

Investigating changes in acceptance of wild caught Barramundi in the foodservice and hospitality market sectors

Professor Meredith Lawley

Dr Kathy Hastings

Dr Rory Mulcahy

Mr Pascal Lederman

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Table of Contents

Executive Summary

1. Project Purpose and Background
2. Methodology
3. Stage 1: Desktop Review of Existing Consumer Research Results
4. Stage 2: Food Service Sectors Interviews Methodology and Respondent Profile Results
5. Stage 3: Desktop Review of Food Service Websites
6. Insights: Bringing it together

References

Contact Details

Appendix 1: Interview Survey



Executive Summary

Executive Summary

Purpose

This project seeks to gain insights into the drivers and barriers of demand for wild caught barramundi across different food service industry sectors to allow the wild barramundi fishers to better understand and meet industry needs.

Methodology: A three stage process



Stage 1: Desktop
review of existing
consumer research



Stage 2: Food Service
Sector Interviews



Stage 3: Desktop
review of Food Service
websites



STAGE 1 DESK RESEARCH SUMMARY OF KEY THEMES

(Previous Research)

CHEFS



time poor
value convenience

rely on supplier(s)

approx. 25%
buy some seafood direct

'removed' from fishers
- no direct communication
either way

heavy reliance on supply chain

MOST IMPORTANT = consistency of quality + size



SUPPLY CHAIN

perceived as gatekeepers who could
be providing much better service

prefer wild caught
- most likely:
male; older;
Queenslanders; and
frequent seafood consumers

UNCERTAINTY

Value Australian/local



farmed vs wild caught

most associate
with

Australian vs imported

Wild Caught
Barramundi



CONSUMERS

majority ambivalent re
farmed vs wild caught



not highly important in overall menu choice decision

WILD CAUGHT BARRAMUNDI



suited to upscale
restaurants, however

may be perceived as -
'not exotic/exclusive enough'
or

seen by chefs as suffering
from variability in supply;
size; price; and availability

Top reason
for preference

→ better taste and
more natural

BARRAMUNDI

more popular on
Qld/NT menus

less popular of
Sydney menus

may be perceived as a
'Queensland/Northern Territory' fish
so local as well as Australian



FISHERS

Perceived as removed from
chef's so have no idea what
they want



STAGE 2 FOOD SERVICE SECTOR INTERVIEWS RESULTS: SUPPLY CHAIN

Where do you source your fish?
(n = 15)



” Majority rely on a single source – with only 30% buying directly from fishers!

Wild Caught
Barramundi

Why don't they stock wild barramundi?

” Price point is too high and there simply isn't enough volume for us

” No, too unreliable on availability, sizing and price. Also my clients demand skin on and it is rare to get that off Wild Caught

” It is a good product, however it is inconsistent in supply and variable in quality due to handling and grading

Most important factors when purchasing fish
(n = 27)

Quality/Freshness
Price
Availability
Consistency

Changing customer trends

- Preference for skin on
- Demanding consistency (volume/size)
- Knifeless kitchens
- Provenance

What do you think could be improved with the WILD CAUGHT barramundi you are purchasing?

- Use 5kg boxes instead of 10 as stand alone restaurant don't like purchasing so much fish at a time
- Communication re volumes throughout season
- Consistency of grading and packaging

Sustainability

” 50/50 split on whether sustainable packaging is important or not

” Sustainability certification is of little/ no importance

Information

” Heavy reliance on word of mouth both to get information and distribute information

Ideal packaging

Only common theme 'iced'



Fillets

- Preference frozen
- Individually wrapped
- 10 to 15 in a box



STAGE 2 FOOD SERVICE SECTOR INTERVIEWS RESULTS: CHEFS

Less than 25% stock some WCB



"Too bland and mainstream"

"It's a quality product but consistency is an issue"

"Need skin on - volume and price dictates farmed"

"Price and availability"

Wild Caught
Barramundi

Knowledge of barramundi amongst chefs could be improved

Many don't know the best time of year to get the best quality barramundi or gave an incorrect response

Three most important factors when purchasing fish

- 1 Quality/freshness
- 2 Price (affordability/stability for menus)
- 3 Reliability/relationship with supplier

Changes and trends over time



"More people asking where it is from"

"More unusual signature dishes/ more adventurous"

Provenance/origin of the WCB VERY important to Chefs

Storytelling behind WCB VERY important to customers

Information sources and channels

Media used to promote restaurant:

Instagram	31
Facebook	22
Social media	11

Food and food trend information source:

Supplier	44
Instagram	41
WOM	34

What are 3 things you like most about WCB?

Contradictory. Many say 'higher fat content', others say 'wild is leaner' or wild is 'muddy'



Source of fish (n = 48)

Over 60% of chefs buy 100% direct from wholesaler(s)



Wholesalers rule!

What do you think could be improved with the WCB you are purchasing?

- Consistency
- supply
- pricing
- grading

- Information when it is available
- handling
- sustainability
- provenance/source

→ Never been offered it

Stage 2: Suppliers and Chefs

Where they agree

- Top 3 most important criteria when purchasing fish
 - Quality/freshness
 - Price
 - Reliability/consistency
- Improvements in Wild Barramundi
 - Consistency
 - Quality, supply and grading
- Provenance and Storytelling
 - Either important or very important
- Both want information

Where they differ (or responses are inconsistent)

- Skin on vs skin off
 - Varies within each group
- Frozen vs fresh
 - Overall suppliers prefer frozen, chefs prefer mix of frozen and fresh
- Format (whole vs fillets) and Weight
 - Varies both within and between suppliers and chefs
- No consistent packaging preferences
- Information
 - Suppliers heavily rely on WOM
 - Chefs rely on suppliers and Instagram



STAGE 3 DESKTOP REVIEW FOOD SERVICE WEBSITES



METHODOLOGY

Websites of all 39
chefs interviewed

plus...TripAdvisor's
'top 50 seafood restaurants'



Wild Caught
Barramundi



INFORMATION REVIEWED

- Presence/absence of barramundi on menu
- Description
- Price



BARRAMUNDI ON THE MENU

17 specified
'wild'
barramundi
10 Darwin | 5 Qld
None in Sydney
or Melbourne

48%
omitted
barramundi
from the menu

43/89 sites



PRICE

No price premium
evident for wild barramundi



EXAMPLES OF DESCRIPTIONS

WILD CAUGHT BARRAMUNDI -
Local Wild Caught Barramundi

OTHER (FARMED) -

Crispy skin infinity blue saltwater Barramundi,
charred zucchini, confit tomatoes, white onion
soubise and tarragon dressing



BRANDING

7 out of 98
menu descriptions had branded
'farmed' barramundi



STAGE 6 INSIGHTS BRINGING IT TOGETHER

THEME 1 SUPPLY



Limited availability

customers who need reliability of supply will not use this product

Unpredictability of fish catches across the season means that prices can spike which causes issues for wholesalers and restaurants

Differentiating based on the seasonality may help position WCB with marketing placed around the start of the wild caught season creating some heat in the market

THEME 2 SUPPLY CHAIN



Wholesalers are gatekeepers work with them **and/or** work around them

Need for education/information throughout supply chain

- wholesalers/chefs require education/information
- availability
- product related/provenance/handling/sustainability

THEME 3 PRODUCT



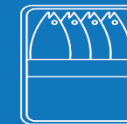
Potential to be a premium product but there are challenges

Handling of the fish post capture directly influences Fish quality on the plate

- Quality cooling/freezing techniques are paramount
- Reducing fish temperature quickly → **maintains quality**
- **Packing** should maintain the integrity of the product as a premium product
- **Sizing/grading** essential to attain premium prices
- Fish that are too big are **just as problematic** as too small
- By catch needs to be **removed** in the packaging process
- Fresh or chilled considered a **premium benefit**
- **Packaging** of fresh WCB in melon crates and slurry can damage the bottom fish **before they get to market**

Wild Caught
Barramundi

THEME 4 CURRENT TRENDS



Knifeless kitchens gaining popularity. Some restaurants and cafes prefer fish delivered portioned and individually wrapped, due to the lack of knife skills within a restaurant to scale and prepare fish

Barramundi is perceived as too main-stream to serve in more up market restaurants. Some restaurants are looking for a twist such as crispy skin. The skin on product is only being produced by the farmed Barramundi producers.

THEME 5 BRAND DEVELOPMENT



Story telling would improve WCBs positioning in the market.

Clean, beautiful seas, sustainable practices brought straight to the customer

Some respondents noted the only WCB brand they knew was Cone Bay (a farmed product).

WCB not branded - allows it to be easily substituted and **sold as a commodity**. Farmed Barramundi are marketing themselves as close as possible to being 'Wild Caught' with terms such as 'salt water', 'ocean grown' and confusing what is real 'Wild caught' and what is farmed.

Brand development needs to be considered for overall WCB product

1. Project Purpose and Background

Project purpose and objectives

- Recent market failure of Australian wild caught barramundi has seen the price to fishers fall to an all-time low.
- Research as to what the food service and hospitality sectors require in terms of product grading, packaging and presentation needs to be undertaken to define what is needed to improve market share for this iconic species.
- To allow the wild barramundi fishers to better understand and meet industry needs this project addresses the following research question.

RQ What are the drivers and barriers of demand for wild caught barramundi across different food service industry sectors?


Background justification

- Quality is a key driver of competitiveness in agri-food markets and is inherently variable due to fluctuating environmental conditions, as well as the treatment of the product throughout the supply chain.
 - Minimising variability to ensure customers receive a consistent quality product is challenging.
 - Any quality standard should start with a clear understanding of what consumers value.
- Recent market failure of Australian wild caught barramundi has seen the price to fishers fall to an all-time low.
 - Anecdotal information suggests that this failure is, in part, from a lack of development in packaging, presentation and grading of product, and has seen demand from the food service and hospitality sectors decline over time.

Background justification

- Key issues with wild caught barramundi include:
 - Variability in supply
 - Variability in quality
 - Variability in price
 - Consistency in supply (given closure of fishing grounds over summer)
 - For the food service sectors the issues above are problematic as they rely on consistent supply, quality and price.
 - Farmed Barramundi (Australian and imported) has improved in quality and increased production to fill supply gaps when wild caught Barramundi is not available.
- Packaging and grading may go some way to addressing these issues, a bigger question is identifying the sectors of the food service and hospitality industry where the issues above may be turned into advantages i.e. those sectors where wild caught barramundi can be promoted as a scarce and seasonal commodity with limited availability/supply so when it is available it is in demand and can achieve a premium price.

Expected outcomes



Better understanding the food service sectors and their needs will enable the wild barramundi industry to build and implement a cohesive market development strategy - incorporating consumer education, product development and supply chain improvement.

2. Methodology

Methodology

Stage 1: Desktop review of existing consumer research

Stage 2: Food Service Sector Interviews

- 54 Chef interviews
- 27 Supply chain interviews
- See Appendix 1 for the full set of interview questions

Stage 3: Desktop review of Food Service websites

- 89 in total
 - 39 websites of chefs interviewed
 - 50 from TripAdvisor 'top seafood restaurants'
 - 10 Darwin
 - 10 Cairns
 - 10 Brisbane
 - 10 Sydney
 - 10 Melbourne

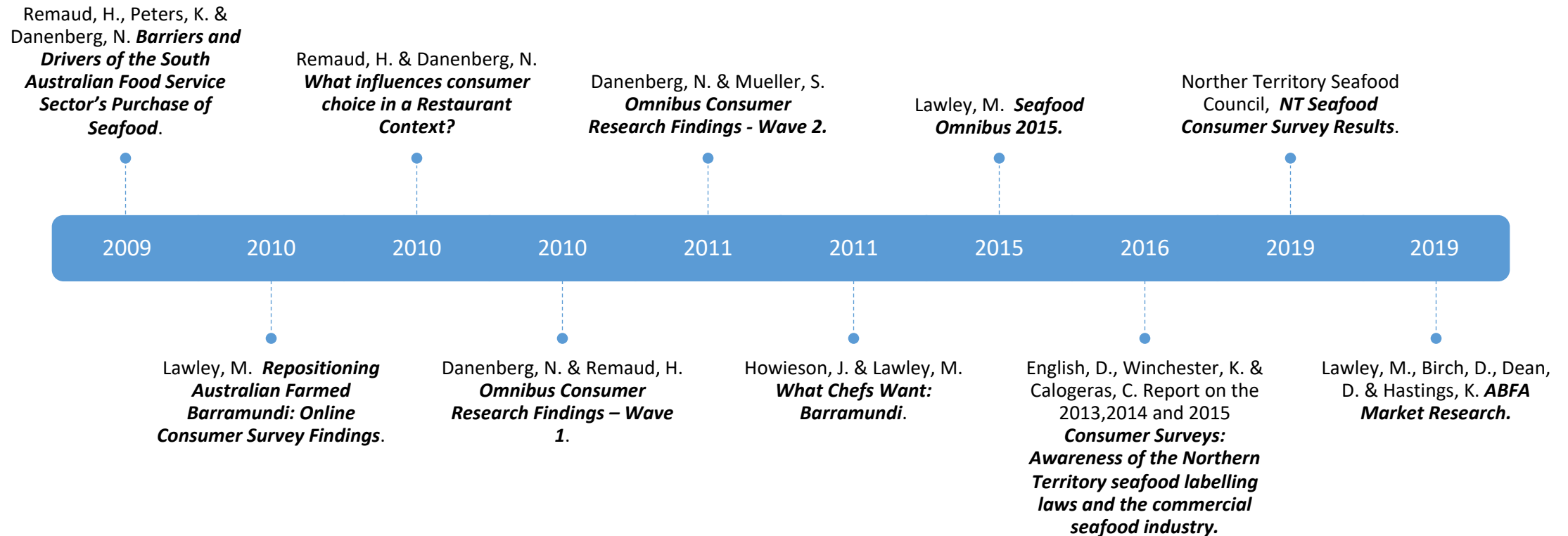
3. Stage 1: Desktop review of existing consumer research

Project purpose and objectives

Stage 1: Desktop review of existing consumer research

- Review previous Seafood CRC and FRDC consumer projects, as well as other publicly available data sets, to identify trends, preferences and attitudes towards wild caught seafood.
- Specifically, the ***three Omnibus studies undertaken by the CRC were reviewed for preferences for wild vs farmed*** and datasets were mined to develop a profile of consumers preferring wild caught.
- In addition to all ASCRC reports, FRDC research reports were reviewed for results relevant to the current study. The reports cover the timeframe 2009 to 2019.

Timeline of Previous Studies Reviewed (2009 – 2019)





STAGE 1 DESK RESEARCH SUMMARY OF KEY THEMES (Previous Research)

CHEFS



time poor
value convenience

rely on supplier(s)

approx. 25%
buy some seafood direct

'removed' from fishers
- no direct communication
either way

heavy reliance on supply chain

MOST IMPORTANT = consistency of quality + size



SUPPLY CHAIN

perceived as gatekeepers who could
be providing much better service

prefer wild caught
- most likely:
male; older;
Queenslanders; and
frequent seafood consumers

UNCERTAINTY

Value Australian/local > farmed vs wild caught

most associate
with

Australian vs imported

Wild Caught
Barramundi



CONSUMERS

majority ambivalent re
farmed vs wild caught

not highly important in overall menu choice decision

WILD CAUGHT BARRAMUNDI

suited to upscale
restaurants, however



may be perceived as -
'not exotic/exclusive enough'

or

seen by chefs as suffering
from variability in supply;
size, price, and availability

Top reason
for preference

→ better taste and
more natural

BARRAMUNDI

more popular on
Qld/NT menus

less popular of
Sydney menus

may be perceived as a
'Queensland/Northern Territory' fish
so local as well as Australian



FISHERS

Perceived as removed from
chef's so have no idea what
they want

4. Stage 2: Food Service Sectors Interviews

Methodology and Respondents

- Respondents selected to ensure representation geographically and across the supply chain. Interviews were conducted between October and December 2020.
- Initially 35 in depth interviews and 15 shorter responses were planned. Due to difficulty in recruiting participants (even with introductions by industry contacts) 21 participants were interviewed in depth (60 to 90 minutes) and 60 respondents completed a shortened interview of approx. 15 minutes.
- The full set of interview questions is included as Appendix 1.

	In depth interview	Shorter Interview	Total
Supply chain (wholesaler/distributor/agent)	15	12	27
End user (chef/owner manager)	6	48	54
Total	21	60	81

Word Comparison:
Three Top Words
Mentioned for
Barramundi
Variants (all
respondents)

WILD BARRA	FARM BARRA	IMPORTED BARRA
Quality	Consistent	Price
Scarce	Muddier	Consistent
Supply	Taste	Volume
Variable	Volume	Available
Australian	Caught	Packaging
Clean	Farmed	Australian
Expensive	Good	Cheap
Fresh	Price	Difference
Iconic	Quality	Good
Pristine	Reliable	Individual (packaging)

Wild

[illegible]

A word cloud shaped like a circle, containing various terms related to food packaging and quality. The most prominent words are "Price", "Volume", "Available", and "packaging". Other words include "Consistent", "taste", "Australian", "fish", "Sea", "Low", "Quality", "Point", "negligible", "grading", "Convenience", "Asia", "Individual", "Cheap", "Flavour", "impressed", "difference", "size", and "Inferior".

Food Service Sectors Interviews

Results: Chefs

Profile of Survey Respondents

6 in depth interviews

- Position
 - 3 chefs
 - 3 owner/managers
- Location (all Qld)
 - 2 Cairns
 - 3 Sunshine Coast
 - 1 Gold Coast
- Type
 - All restaurants (small to 800 seats)
 - 3 also functions and events (1 RSL)
 - 1 also a catering service

48 shorter interviews

- Position
 - 47 chefs
 - 1 owner/managers
- Location
 - 29 Queensland
 - 10 South Australia
 - 5 NSW
 - 3 Victoria
 - 1 ACT
- Type
 - 41 restaurants
 - 3 functions and events
 - 2 hotels
 - 1 hospital
 - 1 catering service

Wholesalers
rule!

Source of fish
(n = 48)

30 wholesaler only

8 mainly wholesaler with some direct

9 mix of more than 2 sources (incl.
retailer and 1 auction)

1 direct from fisher (100%)

Three most important factors when purchasing fish (in order)

- Quality/freshness
 - often used together
- Price
 - both in terms of affordability and the need for stability on menus
- Reliability/relationship with supplier
- Other factors included:
 - availability
 - provenance/Australian/local
 - sustainability

Knowledge of barramundi amongst chefs could be improved.....

When is the best time of the year to get the best quality barramundi?

- Consistent all year around (farmed)
- Don't know
- Winter
- Summer
- 2 (of 48) respondents provided detailed/correct answer

What are 3 things you like most about WILD CAUGHT barramundi?

- Contradictions –
 - many say higher fat content but others say wild is leaner
 - Some say wild is 'muddy'
- Taste/flavour 20
- Firm/texture 13
- Bigger 10
- Ease of use/cooking 8
- Fat content 5
- Provenance/story/Australian 6

Type of Barramundi stocked and if not why not?

Type stocked

- 4 x 100% wild barramundi
- 34 x 100% farmed barramundi
- 7 x mix farmed and wild
- 1 x 100% imported
- 2 x don't know

Why don't you stock wild?

Too bland and mainstream

Price and availability

It's a quality product but consistency is an issue....

Need skin on - volume and price dictates farmed

Changes and trends over time

- Majority no change – barramundi popular and a good seller

They are confused over what is good quality Barramundi! I had a lady from Melbourne who insisted that our Barramundi wasn't Barramundi as it didn't taste like what she bought in Melbourne. I presume she was eating farmed.

More unusual signature dishes/ more adventurous

Quality and consistency is key for high end market. Need to guarantee high quality and consistent supply all the time.

My clients have the perception that Barramundi is an average fish for pubs and low to middle end restaurants. They would suggest it's a fish too readily available and not local (to us anyway)

More people asking where it is from....

The Product

Format

- Fillets chilled 30
 - Whole fish chilled 18
 - Fillets frozen 15
 - Other (wings/bladder) 2
-
- No discernible pattern in responses. Both restaurants using barramundi wings were in Melbourne.

Ideal weight for a WHOLE WILD CAUGHT barramundi

- >2kg 23
 - 1.2-2kg 13
 - 800-1.2kg 2
-
- No discernible pattern in responses.

What do you think
could be improved
with the WILD
CAUGHT
barramundi you
are purchasing? (in
order)

- Consistency
 - supply
 - pricing
 - grading
- Availability
- Information
 - when it is available
 - handling
 - sustainability
 - provenance/source
- ***Never been offered it***
- Recipes that stand up to the strong flavour
- Position as a premium product

*Consistency of
supply. Just being
able to get any at
all would be good.*

*Sizing, some is
huge, some small,
hard to plan
around that.*

*Never been
offered it.....*

How important is the provenance or origin of the WILD CAUGHT barramundi to you?

- Very important 39
- Important 8
- Somewhat important 4
- Little importance 2
- No importance 1

How important is the ***storytelling*** behind the WILD CAUGHT barramundi to your customers?

- Very Important 28
- Important 16
- Somewhat important 6
- Little importance 1

Local sustainability. Local story, local source. Want that story. Want connection farm gate to plate. People want to hook onto that. We are now claiming that we buy locally. Customer is much more savvy. Consumers want to know where their product is coming. Want to see the fisherman and the story behind the fish.

Portion size

- 120g 3
- 180g 34
- 150g 2
- >200g 8

All 6 in depth
respondents
preferred skin
off

Sustainability

- 16 very important
- 12 important
- 14 somewhat important
- 9 little importance
- 3 not important

Only 50% of respondents
suggested sustainability was
important or very important!

- Limited recall of any sustainability certifications

Whole - What type of packaging would you prefer barramundi to come in?

- 9 On ice, but not touching fish
- 9 Styrofoam box with ice
- 3 Cardboard Boxes
- 5 Reusable cartons

Fillets - What type of packaging would you prefer barramundi to come in?

- 13 Cryovac/vacuum sealed
- 2 Individually sealed in small packs
- 4 Individual portions

Willingness to pay

Whole \$ per kg - How much are you willing to pay per kg of whole WILD CAUGHT Australian barramundi of good quality?

• \$20 - \$24	15
• \$13 - \$15	6
• \$16 - \$19	4
• \$25 - \$28	5

Fillets \$ per kg - How much are you willing to pay per kg of whole WILD CAUGHT Australian barramundi of good quality?

• Under \$20	2
• \$20 – \$25	3
• \$26 – \$30	14
• \$31 – \$35	10
• \$36 – \$40	6

Information sources and channels

Where do you GET information about food and the latest food trends from?

- Supplier 44
- Instagram 41
- WOM 34
- Facebook 28
- Internet 26
- Trade journals 10
- Tradeshows 8

If you promote your restaurant what media do you use?

- Instagram 31
- Facebook 22
- Social media 11
- Email 5
- Traditional 5

Some final comments

Barramundi has been hijacked by the pubs and it is therefore difficult for us to offer it as something special!

Wild caught probably does need to have a pro-active campaign.

Brand consistency, sizing and specifications need work if you want this product to be a premium offering

Food Service Sectors Interviews

Results: Supply Chain

Profile of Survey Respondents (n = 27)

- All either owner and/or manager
- Experience
 - Average 17 years experience
 - Ranged from 1 to 42 years
- Role in Supply Chain
 - Wholesaler/distributor 24
 - Processor 3
 - Agent / Broker 2
 - Importer 1
 - (some multiple roles)
- Market served (geographically)
 - National 5
 - Queensland 16
 - New South Wales 4
 - Northern Territory 3
 - Victoria 2
 - Western Australia 2
 - South Australia 2
 - (some multiple states)
- Customers
 - Seafood specialist to general food service wholesalers
 - Premium food service to general food service

Where do you source your fish? (n = 15)

Majority rely on a single source – with only 30% buying directly from fishers!

Fishers direct from boat

- 80% or more 5
- 5% to 25% 5
- 0% 5

Fish Farmers

- 75% or more 2
- 15% to 50% 3
- 0% to 5% 5

Wholesaler

- 70% or more 7
- 15% to 30% 3
- 0% 5

Auction

- 0% 15

Three most important factors when purchasing fish (n = 27)

Quality

- 20

Price

- 17

Freshness

- 11

Availability

- 10

Consistency

- 6

Describe
your ideal
piece of *wild*
barramundi
(n = 27)

Clean taste	9
White flesh	7
Firm texture	5
Salty taste	3
Skin on	2

What type of barramundi do you currently stock? (n = 15)

	90 to 100%	5 to 10%	0%
Wild caught	5	2	8
Farmed (Australian)	5	1	9
Imported	5	0	10

Why don't they stock wild barramundi?

No, too unreliable on availability, sizing and price. Also my clients demand skin on and it is rare to get that off Wild Caught

It is a good product, however it is inconsistent in supply and variable in quality due to handling and grading.

Price point is too high and there simply isn't enough volume for us.

Changing customer trends

Common themes (3 or more mentions)

- Preference for skin on
- Demand for consistency in volume and size
- Knifeless kitchens
- Provenance

Asking for the provenance, the story, where it was caught, and how it was processed.

We totally supply what Chefs are asking for and I have to say that 95% of our barramundi business is skin on.

Move to knifeless kitchens. Want fillets and products that are ready to go!

Issues around quality and consistency

I think as a product it is currently off the mark, it needs to offer skin on and move to be a premium product. More innovation on handling is needed to get product to market in good condition

Fishers need to work on their quality to make a point of difference.

Handling has to be improved and positioning as a premium product

How Wild Barra is handled makes it a variable product

In what forms do you purchase wild barramundi?

Format	70% to 100%	25% to 50%	10%
Fresh Whole	3	2	1
Frozen Whole	1	1	
Fresh Fillets			
Frozen Fillets	4	1	

All respondents (8) stocked wild barra between 8 to 12 months a year)

What do you think could be improved with the WILD CAUGHT barramundi you are purchasing?

Consistency of grading and packaging:

- *Need to sort through and size and grade carefully and market on consistent size and grade.*
- *We would like the fishers to work more closely with us to supply what we need more consistently*
- *Use 5kg boxes instead of 10 as stand alone restaurant don't like purchasing so much fish at a time.*
- *Definitely the presentation of and packaging itself (ensuring it's shatter packed, user-friendly), and the grading of the fillets.*
- *Issue with the size of the boxes which are 10kg it would probably suit us better to use 5kg. We would also prefer not to have stapled boxes due to health and safety in Kitchens.*
- *We would like the fishers to work more closely with us to supply what we need more consistently*
- *Communicate with us and give us some clarity on volumes coming in over the next few weeks. Have been caught on "none available" with no warnings!*
- *Wild Barramundi should work the seasonal factor to their advantage. Have an opening festival for Wild Barra, talk it up on Radio and in the press. Don't try to go all year!*
- *Implement consistent quality standards.*

Ideal packaging

- *Iced*
- *Anything so long as it comes in good condition*
- *Anything except Styrofoam*
- *Kin bins fine*
- *Anything except kin bins – they leak*

Fillets

- Preference frozen (14 out of 17)
- Individually wrapped
- 10 to 15 in a box
- Skin off (13 out of 17)
- Portion size
 - 120 grams 3
 - 150 grams 1
 - 180 grams 1
 - 250 grams 1

Sustainability

Importance of sustainable packaging (n = 20)

- Important or very important
 - 50% (n = 10)
- Somewhat important
 - 15% (n = 3)
- Little or no importance
 - 35% (n = 7)

Importance of sustainability certification (n = 8)

- Somewhat important
 - n = 3
- Little or no importance
 - n = 5

Information sources and channels

	Where do you get it?	How do you distribute it?
Word of mouth	3	8
Trade journals/shows	5	0
Social media	0	0
Other	0	0

Food Service Sectors Interviews

Suppliers vs Chefs

Suppliers and Chefs

Where they agree

- Top 3 most important criteria when purchasing fish
 - Quality/freshness
 - Price
 - Reliability/consistency
- Improvements in Wild Barramundi
 - Consistency
 - Quality, supply and grading
- Provenance and Storytelling
 - Either important or very important
- Both want information

Where they differ (or responses are inconsistent)

- Skin on vs skin off
 - Varies within each group
- Frozen vs fresh
 - Overall suppliers prefer frozen, chefs prefer mix of frozen and fresh
- Format (whole vs fillets) and Weight
 - Varies both within and between suppliers and chefs
- No consistent packaging preferences
- Information
 - Suppliers heavily rely on WOM
 - Chefs rely on suppliers and Instagram

5. Stage 3: Desktop review of Food Service websites

Methodology and profile of websites reviewed

Websites of 39 of chefs interviewed

- Qld 32
- NSW 3
- Victoria 3
- ACT 1

Type of venue

- Restaurants 30
- Functions 2
- Corporate caterers 2
- Hotels 2
- Club 1
- Hospital 1

Plus...

- 50 from TripAdvisor 'top seafood restaurants'
- 10 Darwin
- 10 Cairns
- 10 Brisbane
- 10 Sydney
- 10 Melbourne

Information reviewed

- Presence/absence of barramundi on menu
- How described
- Price

Barramundi on the menu?

48% of sites (43 out of 89) did not have barramundi on the menu

Of the 46 menus with barramundi:

- 98 menu items in total
- 2 entrees
- 10 barra part of a combination dish ie seafood platter
- 17 specified 'wild' barramundi
 - 10 Darwin
 - 5 Qld
 - 0 Sydney and Melbourne

Examples of menu descriptions

Wild barra

- *Wild Barramundi Fish & Chips Tempura battered fish, smashed peas, lemon, tartare served with fries*
- *Local Wild Caught Barramundi*
- *Local wild caught grilled Barramundi*
- *Stir-Fried Local Wild Caught Barramundi With Seasonal Vegetables, Chilli, Ginger & Steamed Jasmine Rice*
- *Oven Baked Wild Caught N.T. Barramundi with Garlic, Lemon & Caper Butter Served with Chips*

Other (farmed)

- *Crispy Skin Infinity Blue Saltwater Barramundi Charred zucchini, confit tomatoes, white onion soubise & tarragon dressing*
- *Risotto Conchiglie Barramundi stock with steamed black mussels, Noosa scallops & Cloudy Bay clams*
- *Barramundi in brodetto (gf) barramundi (Cone Bay, WA) served in a saffron broth with kipfler potatoes, carrots and broccoli, fennel and chives*
- *Crispy-skin Grilled Barramundi Fillet With salt and pepper squid, braised fennel, fresh parsley and caper salsa, shaved fennel salad and lemon*

Trip Advisor sample

8 out of 10
Darwin
restaurants
had Barra on
menu

3 out of 10
Cairns
restaurants
had barra on
menu

7 out of 10
Brisbane
restaurants
had barra on
menu

7 out of 10
Sydney
restaurants
had barra on
menu

7 out of 10
Melbourne
restaurants
had barra on
menu

Key words

Word	Count
Wild	17
Queensland	18
Local	9
Northern Territory/NT	5
Sustainable and/or Aquaculture	1
Australian	1

Branding

7 of 98 menu descriptions had branded 'farmed' barramundi

- Cone Bay 3
- Humpty Doo 2
- Coral Coast 1
- Infinity Blue 1

Pricing

No price premium evident for wild barramundi

- Majority of restaurants \$32 - \$42
- Some lower end \$15 - \$25
- More expensive for seafood platters
- No obvious difference farmed vs wild and if anything more wild at lower end of prices e.g. wild barra fish and chips \$18

6. Insights: Bringing it together

Theme 1 Supply

- **Limited availability** of Wild Caught Barramundi means that customers who need reliability of supply will not use this product. It is not often placed on menus as there cannot be a guarantee of constant supply.
- **Unpredictability** of fish catches across the season means that prices can spike which causes issues for wholesalers and restaurants.
- **Differentiating** from farmed barramundi based on the seasonality may help position WCB with marketing placed around the start of the wild caught season creating some heat in the market.

Theme 2 The Supply Chain

- Wholesalers are gatekeepers
 - work with them and/or work around them
- Need for education/information throughout supply chain
 - both wholesalers and chefs require education/information
 - availability
 - product related /provenance/ handling/ sustainability

Theme 3 Product

WCB has the potential to be a premium product but there are challenges.

Handling of the fish post capture directly influences the texture and quality of the fish on the plate.

- Getting the **temperature** of the fish down quickly maintains quality so good cooling/freezing techniques are paramount.
- **Packing** to maintain the integrity of the product as a premium product is necessary.
- **Sizing and grading** are essential to attain premium prices. Fish that are too big are just as problematic as too small. By catch needs to be removed in the packaging process.
- While fresh or chilled can be considered a premium benefit, the **packaging** of fresh WCB in melon crates and slurry can damage the bottom fish before they get to market.
- **Skin on vs Skin off is polarised – some want it and some don't**

Theme 4 Current trends

- ***Knifeless kitchens are*** gaining popularity. Some restaurants and cafes prefer fish delivered portioned and individually wrapped, due to the lack of knife skills within a restaurant to scale and prepare fish. Further, there is a growing awareness of waste which is reduced by the portioned concept.
- Barramundi is perceived as ***too main-stream*** to serve in more up market restaurants.
- Some restaurants are looking for a twist such as ***crispy skin***. The skin on product is only being produced by the farmed Barramundi producers.
- Instagram is the chefs 'go to' for getting and giving information

Theme 3 Product

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- **Skin on vs Skin off is polarised – some want it and some don't**

Theme 5 Brand Development

- Story telling would improve WCBs positioning in the market.
 - Clean, beautiful seas, sustainable practices bought straight to the customer, is a good story.
 - Some respondents noted that the only WCB brand they knew was **Cone Bay** (actually a farmed product).
- The fact that WCB is not branded allows it to be easily substituted and ***sold as a commodity.***
- Farmed Barramundi are marketing themselves as close as possible to being 'Wild Caught' with terms such as 'salt water', 'ocean grown', thus confusing what is real 'Wild caught' and what is farmed.
- Consideration needs to be given to brand development of the overall WCB product.

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Contact details

University of the Sunshine Coast (USC)

- Prof Meredith Lawley – mlawley1@usc.edu.au



Appendix 1: Interview Survey

Barramundi Survey (in depth version)

Q1 Date of interview? (dd/mm/yyyy)

Q2 Name of participant?

Q3 Name of business?

Q4 Position in business?

Q5 How long have you held that position (in years)?

Q6 Type of business?

- ☐ Catering service
- ☐ Functions and events
- ☐ Pub/club
- ☐ Restaurant
- ☐ Resort/casino
- ☐ Cruise ship/airline
- ☐ Processor
- ☐ Wholesaler/distributor
- ☐ Other, please specify

Q7 Location of business?

- ☐ Darwin
- ☐ Other NT (please specify) _____
- ☐ Brisbane
- ☐ Other QLD (please specify) _____
- ☐ Sydney
- ☐ Other NSW (please specify) _____
- ☐ Melbourne
- ☐ Other VIC (please specify) _____
- ☐ Other Australian state territory (please specify) _____

Q8 Can you tell me briefly your background and how you came to this position?

The following questions are about your business and the role the business plays in the seafood supply chain. (Skip questions that do not apply to the business).

Q9 Can you tell me a bit more about your business, what you do and who your customers are?

Q10 Considering all the fish you handle, what percentage do you get from each of the sources below?

Fisher boat : _____

Fisher farm : _____

Wholesaler : _____

Auction : _____

Total : _____

Q11 Who are your main customers [and category e.g. retailer] for fish? Can you describe them?

Q12 What are the three most popular fish products that you handle?

Q13 Why do you think they are the most popular?

Q14 Is the demand for the three most popular seasonal? Can you tell us why/why not?

Q15 What are the three most important factors (with 1 being the most important) you consider when purchasing fish?

1 / Most important _____

2 / Second most important _____

3 / Third most important _____

Q16 What are the first three words that come to mind when I say WILD CAUGHT Australian barramundi?

1st Word _____

2nd Word _____

3rd Word _____

Q17 What are the first three words that come to mind when I say FARMED Australian barramundi?

1st Word _____

2nd Word _____

3rd Word _____

Q18 What are the first three words that come to mind when I say IMPORTED barramundi?

1st Word _____

2nd Word _____

3rd Word _____

Q19 Can you describe your ideal piece of WILD CAUGHT barramundi?

Q20 What type of barramundi do you currently stock (in %)?

_____ % Wild caught in Australia

_____ % Imported farmed

_____ % Australian farmed (from which state?)

If the respondent does not stock barramundi wild caught in Australia:

Q21 Why do you not stock wild caught barramundi?

Q22 Have you stocked wild caught barramundi in the past and if so why have you stopped using it?

Q23 Have you noticed any changes over time in your customers preferences regarding barramundi?

Q24 Please indicate your level of agreement regarding the following statements

	Strongly Disagree	Disagree	Tend to Disagree	Tend to agree	Agree	Strongly Agree
I prefer to buy wild caught barramundi to farmed barramundi						
I intend to buy wild caught barramundi in the future						
I recommend wild caught barramundi to others						

Q25 Could you tell us why you agree or disagree with the prior statements?

Q26 The next set of questions relate to your level of agreement about the quality of wild barramundi

	Strongly Disagree	Disagree	Tend to Disagree	Tend to agree	Agree	Strongly Agree
Wild barramundi is a quality product						
Wild barramundi is of a consistent quality						
The quality of wild barramundi is high						

Continue with the below questions If the respondent stocks wild caught barramundi, if not proceed to end of survey.

Q27 In what form(s) do you purchase your WILD CAUGHT barramundi?

- _____ % Fresh whole fish
- _____ % Frozen whole fish
- _____ % Fresh fillets
- _____ % Frozen fillets
- _____ % Other, please specify

Q28 How many months of the year do you stock wild barramundi?

Months: _____
Total: _____

Q29 Why do you not consistently stock WILD CAUGHT barramundi?

Q30 How do you procure your WILD CAUGHT barramundi?

- _____ % Auction
- _____ % Direct from fisher(s)
- _____ % Wholesaler
- _____ % Other, please specify

Q31 What do you think could be improved with the WILD CAUGHT barramundi you are purchasing?

Q32 What is one thing that your supplier could do to help you with WILD CAUGHT barramundi?

Q33 What does quality mean to you in relation to WILD CAUGHT barramundi?

Q34 How important is the provenance or origin of the WILD CAUGHT barramundi to you?

- ☐ Not at all important
- ☐ Little importance
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

Q35a When you purchase WILD CAUGHT barramundi, how certain are you of its provenance/origin?

	Strongly Disagree	Disagree	Tend to Disagree	Tend to agree	Agree	Strongly Agree
I am confident I know the provenance/origin of wild caught barramundi						
I can tell where wild barramundi has been caught						
I know where wild caught barramundi has come from						
I often have doubts of where wild caught barramundi has come from						

If not certain:

Q35b If not certain – what could be done to improve your trust?

Q36 STORYTELLING: Storytelling as part of your product offering

We would like to get your thoughts on the following statement: Storied Fish refers to seafood that tells a story about its journey from water to table. The story may include facts about the fisherman or fishing community that caught it, information about how the fish was harvested or processed, details about the fishery or region of the world where it originated, or a description of its health or sustainability-related qualities. The details included in storied fish may be part of a product label, included in a food brand or tagline, listed on a menu, or highlighted by a server in a restaurant.

Source: Future of Fish, 2016 Untapped potential of Story to sell Seafood

We would like to know how you think “storytelling” as part of YOUR PRODUCT offering would be received by your customers?

Q37 Would the storytelling behind the WILD CAUGHT barramundi you are supplied/buy influence your purchasing decision? Can you please tell us briefly why?

Yes: _____

No: _____

Q38 What further information influences your purchase of WILD CAUGHT barramundi?

Q39 If you were speaking to a WILD CAUGHT barramundi fisher, what would you ask? What would you want to know?

Q40 What is your ideal weight for a WHOLE WILD CAUGHT barramundi fish (to be sold whole) to be used in your establishment?

In kilograms: _____

Total: _____

Q41 What is your ideal weight for a whole WILD CAUGHT barramundi fish (to be sold as FILLETS) to be used in your establishment?

In grams: _____

Total: _____

Q42 What type of packaging would you prefer the whole fish to come in?

Q43 How much are you willing to pay per kg of whole WILD CAUGHT Australian barramundi of good quality? Include any price points for different products.

Q44 Would you prefer the fillets to come fresh or frozen?

- ☐ Fresh chilled
- ☐ Frozen
- ☐ Not applicable

Q45 Do you prefer to fillet yourself or purchase fillets?

- ☐ Filet myself
- ☐ Buy fillets

Q46 Would you prefer the skin on or off the fillet?

- ☐ Skin on
- ☐ Skin off

Q47 What do you think is a reasonable portion size/serving size for a WILD CAUGHT barramundi fillet?

- ☐ 120g
- ☐ 150g
- ☐ 180g
- ☐ >200g
- ☐ Other (please specify): _____

Q48 What type of packaging would you prefer the fillets to come in?

Q49 How many fillets would you like to come in each package?

Q50 Are there any differences in the size of packages for different customers/users? If yes, can you please list them below?

Q51 Approximately on average how much are you willing to pay per kg for Australian WILD CAUGHT barramundi fillet?

\$ per kg: _____

Total: _____

Q52 Are there any factors that change your willingness to pay higher price premiums (seasonal, frozen/fresh, cut, etc.)?

Q53 Is sustainable packaging important to you?

- ☐ Not at all important
- ☐ Little importance
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

Q54 When deciding who/where to purchase from how important is sustainability certification to you?

- ☐ Not at all important
- ☐ Little importance
- ☐ Somewhat important
- ☐ Important
- ☐ Very important

Q55 Which seafood sustainability certification marks are you familiar with?

Q56 Where do you GET information about food and the latest food trends etc. from? (Please tick all that apply.)

- ☐ Word of mouth (can you tell us whom from) _____
- ☐ Supplier
- ☐ Instagram
- ☐ Facebook
- ☐ Other social media (please specify) _____
- ☐ Trade journal or magazine (please specify) _____
- ☐ Trade show (please specify) _____
- ☐ Internet (please specify) _____
- ☐ Other (please specify) _____

Q57 Where do you DISTRIBUTE information about food and the latest food trends etc. from? (Please tick all that apply.)

- ☐ Word of mouth (can you tell us whom from) _____
- ☐ Supplier
- ☐ Instagram
- ☐ Facebook
- ☐ Other social media (please specify) _____
- ☐ Trade journal or magazine (please specify) _____
- ☐ Trade show (please specify) _____
- ☐ Internet (please specify) _____
- ☐ Other (please specify) _____

Q58 Any other comments?

Thank you for your time and cooperation in completing this survey.

