should include information on :

- Goolwa Pipi Co people
- their sustainable fishing story, pristine South Australian eco-certified provenance
- the food product
- general handling, and refrigeration
- preparation and cooking directions
- a couple of simple recipes that do not require a large number, or costly, ingredients nor great cooking skills.

Illustrations and graphics should include:

- Hand harvesting picture
- Close up picture of pipis: clean pipis, (with no visible sand that could raise any possible concerns)
- Photographs of ready to eat pipis, preferably recipe dishes featured in the leaflet.

Readers should be directed to the company web address for more recipes and nutrition information. Such recipes can be sought from well-known chefs to enhance the product and company image and these recipes can be more challenging and/or costly to prepare than those on the leaflet.

Other items/tips/issues for inclusion are:

- Goolwa pipis are the Australian equivalent of the Italian ***vongole***, Spanish ***almejas*** and American ***baby clams*** and can be used in all of the classical recipes for these shellfish
- The MAP product has been desanded, refrigerated and comes ready to cook after simply rinsing in clean running water
- Pipis are versatile, quick and easy to prepare; They can be used in pasta, paella, stir fry, soup, chowder or ***escabeche*** dishes, and also cooked and served in salads; they are an excellent addition or side accompaniment to many dishes as well as the centre piece of classic dishes such as ***Pasta Con Vongole***
- Pipis can also be pickled, soused or preserved for later use with home canning
- Some guidance on weight of pipis needed per person for different types of dishes
- A note that not all of the pipis will open up with cooking, and that it is not unusual to have many still fully closed even after lengthy cooking time; that pipis should not be overcooked as they will shrink and toughen; that pipis that have not opened after cooking do not need to be discarded, they can be prised open with a knife and eaten or cooked more if desired
- Keep refrigerated at all times
- Not recommended for pregnant women
- Packed with a 10 day shelf life from date of packing. Do not freeze if they are near the end of their ***Use By*** date
- Seasonality or year round supply
- Desanded and packed under strict quality control processes following Australian government standards.

8.2 Web Requirements

A Goolwa Pipi Co website should include all of the items and information recommended for the POS leaflet but expanded with more words and illustrations. Photos and recipes on the famous dishes such as *Pasta Con Vongole* and Pipis with XO Sauce as well as on the lesser-known ways of eating such as pickling, soups and chowders are also recommended.

The site should also carry the standard company promotional information under recognizable headings such as:

About the company/About Us

The people story:

- Co management, marketing director, QA director, QA factory person
- The fishers
- Sustainable fishing method and eco certification

The Products

- Species: With word vongole as Italian; Spanish, Chinese, Japanese, Vietnamese names also with appropriate language script
- Nutrition panel
- Product specifications and pack size
- Size/ seasonality

Cooking and Recipe Ideas (more information on this in chapter 13.5)

- From a Champion chef who loves pipis
- From well known food bloggers who love pipis

News & Engagement items, updated regularly

- Competitions
- FaceBook, Instagram and You tube pictures/video from happy users
- Encourage feedback and two-way conversation

Links To relevant external sites

- PIRSA and SARDI
- Goolwa pipi champion chef
- Goolwa pipi champion blogger

POS, Suppliers & Marketing Chain Information

- Information on where/how they may buy for trade purchase
- Purchase for in home consumption.

Contact Us

- Nominate a person to be the public face and spokesman for the company

Myth Busting

- **For example:** Soaking in fresh or salt water or "feeding with oats" is unnecessary and counter productive; simply quick rinse in running water before cooking.

9. DOMESTIC DEMAND AND INDICATIVE PRICES FOR MAP PIPIS

Preliminary taste testing exercises with the chilled MAP Goolwa pipis have produced positive feedback but the demand in the marketplace will be determined, by the interaction of the final product presentation and taste, the accompanying promotion, place of sale and the price.

Most business people interviewed noted how demand is going to be determined by price and other factors, and so, many were uncertain or hesitant about offering guidance on likely demand and indicative prices. This was particularly so for fine food retailers with little experience with any seafood products.

A second round of discussion was therefore opened with a few key wholesale and retail fishmongers in both Sydney and Melbourne (the cities identified as the key locations for this product, based on past and current research) prepared to further explore this subject.

A number of key points arising from desk research and discussions with various prospective users and with the Goolwa packers at various stages in this study, were weighed in arriving at an indicative launch price for the product (1kg pack). These included:

- The price for the packaged pipis had to cover cost of harvesting, processing, MAP packing, packing and distribution costs of the master pack plus a profit margin

- The high costs of harvesting and packing Goolwa pipis versus imported packaged chilled clams means that the selling price for pipis would need to be higher than those for all Asian clams and the New Zealand diamond shell clams, (the main marketplace competitor)

- Only a few retailers have the necessary personnel in store to actively sell such a new product in the face of competition from similar high quality packs of clams as well as the cheaper loose pipis unless the MAP pipi is keenly priced.

- The MAP pipis could however be profitably offered in the marketplace at a price a little below the very high prices attained by South Australian and Tasmanian vongole (cockles).

- Sellers (wholesalers, retailers and restaurateurs) are mostly wanting to see products offered for sale – to them and then onto the consumer – for as cheaply as they can.

- There were several Sydney and Melbourne seafood retailers prepared to buy MAP pipis at prices in between those paid for the NZ diamond shell clams and those for the SA or Tasmanian vongole

- Consumer demand is related to price, so the lower the price the higher the likely demand (all other things being equal).

- A retail price point of $20 per kilo or per pack represents a marketing hurdle for many shoppers, particularly with a new seafood product. $25 or more per kilogram or per pack would be a “scare point” for most.

- Fine food stores typically work on larger markups and higher retail price points than seafood retailers. Price is not as big an issue in the fine food trade because their customers appreciate that premium packaged foods with a grand provenance are not cheap. Shelf life of seafood is the critical issue affecting demand from fine food stores because seafood is not a fast selling item for them.

- $12.00 to $13.50 per kg Free in Store was nominated as the ceiling price by informed Sydney seafood wholesalers, to achieve acceptable sales results.
  $ 14 to $15 was nominated as the ceiling price by informed seafood retailers as that would necessitate a retail price point of about $20 to $22 for profitability.

- A smaller pack, say 700gram or 500 gram, would be able to be offered at lower price point than a 1kg pack but given the relatively high packaging and distribution costs of this pack, aggregate sales volume and overall profitability would probably be lower if only this smaller pack were introduced instead of a 1kg pack.

The existing seafood marketing chain with wholesaler, retailer and consumer selling a one kilogram pack offered the most reliable guide to a “best indicative price”. So starting with an optimal retail price point of $20 per kilogram bag in a medium priced seafood retail outlet and allowing for typical margins for the market intermediaries between the consumer and the Goolwa Pipi Co led to the selection of a FIS price to a Sydney seafood wholesaler of $12.50 -$13 per kilogram as a launch price, as shown below.

Simple representation of prices along a traditional Sydney seafood marketing chain

12.75/kg FIS	sells for $14	to retailers who sell at $ 20 to 22/kg		
Sydney Wholesaler	>>>>>	***Retailer***	>>>>>	***Consumer***

An FIS seafood wholesaler price 50c per kg less is proposed for Melbourne and Adelaide, where pipi and mussel prices are lower as are freight costs, and higher prices in the other capital cities according to freight costs.

Based on current indications of a 10-day shelf life the suggested FIS price of $12.75 to Sydney seafood wholesale would be an equally satisfactory starting point for a fine food wholesaler-distributor who could then sell this to retailers at an agreeable price.

Considering the current sales volumes/price levels of loose Goolwa pipis and chilled New Zealand clams and all sentiments expressed in trade interviews it is estimated that these proposed FIS wholesaler price levels would be likely to lead to total sales of about 30-40 tonnes of a one kilogram pack in year one with traditional selling practices and minimal cash investment in market promotion.

With a market launch and modest promotion spend of about $50k in year one, and/or lower prices than proposed above, sales volume would likely be about 50-60 tonnes or more for the first year.

Sales levels achieved are highly dependent on the human and financial resources and calendar of events utilised to promote the new products. With modest financial resources sales growth of about 20-40% could be expected in the second year and a similar increase is possible in year three, depending on the success with promotion, as described in Section 13.5.

10. ASIA FINDINGS AND CONCLUSIONS

- Refer report from Tom Robinson:

  Singapore-Hong Kong Overview.pdf (Appendix 1)

Commercial In Confidence information has been made available to the FRDC

11. EU FINDINGS AND CONCLUSIONS

- Refer document titled:

  Jamie Angus EU Preliminary Report.pdf (Appendix 2)

  And

  Jamie Angus EU Final Report.pdf (Appendix 3)

12. TECHNICAL RESEARCH FINDINGS AND IMPLICATIONS

1. Nutritional analyses on Coorong pipis and documentation of food safety and other regulatory requirements for product and packaging for AQIS and overseas agencies:

J. Carragher K Petherick and the SA Food Lab

- Refer document from Logifish (separately provided)
- K Petherick approved arranged documentation is currently being finalised. Final AA will be completed w/c 7/12/14.
- SA Food Lab results remain commercial in confidence. Available for review by FRDC if required.

K. Validation of pipi shelf life data. J. Carragher and the SA Food.

- Refer attached document from Logifish above.

L. *Technical trials on packaging film type, manufacture and sealing of selected pack size:* Butchers Machinery BMSS

- Refer letter from Butchers Machinery:

  Viking Food Solutions - New Pack Trials.pdf (Appendix 4)

M. *Labelling and packaging design and communications collaterals:*

- Refer letter from KS Design:

  KS Design - Pack Design Upgrade.pdf (Appendix 5)

13. MARKET ENTRY STRATEGIES

13. 1 Domestic Market Entry Strategy Considerations

The Goolwa Pipi Co (GPHA MAP group) wishes to sell up to 50 tonnes of MAP small size grade pipis in its first year into a competitive domestic clam market with minimal damage to the aggregate financial returns from the traditional sale of loose pipis. A market entry strategy that selectively targets "new" pipi trade buyers and consumers and does not rely heavily on traditional loose pipis marketing channels was therefore proposed to achieve that goal.

This domestic market entry strategy is outlined in detail over the following pages, with Australian examples, and this is followed by a more general discussion on entry to overseas markets.

The Product strategy proposed for Australia is a portfolio of quality assured brands tailored for particular market segments: a premium or primary brand for the higher quality seeking trade buyers and consumers, and another – a secondary brand – meeting the needs of buyers wanting a cheaper standard product and service.

The Price strategy should be to highlight the unbeatable value in the offer: reliably good quality pipis with several unique benefits and extraordinary service as per specifications for the individual brand offerings (premium and secondary).

The Place (Distribution and Sellers) strategy should work to widen the geographical spread of pipis, primarily MAP pipis, around Australia and increase its reach to the key ethnic users of clams by building transparent relationships with new, existing and "old" distributors and selling outlets.

The Promotion strategy should aim to build awareness, engagement and support for trade and in-home users to buy and consume more pipis with confidence. A mix of market pull and market push activities should be utilized to encourage on-going two way communications between producers and consumers.

The Product, Price, Place and Promotion, commonly referred to as the 4 Ps of marketing or four elements of the Marketing Mix will each be discussed separately over the next few pages but it should be noted that they are interrelated and work together collectively. A change in one typically affects one or all of the others so they need to be considered as a part of the whole marketing program over the short and long term, and the marketing mix needs reviewing regularly with the changing marketplace and updated to ensure it remains effective.

13. 2 Domestic Product Strategy Considerations

The product concept in modern marketing goes beyond consideration of just the species name and the size of the fish. It entails the issue of brand name, product specifications covering size grading, food quality and safety, as well as pack sizes and design.

The product strategy proposed is a portfolio of quality assured brands, one tailored for the higher quality/premium goods seeking trade buyers and consumers, and a secondary brand that meets customer specifications for a cheaper or "standard" pack. The 1kg and the 700 gram pack were the pack sizes most favoured by prospective Australian trade buyers and the two are recommended for rapid and widespread market entry.

The product specifications and food safety plans should be documented in a quality assurance (QA) program to ensure that the product and service delivery meets the agreed customer's requirements. The product specifications and QA documentation should be available to customers as needed to assure them that the company is indeed packing and checking on its processes and products as it purports to do.

The QA records are invaluable for the company in defending itself against any customer or consumer claims for product defects or other damage.

The documented product and packaging specifications should cover the following items:

- Brand name
- Product name Pipi, plus the Italian, Spanish, Chinese, Vietnamese and Japanese name for this clam. The Italian generic name (for many clam species) is essential for Sydney sale
- Provenance: wild hand harvested, from MSC certified Coorong and Lakes fishery
- Purged and de-sanded for 18 hours
- All processing and packing is in compliance with state and federal regulations; licence numbers SA and AQIS and a third party certified QA system
- Packed alive with natural juices
- A warranty on package integrity and/or a nominated tolerance on broken shells and out of size grade is a strong marketing tool that warrants consideration by Goolwa Pipi Co.
- Pack size 1 kg and Master Pack content weight and dimensions.
- Refrigerated shelf life 10 days
- Size grade and any size grading tolerances (for example, size 38 to 45 mm shell, no more than 5% out of grade).

13.3 Domestic Place Strategy Considerations

New sellers and consumers of pipis were identified as the most promising avenue for selling MAP pipis with minimal impact on the profitability of the GPHA traditional loose pipis trade. New market intermediaries – wholesalers, retailers and restaurateurs, can help to get MAP pipis to consumers who might not otherwise buy pipis. A reliance on existing users of loose pipis would come at a cost, as outlined next page.

Fine food specialist stores, mega food stores, gourmet delis, some small supermarket companies/stores such as Thomas Dux and selected Supa IGA stores currently sell a limited range of packaged chilled seafood such as smoked fish or marinated delicacies and are therefore outstanding targets for MAP pipis because their well off clientele are more receptive to trying new premium quality convenient foods with an interesting local provenance story.

Other prospective new outlets include:

1. Online food distributors and online seafood retailers. There are many of these now and several successful ones in each of the capital cities; packaged seafood are particularly attractive to these businesses and most sell packaged mussels and several offer New Zealand clams.

2. Growers Markets. These are widely found around Australia and their clientele are also well disposed to trying a new packaged wild seafood with a good local provenance story.

3. Tourism And Food Trails. These are a growing area of economic activity and like the growers markets patronized by the “right type” of shopper.

All these prospective new market intermediaries can be serviced by the Goolwa fishers through their existing distributors of loose pipis and/or by utilizing the synergy potentially available via the distribution network already serving chilled foods to these businesses.

Regardless of the market channels and intermediaries selected, transparency and trust needs to be built up between all parties (and noted in all business agreements), and with consumers, to produce Win-Win relationships all round.

The large national supermarket chains do not represent a particularly attractive target in the first year of the MAP product because of their special needs regarding quality assurance and other matters discussed earlier. Moreover the placement of a new brand such as the Goolwa PipiCo’s in the mass market of national supermarket chains soon after market launch would hamper efforts to establish it as a premium brand with shoppers who would value its unique attributes and benefits highly. Placement in the low price Aldi or Costco stores would be even more counterproductive to achieving premium positioning with restaurants and consumers seeking premium quality, prestige image and value.

It is far easier to go "down market" to a lower priced market segment than it is to start low and try to move into a higher value-higher reputation market segment, so the large supermarket stores are best left as an option for later years when production volumes are so high that a mass market distribution strategy is necessary.

The large supermarkets chains however may serve well in the near term when large volumes need to be sold by the fishers to help overall profitability or clear an oversupply with special deals at low margins, providing the pipis are packed under a second brand or the supermarket house brand, that has no obvious link to the premier brand. This option however should not be taken lightly if it threatens existing supply agreements elsewhere.

There are many lapsed sellers and consumers of loose pipis and there are geographical areas such as Cairns and Perth where sales are relatively low given the population size and the number of restaurants in these cities. Japanese cuisine makes considerable use of clam dishes but Japanese restaurants have not been served well in recent years with loose pipis and represent another "new" potential market for MAP pipis outside the existing trade.

The existing loose pipi marketing arrangements involve a group of easily accessed market intermediaries to consumers. But the sale of MAP pipis to these current sellers and their customers will reduce demand for the loose product, a cannibalization of existing business, and lower prices on the larger product line volume (about 300 tonnes per annum) and sub optimal economic returns from the fishery resource.

The Australian mussel industry has over a period of about six years evolved to a position where the volume of packaged mussels currently exceeds the volume of product sold loose, much of this shift has come at the expense of the loose product market according to mussel industry sources.

Each category of potential new buyers identified above has special strengths and short term challenges but collectively they represent a sizeable latent market segment warranting early attention.

13. 4 Domestic Price And Pricing Strategy Considerations

The pricing strategy should be to promote the unbeatable value offered in regard to product and pack quality and the service that comes with the brands so that trade and home buyers recognize that they are indeed better value than lower priced competitors.

All the key words in the unique selling proposition of "sustainably wild harvested Australian live packed desanded pipi with natural juices" need to be used boldly and proudly to differentiate the Goolwa brands from the cheaper packs (and the more expensive ones too) that do not have these attributes and benefits. In short the Goolwa brands must offer and deliver reliably good quality and extraordinary service as per the individual brand specifications.

Seafood businesses accustomed to selling fresh loose seafood find entry to the packaged food market challenging because packaged food is typically traded at agreed fixed prices which usually only change seasonally or after ample notice and negotiation. Fish wholesalers and retailers understand the volatility of fresh fish prices, but they nevertheless have difficulties coping with it.

Consumers and fine food retailers do not understand this erratic pricing and would not like volatile prices in packaged pipis nor disruption to supply. State and national buyers for supermarket companies dislike price volatility and "out of stock" and won't accept unexpected price rises. This highlights the need for thorough harvest planning to try and match supply with expected demand throughout the year, and minimize price volatility of the MAP pack.

Development of a long lasting relationship amongst marketing chain partners is widely recognized as a principle of modern marketing chain management. This means adopting uniform pricing policy based on order volume rather than having different prices for different people or different types of businesses, for example.

Consideration also needs to be given to promotional pricing and introductory offers in launching the product; this is expected for new products today. A small company with modest financial resources can best do this by placing time limits on promotions and offering free product (eg one free pack for every 15 ordered) for Point Of Sale promotion rather than a price discount.

Goolwa PipiCo members will also need to be conscious of seasonal or promotional responses from competitor companies (as well as a predictable response soon after market launch) and be ready to respond quickly.

13.5 Domestic Promotion Strategy Considerations

The Promotion Strategy has to build awareness of the new product: live desanded MAP pipis with natural juices, hand harvested from the pristine South Australian waters of the MSC certified Lakes and Coorong fishery. Consumers need to hear or read about this new convenient pack of pipis, its unique features and benefits, its price and where to buy it. Sellers will need to be convinced that this product will sell well in their food or restaurant business for successful market development.

Retailers and restaurateurs need trade support with information on the product, how to handle and refrigerate it to maximize shelf life. Moreover retailers must have a tailored leaflet (as described earlier) at the point of sale to encourage shoppers to buy and help them enjoy their purchase and come back for more.

This mix of market pull (informed consumers asking for the product and pulling it out of the supply chain), and market push activities (salespersons getting it into restaurants and retail outlets) is needed to develop on-going two way communications between producers and consumers to strengthen sales.

Today's consumers are wanting more and more information on what to do with the product and its provenance and any feedback they offer is of great value to any business. Whether it is positive or negative it helps the producer to improve the product and/or the service ultimately enhancing brand image and value.

A promotional program is recommended, starting with a product launch and a schedule for on going activities over the next year to keep Goolwa pipis "top of mind". Without promotional activities product uptake and sales will be slow. This program should be developed in collaboration with supply chain partners so as to enlist their active participation, and to help gain financial or other support from them or third parties via joint promotion or shared community activities.

Funds are invariably scarce with fisher groups like the Goolwa group, so opportunism and creativity are needed to take advantage of any inexpensive or free opportunities for customer and consumer engagement and for sales promotion activities.

Nevertheless a budget of about $50,000 minimum is recommended to launch and support the new product portfolio in its first year. The provision of plastic product/price tickets for retailers to use in their displays, printed with the Goolwa PipiCo brand and the product name to clearly differentiate them from competitive clams, is strongly recommended. The distribution of these tickets should be documented and managed so that the company retains control and can recall them from any retailer engaging in deceptive conduct or careless/dangerous handling of the product.

Additionally a significant volume of pipis will be required for free tastings and cooking demonstrations in selected retail, restaurant or other situations; in store or food festival events tastings (with the consumer leaflet discussed above) are essential parts of any new product market development today.

A number of ideas for inexpensive promotional activities are outlined below:

- Using social media, in a measured personal manner that actually helps or entertains the consumer and the food trade but does not "shout at " the viewer. Simple recipe, drink or food ideas, competitions and/or a prize for best Instagram photograph or a You Tube video posting of a pipi dish etc all represent very good value for very little cash investment, especially if prizes are donated by co-sponsors.

- Enlisting the support of a "celebrity chef" fond of clams and prepared to act as a product champion or company ambassador; a South Australian based chef would be ideal given the Coorong provenance and MSC certification is truly a unique selling proposition of this clam.

- Enlisting the support of a noted food blogger(s), as outlined above for chef.

- Occasional or annual public events such as a "pipi party" replicating many of the activities in the famous "clam bakes" of the USA. These could be held with the aid or endorsement of the chef and bloggers noted above.

- Look for and act on opportunities for inexpensive co-promotion with complementary foods and wines. South Australia's large wine industry should be helpful in this regard.

- Finally, a company web site should be developed as an "in house" medium through which consumers and supply chain partners can be kept informed of seasonal activities, unexpected changes to supply and any other news that can help them use pipis in a more beneficial way (along the lines discussed earlier).

Financial resources in the Goolwa Pipi Co may be limited but the collective imagination of its members to come up with cost effective ideas to raise per capita consumption of pipis should be able to overcome that.

13.6 Overseas Market Entry

In the absence of a particular overseas target market, a detailed market entry strategy would be of little value here given the diverse cultural, economical and regulatory environments and dynamic marketplace operating today (and changing continually). However a generic market entry strategy can be proposed, along similar themes and the same marketing principles outlined for the domestic market, that can be tailored and fine tuned according to the prospective customer's commercial, cultural and regulatory requirements for a particular country when needed.

As with the domestic market entry strategy discussion will follow the four Ps as themes for critical considerations.

Product Considerations
A portfolio of quality assured products to meet customer specifications and national regulatory requirements. The primary considerations here are the brand name and product name as well as the language(s) to be used on packs etc; the Australian brand and or product name may not be appropriate or indeed permitted overseas. Australia has federal labeling requirements and regulations as well as a set of Standard Fish Names; other developed countries have similar requirements.

Special consideration also needs to be given to the "marketing strength" of a brand or product name and the labels accompanying the product; some words are powerfully positive and contribute to market success while others can prove disastrous for business in any particular country.

The word pipi for example is native to New Zealand and Australia and may be a strong selling point in one market but ineffective in another. As noted earlier with the domestic market discussion more than one brand and product name can prove useful if not essential.

Food safety regulations need to be met overseas as in Australia so reliable up to date information is essential for the target city. Given the diverse business cultures operating globally, would be exporters need to make their own enquiries and exercise professional judgment in all matters and not rely just on information or requests from potential buyers.

Price And Pricing Considerations.
Pricing levels and policies have to be selected and agreed upon to provide a mutually agreeable situation for the primary customer, other market intermediaries and consumers.

Documented agreements, pricing policies and a transparent trusting business relationship are the key to enduring success and minimal hassles overseas too.

Promotion Considerations

A scheduled program to launch and support the product; this should be planned and initiated in collaboration with market chain partners to identify the relevant and most compelling messages for the target market. While the Goolwa pipis are currently unique with an MSC certification in the bivalve trade this competitive advantage is likely to be lost in a short matter of time. This highlights the need to keep the marketing mix in each market segment under regular review to ensure it remains effective.

Place Considerations

Importer and market intermediaries should be selected on their capability to manage the brand to meet agreed business agreements, sales targets and ensure public health and consumer satisfaction with the product.

Marketing chain partners need to be selected with due diligence and distribution agreements documented, to ensure the brand and the exporting company's reputation and commercial interests can be protected under local law. These agreements need to have provision for cessation of the business where trade conditions and provisions are not met.

Final Comments On Overseas Trade Considerations

Finally, a noteworthy maxim, particularly for new exporters, is not to neglect or completely abandon the home market for greener pastures overseas and then expect to reignite the same relationship from the domestic customer when export trade falters. The history of Australian seafood marketing has some outstanding examples of the "Madrid before Melbourne" syndrome (Ruello & Associates 2005) where companies neglect the domestic market in favour of the excitement, glamour or challenge of export trade.

14. CONCLUSIONS AND RECOMMENDATIONS

This project is the culmination of over a decade of cultural change in the South Australian Pipi industry. Fishermen and women from backgrounds as diverse as third generation Lakes and Coorong fishing families, other Australian fisheries, and individuals with marketing backgrounds have put aside their egos and many of their commercial secrets with a view to maximising the return from the finite resource they fish. Goolwa PipiCo, more specifically, its Modified Atmosphere 1kg bag (MAP) is the consumer-facing headline of this collaborative thinking.

The financial success of the Goolwa PipiCo will depend on the skills and energy of the persons directing and undertaking the various marketing activities. Marketing is a complex active function that needs frequent reviews and updates and cannot just be left to the distributors engaged to get the product out to consumers.

One of the company directors should therefore take on the role of marketing director to ensure that the marketing plans and market intermediaries are indeed working satisfactorily. This means leading and monitoring all marketing activities, negotiating with distributors and other market intermediaries to build enduring business relationships, and where necessary correcting breaches or terminating business agreements. Managing the marketing chain in a collaborative transparent manner can help the producers become price makers rather than remain the price takers that most are today.

This director should also act as spokesperson and public face for the Goolwa PipiCo and the brand with both good or bad news. "Tell to sell" is a current marketing mantra so media skills would be helpful to tell the story about the Goolwa pipis to the media, sellers and consumers.

The proposed marketing director's role carries great responsibility in managing the marketing chain and deserves some financial reward. Such payment, even if only a modest honorarium, would be a constant reminder for all board members of the overarching importance of good marketing for long term financial success.

Efficient and effective quality assurance is another matter that requires board oversight, albeit less time consuming than marketing oversight. A director should be selected to take responsibility for the company's quality assurance activities to ensure that staff manage the QA system, testing and records as intended.

All members of the Goolwa Pipi Co should prepare to manage the tensions that are likely to arise while they are individually responsible for marketing their loose pipis in competition with the company's MAP packs.

Continued investment in Research & Development is critical for the Goolwa PipiCo's long term future. The business maxim " If you are not moving forward you will passed by your competitors" is particularly pertinent with food marketing.

Two suggestions for new product development research are offered for consideration:

- Examine the feasibility of developing a Pasta Con Vongole pack (pasta, pipis and sauce) jointly with a food manufacturer or distributor.
- Exploring the opportunities for a pickled (in jar) pipi to meet the latent market demand uncovered as part of this project.

Both of these products would fit in well with today's life style of quick and easy dining, snacking and drinking.

A final R & D recommendation relates to shelf life extension. A few more days shelf life would make the Goolwa pipis far more attractive to small businesses, particularly those with low stock turnover such as food outlets, seafood and restaurant businesses that frequently experience erratic and unpredictable demand from customers.

Further investment on shelf life extension certainly warrants consideration because sales volumes need to be grown rapidly for Goolwa PipiCo to gain some much needed economy of scale in production and marketing MAP pipis.

Customer feedback during the project period has provided important learning about the requirements of the end user. This feedback has already resulted in new packaging formats and branding outcomes. Further developments are also in the pipeline for point of sale materials and communicating recipes at a retail level.

The recent focus on sustainable fishing via programs such as SBS's 'What's the catch' presents opportunities for the company to highlight the sustainability credentials of the product. The company will need to act on this as soon as the issues surrounding the pending approval to use the MSC logo are resolved. (Anticipated in early 2015.)

Goolwa PipiCo has chosen to take the approach of walking before running. The marketing objective is to initially sell the product to food service wholesalers that supply high-end restaurants, ideally with celebrity chefs. It is hoped that by putting the product on the menus of these restaurants consumers will 'discover' a new type of seafood to add to their at home cooking repertoire.

A second phase of the roll out will commence in 2015 when retail sales of the product through higher end fishmongers and specialty stores are planned to start. A third phase is likely to occur in late 2015/early 2016 when it is hoped the product can make inroads into higher-end supermarkets, as outlined in this report. By this time it is anticipated that the company would have acquired a machine capable of processing significantly larger volumes of product than is currently possible.

Since the time of starting this project significant progress has been made. The formation of a joint processing facility at Port Elliot is already helping to drive down the cost of production for its shareholders. The new MAP product currently accounts for less than 10% of total production, however it has opened up a completely new market for the small sized shellfish previously sold to the bait market.

The board of Goolwa PipiCo is bullish about the prospects for the MAP product and believe that at least 50% of total production will be packed in the format within the next two years. The board also support the model of processing other quota holders catch on a contract basis as a way of standardising product quality, resulting in greater consumer confidence when buying pipis.

In the coming months Goolwa PipiCo has budgeted to experiment with new pack types and packaging options aimed at meeting the needs of new market niches identified through the trial process. These packaging initiatives will be supported by a range of new point of sale material incorporating feedback from retailers and food service customers.

Goolwa PipiCo hopes to pursue the concept of pickling opportunities for the product based on requests made from the public via the Goolwa PipiCo website. It is hoped that Food SA will be able to assist the company find a commercial partner with the appropriate technical skills for this initiative.

Finally, Goolwa PipiCo will pursue export opportunities early in 2015 as soon as the issues surrounding the use of the Marine Stewardship Council logo are resolved. It is hoped that export sales will account for 10% of total production by 2016.

15. REFERENCES

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16. ACKNOWLEDGMENTS

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- The Goolwa Pipi Marketing Company.
- DELTOR Pty. Ltd.
- Captain Cockle Pty. Ltd.

Our thanks are also extended to all the other people that provided some input to this study.

Appendix 1. New Zealand “cockle & clam” exports to Australia*.

Product	Calendar year 2013		2012	
	Tonnes	NZ $/kg	Tonnes	NZ $/kg
Cockles frozen	38.7	6.89	30.2	7.53
Other clams frozen	63.8	6.25	28.7	8.30
Cockle chilled	0		1.5	9.26
Other clams chilled	93.4	8.35	23.6	9.34
Tua tua chilled	8.1	9.19	0.8	9.18

Year	Volume kg		NZ $/kg
11/12	52,110	All frozen	6.89
10/11	74,208	Frozen except for 400kg fresh	7.15
09/10	19,960	Live chilled or frozen	6.74
08/09	436	Live chilled or frozen	7.80

*New Zealand Seafood Industry Council data.


GOOLWA PiPiCo.
DE-SANDED & PACKED LIVE, READY TO COOK.
Goolwa Pipis [Donax deltoides] also known as vongole
Sustainably hand harvested Pipis from the pristine ocean off South Australia's Coorong National Park.
CERTIFIED SUSTAINABLE SEAFOOD MSC
1kg NET

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Goolwa Pipi Harvesters Association

FRDC Project # TR031

"Identification and development of domestic and export market requirements for packed (MAP, Frozen and Pasteurised) Pipis."

Singapore / Hong Kong

Final consolidated report
(ie: without commercially sensitive customer details)

Prepared by Tom Robinson -

Singapore (Monday 24, Tuesday 25 April)

and

Hong Kong (Thursday 27, Friday 28 and Saturday 29 April).

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Introduction

This report forms part of The Goolwa Pipi Harvesters Association (GPHA) project # TR031. "Identification and development of domestic and export market requirements for packaged (MAP, Frozen and Pasteurised) Pipis.

To make the most of the limited time in Singapore and Hong Kong, the GPHA identified key individuals who would most efficiently provide an overview of the market dynamics of the region. The names were compiled with assistance from the following:-

- Recommendations by MSC - Kelvin Ng (Singapore)
- Contacts recommended Nick Ruello (Cairns)
- Contacts identified in previous visits to Singapore and Hong Kong paid for by Coorong Cockles Pty Ltd (2002 and 2011).
- Assistance and advice from Food SA - Catherine Barnett (Adelaide)

Singapore

Tom Robinson met with representatives from the Marine Stewardship Council (MSC) and five Singapore based wholesale companies on Monday 24 April and Tuesday 25 April. The key findings from these discussions were as follows:-

- The Singapore market can be categorised into two main groups.
    - Domestic Asian buyers who buy live/frozen clams sourced from the region (predominantly aquaculture grown) for between $2.00 and $4.00kg. These are predominantly bought from supermarkets and wet markets targeting local residents who live on relatively low incomes and use the clams for local dishes that form part of their staple diet.
    - Expat or high-end restaurant markets. These are the likely customers for our Pipis, but represent a comparatively small percentage of the market when compared to the above. Expats will buy clams in relatively small volumes from high-end supermarkets that sell specialty products from all over the world. Likewise, high-end restaurants will put clams on their menus as a specialty item targeted at customers prepared to pay premium prices for special products. Wholesalers supplying both of these markets (retail/food service) will pay a premium price (around $10.00 to $12.00kg) for a premium product.

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- The points relevant to 'premium clams' are as follows:
  - Products that are sold loose in a foam box do not command the premium prices of those sold in a bag (net or vacuum packed). The bag format allows a story to be told about the product.
  - 'Live' product always commands a premium price in Asia.
  - Significant work needs to be done to position our 'live pipis in a bag' as superior to the 'blanched' product coming out of New Zealand. The 'Cloudy Bay' clams have been sold in this market for over three years and have established a solid market niche. ie: If we are to sell our pipis into this market, we will likely need to take market share from the NZ product. It is estimated that approximately 500kg of the 'Cloudy Bay' clams are sold into the Singapore market every week.
  - Clams sourced from a premium 'clean' market such as Australia or New Zealand.
  - Clams that look different to the local 'ridged shell' type will be easier to sell as 'different' and therefore superior.
  - Anything with a 'sustainable' claim will command a premium price. Marine Stewardship Council (MSC) is currently regarded as the gold standard. Asian customers seem to place a higher premium on the MSC label than in Australia. Some less honorable wholesalers have started to invent their own 'sustainable' brands, despite the product they are applying it to is not from a sustainable fishery This is particularly prevalent in some of the poorer Asian regions.
  - Price, specifically higher price, allows the product to be sold in more premium outlets targeting expats. ie: It costs more, therefore it must be better.
  - Premium products are usually stocked by 'premium wholesalers'. Therefore, if you want to sell products at higher prices, you need a premium distributor to sell your product amongst other 'premium' products.

- Given the size of the Singapore population (5.5 million people), this is a relatively small market. Further, a large percentage of the market has a low socio economic base and therefore are unlikely to be able to afford premium priced products such as our pipis. In relative terms, the market is therefore really not much bigger than Brisbane. That said, it is a significant trading port, so there will be opportunities to sell product to other markets in the region, with Singapore being the hub.

- My best estimate is that there is a market for up to 500kg per week (starting at 100kg) for our pipis at a price of between $10.00 and $12.00 maximum per kg.

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Hong Kong

I met with seven wholesale companies on Thursday 27th and Friday 28th April. The companies ranged from niche wholesalers targeting high-end restaurants, through to others that specilaised in high-end super markets. Whilst in Hong Kong, Tom also met with two wholesalers who sell large volumes of frozen product to Macau casinos and lower margin/higher volume supermarkets.

As per the Singapore overview, but with the following Hong Kong specific details.

- The Hong Kong/Macau market is approximately 7.8 million people with a large transient tourist volume on top of the core population. It is also one of the world's largest trading hubs, providing large volumes of product into China and the region.

- Importantly, our learning from the trip was that Hong Kong is not the gateway to China as many people think it is. The wholesalers I spoke with had little if any interest in selling our product into China. It would appear there are completely different channels used to sell to China.

- Unlike the wholesalers we spoke with in Singapore there did seem to be a much higher interest in frozen product. Particularly branded frozen product that could be sold in volume to Macau based resorts. One of the wholesalers showed us an example of vac-packed Canadian mussels in 10kg shipping boxes. These portion-controlled packs were sold in huge volumes to the resorts where margins were tightly controlled by the operators.

- The consistent messages from all the people we spoke with in Hong Kong can be summarised as follows.

    - Price is everything. It is a highly competitive market operating on extremely tight margins. Prices paid for food with a 'premium story' have certainly improved in recent years, however we are competing with many clam species (aquaculture and wild-caught) from all over the world and as far as we could intrepid, all are selling for less than ours.
    - The positive news is that because they tender for business every couple of weeks, you are always in with a shot to lower your price for a crack at the next tender.
    - The Chinese pallet seems to be highly sensitive to taste. They have historically had issues with the following:
        - Grit. Any trace of sand becomes a major issue.
        - Bitterness. They have, in the past, raised this as an issue. From my experience this has had some correlation with spawning (and possibly rough weather), although we've never really been able to get to the bottom of it.

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IN SUMMARY - FOR BOTH SINGAPORE AND HONG KONG

1. **SUSTAINABILITY**: The market has evolved substantially in the last five years. Where price used to be the only determining factor, quality and a 'sustainable' story have become very important in differentiating a brand. Bluntly - if we don't have MSC, we don't have a chance in Singapore or Hong Kong as a our product will become a commodity competing with other low value clams.

2. **PRICE**: Not the issue it used to be. Whilst the '2 week tender' issue seems to drive most of the purchasing decisions, quality product with a story seems to take some of the focus away from price.

3. **PRODUCT EVOLUTION (BRANDED MAP)**: Hong Kong customers are going to want their product delivered in some sort of plastic packaging within the next couple of years. MAP and FROZEN. We will need to evolve our product into this format if we want to make sales into these markets.

4. **MAP**: Absolutely, categorically, without doubt, MAP (or cryovac frozen) is the future of this product. Further, we are likely to need to incorporate a 500gm pack if we wish to sell in retail outlets.

5. **LIVE**: Our product is differentiated from others by being live. It will be important to emphasise this on the MAP packaging. MAP 'live' would appear to be a unique offering in Singapore and Hong Kong.

6. **SASHIMI**: Virtually everyone I met with tasted the product raw. They then asked if it was safe to do so? We will need to get a report from a food technologist/scientist that our clams are safe to eat raw after nine days of shelf life.

7. **NAMING**: As previously stated, the name 'CLAMS' has become the default naming for anything that looks like a pipi / cockle. More than one wholesaler suggested emphasising 'live' and 'pipi' on the branding as a way of differentiating the product in the market. ie: if clams represent everything from $0.50kg to $15.00kg, wouldn't it be better to take the brand outside of category?

8. **VERIFICATION**: It would appear that a lot of product lands in Hong Kong and Singapore without a health certificate. We are not quite sure how this happens, but a traceable chain of custody for health certs and MSC COC is imperative in terms of achieving premium prices.

9. **VOLUME (SINGAPORE - MAP)**: Broadly, there would appear to be a market for approximately 250 - 500kg per week (initially) of premium MAP product for the Food Service market. We should be able to sell this for approximately $11.00kg. There may also be a market for a further 500kg per week (initially)

if we can get the people who manage some of the premium supermarkets over the line.

10. **VOLUME (SINGAPORE - FROZEN)**: There is an initial opportunity to sell 15 ton to the marine aquarium people. This would be bait, literally. Sand in. Packed in a 10kg box. We would need to work out what our floor was to this pricing. There might also be opportunities to sell bulk frozen to the food service sector, but this would rely on keen pricing and wasn't something we really explored in the meetings. Perhaps it is something John could follow up at FHA?

11. **VOLUME (HONG KONG - MAP)**: Broadly, there would appear to be a market for approximately 250 - 500 kg per week (initially) of premium MAP product for the Food Service market. We should be able to sell this for approximately $11.00kg. There may also be a market for a further 500kg per week (initially) if we can get the people who manage the premium supermarkets over the line.

12. **VOLUME (HONG KONG - FROZEN)**: There would appear to be two interesting avenues for bulk frozen product into Hong Kong (and the casino resorts on Macau). Both would require us to blast freeze bulk 10kg (hopefully loose, not MAP). The casino one would be sold in 10kg boxes to the resorts. The other 'bulk' option would have them re-pack the product into their packaging in Hong Kong and then have them on-sell it to the supermarket group. Pricing in both instances would be around $6.00 net of any other costs. Combined volume could be in excess of 50 ton. We know Nick cautioned us not to go down the off-shore packing route, but we simply couldn't afford to do it in Australia.

13. **FLEXIBILITY**: The other thing we need to think about is becoming more willing to be flexible in the way we package our product. Opportunities like the 15 ton 'fish feed' or 500gm packs are there to be taken, but require work from our end to meet the customer requirements. We can't assume everyone wants the same product.

14. **DRIVING DOWN THE COST OF EXPORT**: The way we currently export is cumbersome and expensive. There are ways to drive down these costs but involve (a relatively small) cost to install AQIS exdoc software etc. We believe that if to want to seriously explore export opportunities we would need to reduce the cost of sending shipments as much as possible. Further, we need to think about working in with other South Australian exporters to co-consign our shipments - ie: A twice weekly shipment to Hong Kong with Kinkawooka Mussels and our product. (easier said than done, as we believe there is a marketing arrangement between Kinkawooka and Cloudy Bay clams?)

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15. **BROADENING OUR PRODUCT OFFER**: It was very apparent that we need to find other products to send with ours. Importing companies want to go to the airport once, not multiple times to collect product from multiple suppliers. This is actually quite a big opportunity, but one that the GPHA might not want to take onboard. (ie: Does the GPHA want to bankroll someone else's shipment for a 2% commission and take the risk of the importer making a claim for over temperature product? We think not?) It is something that we are personally quite interested in exploring if the GPHA doesn't want to become a consolidation company. Will need to be discussed as a group.

16. **INTERIM BRANDING** : We were surprised how the majority of customers were prepared to accept the product in the format we presented. (ie: Clear plastic MAP with printed label). This may be a way of testing the market, initially at least, particularly for food service, without the risk of printing a bag? Especially if it is only going to Food Service customers.

17. **FINAL PACKAGING** : My view is that the final packaging will need to be 500gm for retail and 1kg for food service. All seemed to prefer the second option (Blues/Aquas/White) to the first version (Blues and Browns). They did however see the need for a window to show the actual product. The issue of naming needs to be resolved.

18. **COMMUNICATION (AND ASSOCIATED COSTS)**: All of the people we met with were great. But this was just a first introduction. Closing an initial order, let alone developing an ongoing business will require a lot more work. It's no different to building business with customers in Australia. New customers in particular require constant attention. We there is good business to be had in these markets, but because of their location it will be harder (and more expensive) to maintain than in Australia. We're not convinced that the GPHA members are going to be happy to continue paying to develop these markets?

19. **MARKETING MATERIALS**: As well as the website being developed for the product, there is an urgent need for a professionally designed leaflet that clearly explains our product offering. In fact there are two needed.

    a. A leaflet with prices and specs to give to importers.
    b. A leaflet that can be handed out to potential buyers by the importer. This one doesn't have prices.

20. **SOCIAL MEDIA:** On top of the traditional marketing materials outlined above, social media plays an important critical role in telling the 'back story' of the product to chefs and wholesalers in particular. This medium is best suited to updating users with newsworthy facts about the product that chefs could use to add interest to menus etc. *ie: "Goolwa PipiCo pipis are manually harvested from the MSC approved Coorong National Park." Or, "Goolwa PipiCo pipis win prestigious Food SA award.'*

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Preliminary Comments on South Australian Donax Deltoides in the European Market

Appendix 2

Jamie Angus EU Preliminary Report

CONTENTS:

1. Project Summary

These insights have been documented in conjunction with Ruello & Associates in Australia to provide an updated indication on where the donax deltoides (Coorong Cockle) fits into the EU seafood market. Given the pre-existing low expectations of the market opportunity in Europe the budget for this study was very small and did not allow for a) extensive face-to-face interviewing or b) product sampling. Both points make a significant difference to the detail of feedback collectable. In addition the main team-member scheduled to do some very limited on the ground research was unable to do this in the required timeframe. Note however that the insights shared below do benefit from his insight- he was instrumental in the launch of the Littleneck Clams from New Zealand into Germany and Spain (both projects no longer active, Littlenecks now only being sold into UK), and tried to launch the Cloudy Bay Clams in live and blanched format into Spain and Italy.

So the feedback from Customers below is a combination of a) knowledge of our team on the ground in Europe over the ten years, and b) more intensified discussions with key customers and chefs around Europe since December 2013 when we first resumed contact with the industry.

Briefly in terms of context of the EU market – almost 500m inhabitants, the EU is touted as the world's third largest population behind China and India. Multiple different countries and cultures and the EU is adept at protecting its trade through a variety of tariff and legislative barriers.
But seafood prices in Europe are usually the highest in the world, and customers tend to be very loyal.

2. Findings

Market for Live Clams – the most sought after shells command very high prices in Europe –Eur12-18/kg trade price. However these high price levels are only for the really crème de la crème species that have a grand tradition – as a comparison regular vongole are down around Eur2-4 trade price, as are most other clams. Local catch "tellinas" can have higher pricing at some times of the year, say retail Eur12-15, this backs out to around A$4-5 FOB and is not a steady price. Pricing for Live Clams in Southern Europe has actually fallen by around 20% over the last five years further narrowing our window of opportunity.
Customers spoken to: Major shellfish distributors such as Clamm, Edemar, 4th Cliff Lobster, Delmar (Italy) Frime, Torne (Spain) Togie (France), Le Petit Pecheur (Benelux), Direct Seafood (UK).
Short Term Opportunity for Live – no clear interest flagged by any wholesaler at the required returns.
Medium Term Opportunity – could be windows of opportunity in the future but it will be tough – market needs to be built bag by bag and needs a highly motivated distributor which is hard to secure with small volume.

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Preliminary Comments on South Australian Donax Deltoides in the European Market

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Appendix 2

Jamie Angus EU Preliminary Report

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Importing/Logistics:

Good airfreight connections from ADL to EU, albeit quite high costs (A$3.50-5.00)- co-ship opportunities may exist with Cleanseas Yellowtail Kingfish.
Seafreight reasonably competitive to EU, A$0.50-.60/kg.
The import duty is 11% for live and frozen.

Topline recommendations for market entry:

1) Initial focus should be on a basic frozen program to the Italian market – negligible marketing investment required, and the end-user can use the shell size that the South Australian industry is keen to take offshore.
2) Keep monitoring Spanish and Italy markets for opportunities for Live Programs
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Southern Aqua, London, England, 9th April 2014

Appendix 2

Jamie Angus EU Preliminary Report

Precios válidos desde 29-03-2014 al04-04-2014

Red/Malla

	1kg.	3kg.	5kg.	10kg.
	PRECIO KILO CIF IRÚN			
Almeja salvaje (estimado 50-80)	6,93 €	6,83 €	6,73 €	6,63 €
Almeja italiana (estimado 70-90)	7,05 €	6,95 €	6,85 €	6,75 €
Chirlas (estimado 180-220)	6,95 €			
Bigaros "M" (estImado 275-350)	4,30 €	4,20 €	4,10 €	4,00 €
Bígaros "G" (estimado 180-275)	5,33 €	5,23 €	5,13 €	5,03 €
Bígaros "J" (estimado >180)	6,25 €	6,15 €	6,05 €	5,95 €
Almendra de mar (estimado 15-25)	2,99 €	2,89 €	2,79 €	2,69 €
Berberechos "M" (estimado 100-130)	3,90 €	3,80 €	3,70 €	3,60 €
Berberechos "G" (estimado 80-100)	4,42 €	4,32 €	4,22 €	4,12 €
Tellinas				
Navaja (estimado 40-60)	4,77 €	4,67 €	4,57 €	4,47 €
Almeja americana "G" (estimado 5-12)	7,73 €	7,63 €	7,53 €	7,43 €
Almeja americana (estimado 12-20)	7,73 €	7,63 €	7,53 €	7,43 €
Caracola de mar (Bocina de mar, estimado 45-60)	4,61 €	4,51 €	4,41 €	4,31 €
Escupiña (estimado 15-25)	8,33 €	8,23 €	8,13 €	8,03 €
Almeja blanca (estimado 50-80)	7,32 €	7,22 €	7,12 €	7,02 €
Almeja concha fina (Almejón, estimado 10-20)	8,76 €	8,66 €	8,56 €	8,46 €
Almeja reina de Nueva Zelanda				

RED

RED

MAP/ATMÓSFERA MODIFICADA

	330gr	500gr.	1000gr.
	PRECIO KILO CIF IRÚN		
Almeja salvaje (estimado 50-80)	3,66 €	4,47 €	6,93 €
Almeja italiana (estimado 70-90)	3,70 €	4,52 €	7,05 €
Chirlas (estimado 180-220)	3,67 €	4,48 €	6,95 €
Bigaros "M" (estimado 275-350)	2,78 €	3,15 €	4,30 €
Bígaros "G" (estimado 180-275)	3,13 €	3,67 €	5,33 €
Bígaros "J" (estimado >180)	3,43 €	4,12 €	6,25 €
Almendra de mar (estimado 15-25)	2,35 €	2,49 €	2,99 €
Berberechos "M" (estimado 100-130)	2,65 €	2,95 €	3,90 €
Berberechos "G" (estimado 80-100)	2,82 €	3,21 €	4,42 €
Tellinas			
Navaja (estimado 40-60)	2,94 €	3,38 €	
Almeja americana (estimado 12-20)	3,93 €	4,87 €	7,73 €
Caracola de mar (Bocina de mar, estimado 45-60)	2,89 €	3,31 €	
Escupiña (estimado 15-25)	4,13 €	5,16 €	8,33 €
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MAP

MAP

MAP/ATMÓSFERA MODIFICADA

Navajas 800gr.	3,81 €
Caracola de mar (Bocina de mar 800gr.)	3,69 €

Precios sujetos a confirmación final

Appendix 2

Jamie Angus EU Preliminary Report

Final Report on South Australian Donax Deltoides in the European Market

Appendix 3
Jamie Angus EU
Final Report.pdf

CONTENTS:

1. Project Summary

These insights have been documented in conjunction with Ruello & Associates in Australia to provide an updated indication on where the donax deltoides (Coorong Cockle) fits into the EU seafood market. Given the pre-existing low expectations of the market opportunity in Europe the budget for this study was very small and did not allow for a) extensive face-to-face interviewing or b) product sampling. Both points make a significant difference to the detail of feedback collectable. In addition the main team-member scheduled to do some very limited on the ground research was unable to do this in the required timeframe. Note however that the insights shared below do benefit from his insight- he was instrumental in the launch of the Littleneck Clams from New Zealand into Germany and Spain (both projects no longer active, Littlenecks now only being sold into UK), and tried to launch the Cloudy Bay Clams in live and blanched format into Spain and Italy.

So the feedback from Customers below is a combination of a) knowledge of our team on the ground in Europe over the ten years, and b) more intensified discussions with key customers and chefs around Europe since December 2013 when we first resumed contact with the industry.

Briefly in terms of context of the EU market – almost 500m inhabitants, the EU is touted as the world's third largest population behind China and India. Multiple different countries and cultures and the EU is adept at protecting its trade through a variety of tariff and legislative barriers.
But seafood prices in Europe are usually the highest in the world, and customers tend to be very loyal.

2. Findings

Market for Live Clams – the most sought after shells command very high prices in Europe –Eur12-18/kg trade price. However these high price levels are only for the really crème de la crème species that have a grand tradition – as a comparison regular vongole are down around Eur2-4 trade price, as are most other clams. Local catch "tellinas" can have higher pricing at some times of the year, say retail Eur12-15, this backs out to around A$4-5 FOB and is not a steady price. Pricing for Live Clams in Southern Europe has actually fallen by around 20% over the last five years further narrowing our window of opportunity.
Customers spoken to: Major shellfish distributors such as Clamm, Edemar, 4th Cliff Lobster, Delmar (Italy) Frime, Torne (Spain) Togie (France), Le Petit Pecheur (Benelux), Direct Seafood (UK).
Short Term Opportunity for Live – no clear interest flagged by any wholesaler at the required returns.
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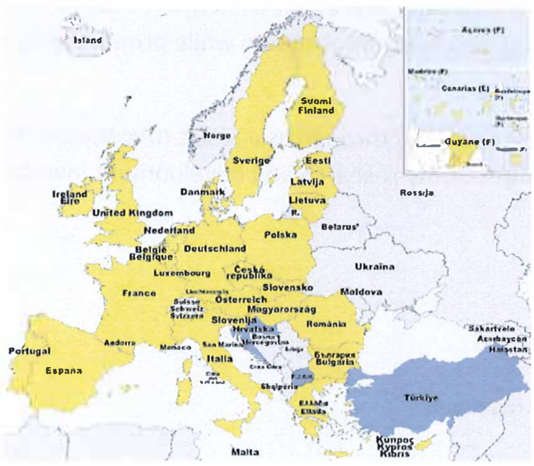
Southern Aqua, London, England, 9th April 2014



Appendix 3
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Final Report.pdf

Your Food Processing & Packaging Solutions Partner

Appendix 4

Viking Food Solutions New Pack Trials.pdf

22nd October, 2014

Goolwa Pipi Harvesters Association Inc.
Attn: Tom Robinson
PO Box 370
PORT ELLIOT SA 5212

RE: RESEARCH INVOLVED IN PIPIS PROJECT

Creating the ideal packaging for the pipis hand-harvested in Goolwa required considerable Research & Development efforts from ourselves and the Goolwa Pipis team.

Thorough testing was completed, covering a number of different points.

The chosen format was a vacuum pouch, which would be hygienically sealed within a vacuum chamber machine. The pouch could be customised for maximum brand awareness and presentation.

- Different micron thicknesses – the thickness of the vacuum pouch used affects its shelf life and the puncture resistance of the pouch. Because the pipi shells are quite sharp, a higher than usual micronage was required. Testing was carried out on multiple options with the decision to use 115μm.
- Bag construction – in order to maintain a minimum rate of oxygen transfer within the bag, the optimum bag construction was found to be PA/PE.
- Pouch dimensions – the pouch dimensions were carefully considered, to allow easy packing without causing unnecessary bulk for cartage, contributing to greenhouse emissions. Extensive testing was conducted, with the resulting pouch size (taking side seams into consideration) being decided on.
- Printing design – considerable effort went into the design of the printing on the vacuum pouch, including necessary information while producing an aesthetically pleasing, cohesive design

Each of these issues were worked through as a result of extensive testing and forecasting. The final product shows the benefit of the research and development investment.

Kind Regards,

Stuart Mead General Manager

35 Shirley Way Epping, VIC 3076 Australia. P.O. Box 1162
t | 1300 88 99 51 f | 1300 88 99 07 e | sales@vikingfoodsolutions.com.au w | www.vikingfoodsolutions.com.au

23 September 2014

Appendix 5
KS Design - Pack
Design Upgrade.pdf

KSD

16 October 2014

Tom Robinson
Goolwa Pipi Harvesters Association
PO Box 370
Port Elliot 5212

Dear Tom,

RE: Packaging for Goolwa Pipis

Thank you for the opportunity to work through your packaging brief for Goolwa PipiCo. As you are aware this turned out to be a long and protracted job with over fifteen iterations of the packaging supplied for market feedback. I've chronologically detailed the evolution of the packaging for your information. Attached to this email are the major design evolutions for your reference.

- Initial fawn and aqua design
- Several name changes (Coorong Clams, Pristine Pipis, Vongoline Clams etc)
- Inclusion of hand harvested icon
- Inclusion of draft copy
- Multiple revisions of copy (approx 12 front and rear)
- Additional 500g size (quote was for 1kg only)
- Purchase of fonts
- Multiple full size colour mock ups

The cost of this project exceeded our initial estimate because of the numerous changes. That said, I waived the cost for some of the changes to assist you with keeping your budget under control.

The total cost for the project was $6,850.00 + $3,300.00 for the photography component taken by Jacqui Way.

Thank you for the feedback you have receiving on the product since the launch in mid September. I'm pleased to hear that it is going well. I look forward to refining the design with you for the next reprint. Remember to keep a list of the product suggestions being made to you by your buyers.

Kind Regards,

Karin Seja
Managing Director

access@ksdesign.com.au
www.ksdesign.com.au
T +61 8 8332 0000
F +61 8 8364 0726
47a High Street, Kensington
South Australia 5065
KS Design Studio Pty Ltd
ACN 124 634 699

V5

Appendix 5

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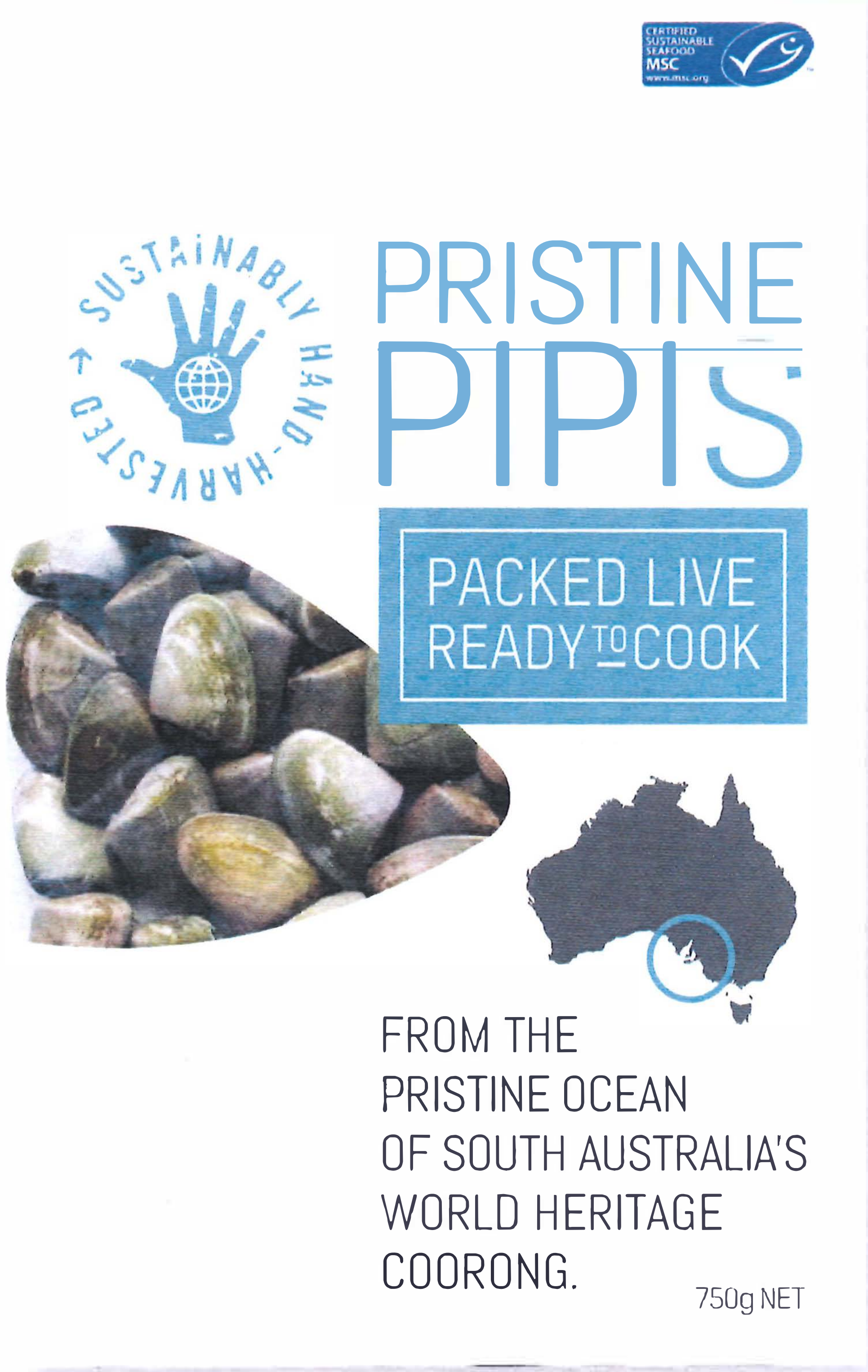

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Appendix 5

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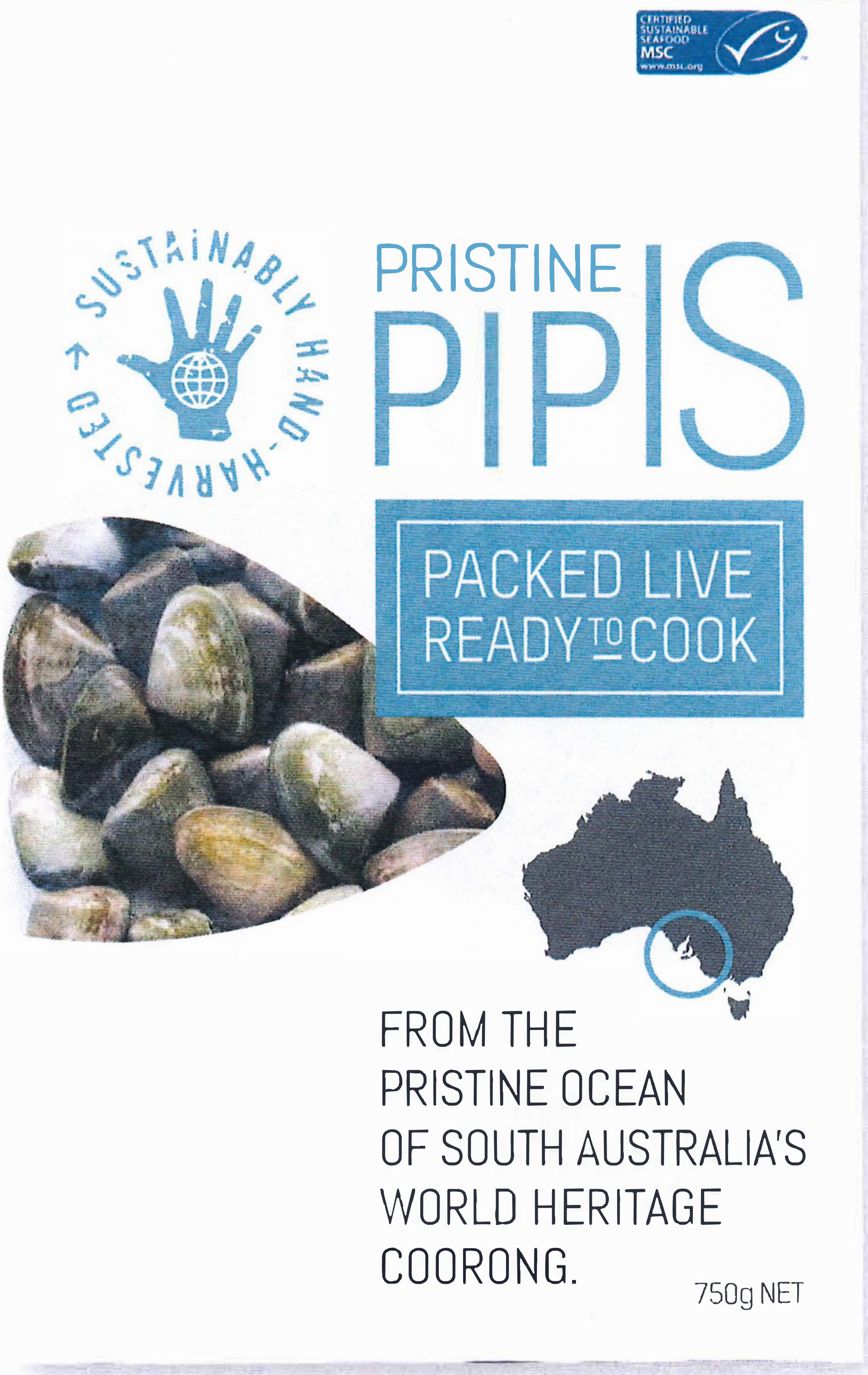

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Appendix 5

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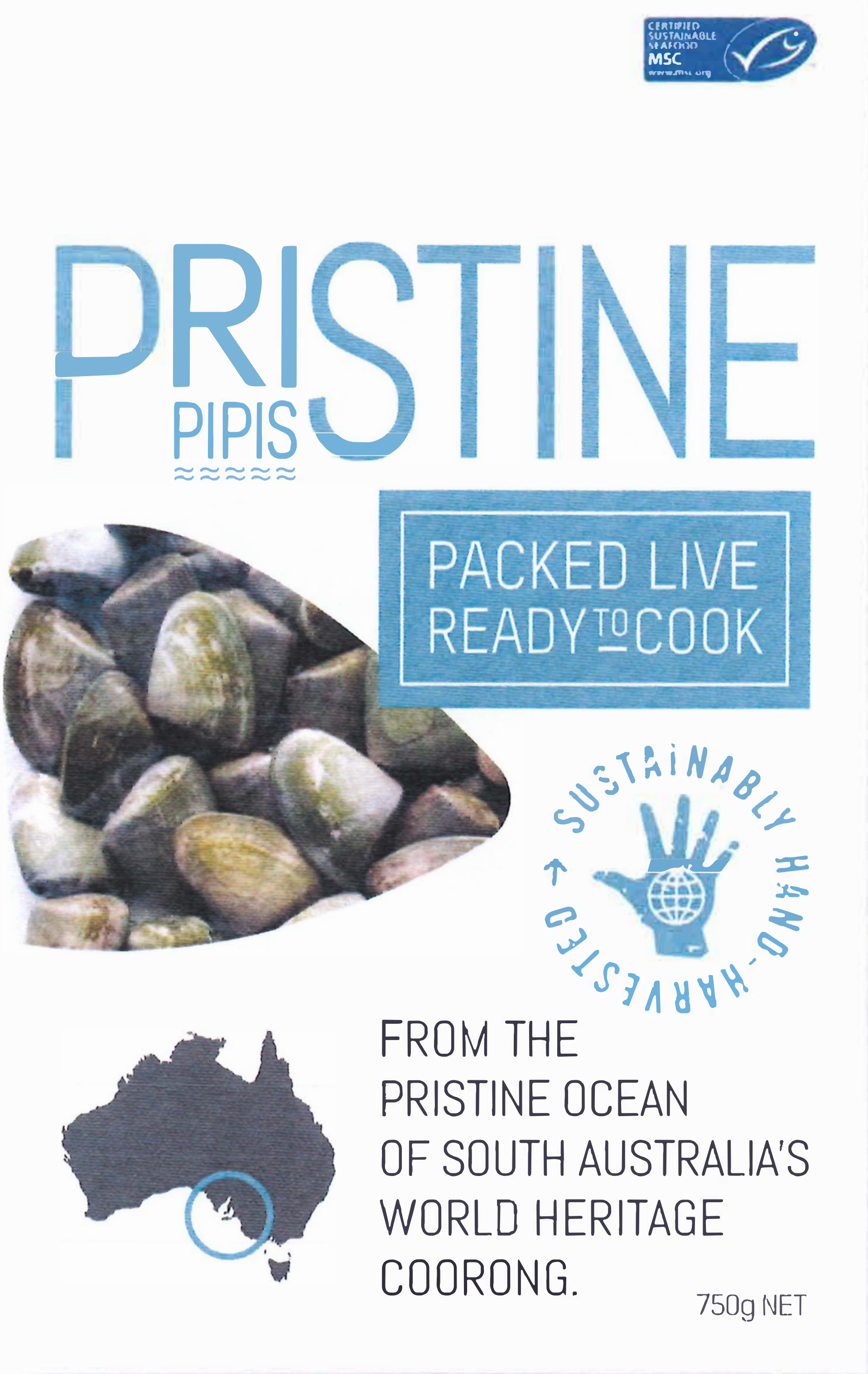

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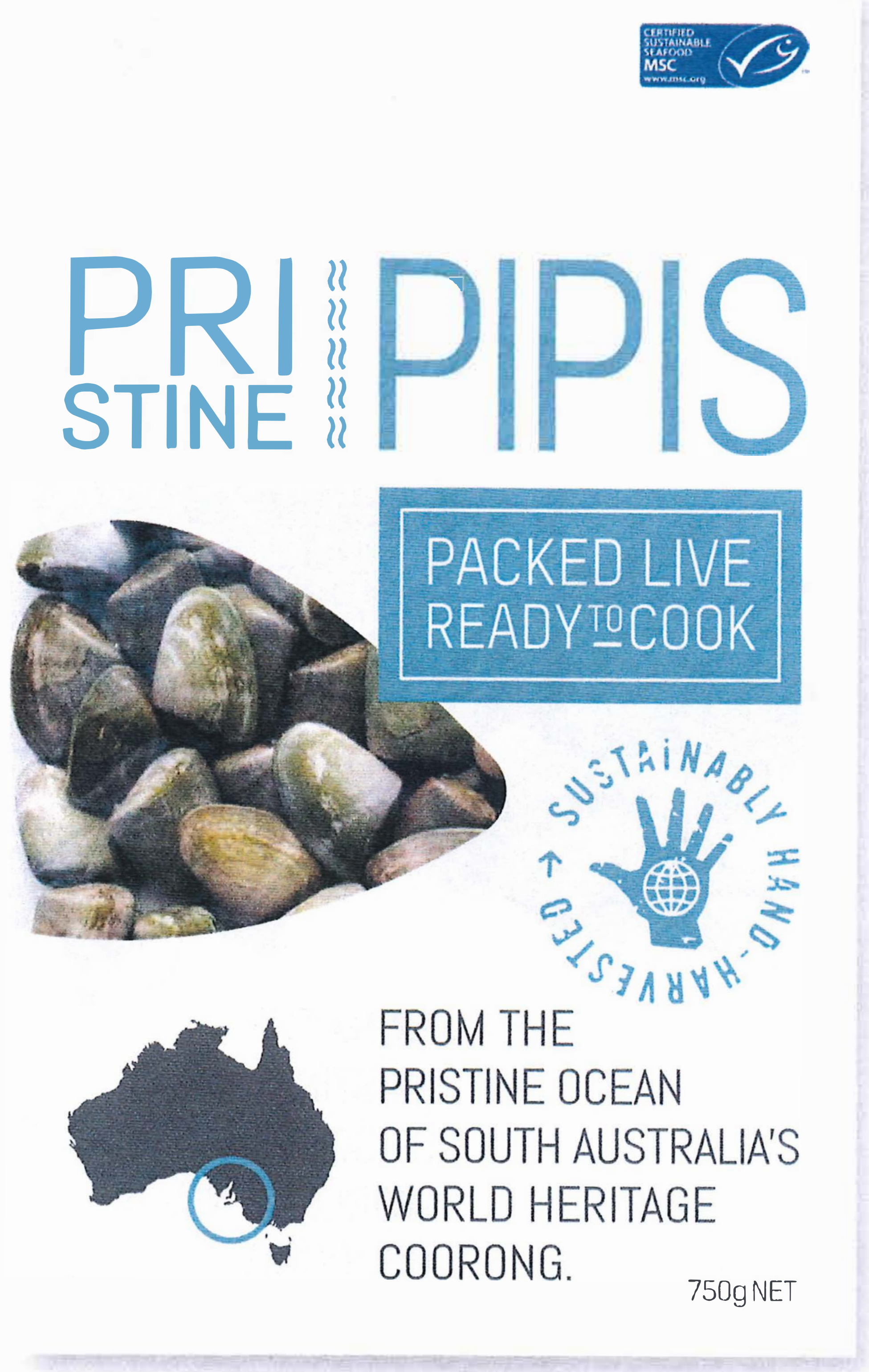

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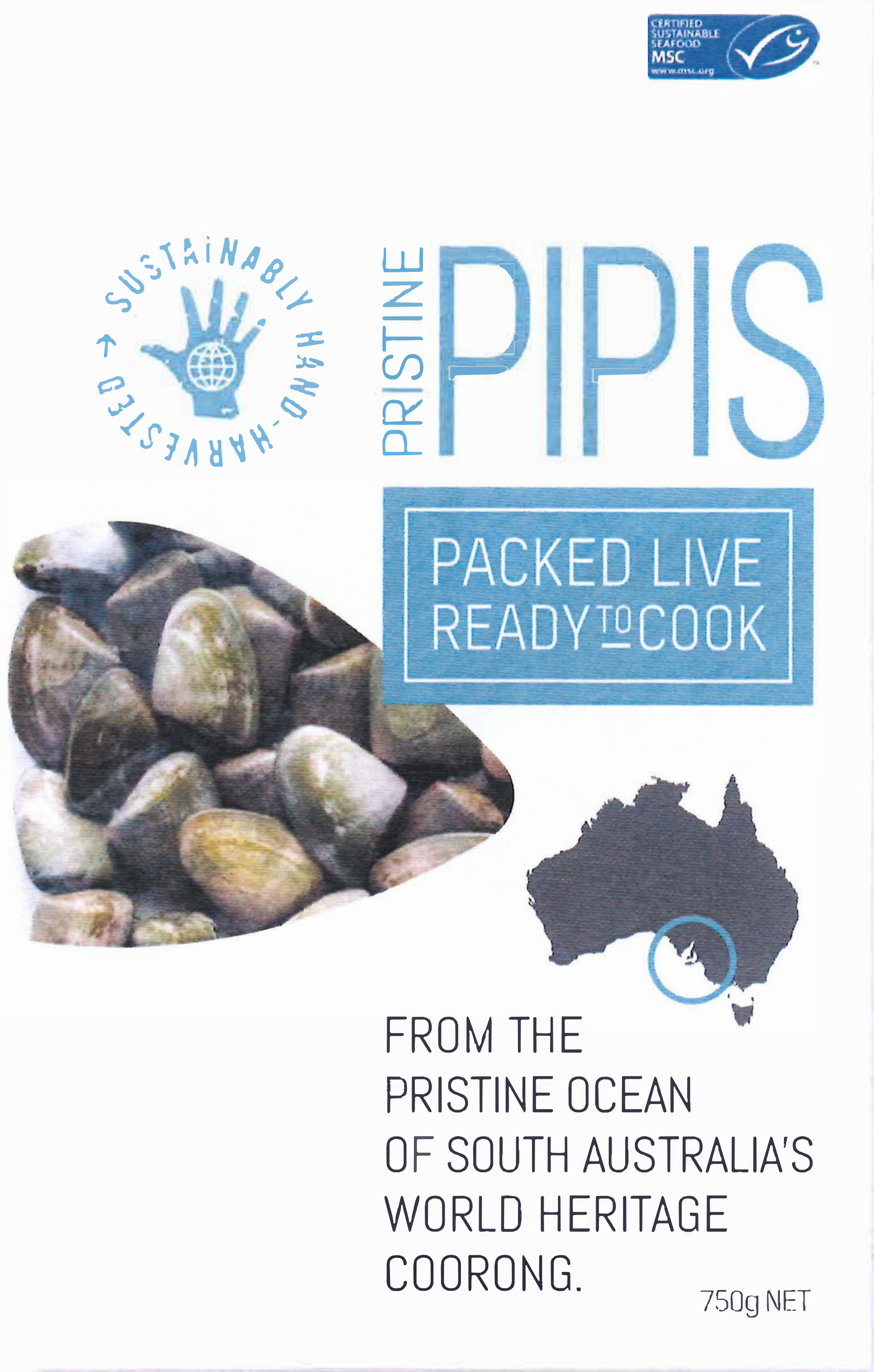

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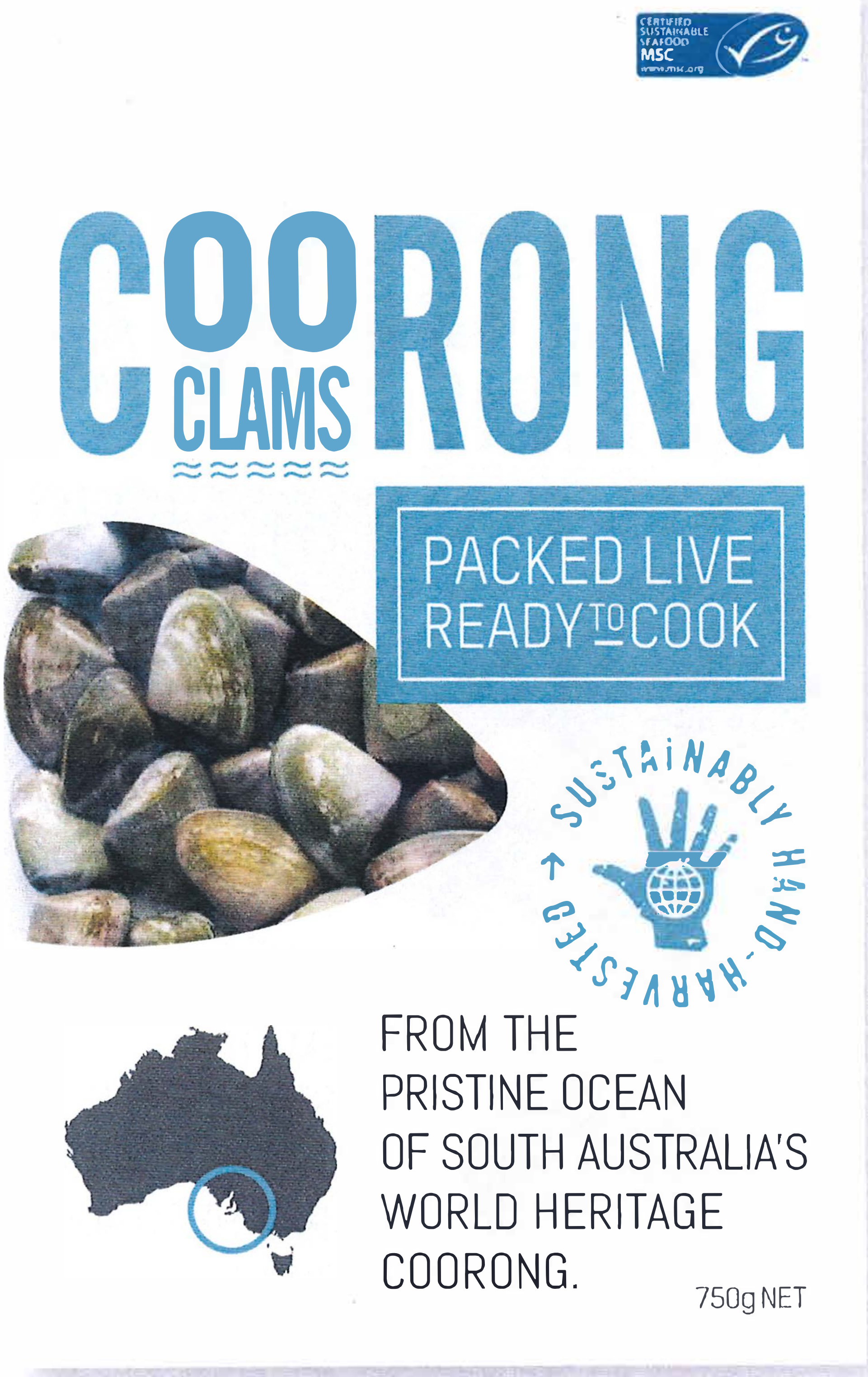

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Appendix 5

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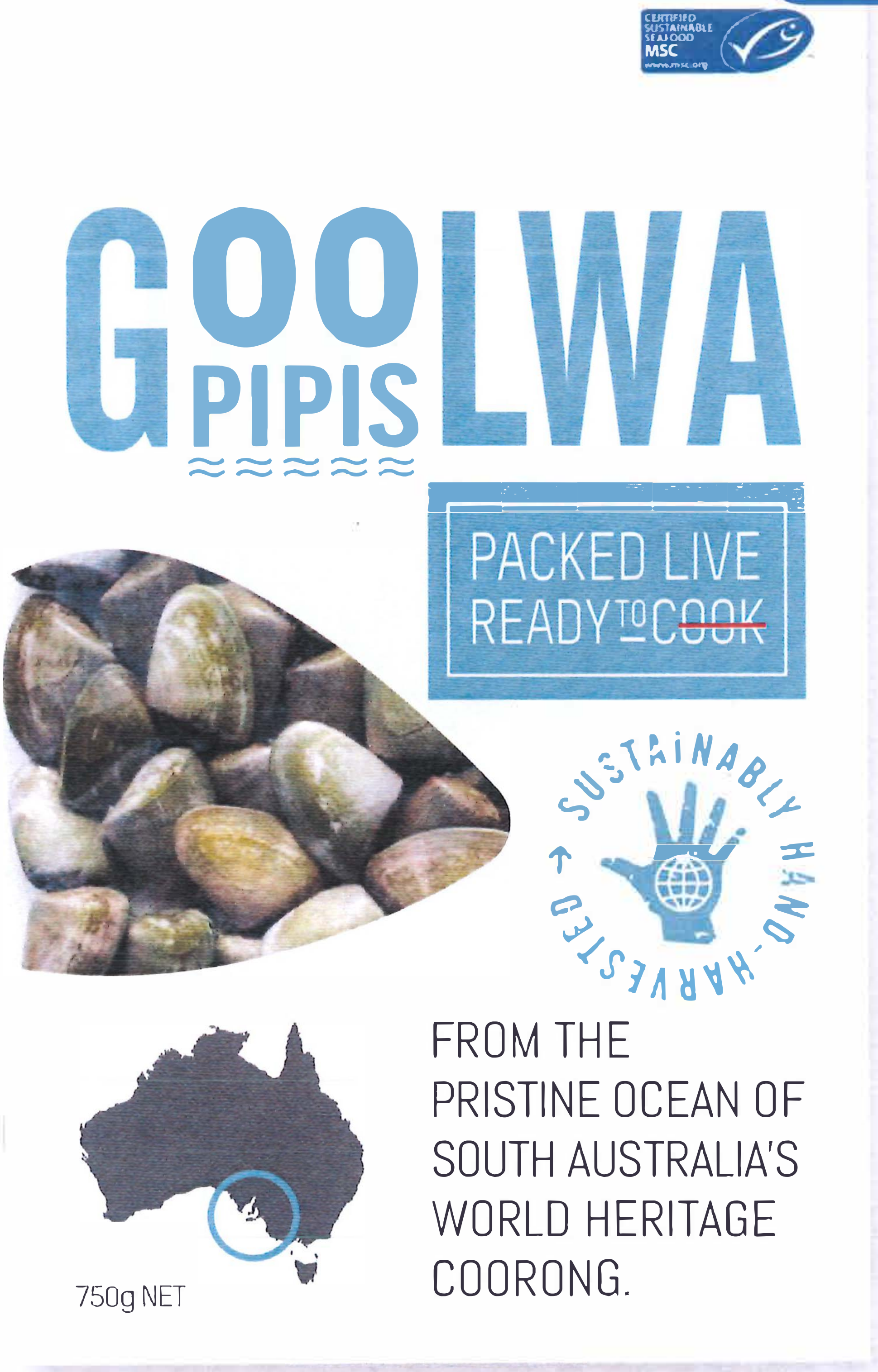

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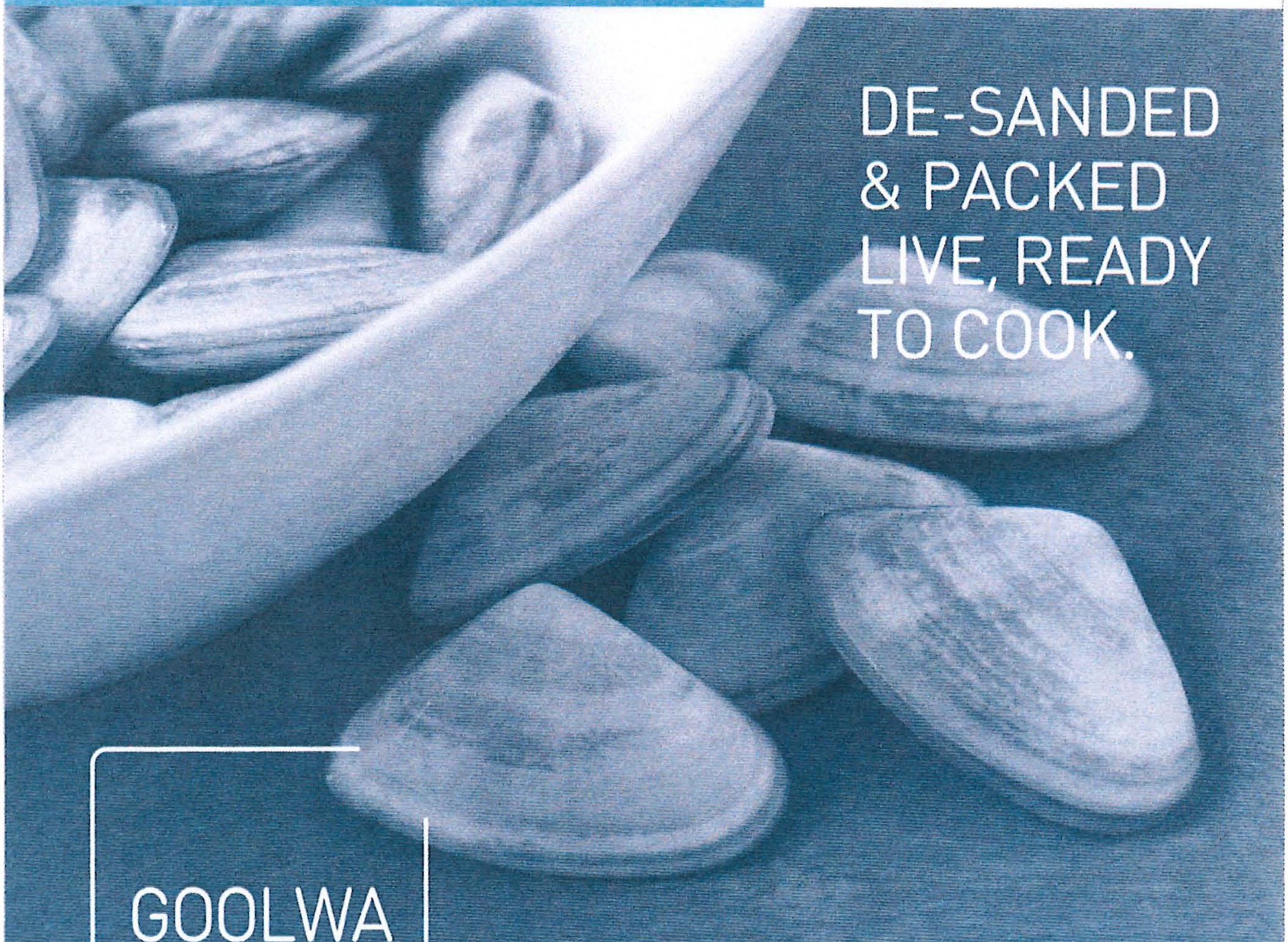
VONGOLINI®

PiPiS

KNOWN AS VONGOLE IN ITALIAN, ALMEJAS IN SPANISH AND CLAMS IN ENGLISH.



GOOLWA PiPiCo.

Sustainably hand harvested from the clean ocean beachfront alongside South Australia's Coorong National Park.

CERTIFIED SUSTAINABLE SEAFOOD MSC www.msc.org ™

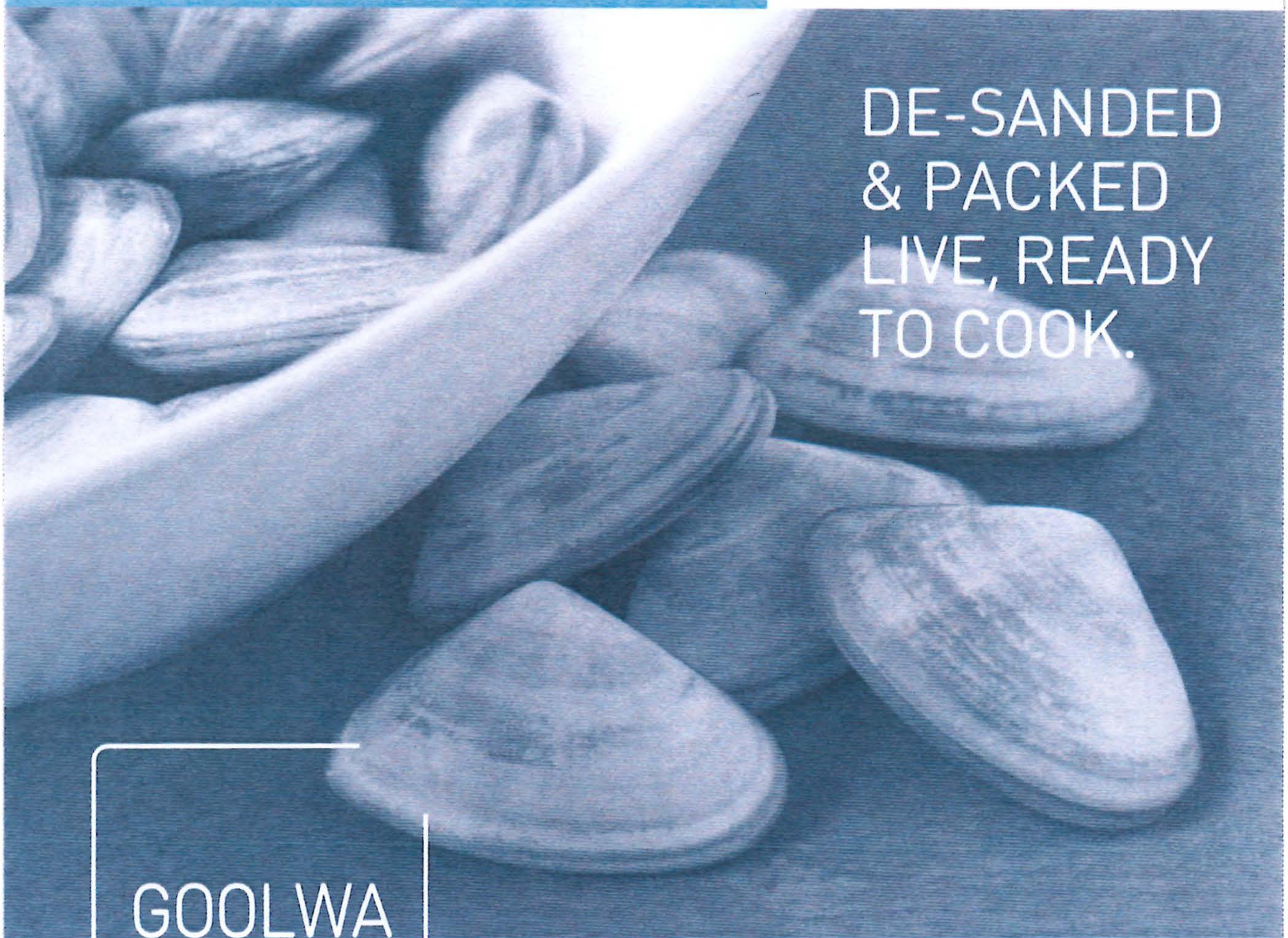
1kg NET

Appendix 5

KS Design - Pack Design Upgrade.pdf

SOUTH AUSTRALIAN CLAMS

KNOWN AS VONGOLE IN ITALIAN, ALMEJAS IN SPANISH AND PIPIS IN ENGLISH.



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1kg NET

KSD

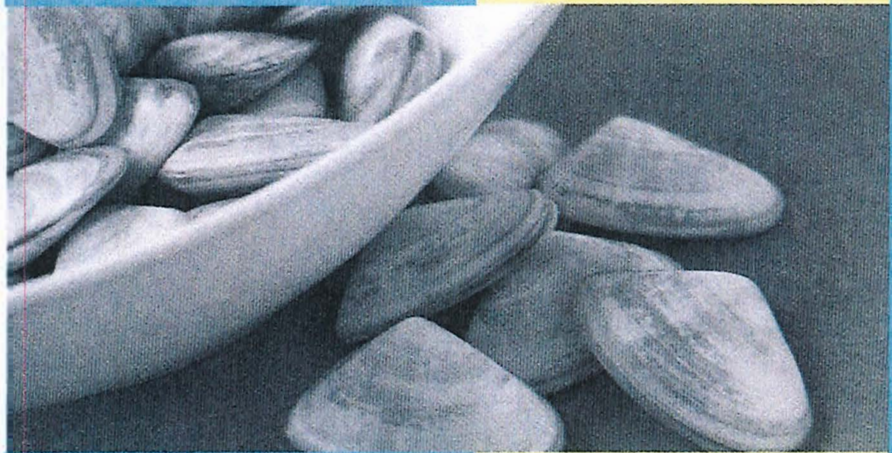
GOOLWA PIPI CO.
1kg
300mm x 450mm (folded to 225mm)
45mm clear space header for sealing

WHITE | BLACK | PANTONE 631 | PANTONE 286

GOOLWA
PiPiCo.

DE-SANDED
& PACKED LIVE,
READY TO COOK.

Goolwa Pipis (Donax deltoides)
also known as vongole



Sustainably hand harvested Pipis from the pristine ocean off South Australia's Coorong National Park.

CERTIFIED SUSTAINABLE SEAFOOD MSC www.msc.org

1kg NET

GOOLWA
PiPiCo.

Harvested from the pounding shores of the Southern Ocean, our Pipis originate from some of the cleanest waters in the world. Hand caught using 'The Pipi Shuffle' method, the humble Pipi remains a truly sustainable seafood that is fished from one of most responsibly managed fisheries in the world.

Goolwa PipiCo quota holders have been supplying premium grade Pipis since 1998. Our crews travel by boat and then truck to the 90 mile beach near Goolwa, South Australia. At the end of a harvesting day they return the catch to our state of the art processing facility where they are de-sanded and packed ready for shipment to the world.

COOKING INSTRUCTIONS

Pipis are really easy to cook. Simply remove the Pipis from this bag, rinse and place them in a pot or wok, steam, poach or stir-fry over a high heat. Placing a lid over the pot or wok will help speed the opening process.

Do not overcook. Any unopened Pipis afte cooking can be prised open and eaten, or cooked further.

FOR SOME GREAT RECIPE IDEAS AND TO FIND OUT MORE ABOUT OUR STORY, VISIT OUR WEBSITE
goolwapipico.com

NUTRITIONAL INFORMATION

SERVINGS PER PACKAGE 4
SERVING SIZE 83 g (meat weight, excluding shell weight)

AVERAGE QUANTITY	PER SERVING	PER 100g
ENERGY	132 kJ	160 kJ
PROTEIN	6.7 g	8.1 g
FAT, total	0.41 g	0.5 g
- saturated	0.17 g	0.2 g
CARBOHYDRATE	LESS THAN 1 g	LESS THAN 1 g
- sugars	LESS THAN 1 g	LESS THAN 1 g
SODIUM	718 mg	970 mg

SAFE HANDLING INSTRUCTIONS STORE AT 4°C
DO NOT FREEZE IF PRODUCT IS NEARING ITS USE BY DATE. DO NOT FREEZE ONCE PACK IS OPENED
WARNING: GOOLWA PIPIS SHOULD NOT BE CONSUMED BY PREGNANT WOMEN.

PRODUCT OF AUSTRALIA PACKED BY GOOLWA PIPICO.
50 HILL STREET PORT ELLIOT 5212
AQIS REGISTRATION #6933
SASQAP REGISTRATION #(21-027/21018)
PIRSA FISH PROCESSOR #FP0529
FAO ZONE #57

THIS SEAFOOD HAS MET THE MSC'S GLOBAL STANDARD FOR SUSTAINABILITY.
www.msc.org
MSC-C-53040

Appendix 5
KS Design - Pack
Design Upgrade.pdf

USE BY:
BATCH#

9 341284 009824

SOUTH AUSTRALIA

KS Design Studio Pty Ltd

The clam species is *Donax Deltoides*. South Australians call it a cockle, but the rest of the world says it's pipi. It's also called ugari. Whatever, a Port Elliot company has just come out of its own shell and is creating a scrumptious new product for the national and overseas market. People are literally...

Clamouring for pipi

Appendix 6

Media Releases

Facebook Posts

It doesn't quite match the romanticism of the balcony scene, Act 2, Scene 2, of *Romeo and Juliet*, but to steal a pearl of a line from William Shakespeare, *what's in a name...that which we call a rose by any other name would smell as sweet.*

The bristly-faced blokes along Goolwa Beach and down the Coorong have called the clams that wash up on the pristine sands cockles for as long as the bush poets have been around, but now it's pipi.

And some may ask: what's in a name? For the newly-formed Goolwa PipiCo, which is made up of some of the biggest fishing names along our South Coast, plenty. They are now playing a key role in further turning a product that South Australians have called cockles and used for fishing bait into entering an exciting new national and overseas market that has seen pipi as a seafood delicacy.

Of course, call a cockle by any other name would smell as sweet, but the image has been only one part of this new process – these pipi pioneers have also developed a way to sell their scrumptious clams in new vacuum packaging that ensures the product has twice as much longevity in specialty shops and supermarkets.

Perhaps the real achievement in an industry that, perhaps unfairly, has not always been recognised for looking at the bigger picture is the fact the players who form Goolwa Pipico come from a variety of backgrounds and present an exciting new venture as one.

We have Tom Robinson, who spent much of his working life as a group account director at a city agency telling us big was better and using Mohammed Ali to launch the Mitsubishi

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August 2014

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From P9

Pajero as the greatest 4WD and has never fished professionally in his life, his new business partner John Reeves, a highly-credentialled ex-commercial shark fisherman in the South East, Hoad Fisheries of Hindmarsh Island – dad & mum Kevin & Jeanette, and their sons and daughters-in-law Darren & Michelle and Matthew & Marelle and perhaps soon their sons Jace & Jiye – plus Deb Kessegian and Greg Kessegian who are both recognised as leaders in this fishing caper.

They have pooled their marketing and business acumen, and especially their seemingly infinite knowledge of fishing, to take on the world in a specialist market and in the process provide our spectacular Goolwa Beach and the heritage-enriched Coorong region with priceless tourism promotion.

The bottom line goes much deeper locally because we now have the state's biggest supplier and processor of pipi on our doorstep – at their Hill Street, Port Elliot plant – previously Coorong Cockles, a business that Tom started in 2002.

Adding to this business expansion the region needs, plus the promotion as a tourist destination, is the fact the group has focused heavily on showing the rest of the world that we must protect the industry by fishing only for what the daily market commands – and not one pipi more. They welcome the strictly enforced industry protection guidelines and permits.

This region should be immensely proud of this new local industry development, and it leaves you pondering why more of our eateries aren't clamouring – pun intended – to buy our local pipi to further enhance the Fleurieu Peninsula's claim of promoting its own produce.

The progression has led to Goolwa PipiCo putting its smaller catch in new modified atmosphere packaging, which essentially extends the shelf life of the product from five days to 10. It means you don't have leaky seafood rolling around in your car. Those in the mussel business have been doing it for a long time, but Goolwa PipiCo is one of the first in Australia to put clams in a pack for consumers. Great idea, but the overwhelming marketing challenge for the group has always been convincing people to eat something that traditionally we have used for bait, and appeasing conservationists that this industry actually cares for the marine environment.

Tom said until 10 years ago Coorong Cockles used all of its catch for bait, but since then has sent the larger fish to the Asian market.

"The problem was that, until now there hasn't really been a market for the smaller pipi in Australia," Tom said.

"There are lots of fish that have gone from bait to food; squid is the classic example where 20 or so years ago most people thought you would not have eaten it. Even pilchards are now considered a sophisticated food product.

"Our cockles or pipi are regarded as some of the best clams you can buy in the world because they come from such a clean environment. It is a very special product; sustainable. We have the product badged MSC (the Marine Stewardship Council) which is recognition that it is coming from a properly managed sustainable resource that will give consumers comfort or satisfaction that we are not harming the marine environment.

"In fact, between 2000-05 we were fishing more than a thousand tons a year, and today we fish only 450 tonnes – less than half. We do that voluntarily because we want to make sure we protect the resource. It is regarded by many as one of the best-managed fisheries in Australia."

The new Goolwa PipiCo venture makes it a key player in this specialist national market, but according to Tom the merger was mainly created to allow those involved to do the new packaging and drive down the cost of production. The Hill Street factory has been bought, and overall the new business nicely wraps up his journey from the corporate world.

"There are lots of challenges facing the pipi industry, but I am really pleased to say we work very well with some great people at PIRSA (Primary Industries and Regions SA) and those who have been involved with the fishing industry for a long time in this area," Tom said.

Interestingly, in 2002 Coorong Cockles, which established a good market through the European Union and Asia, sold about 5% of its catch as food. The total domestic industry now sells about 85% as food, with 300 tonne or 90% going to Sydney and Melbourne each year, but with less than a tonne sold in South Australia.

"Generally, few know about pipi as a product here," Tom said. "They have looked at it as cockle bait, but by combining the real fishing knowledge of the Hoad family, plus Deb and Greg, with this new packaging people will hopefully discover a whole new fresh and succulent taste."

As they say in the stage classics, like we call processed meat fritz and other states say Devon that we buy in a delicatessen and they go to a milk bar, what's in a name? Cockles or pipi; it tastes great. CL

Goolwa Pipico

Goolwa Pipico
October 2, 2014

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The Advertiser's article on Goolwa PipiCo

Pip pip, pick up some pipis

PERFECT The new PipiCo is ready to roll

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Goolwa Pipico added 13 new photos to the album: Official opening of Goolwa PiPiCo
October 1, 2014

Big thank you to everyone who came yesterday, especially Minister Leon Bignell for officially opening our business - also shout out to Olaf and his team from Bombora cafe down at Goolwa Beach for cooking our delicious Pipi's!

Unlike Comment Share 43

Goolwa Pipico
October 1, 2014

Minister Leon Bignell News Release about Goolwa Pipico

News Release

PEOPLE

381 likes

Britt Weckert, Sharyn Phillips and 5 others like this

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Julie Mariner Invite

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Kym Tucker Invite

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Australia's premier clam

http://www.goolwapipico.com/

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January 14 at 3:56pm

Hoad fisheries with a full load of pipis again for Goolwa Pipi Co

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Linda Putland
December 15, 2014 at 1:53pm

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Goolwa Pipico
October 1, 2014 Edited

Jamie explaining how the Map machine works

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Goolwa Pipico
October 1, 2014 Edited

Vic serving the amazing Pipi chowder

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Goolwa Pipico
September 29, 2014

If you missed the Paddock to Plate with Matt Moran episode featuring Goolwa PiPiCo that aired last week then stop reading and start watching.

Like Comment Share 32 4 16

Goolwa Pipico
September 26, 2014

Here are our delicious Pipi's packed fresh and ready to go all thanks to our hard workers at Goolwa PiPiCo

Deirdre Shapler
Jessamy Lull
Ryan Highet
Barry Putland
Kerry N Scoota M
Stacey Putland
Christine Foster
Melanie Putland
Deborah Frahn
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FISH

VOLUME 22 NUMBER 4
DECEMBER 2014

Joint effort adds value to pipis

DIVING FOR ABALONE DATA
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FISHER INNOVATION TO SAVE SEABIRDS

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Economics 101 TRANSFORMS PIPI FISHERY

ECONOMICS A simple mathematical tool used in agriculture and manufacturing is improving the way the South Australian Pipi Fishery is managed, and optimising its value

By Lynda Delacey

Fifteen years ago, pipis (also called clams or cockles) had fallen out of fashion as a food product in Australia and were mostly sold for bait. But when the human consumption market began to expand again, more fishers began to work in the South Australian Pipi Fishery, which is part of the Lakes and Coorong Fishery. This caused major concerns about the stock levels. Strict quotas were introduced to protect and rebuild the resource, but getting all stakeholders to agree on a process to set the total allowable catch (TAC) levels was causing considerable angst within the community.

In 2012, the Australian Fisheries Management Forum (AFMF), a group comprising heads of state and territory government agencies responsible for fisheries, was tasked with developing the National Guidelines to Develop Fishery Harvest Strategies. The aim was to meet a need for a coordinated, nationally consistent approach to creating harvest strategies across all fisheries. The project was led by Sean Sloan, director of fisheries and aquaculture policy from the Department of Primary Industries and Regions, South Australia, and supported by the FRDC.

The pipi fishery served as an early test case for the guidelines. The group sat down with scientists, fishers and government and industry representatives from the fishery to develop an annual harvest strategy that everyone could agree on.

"The pipi fishery posed some interesting challenges as it was a small fishery catering to

Bringing in their catch: Chris Wilton (left) and Brett Goodwin.

Donax deltoides – better know as pipis – harvested fresh 365 days of the year.

PHOTOS: JACQUI WAY

both the recreational fishing bait market and the human consumption market," Sean Sloan says. "The science was showing that stocks had improved so the catch could be increased, but fishers predicted that prices would go down if more catch was put onto the market, which meant they'd be working harder for the same money. We needed to develop a decision-making process to set the TAC annually that would take all the heat out of the debate."

This is where Roger Edwards entered the debate. Roger Edwards has been the independent chair of the Goolwa Pipi Harvester's Association since 2008. He originally trained as an agricultural economist, working with the Department of Agriculture before moving into the fishing industry. For 20 years he developed and ran various fishing associations and represented the industry to government.

Roger Edwards says that it was clear the fishers were asking for economic data to be taken into account when setting the annual catch levels. Usually, setting TAC levels is based on biological data. When economics is factored in, it often takes complicated and very costly modelling to produce a maximum economic yield (MEY) estimate. The pipi fishery needed a process that was much less expensive, that would take less than 12 months to turn around and that all the fishers could understand.

"I think I just brought a fresh set of eyes to the table," Roger Edwards says. "I remember looking at the graph of the pipi catch for the past 12 years and realising it was just a classic supply-and-demand graph – straight out of Economics 101. The higher the catch went, the lower the price. And the lower the catch, the higher the price went. It showed that the pipi market in Australia was responsive to supply."

Having worked in the Department of Agriculture many years before, Roger Edwards knew that a tool called the gross margin calculator is widely used to set supply levels. "I couldn't see why it wouldn't work in the pipi situation," he says.

Roger Edwards developed a simple preliminary fishery gross margin model, which he then presented to the harvest strategy group. The group approached one of Australia's top fisheries economists, Julian Morison from EconSearch, and asked him to critique the model.

"Julian reported back that it did work in our situation but there are some considerations to keep in mind – such as the fact that you can't predict price. He was then commissioned to take the model and make it very robust from an economic point of view," Roger Edwards says.

From there, the pipi fishery could develop an annual harvest strategy that takes into account both stock levels and market drivers. Thus far the strategy has proven to be highly accurate and has resulted in more conservative annual catch levels than might otherwise have been applied.

"I think there are two key elements to the strategy that are fundamental," Sean Sloan says. "The first is that the fishers participate in the independent surveys that are conducted on the beach three times a year by our scientists to estimate the relative biomass activities on the beach – the size and numbers of pipis. This then provides a reference point for the scientists to propose catch levels for the year.

"The second element is that we can look at what the economic outcome for the fishers would be if we changed the TAC for the year. If the science shows that the catch could be increased, but the economics show that the fishers would make less money, everyone can agree not to increase the catch that year."

Roger Edwards believes part of the success of the survey is that fishers take such an active role in the decision-making process and can see the logic in the outcome.

He says the success of the model hinges on the fact that the pipi market in Australia is almost entirely a domestic market. "It wouldn't work for an international market such as rocklobsters because there are too many factors that you just can't measure and predict."

It also works because the fishery could draw on good economic data that was already available through EconSearch. "If we didn't have good data already available, it wouldn't have worked," Roger Edwards says.

For Sean Sloan, it has been a positive test case for the national harvest guidelines. "The next step is to develop more case studies to test the practical application of the guidelines," he says.

FISHERS TO FOOD MARKETERS

PHOTO: JACQUI WAY

Roger Edwards

On 30 September 2014, fishers and business people from the Lakes and Coorong Fishery came together to launch a new national company, the Goolwa PipiCo and processing plant at Port Elliot. The new state-of-the-art processing facility was established in part with the help of South Australian Government and FRDC funding.

The independent chair of the company, Roger Edwards, says the business sprang from the recognition that pipi populations had recovered and extra tonnage was available, but there was a need to find ways to increase demand in the market.

Although pipis are considered a seafood delicacy overseas, SA pipis could not develop the human food market in Australia until a convenient product was made available to restaurants and wholesalers.

"We did a lot of market research on product form and consumer preferences and found there was definitely latent demand out there, but the product needed to be more convenient and shelf life was an issue," Roger Edwards says. "Then we found that modified atmosphere packaging (MAP) could extend the shelf life up to 10 days.

"We also found through our market research that consumers would accept a frozen MAP product, which meant we could provide a year-round supply."

MAP keeps the catch vacuum-sealed in water. Based on learnings from the mussel industry, the group believes the MAP product will soon account for large volumes of the catch.

The Goolwa Pipi Harvesters Association, whose members hold 56 per cent of the pipi quota in SA, decided to set up a company to buy a factory and process their harvest. The facility is capable of processing up to three tonnes of catch per day. The pipis go into tanks to be de-sanded, sorted, blanched, packaged and distributed nationally and internationally.

"The Goolwa PipiCo is one of the first in Australia to put pipis into a package for consumers," Roger Edwards says. "It's a really unique example of fishers working to shift from independent hunter/gatherers to food marketers."

In the 1990s, Goolwa's Pipi Fishery was worth about $750,000 a year. In 2012-13, it generated $3.2 million gross value of production for the local economy. Roger Edwards says if they can build the demand and price, the fishery could support an increase of up to 50 per cent in harvesting. This would increase the value of the fishery 50 to 100 per cent.

Summer Edition 14/15

Pipi — the Fleurieu's new export product

The successful resurgence of the Pipi (Goolwa Cockle) fishery has the industry looking to the future and a new export product for the Fleurieu Peninsula.

In a sign of the industry's confidence, the Goolwa Pipi Company, assisted by a State Government grant of $75,000, recently established a production facility at Port Elliot with the view of exporting Pipis across Australia and internationally.

The Pipi sector is part of the Lakes and Coorong fishery—one of only two fisheries in South Australia to obtain the prestigious independent sustainability accreditation from the Marine Stewardship Council.

Pipis are an important commercial and recreational fishing species to the Fleurieu region and the State, with the commercial fishery developing rapidly over the past 15 years in response to a growing human consumption market.

Director Fisheries and Aquaculture Policy at Primary Industries and Regions SA (PIRSA) Sean Sloan said the development of the management framework, led by PIRSA, has fostered a more constructive and collaborative co-management arrangement between the Government and industry.

"Given the growing economic importance of the industry to the Fleurieu region, it was important for us to ensure the sustainability of the fishery," he said. "The close collaboration between us, the industry and the South Australian Research and Development Institute's (SARDI) scientists over the years has ensured its future with our stocks now classed as 'sustainable'."

The Southern Fishermen's Association's Executive Officer, Neil MacDonald, said the Goolwa Pipi fishery was worth about $750,000 a year in the 1990s. In 2012-13 it generated $3.2 million for the local economy.

Having secured a sustainable stock supply, the industry is now value adding its product so that it can continue to remain a significant contributor to the economy of Goolwa and the Lower Lakes region.

Last year the Goolwa Pipi Harvesters Association, in association with SARDI and supported by the State Government's Innovation Voucher Program, developed a modified atmosphere packaging system.

The new packaging system has extended the shelf life of Pipis, making it easier to transport them, and opening up the potential of new export markets.

Independent Chair of the Goolwa Pipi Harvesters' Association, Roger Edwards, said as a result of successful market trials the Association earlier this year formed the Goolwa Pipi Company. This involved a number of Pipi quota licence holders purchasing the facilities at Port Elliot.

"We now intend to invest a further $500,000 to create a fully commercial modified atmosphere packaging plant," he said.

"We believe that within two years the plant will have the ability to produce up to 500 kilograms a day, allowing our packaged Pipi to expand into both domestic and international markets."

Goolwa PiPiCo directors John Reeves and Tom Robinson at the Port Elliot packaging plant opening. Other owner-directors of the company are commercial cockle licence holders Darren and Matt Hoad and Deb and Greg Kessegian

For further information on the Goolwa Pipi Company visit **goolwapipico.com**

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"The simple structured approach to setting harvest levels has taken the emotion and sectoral interests out of the process, and for the first time maximising profit from the fishery, within sustainable catch limits, is also embedded in the decisions. This has seen a shift in thinking to ways of improving business performance such as timing of harvest, marketing and value adding."

ROGER EDWARDS
INDEPENDENT CHAIR
OF THE GOOLWA
PIPI HARVESTERS
ASSOCIATION

that this is factored into the selection of the performance levels that are used as limits and targets.

It is also very important for an assessment to be able to estimate or describe any sources of uncertainty. Even for data rich fisheries, there can be many factors contributing to errors including observation error, process error and model error. It is important that the uncertainties are described, to inform managers and fishers using the assessment to make decisions.

8. Periodically review and update the harvest strategy

All harvest strategies should be periodically reviewed to ensure they are up to date and take into account the best available information, knowledge and understanding of a fish stock or fishery. Periodic amendments to harvest strategies ensure optimal decisions are likely to be made.

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