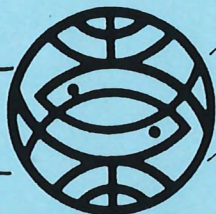


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A study of the demand
and importance of seafood
sourced in NSW and elsewhere
to the
catering & tourism industries in NSW

Prepared for the
Fisheries R & D Corporation

November 1996

By Ruello & Associates, Consultants
Sydney

Foreword and Disclaimer

This report has been prepared for the Fisheries R & D Corporation.

It is based on information gathered from published reports, unpublished documents and by means of interviews with many persons in business.

We believe the report to be accurate but it contains estimates and evaluations of future events and we accept no responsibility for the information herein, hence readers should make their own enquiries to satisfy themselves on all matters

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ACRONYMS and Terminology

ABARE:	Australian Bureau of Agriculture and Resource Economics
ABS:	Australian Bureau of Statistics
ASIC:	Australian Standard Industry Classification
CSIRO:	Commonwealth Scientific and Industrial Research Organisation
DPIE:	Department of Primary Industries and Energy
SET:	South East Trawl
SFM:	Sydney Fish Market Pty Ltd
IVS:	International Visitor Survey
DTM:	Domestic Tourism Monitor

Catering industry/catering sector: This terminology was used by the Fishing Industry Research Advisory Council as a short title for the catering and restaurant industry. It includes cafes, restaurants, clubs (hospitality), pubs, taverns and bars (mainly drinking places), motels and hotels (mainly for accommodation), fish and chips shops and takeaway outlets.

Seafood : Unless otherwise indicated, the term seafood includes all species of finfish, crustaceans, molluscs and other animal foods from fresh or salt waters.

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PART TWO REPORT

PART THREE REPORT

SUMMARY

The NSW fishing and aquaculture industry recognises that there is an increasing demand for seafoods from a growing number of domestic and overseas buyers but it is facing restrictions on various activities because of the limited nature of the fisheries resources and waterfront aquaculture sites in the state.

The industry felt that there was likely to be a shortfall in seafood supply for the year 2000 with the Olympics in Sydney in September therefore it initiated research to appraise the demand and importance of seafood for the catering industry. It also sought an evaluation of the importance of fishing and aquaculture related tourism to the State (together with the value of the seafood) in the light of recent debate over water resource allocation between different parties.

The volume and value of seafood bought and sold by the catering industry (caterers, restaurants clubs and take aways) in NSW in 1994/5 was assessed from interviews with 406 businesses and other information gathered from 21 fishermen's cooperatives and wholesale seafood suppliers.

Approximately 23000 tonnes of fish and shellfish were landed in NSW in 1994/5 valued at almost \$160 million and more than 90% of this was sold via the Sydney Fish Market auction. The 21 fishermen's cooperatives play only a minor role in direct sales to the catering industry and the majority of purchases (about 70%) are made through seafood wholesale companies.

This study indicated that in 1994/5 an estimated

- \$625 million of seafood was bought by almost 15000 catering businesses
- representing some 30,000 tonnes of product weight in aggregate, of which some 10% was from NSW
- this seafood was sold for approximately \$1125 million ; average mark up was 87% for finfish and 76% for shellfish.

More than 40 fish species and 20 shellfish were named as main sellers by the catering industry in 1994/95 but the three most important fish were:

• Hake	4400 tonnes	sold for \$59 million
• Atlantic salmon	830	35
• Barramundi	620	18

The three most important shellfish species groups were:

• Prawns	3390 tonnes	sold for \$110 million
• Oysters	4 mill dozen	50
• Squid	1380 tonnes	20

Hake is an imported frozen fillet, the Atlantic salmon Tasmanian, and the barramundi was from interstate and overseas. The important species from NSW are snapper and flathead but these are available from elsewhere too.

The shellfish are mostly sourced interstate or overseas although several hundred tonnes of NSW sea and farmed product are used. The Sydney rock oyster, grown predominantly in NSW, dominates the local oyster sales. The squid products are mostly imported frozen cleaned tubes.

Approximately 40% of catering businesses reported that they felt that it was important to offer NSW caught seafood for visitors and almost 50 % promote the local product. About a third of domestic visitors and almost half of international visitors to NSW reported that the opportunity to eat local seafood was important for their visit.

More than 24% of domestic and 11% of overseas visitors to NSW in 1996 are expected to participate in a commercial fishing or aquaculture related activity such as a visit to a fishing cooperative, jetty, market, fish farm or festival and spending approximately \$115 million in direct expenditure.

Tourism clearly represents a hitherto undervalued opportunity for the fishing and aquaculture industry that should be developed for its income and public relations value. The value of fishing and aquaculture industry related tourism in NSW could surpass the value of seafood landings by the year 2000 with a concerted effort by interested parties.

Seafood demand in the year 2000 is estimated to be approximately 15% greater than that in 1994/5. This estimated growth should not represent any problems as stocks are sustainable and the annual fluctuations in abundance of many NSW and imported species frequently exceed this figure.

However there is expected to be a serious supply problem with fresh (never frozen) prawns and Sydney rock oysters in September as a result of normal seasonal shortages of prime product coupled with the increased demand and resultant higher prices generated by the influx of Olympic visitors.

Nevertheless the seafood suppliers and catering industry can overcome these problems, as they often do, by switching to frozen product or alternative products in order to avoid the higher prices of the fresh produce.

It is recommended that the NSW industry develop promotional plans to raise awareness and consumption of underutilised or lesser known species such as Australian salmon, albacore tuna, ribbon fish and farmed silver perch to increase the availability of these NSW fish for the catering industry and visitors in the year 2000.

1. GENERAL INTRODUCTION and BACKGROUND

The demand for seafood from the catering industry in NSW has been growing steadily for the past five years as a result of a growing domestic population, the increased frequency of dining out, the great attention focussed on the health benefits of eating seafood and increasing international tourism activities.

In 1994 the commercial fishing industry in NSW recognised that the demand for seafood in the State will increase due to population growth, changed eating preferences and increasing tourism, particularly leading up to the Sydney 2000 Olympics.

At the same time it also noted that production from commercial fishing is restricted by fish abundance, government regulations and limits on the total allowable commercial catches, industry policies, environmental degradation and increasing catches by recreational fishers.

The NSW aquaculture sector also faces restrictions on its activities for a variety of reasons including competition for utilisation of the waterways and increasing limitations on the quantity or quality of the water used and released from waterfront aquaculture sites.

In short, the industry felt that there was likely to be a shortfall in the supply available to meet the growing demand, particularly the demand from the catering industry by the year 2000. It therefore sought expressions of interest from researchers, through the NSW Fishing Industry Research Advisory Committee, to appraise the importance of NSW seafood and related tourist activities to the catering and tourism industries and the future demand for seafood.

Research funds were subsequently made available to the Sydney firm of consultants Ruello & Associates in 1995/6 by the Fisheries R & D Corporation to undertake "A study of the demand and importance of seafood, sourced in NSW and elsewhere, to the catering and tourism industries in NSW"

Prior to this study the expectations of tourists in regard to local seafood supplies had not been the subject of much research in Australia. More importantly, there had been no previous attempt to assess the importance of other "products" such as sightseeing, educational and photographic opportunities provided by the commercial fishing and aquaculture industry anywhere in the world.

Information to be gathered by this study would therefore provide a strong foundation for seafood industry policy and planning activities and would also assist the decision makers in the catering and tourism industries in NSW.

Earlier research relevant to the present study was the National Fish Consumption Study undertaken by a consortium of consultants (including the research team for the present study) in 1990/91 for the Fishing Industry R & D Council, the predecessor of the Fisheries R & D corporation (PA Consultants 1992).

This major research project included a study of the seafood used by the catering industry in each of the Australian capital cities (including 161 Sydney businesses) and reported on the seafood sales and perceptions of this industry. The present study has been designed to parallel the 1990/91 study wherever possible.

Other research of interest is a telephone survey of 118 restaurants in the Cairns district of North Queensland, in June 1993, undertaken by the Geography Department of James Cook University.

This survey (JCU 1993) found that seafood based meals were served in 95% of restaurants and that 78% of restaurateurs felt that their customers expect local seafood on the menu.

1.1 Report Presentation

The findings of this study are presented in three parts covering the three different parts ("stages") of the study.

Stage One : Seafood production and sales to the catering industry

Stage Two : Demand for seafood from the catering industry

Stage Three: Importance of Fishing, Aquaculture and Seafood to the tourism industry.

This first part of the report, on stage one, covers

- the NSW finfish and shellfish production (fishing and aquaculture) in 1994/95
- the 1994/95 sale of finfish and shellfish by fishermen's cooperatives
- the 1994/95 sales by wholesale suppliers to the catering industry
- Future supply and demand for seafood
- General discussion and conclusions

The sections on Future supply and demand and on discussion and conclusions in this report take account of the findings presented in the reports on Stage Two and Stage Three also.

The reports on Stage Two and Stage Three, by market researchers Yann Campbell Hoar and Wheeler, have been prepared so that they can be read independently of each other if desired, but they should be read in conjunction with this Stage One report particularly the sections on Future demand and supply and the General discussion and conclusions.

2. RESEARCH OBJECTIVES

The overall objectives of the study were:

- To estimate current value and volume of seafood sold to the catering sector and the likely future trend in demand.
- To assess the importance of and demand for seafood by the catering sector and the likely future trend as perceived by the catering sector
- To assess the expectations of tourists regarding commercial fishing, aquaculture and local seafood and the importance of seafood and other industry products such as sightseeing, educational and photo opportunities.

2.1 RESEARCH OBJECTIVES Stage One

For Stage One the objectives were to :

- estimate the volume and value of seafood sold to the catering industry in NSW in 1994/5 by wholesalers and fishermen's cooperatives.
- identify likely trends in supply and demand by the major species groups

Other issues examined in this part of the study included an assessment of the facilities and resources dedicated to tourism by the fishing and aquaculture industry, particularly the fishermen's cooperatives.

3. METHODOLOGY

The volume and value of seafood sold to the catering industry by fishermen's cooperatives and wholesale suppliers was estimated from information gathered during interviews with these enterprises, as detailed below. Data on the volume of seafood caught by NSW fishermen and produced by aquaculture in 1994/5 was obtained from NSW Fisheries.

Future trends in supply and demand was assessed from data obtained in these interviews, information gathered from trade magazines and from data collected in Stage two and three of this study.

3.1 Survey of Wholesale Suppliers

According to the Australian Bureau of Statistics there were 174 fish wholesalers in NSW in March 1994, businesses primarily engaged in wholesaling fresh or frozen fish or other seafoods.

The Telecom directories listed a total of 362 businesses in NSW under the category of fish wholesalers (Australian Standard Industry Classification 4763), but these are not necessarily mainly engaged in the wholesale of fish. Appendix one shows the distribution of Telecom listings of fish wholesalers in the various areas of the state.

Preliminary screening revealed most of these listings to be retail businesses primarily (which purport to be wholesalers too; more so in Sydney), oyster farmers, general food distributors with a negligible volume fish business.

Only firms which were in fact primarily seafood wholesalers or businesses supplying a range of seafood and with at least a dozen regular wholesale customers for seafood were selected for interview. A copy of the questionnaire is attached as Appendix two

Information from 48 businesses qualified for inclusion in this study on seafood wholesalers, from 23 personal interviews from the Sydney region and 25 interviews with Country NSW wholesalers (five personal and 20 phone interviews). The interviews were conducted with the sales manager or person responsible for seafood sales.

The volume data (weights) are product weights as reported by the respondents.

Table 1. Number of wholesalers* of seafood in study sample and in NSW

	Sydney	Country
Sample size	23	25
Total number	48	46
Percentage sampled	48%	54%

* as defined earlier

The sample of wholesalers represented in this study therefore was not strictly proportional to the number of wholesalers in each telephone area around the state but was of necessity selected to enable areas with only several wholesalers to be adequately represented and provide better estimates of variety and volumes sold in NSW.

The results were weighted to reflect the total number of seafood wholesalers in the Country and Sydney regions respectively.

3.2 Fishermen's Cooperatives Survey

Interviews were conducted with the general managers and retail manager (where one was employed) of all 21 fishermen's cooperatives in NSW in order to collect quantitative data on 1994/5 landings and sales and to gain an understanding of:

- the volume and variety of fish and other seafood supplied to the cooperative by fishermen and farmers
- seafood sales to catering trade at "the gate" or via their retail store
- any facilities or resources directed at tourists to the district
- likely trends in fish supply

Personal interviews were conducted at 20 of the cooperatives and telephone interviews were undertaken with the remaining one.

The quantitative information available from these cooperatives varied from quite extensive and detailed records to scant data in several cooperatives with very few resources (and information had to be gathered at the SFM). In most cases sales data were not categorised according to customer type or species.

Again, volume data were the product weights as reported by the respondent.

3.3 NSW Catch and Sales Data

The NSW Fisheries department provided a listings of the volume of fish and shellfish landed in NSW in 1994/5 in late September 1966.

The Sydney Fish Market made available a copy of the total volume and average price of all fish and shellfish species sold on behalf of NSW fishermen suppliers for the 1994/5 year.

3.4 Fish Names

The names used in this report are those recommended as the marketing name in the recently published book on Marketing names for Fish and Seafood in Australia (DPIE 1995).

These names are not always the same as those used by fishermen in preparing their catch returns for State or Commonwealth fisheries agencies and the Sydney Fish Market statistics occasionally use different names too. Therefore the following table (Table 2) shows the marketing names used in this report, their short form and any other names used by these other organisations for the various species.

Fish names are listed alphabetically according to the principal word (eg dory) and with the descriptive name (eg mirror) listed second.

Crustacean and mollusc names are not as big a problem as with fish. There are two notable exceptions : the mud crab, which is sold under the name of black crab at the Sydney Fish market auction and the eastern rock lobster which is known as the local lobster at the SFM.

Table 2. Finfish and shellfish names used in this report, names used by NSW Fisheries, the SFM and any other names commonly used in trade.

<u>Marketing name</u>	<u>Short name</u>	<u>NSWF category</u>	<u>SFM name</u>	<u>Other names</u>
albacore (tuna)	albacore			
biddy silver	bid silver			
blue-eye	blue eye			
barracouta	b'couta			
bonito	bonito			
bream yellowfin	bream yfin	bream black & y'fin	bream silver	bream
dory john	dory john			
dory mirror	dory mirr			silver dory
dory silver	dory silver			red dory
flathead dusky	flat dusky		fhd, black	
flathead sand	flat sand			
flathead tiger	flat tiger			
gemfish	gemfish			
grenadier blue	grenad blu			hoki
gurnard	gurnard	red gurnard	latchet	
kingfish yellowtail	kingfish y			
ling	ling			
leatherjacket	ljacket			
luderick	luderick			blackfish
mackerel blue	mack blue			slimy mackerel
morwong rubberlip	morw r'lip			
morwong	morwong	morwong, jackass		bream fillet
mullet other	mullet othr			
mullet sea	mullet sea			
mulloway	mulloway		jewfish	
perch golden	perch gold		perch yel'fin	Murray perch, callop
perch ocean	perch ocn			coral cod, red oc perch
pilchard	pilchard			sardine
redfish	redfish			
ribbonfish	ribbonfish			
roughy orange	roughy or			deep sea perch
salmon Australian	salmon A			
shark	shark			
snapper	snapper			
sprat sandy	sprats	whitebait		whitebait
trevally silver	trevally sil			
tuna others	tuna other			
tuna yellowfin	tuna yfin			
warehou blue	warehou blue			
warehou silver	warehou s	warehou blue & silv.		warehou spotted
whiting school	whiting sch		whiting red	whiting red spot
whiting sand	whiting sand			
whiting trum	whiting trum			whiting trumpeter
yellowtail	yellowtail			
prawn farmed	prawn farm	prawn	prawn ld tiger	tiger prawn, black
crab mud	crab mud	crab black		
lobster East. rock	lobster		lobster local	crayfish

4. NSW FISHING & AQUACULTURE 1994/5

4.1 Commercial Fishing

There were 2023 active licensed commercial fishers in NSW in 1994/5 working from a total of 3054 registered fishing vessels and they landed a total of 18238 tonnes of fish and 4322 tonnes of other seafood according to NSW Fisheries' statistics (Total 22560 tonnes). Aquaculture provided another 700 tonnes, plus oysters (Section 4.2, below)

The landed or primary value of this commercial catch and aquaculture produce totalled almost \$160 million (this includes an imputed value for South East Trawl fish and East Coast Tuna caught in NSW) according to the ABARE database.

The NSW commercial fishing industry is characterised by the large number of small vessels operating from the many estuaries and ports along the coast. There are only 45 licensed commercial fishers in inland waters and commercial production of fish from the inland fisheries of NSW are essentially negligible other than for carp and golden perch.

The greatest number of fishermen and fishing activity is concentrated on the northern NSW coast around the Clarence River, where according to NSW Fisheries data there were 247 fishers registered in 1994/5. By contrast the inland fishing district of Narrandera had just one person registered.

The NSW Fisheries department's fishing returns sheets lists 185 species of fish and 32 species of "shellfish" (crustaceans, molluscs and worms).

The Sydney Fish Market recorded 170 of these fish species and 30 species of other seafoods from NSW fishermen/suppliers in 1994/95: 49 fish species/products and 26 other seafoods (from NSW and elsewhere) were nominated as amongst the best selling products to the catering trade by respondents in this study (Section 7).

The major commercial fishing sectors are the East Coast Trawl, the prawn fisheries (estuarine and ocean), abalone, the estuarine finfish and the coastal beach hauling and trawling.

The bulk of the so called "market fish" such as tiger flathead which make up a large part of the Sydney Fish Market turnover each day are taken in the South East Trawl fishery which is managed by the Australian Fisheries Management Authority by means of quota on the 16 key species.

Table 3 NSW catch and SFM sales volume, in tonnes, for selected species

Species	NSW Catch	SFM Volume	Species	NSW Catch	SFM Volume
albacore	168	100	abalone	308	1
biddy silver	179	170	bugs	68	60
blue eye	178	156	cockles	42	34
barracouta	31	1	crab blue sw	211	159
bonito	138	140	crab mud	85	73
bream silver	469	416	crab other	31	7
carp	148	70	crab spanner	361	4
dory john	206	296	cuttlefish	372	323
dory mirror	141	216	lobster eastern	73	34
dory silver	26	6	octopus	414	480
flathead dusky	158	69	pippi	214	178
flathead sand	111	42	prawn rr	337	244
flathead tiger	471	606	prawn school	621	94
gemfish	114	136	prawn king	690	372
grenadier blue	64	17	squid	55	134
kingfish	291	248	squid arrow	213	164
latchet	52	38	yabby	73	9
ling	320	356			
leatherjacket	168	143	total all	4322	
luderick	410	173	shellfish		
mackerel blue	203	138			
morwong r lip	163	106			
morwong	158	408			
mullet - other	214	30			
mullet sea	2805	714			
mulloway	112	70			
perch golden	105	6			
perch ocean	201	236			
pilchard	295	72			
redfish	946	1344			
ribbonfish	115	101			
salmon - Aust	614	55			
shark	536	595			
snapper	374	235			
sprats	61	50			
trevally silver	515	532			
tuna - others	822	15			
tuna yfin	332	153			
warehou blue	64	67			
warehou silver	98	315			
whiting school	581	258			
whiting sand	187	131			
whiting trump	59	48			
yellowtail	177	158			
total all fish species	18238				
			TOTAL all species	22560	20908

Source: NSW Fisheries and SFM

Sea mullet has long been the single most important fish species in tonnage landed but it is not a highly prized table fish, does not play a major role in sales to the catering trade in NSW or at the SFM and is of relatively low value. The greatest value of this fishery comes from the high export price of the roe in female fish.

Much of the coastal fish and shellfish production in NSW is estuarine dependent and subject to marked variations in landings from one year to the next as a result of varying meteorological and oceanographical conditions.

Table 4 below, shows the variations in landings of selected species over the last three years. The volume of school prawns landed is renowned for its annual fluctuations and its correlation with rainfall conditions.

Abalone licenses and catches are restricted hence there has been little variation in the period shown.

Table 4. Annual Production of Selected Species (whole weight in tonnes)

Species	1992/3*	1993/4*	1994/5#
Fish			
mullet sea	3927	5440	2804
trevally silver	754	717	515
kingfish	413	346	291
whiting sand	145	210	187
salmon Aust.	824	489	614
snapper	610	513	373
t. flathead (SET)	1545	1483	1585
john dory (SET)	104	123	122
Shellfish			
abalone	327	312	308
lobster	104	154	73
prawn king	804	907	690
prawn school	673	417	621

Tuna are another large component of the NSW industry, but these come under Commonwealth management of the East Coast Tuna fishery; the bulk of the landings are directed for export or canning but a small part is sold on the domestic fresh fish markets (Table 3).

King prawns have been the most important commercial crustacean in NSW because of their high landings and price in the past two decades while the octopus which is a by catch of coastal trawlers represents the most voluminous mollusc group in the State. Both of these are widely used in the catering trade as shown in Section 7.

Abalone is the most valuable mollusc targeted by commercial fishermen but this product is mostly exported to Asian countries and little is sold through the domestic fish marketing channels.

Australian salmon usually represents a large component of the NSW landings but this is not a popular table fish and most of this catch is directed to canning and sometimes utilised as bait.

4.2 NSW Aquaculture

More than 20 species of finfish and shellfish were being farmed commercially in inland and coastal areas of NSW in 1994/5 by 1398 permit holders, according to NSW Fisheries statistics.

Nevertheless the aquaculture sector in NSW plays only a small role as a producer of table fish other than for rainbow trout

Other species of note are oysters, the tiger prawn, kuruma prawn, yabby, silver perch and the Pacific oyster (Table 5). Total production was almost 700 tonnes in 1994/5 valued at \$36 million, mostly due to the 9 million dozen oysters.

Table 5 Volume and value of aquaculture production in NSW 1994/5 (species with more than a tonne aggregate production reported).

Species	No. of farms in production	Production volumes (t)	Reported value* \$000
Molluscs			
Sydney rock oyster	645	83545 bags (x 108 dozen)	27616
pacific oyster	14	1713 bags	772
blue mussel	2	34	161
Crustaceans			
black tiger prawn	6	213	2521
kuruma prawn	4	34.5	1220
yabby	44	32.4	511
redclaw crayfish	7	2.6	41
Finfish			
rainbow trout	13	274	1524
silver perch	24	17.2	168
brook trout	4	3.1	31

Source NSW Fisheries

* This is the value placed by farmers at first sale

The Sydney rock oyster has long dominated aquaculture in NSW with a history going back into the last century and today accounts for about half of the Australian production of oysters. 1994/5 production was marginally

less than in preceding years (but only 60% of the production in the record year of 1976/7).

In NSW the farming of Pacific oysters is permitted in Port Stephens only.

Black tiger prawns were sold on the domestic market, principally into NSW, while almost all of the kuruma prawns were exported to Japan with negligible volumes sold elsewhere.

Silver perch and mussel farming are relative newcomers to NSW aquaculture with a history of little more than a decade but both have been identified by NSW Fisheries as aquaculture sectors with great growth potential.

5. SEAFOOD DISTRIBUTION IN NSW

The current State Fisheries regulations restrict the sales of seafood caught or grown in NSW. NSW fishermen are required to sell their catch through an authorised market or fishermen's cooperative, and it is an offence to sell directly to the catering industry or the public. The catering industry may however buy seafood direct from interstate fishermen and farmers.

There are 21 registered fishermen's cooperatives along the NSW coast from Brunswick Heads in the north to Twofold Bay (Eden) in the south. All of these cooperatives act as a facility for packing seafood on ice for transport to wholesalers, processors, the Sydney Fish Market or interstate markets.

In aggregate these 21 cooperatives received and sold the following:

Product		VOLUME Tonnes	VALUE* \$ million
Finfish	101 species	10,562	29.1
Shellfish	19 species	3,497	25.5
TOTAL		14,059	54.6

* Primary value, based on SFM auction price

The majority is consigned to the SFM by almost all cooperatives and only a small volume is sold locally.

Major fishing ports which are not serviced by cooperatives are Tweed Heads on the northern border of the state and Port Jackson and Botany Bay in Sydney. Tweed Heads fishermen sell their catch to Queensland wholesalers and NSW companies with permits to buy from vessels. Sydney fishermen are able to truck their catch to the SFM with their own transport or sell through other authorised channels.

The majority of the NSW caught fresh (chilled not frozen) fish is sold via the Sydney Fish Market auction. The central role of the SFM is demonstrated by the 20900 tonnes of fish and shellfish sold on behalf of NSW fishermen, which represent more than 90% of the catch.

The distribution of the NSW catch to the catering industry frequently follows a maze rather than a simple marketing chain because it is common for fish to pass from a fishermen to a cooperative, then the SFM auction, a wholesaler (who may sell it to a secondary wholesaler, in Sydney or Country) and finally a catering business.

Alternatively it may go from fishermen to cooperative to a caterer, but this is uncommon. Retail stores are also used by the catering trade as a source of some product (Section 5.1).

5.1 SALES BY COOPERATIVES

Twenty cooperatives sold seafood from their premises: wholesale to food wholesalers/distributors or members of the catering industry and retail sales to the public at large.

Eighteen of these cooperatives had one to three retail outlets where seafood was retailed to the public, locals and tourists alike, but for three of these cooperatives local sales (retail and wholesale) were negligible for all species except mullet and the estuarine prawns.

Six had facilities for preparing and selling hot fish and chips for takeaway. Only two had tables and chairs for customers to eat their takeaway food on the cooperatives property.

A small south coast cooperative without any full time staff just acts as a packing depot and has no facilities for any local sales at all.

Twenty cooperatives reported that direct sales to the catering trade were insignificant by virtue of the small number of such customers(<10) and the small volume of trade transacted. One cooperative reported that sales to the catering sector accounted for "just over 10%" of its turnover.

This situation has apparently evolved because each cooperative usually only sells fresh local catch and often has a limited range of products. Cooperative staff reported that the catering industry tends to use the cooperatives to "top up" their supplies and use a wholesaler as the primary supplier.

In many cases the purchase is made anonymously "over the counter" as a retail sale and hence is not identified as a sale to the catering industry.

One large north coast cooperative business had more food wholesalers as customers than restaurateurs and others in the catering sector.

King prawns and snapper were commonly cited as being the key items purchased by the catering trade, particularly in the north coast where these two products are particularly plentiful.

Other items sought by catering industry were shark and sand whiting and bugs, crabs and squid amongst the shellfish.

Table 6 below shows the volume of local sales by cooperatives, this includes sales to wholesalers, caterers, processors and their own retail store.

Species	Tonnes sold locally at cooperative
bream silver	61
dory john	13
flathead dusky	87
flathead sand	101
flathead tiger	13
luderick	138*
mullet sea	1087 *
shark	70
snapper	78.
whiting red	342 *
whiting sand	10
Balmain bug	20
crab blue swimmer	59
cuttlefish	105 *
prawns school	274
prawns king	175

* species mainly used by processors

Data on sales of individual species to the catering industry alone were not available because detailed records on the various types of local sales are not maintained, but based on industry interviews we have estimated direct sales to the catering sector by cooperatives in 1994/5 as approximately :

• Snapper	25 tonnes
• luderick	25
• mullet	150
• shark	20
• bugs	5
• crabs blue swimmer	15
• octopus	20
• prawns king	50

These are regarded as conservative estimates because the levels of over the counter cash purchases made by catering industry personnel to top up supplies are unknown.

Mullet and luderick were the favoured species for cooking in local cheaper restaurants and take away outlets. These two species were also the key species for the cooperatives' retail fish n chips business, accounting for approximately 25 and 10 tonnes respectively (of the volume listed above).

5.2 Retail Sales to Tourists

Detailed records on retail sales were not available at most cooperatives but the following information was gathered.

Five cooperatives located on the Pacific Highway or in cities or large towns north of Sydney offered cooked fish and chips as well as fresh seafood to local residents and visitors to the area.

- Tourists represented a minor part of turnover for four of these businesses.
- One waterfront cooperative in northern NSW with outdoor facilities for customers however reported that tourists now make up 55% of their annual sales.
 - Tourists accounted for about two thirds of sales in 10 weeks of holiday seasons
 - tourists and local residents each represented half of turnover in the other 42 weeks of the year.

In all five localities with hot fish n chips sales to tourists represented less than \$200,000 per year.

The major items sold to tourists were usually the fish and crustacean species which were most abundant on the day.

Thus for north coast cooperatives:

- school or king prawns
- mullet
- luderick
- flathead

dominated the retail sales (in this order)

Fishermen's cooperatives south of Sydney have much smaller retail businesses than their counterparts in the warmer half of the state and only one offered hot fish n chips for takeaway in 1994/5.

On the south coast flathead (tiger) is generally the dominant retail fish while the coastal lakes produce school or small king prawns, but detailed records were unavailable.

5.21 Tourism Promotions and Festivals

While many fishermen's cooperatives had pleasant waterfront surroundings and two had attractive retail stores with outdoor furniture for eating hot fish n chips and other take away food none had any other permanent resources directed to the tourists.

It was notable that only one cooperative provided any material of an educational, public relations or promotional nature for the benefit of tourists to the area.

A north coast cooperative had an attractive poster display in a tourist information facility on the Pacific Highway, several kilometres away, which also housed promotional displays from other business enterprises in the region.

This pictorial display, and a free attractive colour brochure, had information on the local fisheries and the value of these fisheries and the cooperative to the regional economy. Both were well regarded by the tourist information centre management and visitors.

Fishermen from three NSW cooperatives participate in a regional Blessing of the Fleet function each year which helps to promote the key role of fishermen to economic and social life of their district.

Sydney fishermen also participate in a blessing of the fleet ceremony each year and this function generates considerable public and media attention of a positive note even though fishing is not an important industry in Sydney.

The greatest fishing industry resources directed at visitors are provided by Sydney Fish Market Pty Ltd which offers a plethora of information leaflets, cooking demonstrations and classes and a telephone information service for consumers, the catering industry and the media.

6. SEAFOOD WHOLESALE SUPPLIERS

Forty eight wholesale suppliers of seafood (firms who specialise in fish or who wholesale a range of seafood products to more than a dozen customers) participated in this study, 23 in Sydney and 25 Country suppliers.

Almost all of these businesses operated from one outlet only. The single premise business represented 87% of respondents in Sydney and 96 % in the country but the number of outlets ranged from one to three and one to five respectively.

The number of employees in the seafood wholesale activities ranged from one to a little more than a hundred but was less than five for all companies dealing only with seafood in both Sydney and the Country. The numbers of employees are shown in Table 7 below.

Number of employees	Sydney firms	Country firms
<5	50%	56%
5-9	4%	20%
10-19	9%	8%
20-49	32%	12%
>50	4%	4%

There were very few large businesses (4%), with more than 50 employees, selling seafood in both Sydney and Country.

6.1 Importance of Seafood Sales

Seafood was the most important class of products sold by the vast majority of respondents.

For Sydney businesses seafood sales represented from 20 to 100% of the turnover, with the average being 80%. Other goods sold being complementary items such as oils or other frozen or dry foods. Seafood was the only product sold by 46% of these businesses.

In the Country, seafood represented from 15 to 100% of the turnover and averaged 63% for the respondents; but only 36% of these suppliers were seafood specialists and the vast majority sold other goods as well.

6.2 Number of Customers

Table 8 below summarises the findings on the numbers of customers for the wholesale traders who responded to question three. More than 80% of these businesses in Country and Sydney dealt with a range of customers in the restaurant, catering and take away trade and the majority were uncertain about the precise business nature (ie caterer, restaurant take away etc) of many of their customers.

The wholesalers with a narrow customer base, "specialists" with either the restaurant businesses or with take away, were represented in equal proportions but the numbers were low in both Country and Sydney (less than two in each category)

Table 8. Number (and percentage) of customers served by Wholesalers

No. of Customers	Sydney Companies	Country Companies
<20	4 (18%)	1 (4%)
21-50	4 (18%)	5 (20%)
51-100	3 (14%)	5 (20%)
101-500	7 (32%)	11 (44%)
501-1000	3 (14%)	2 (8%)
>1000	1 (5%)	1 (4%)

6.3 Geographical Areas Covered

Many Sydney wholesale suppliers of seafoods have a broad customer base and are pursuing business beyond the local or metropolitan region.

- 39% were delivering to customers as far as the ACT
- another 26% of businesses delivered in the area bounded by Wollongong, the Blue Mountains and the Central Coast-Wyong area.
- a minority, 25%, delivered in the metropolitan area only.

More country wholesalers tended to trade closer to their home town.

- 44% delivering in the local region only (<100km)
- 44% servicing towns in a 200 km radius
- while the remaining 12 % have customers more than 200 km away.

7. WHOLESALERS SUPPLIES TO CATERING INDUSTRY

7.1 Main Selling Species

More than 49 different fish species or fish products and 26 other seafoods were nominated by wholesalers as amongst the 16 best selling products (Table 9). As indicated earlier there are 170 species of fish sold in the Sydney Fish Market and hence available to the seafood wholesalers who buy at the SFM.

Of the hundred or so fish species commonly available at the SFM, Sydney wholesalers nominated:

- 40 species of fish
- 26 shellfish

Country wholesalers nominated:

- 39 fish
- 21 shellfish

The most widely sold fishes were snapper and hake which were both regularly handled by at least 50% of respondents; hake is also an important product because of the large volumes sold.

The next most commonly stocked fish were:

- blue grenadier (hoki)
- orange roughy (deep sea perch fillet) and Atlantic salmon
- Nile perch.

which were sold by at least 40% of respondents

The most common best selling shellfish were sea caught prawns which were sold by more than three out of four wholesalers.

This was closely followed by octopus, squid and the Sydney rock oyster which were best sellers with more than two out of three respondents.

Prawns are a major item of commerce due to the high tonnage and high price sold while octopus are of far less value and smaller tonnage.

Table 9. List of main sellers according to origin; the numbers represent the number of wholesalers who nominated the species as a main seller

Species	All sources	NSW	Inter state	Over seas	Species	All sources	NSW	Inter state	Over seas
barra	16	0	10	8	bugs	21	13	12	0
blue ey	15	10	4	10	crab blue	18	8	13	0
breem s	2	2	1	0	cuttlef	2	2	0	0
dory j	11	8	2	8	lobster	20	8	12	8
dory m	2	2	0	0	mussels	30	3	17	19
dory pac	5	0	0	5	octopus	36	16	3	29
dory sm	9	0	2	7	prawn sea	37	12	30	5
emperor	4	0	2	2	prwn farm	15	3	15	5
flathead	13	12	4	1	prwn cutl	14	0	2	13
flounder	2	0	0	2	prwn meat	24	0	21	9
gren blu	23	0	3	22	scallop	24	0	21	9
gemfish	2	1	1	1	scampi	2	0	2	1
hake	24	0	0	24	squid	33	1	8	29
ling	8	6	0	4	vongole	5	0	5	0
leather j	6	0	0	6	yabby	2	0	2	0
mulloway	3	3	0	0	marinara	3	0	0	3
morwong	9	9	0	4	extender	7	0	1	7
perch Nile	20	0	0	20	sticks	6	0	2	4
perch scal	2	0	2	0					
pilchard	2	1	1	0	oyster Sro	32	32	0	0
redfish	2	2	0	0	oyster Pac	16	1	14	4
roughy or	22	1	15	11	scallop 1/2 shell	2	0	2	0
salmon At	22	0	22	0					
shark	2	2	0	0					
snapper	24	12	5	16					
sole	12	0	0	12					
swordfish	2	1	1	0					
trout coral	2	0	1	1					
trout farm	17	12	8	0					
trout ocn	6	0	6	0					
tuna	10	7	5	2					
whiting sc	3	0	2	0					
whiting sa	2	3	0	0					
warehou	6	4	3	0					
wrasse	2	0	1	1					

Only eleven of these fish species were considered best sellers by at least 25 % of the wholesalers, and six of these were not sourced at all from NSW. Climatic conditions in NSW are an impediment to aquaculture of some species such as the barramundi (tropical) and Atlantic salmon (coldwater), while other species, discussed below, are not naturally found in Australian waters.

Thus only five fish species which are available at times from the NSW sea catch or farms are commonly sold into the catering industry by at least one in four wholesalers. They are:

- blue eye
- flathead
- roughy orange
- snapper
- trout rainbow

Other fish available from the NSW catch which were nominated by 20% of wholesalers were john dory, tuna and morwong (bream fillets).

These represent but a small fraction of the number of species landed in commercial quantities in the state.

Thirteen shellfish products are best sellers for at least 25% of wholesalers and of these, 11 are usually available from NSW in varying quantities.

These are :

- bugs
- crab blue swimmer
- lobster
- mussels
- octopus
- prawn sea
- prawn farmed
- prawn meat
- squid
- oyster, Sydney rock
- oyster, Pacific

7.2 Volumes and Values of Sales

The total volume of all seafood sold to the catering sector in 1994/5 was estimated at 29000 tonnes - 14000 tonnes of fish and 15000 tonnes of shellfish products - with approximately 10% of this total coming from NSW production. Additionally, 2.044 million dozens of oysters almost all Sydney rock oysters, all from NSW, were reported sold that year.

The volumes and value of the main sellers to the catering industry by wholesalers is summarised in the following pages for species where adequate information on origins of the product was available to provide reliable estimates.

1994/5 sales of other species commonly available from the NSW catch but with less detailed information available were:

tuna	260 tonnes sold for \$4.1 million
blue eye	480 \$12.0
ling	340 \$2.9
bream (silver bream & morwong fillets)	120 \$1.2

Hake and Nile perch are not commercially caught in Australia and the supply is exclusively of imported frozen product.

There are only two best selling products where NSW produce dominates the marketplace. These are:

- flathead
- Sydney rock oyster.

Both are species/groups with no supply of the local species available from overseas.

Flathead supply in NSW is dominated by the tiger flathead (Table 3), much of this is caught in the South East Trawl fishery (NSW, Victoria and Tasmania). Closely related species (similar products) are available from NSW and interstate and there is an overseas product sometimes sold as a flathead fillet. Two thirds of the flathead sold to the catering industry was reported as product of NSW origins.

The Sydney rock oyster is essentially endemic to NSW with only a small volume farmed in the neighbouring waters of Queensland or Victoria hence NSW wholesalers were able to source all of this product from NSW farms.

Hake Sales Summary

	NSW	Interstate	Overseas
tonnes	0	0	2704
\$'000			17143

Main Seller for 50%



Total	2704 tonnes
	\$17,143,000

Atlantic Salmon Sales Summary

	NSW	Interstate	Overseas
tonnes		1005	
\$'000		15916	

Main Seller for 46%



Total	1005 tonnes
	\$15,916,000

John Dory Sales Summary

	NSW	Interstate	Overseas
tonnes	117	37	387
\$'000	2187	556	7699

Main Seller for 23%



Total	541 tonnes
	\$10,442,000

Flathead Sales Summary

	NSW	Interstate	Overseas
tonnes	92	33	14
\$'000	829	405	129

Main Seller for 27%



Total	139 tonnes
	\$1,363,000

Blue Grenadier (Hoki) Sales Summary

	NSW	Interstate	Overseas
tonnes		47	951
\$'000		192	3977

Main Seller for 48%



Total	998 tonnes
	\$4,159,000

Orange Roughy Sales Summary

	NSW*	Interstate	Overseas
tonnes	13	415	366
\$'000	226	6788	5782

Main Seller for 46%



Total	795 tonnes
	\$12,796,000

Barramundi Sales Summary

	NSW	Interstate	Overseas
tonnes	0	421	102
\$'000		6255	1033

Main Seller for 33%



Total	523 tonnes
	\$7,288,000

Snapper Sales Summary

	NSW	Interstate	Overseas
tonnes	193	279	297
\$'000	2502	3850	4182

Main Seller for 50%



Total	769 tonnes
	\$9,534,000

Rainbow Trout Sales Summary

	NSW	Interstate	Overseas
tonnes	236	121	
\$'000	1771	865	

Main Seller for 35%




Total	357 tonnes
	\$2,636,000

Prawns Sales Summary

	NSW	Interstate	Overseas
tonnes	308	2350	1447
\$'000	5769	56183	25047

Main Seller for 77%




Total	4785 tonnes
	\$86999000

Lobster Sales Summary

	NSW	Interstate	Overseas
tonnes	63	307	77
\$'000	2379	10241	1948

Main Seller for 42%



Total	447 tonnes
	\$14568000

Squid Sales Summary

	NSW	Interstate	Overseas
tonnes	2	164	1189
\$'000	19	1170	8304

Main Seller for 69%

Total	1355 tonnes
	\$9493000

Oysters Sales Summary

	NSW	Interstate*	Overseas*
dozens	2044#	305	8
\$'000	12975	1991	57

Main Seller for 67%

Total	2,357,000 doz
	\$15023000

This includes 5000 dozen Pacific oyster

*Pacific oyster

Mussels Sales Summary

	NSW	Interstate	Overseas
tonnes	42	601	468
\$'000	305	3760	2332

Main Seller for 62%



Total 1111 tonnes \$6,397,000

Octopus Sales Summary

	NSW	Interstate	Overseas
dozens	377	48	493
\$'000	3359	431	3032

Main Seller for 75%



Total 917 tonnes \$6,822,000

7.3 Sydney and Country Best Sellers

There were several notable differences in the best selling list of Sydney and Country wholesalers, mainly relating to the greater availability of fresh (ie not frozen) product in Sydney and a greater reliance on frozen products in country areas.

Hake, Nile perch and blue grenadier, three products which are imported as frozen fillets, were all nominated as best sellers by far more country wholesalers than Sydney wholesalers.

Hake for example was nominated as a best seller by 16 of the Country wholesalers (64%) while it was only a best seller for 8 of the Sydney companies (35%) as shown in Table 10.

A similar situation prevails for squid, where imported frozen tubes dominate the trade. For the Country the imported product was a best seller for 19 companies (76%) whereas it was a best seller for only 10 Sydney wholesalers (43%) and more Sydney wholesalers than Country wholesalers listed Australian squid as amongst the best sellers (Table 10)

Seafoods such as:

- Sydney rock oysters
- john dory
- ocean trout
- Atlantic salmon

which are normally distributed in NSW in the fresh condition were more commonly cited as best sellers in Sydney rather than country NSW.

This issue of distribution and market penetration of fresh product into inland or distant areas is clearly demonstrated by octopus.

- The (fresh) octopus caught in NSW was a best seller with:
10 Sydney companies (43%) versus 6 country ones (24%)
- While the imported frozen product was a best seller with :
18 Country (72%) versus 11 Sydney companies (48%).

Table 10 List of best sellers for Sydney and Country Wholesalers

Product	Source	Sydney companies	Country companies
barramundi wild	Interstate (I)	5	5
barra farmed	I	3	3
blue eye	Overseas (O)	8	2
bream, silver	NSW (N)		
dory, john	O	7	1
dory, smooth	O	3	4
flathead	N	5	7
grenadier, blue (hoki)	O	9	13
hake	O	8	16
ling	O	3	3
morwong (bream fillet)	N	5	4
perch, Nile	O	8	12
roughy, orange (sea perch)	O	8	7
salmon Atlantic	I	13	9
snapper	O	10	6
sole	O	5	7
trout, rainbow (farmed)	N	5	7
trout ocean (farmed)	N	6	0
tuna	I	5	2
lobster	I	8	4
mussels	I	12	5
octopus	O	11	18
octopus	N	10	6
prawn sea	I	16	14
prawn farmed	I	7	8
prawn meat	O	8	8
squid	O	10	19
squid	I	5	3
oyster Sydney rock	N	18	14

7.4 Price Considerations

Price is clearly one of the major factors driving demand and table 11 below compares the price of NSW products with those available from other origins and highlights the availability of cheaper product from outside NSW for many of the important catering products.

For the five popular shellfish products cheaper goods were available from interstate or overseas sources for all five.

In three of the seven finfish (where comparable data were available) the average selling price (and buying prices) of interstate or overseas product was less than that for NSW product.

Table 11. Wholesalers selling prices (\$/kg) according to the geographical origins of the product.

Product	GEOGRAPHICAL ORIGINS and PRICES		
	NSW	Interstate	Overseas
dory john	18.70	14.93	19.91
flathead	9.05	12.11	
ling	9.05		8.29
orange roughy (sea perch)		16.36	15.78
snapper	12.96	13.80	14.07
trout rainbow	7.51	7.15	
tuna	15.86	16.11	
lobster	37.91	33.38	25.2
mussels	7.25	6.26	4.99
octopus	8.92	9.05	6.15
prawn sea	18.08	18.97	17.11
squid	9.00	7.13	6.98

7.41 Sydney and Country Prices

Country and Sydney selling prices were remarkably similar for most products, as indicated in table 12, following.

The higher average selling prices for product such as sea prawns, morwong fillets, flathead and snapper, which are available fresh from the NSW fisheries, for Sydney companies vs Country companies (Table 12 below) is a reflection of the wider use-- and higher price of the fresh vs frozen product.

For frozen imported products such as hake, blue grenadier (hoki) and squid there was generally little differences in averages selling prices in Sydney versus Country. This was also true with interstate lobster.

Table 12 Comparison of Sydney and Country average selling prices

Product	Source	Sydney \$/kg	Country \$/kg
Barramundi wild	Interstate	15.71	15.93
Flathead	NSW	10.82	7.78
Grenadier (hoki)	Overseas	4.15	4.24
hake	O	6.36	6.28
morwong (bream N fillet)	N	11.41	7.88
perch Nile	O	5.73	6.52
roughy orange	O	15.54	16.65
salmon Atlantic	I	15.84	15.78
snapper	O	15.36	9.66
trout rainbow farmed	N	7.54	7.36
lobster	I	33.36	33.68
mussels	I	6.25	6.33
octopus	N	9.06	8.11
prawns sea	I	19.75	16.14
prawn meat	O	15.69	14.,17
squid	O	7.19	6.60
oyster Sydney rock	N	6.52	5.93

Country wholesalers reported a general difficulty in marketing new and/ or more expensive lines in the country, particularly while the local economy was in poor condition.

This was evident in the product range nominated as best sellers.
For example, no Country wholesalers nominated :

- fresh shellfish such as:
pippis and vongole
- expensive crustaceans such as:
scampi
- or the “newer” shellfish products such as
cuttlefish

as amongst their best sellers.

7.5 Form in Which Common Seafood Were Sold

The majority of fish species were more commonly sold in the filleted form but several of the larger and more expensive species such as Atlantic salmon and snapper are commonly sold in the gilled and gutted form as they can be utilised in the whole, fillet or cutlet form by the caterer.

It should be noted that the form sold is not necessarily the form in which the seafood is presented to the consumer as some cooks prefer to fillet or cutlet in-house rather than have it done by the fish merchant.

The form in which fish was sold to the catering trade is outlined in Table 13 below.

Species/product	Principal form	Others
barramundi sea caught	fillet 80%	whole, cutlet
barramundi farmed	gilled & gutted 90%	fillet
blue eye	fillet 60%	headless, cutlet
bream yellowfin	gilled & gutted	
bream (morwong)	fillet almost 100%	
dory john	fillet 80%	gilled & gutted
dory smooth	fillet almost 100%	
flathead	fillet 75%	g & g
grenadier blue	fillet 100%	
hake	fillet almost 100%	
ling	fillet almost 100%	
perch Nile	fillet 100%	
roughy orange	fillet 100%	
salmon Atlantic	gilled & gutted 70%	cutlet, fillet
snapper	gilled & gutted 60%	fillet, cutlet
trout rainbow	gilled & gutted 90%	fillet
tuna	fillet 90%	g & g
warehou	fillet 95%	cutlet
lobster	whole almost 100%	
mussels	whole 80%	half shell, meat
octopus	whole 100%	
squid	cleaned tubes 90%	whole, crumbed tube
oyster	half shell 99%	whole

7.6 Wholesalers Estimates of Future Demand

Respondents were asked to estimate the future demand for seafood generally and for any particular species from their business over the next five years and the results are summarised in Table 14 below.

Suppliers Forecasts	Increased Demand	Same Demand	Decrease	Don't Know	Total
Sydney	12 (52%)	7 (30%)	1 (4%)	3 (13%)	23
Country	14 (56%)	6 (24%)	1 (4%)	4 (16%)	25
Average	54%	27%	4%	15%	48

Approximately half of the respondents were positive about future demand for seafood, this was twice the percentage of wholesalers who expected demand to remain about the same as current levels and they far exceeded the number of respondents who expected a fall in future demand.

The average of estimated increases by Sydney wholesalers (who expressed positive sentiments about future demand) was 44% over the next five years while the average of increases forecasted by country wholesalers was 52 %.

Thus there were more optimists amongst country wholesalers and the country wholesalers were also more optimistic about the size of future increases than their Sydney colleagues.

Both of the respondents who had expected future demand to decrease were unable to quantify these sentiments.

If we take account of the number of "optimists, "pessimists" and those expecting no change in level of demand and scale up their sales according to their level of optimism/pessimism (expected percentage change in demand) we can produce a broad estimate of the expected net sales increase. Thus the estimate of expected increase in demand, in the year 2000 was approximately 30% on 1994/5 levels.

Interestingly, no particular species was nominated as having an expected change in demand different from the average figure nominated.

Positive sentiments :

The reasons cited for expected increases in demand covered:

- increased awareness of health benefits of eating seafood
- increasing population in the area
- greater usage of fish by restaurants
- more restaurants opening up in the area
- aggressive marketing by the company
- more products and greater variety on offer
- increasing popularity of seafood
- increased use of seafood in smorgasbord dining
- negative perceptions about red meat
- greater use with increasing number of visitors with Olympics
- Australian prices are cheap for foreign visitors.

The most common reason cited (20 % of comments) for a positive sentiment was the increasing awareness of the health benefits of eating seafoods. This attitude and comment was partly related to contemporary media publicity about health benefits for seafood particularly in relation to managing asthma problems.

Negative Sentiments :

The negative sentiments expressed on future seafood demand by respondents included :

- growing customer resistance to high prices, especially for fresh
- demand is dependent on economic conditions
- the move to cheaper dining out especially with caterers
- increasing competition from chicken and other foods

The rising prices of seafood was seen as the major impediment to increasing demand and this factor represented a major difference in attitude between Sydney and Country wholesalers.

Price was mentioned by 10% of Sydney respondents while 28% of Country respondents mentioned high prices and customer resistance to prices as a factor inhibiting business growth. Several country wholesalers highlighted the particular difficulties of selling (high priced) seafood in a depressed rural economy.

7.7 Other Supplier Observations

A third of the suppliers interviewed reported that the seafood industry was becoming far too difficult and margins were declining because of competitive pressures from

- other wholesalers
- or the growth in other takeaway foods businesses such as MacDonalds and other chain operations serving mostly non fish foods.

Related to this increasing competitive price pressure was the increasing distance that Sydney and Wollongong wholesale suppliers were prepared to deliver seafood compared to that of several years ago.

Three wholesale suppliers based in Sydney and three in Wollongong were delivering as far as the ACT where formerly they did not venture to the other cities.

This increasing price competition and geographical range of wholesale suppliers has been partly bought about by the steady increases in price of many key seafoods over the past five years according to respondents.

8. FUTURE DEMAND, SUPPLY and PRICES

Future demand and supply of seafood in the NSW catering industry is related to international supply, demand and prices of the major seafood species groups because NSW is but a tiny producer and just a small scale buyer of seafood in the global markets.

International fish marketing is highly dynamic and forever changing in response to supply and demand issues in key countries and the changes arising from GATT (General Agreement on Tariff and Trade) and WTO (World Trade Organisation) agreements.

Because of the reliance on export markets for many Australian shellfish and the strong reliance on imports for key catering products such as hake, Nile perch, squid and processed prawn products (almost all imports transacted in US\$ term) future prices and hence demand in NSW are essentially dependent on the value of the Australian dollar vis a vis the US\$.

Therefore for the purposes of the following discussion it is assumed that there are no major changes in the value of the Australian dollar over the next four years to 2000.

The outlook for the key species groups from Australian fisheries and aquaculture and major imported products follows.

This discussion is based on an estimated increase in demand of 15% on 1994/5 volumes.

This 15% average figure has been chosen after taking account of the forecasted domestic population growth (from ABS), the expected increase in domestic and international visitor numbers (Sections 5 and 6 Stage three report) and the more optimistic 30% net increase indicated by wholesalers in Section 7.6 above.

8.1 Australian Fisheries Products

The number of commercial fishers in NSW has been declining in the last few years and this downward trend is likely to continue as a result of an ageing population and non renewal of licenses in inland waters and certain coastal fisheries.

Nevertheless this decline in the numbers of licensed fishers is unlikely to have any substantial impact on marine fish landings in the next five years because the total fishing effort is unlikely to be reduced significantly.

The status of the individual fish stocks in NSW and the South East Trawl Fisheries, of interest to the catering sector, is mostly sound and annual supply levels are likely to remain at those of recent years, with the possible exception of orange roughy and jackass morwong according to Australian Fisheries Management Authority (AFMA 1996).

With NSW State managed fisheries the only species likely to record a fall in supply is sand whiting. The growing pressure for reductions in fishing areas and other restrictions on estuarine fishing has led cooperative managers in three of the major coastal lakes to suggest that sand whiting catches are likely to fall if mooted restrictions on the netting of whiting are instigated.

This prospective loss of sand whiting would mostly likely be offset by:

- the more abundant school whiting which are taken offshore in NSW
- replacement by whiting from interstate
- replacement by imported whiting fillets.

Given that :

- Australian fisheries resources are being managed in a sustainable manner
- The general 15% average forecasted increase in demand for seafood in 2000 is less than the annual variations in landings due to biological factors and
- no species was expected to record an above average increase in demand
- all of the key species or products for the catering industry can be sourced from outside NSW if need be,

there is no need for concern from the catering industry as far as volume of supply in the year 2000 is concerned (provided there are no collapses of key fish stocks).

The situation for September 2000 is another matter again. Although the catering industry has learned to live with high prices of fresh local prawns,

orange roughy etc by using frozen product (domestic and imported) there is nevertheless a widespread preference for fresh (never frozen) local product.

The supply and hence prices of fresh product in any particular month are essentially determined by weather and seas conditions as well as seasonal availability. Hence the supply and prices of fresh seafood and availability of local produce for visitors in September 2000 will be dependent to a great extent on weather conditions.

Prolonged inclement weather in NSW in September 2000 would provide a major problem for catering businesses which aim to serve fresh (never frozen) local seafood.

A more specific supply problem for the Olympic period is with prawns, a product of great popularity and importance.

There is usually a seasonal shortage of sea caught prawns in September in NSW and other Australian fisheries and there will almost inevitably be a major shortfall in the supply of fresh whole prawns in September 2000 and very high prices for any product available.

The prospective increases in fresh prawn prices in the weeks of the Olympics are likely to parallel those seen each Christmas ie rises and then falls of about 3 to 5 dollars per kilo at auction/wholesale levels. Price changes in other fresh produce due to acute shortages are less severe.

This shortfall in fresh prawns or other key products will however be overcome by many in the seafood and catering industry in the traditional manner by using frozen product, sea caught or farmed, from the sources which have the most attractive prices.

8.2 Imported Fisheries Products

Australia is a small scale importer of key overseas products such as hake, orange roughy and Nile perch fillets, squid and prawn products hence it is unlikely that there will be any unusual problems in sourcing sufficient supply of these (frozen) products for the year 2000 (provided there are no resource failures).

There are very rarely any lengthy absolute shortages of seafood (particularly frozen product) per se other than the perennial shortfall of fresh prawns at Christmas.

Although almost a third of catering businesses reported difficulties in sourcing seafood, particularly prawns (Section 8.3, Stage Two report) the problem mostly lies with relative abundance and prices rather than a total shortage.

Thus for the year 2000 it is unlikely that importers will not have sufficient stock in cold store to meet demand but wholesalers and catering businesses could face difficulties sourcing product at attractive (ie profitable) prices, particularly if international demand is strong and supplies are relatively low due to resource problems overseas.

Another factor that could exacerbate supply and prices in the year 2000 is the growing demand for many of the popular seafood products from the supermarket industry.

The major supermarket chains are steadily increasing their sales of seafood in NSW, and therefore exerting upward pressures on prices of many fresh and frozen goods.

8.3 Australian Aquaculture Products

Atlantic Salmon

According to salmon industry sources the production and supply of salmon is likely to keep growing at a rate of approximately 10% per annum at current price levels, and supply should meet the expected increases in demand.

It should be noted however that there is currently a Commonwealth government review of the quarantine restriction on the import of unprocessed (ie raw unsmoked salmon).

A lifting of this restriction would probably result in the importation of frozen salmon from various countries and chilled (fresh) Pacific salmon from New Zealand. This would almost certainly mean a decrease in price of uncooked and smoked salmon products for the Australian catering industry.

Barramundi

Barramundi farming in Australia, particularly in the north, is developing rapidly and supply in the year 2000 will have grown to more than double 1994/5 levels according to industry sources. Supply in September 2000 may however not meet demand.

Increased NSW farmed production levels are not expected to alter the Queensland dominance of market share

Prawns

Black tiger prawns are grown in NSW, Queensland and the NT but production levels in NSW are unlikely to continue growing because of a variety of reasons. The much larger Queensland industry is still growing and production is highly likely to increase by more than 50% by the year 2000 according to industry sources. This would have a beneficial impact on supply and help to moderate prices.

There is no fresh NSW product available in September. Supply of fresh farmed prawns from interstate is also at its lowest level at this time of the year too but there is normally ample frozen prawns available from overseas which will help to dampen price rises.

Trout

Hugh Meggit, President of the Australian Trout Farmers Association advises that production is predicted to continue expanding at about 10% per annum into the next five years, provided that there are no new restrictions or impediments introduced by the Environment Protection Authority in Victoria or NSW.

This growth rate is sufficient to meet growing demand for the fish.

Oysters

According to NSW Fisheries statistics about 58000 bags of SRO were sold within NSW with the remainder going interstate. About 60% of oyster production is believed to be consumed in the catering industry according to major oyster distributors.

According to industry sources the SRO and Pacific oyster production are both expected to continue growing at more than 5 % per annum but one critical problem likely to arise in the year 2000 is a shortage of good quality oysters at the time of the Olympics.

There is normally a seasonal shortage of good quality (ie fat) Sydney rock oysters in September, this month is regarded as probably the worst month for oysters in NSW according to R Roberts President of the Oyster Farmers Association.

Several of the more entrepreneurial farmers will be planning production to try and capitalise on the anticipated increased in demand while others will make arrangements with processors to have frozen oysters available in September.

Nevertheless it would appear that there will be a substantial shortfall of prime quality (fresh) Sydney rock oysters in September 2000 and prices are expected to rise accordingly.

Pacific oysters are available in September from Tasmania and South Australia and farmers in these states are also hoping to capitalise on increased demand in 2000 too.

Mussels

NSW is a minor producer of farmed blue mussels with annual production of some 40 tonnes per annum. Development plans for expanding mussel farming in Twofold Bay are with the State government and expected to be approved eventually leading to a steady increase in output.

There is normally a seasonal shortage of fat local mussels from July to September, but the NSW industry is planning production to try and extend its season so that medium to good quality product is available in September 2000. There are however fresh mussels available from Tasmania and WA in September.

The mussel farming industry is still expanding in Tasmania, Victoria and Western Australia and supply will probably match or perhaps even exceed NSW demand in the year 2000.

Silver Perch

This species probably holds the most promise for enhancing fish supplies from NSW aquaculture for the year 2000 as there are currently 119 permit holders for farming silver perch in NSW alone, most not producing fish in 1994/5.

Silver perch is a species native to south east Australia hence it has novelty as well as great tourist value as "bush tucker".

This relatively new aquaculture product will be probably be available in sufficient quantity to meet the demand in the year 2000. Supply is available from NSW and from Queensland farms in September.

New Australian aquaculture products

Mahi mahi fish, snapper, mullet, abalone and the native flat oyster are regarded as possibilities as "new" aquaculture products from NSW for the Olympic year. Snapper is of particular interest as the availability of farmed product would help reduce the reliance on interstate fisheries and overseas supplies.

However the volumes of these products from aquaculture, by the year 2000 would be insignificant and would only serve to add novelty to the menu rather than any substantial improvement in overall seafood supply.

9. GENERAL DISCUSSION AND CONCLUSIONS

9.1 Catering Industry Sales in 1994/5

It has been estimated that businesses in the NSW catering industry bought \$625 million of seafood in 1994/5 which was sold for \$1125 million (Section 9, Stage two Report). It was also estimated that the volume of main species sold totalled 24000 tonnes. This figure marginally exceeds the total reported seafood catch for the State.

The survey with wholesalers indicated that the aggregate volume of all species they sold was 29000 tonnes. Given that wholesalers only account for about three quarters of sales we estimate the most likely aggregate volume of seafood sold by the catering industry in NSW to be some 30000 tonnes.

NSW only supplied about 10% of this tonnage used in 1994/5 and flathead is the only product where NSW product dominates the catering trade.

Details on the volume, cost price and sales value of the main species bought by the catering industry are presented in Section 9.2 Stage Two report. These volumes are different to estimates of total sales by the wholesalers (as to be expected most of the former are larger) but are mostly regarded as reliable except for the attribution of area where the seafood was caught, as discussed further in Section 9.2 below.

Several of the estimates from the catering industry study do not appear as reliable and warrant discussion and qualification: Blue Grenadier (hoki) was a main seller with more than 40% of wholesale suppliers and total sales estimated at 998 tonnes but it was a main seller for an insignificant number of catering businesses. Hence we have taken the mean as the most likely situation, ie approximately 500 tonnes, valued at \$2.1 million.

This divergence of results is probably due to a small percentage of catering businesses buying large amounts of grenadier and these not being well represented in the catering survey sample.

Lobster sales were most likely close to the figure reported by suppliers (440 tonnes) rather than the catering businesses sales figure of 50 tonnes because there are several hundred tonnes of imported lobster sold in NSW and this goes mostly to the catering industry according to follow up research with import statistics and the wholesale trade.

Another finding of note is the difference in the volume of whiting sales reported by wholesalers and by the catering businesses (61 versus 520 respectively). This is probably a reflection of the large number of species (whiting and others) that are sold under the name of whiting (some in the crumbed form) but none of which are main sellers for the vast majority of wholesalers. This problem with the profusion and confusion regarding fish names is discussed below in Section 9.2 below.

Although NSW fishermen produce a great variety of seafood only a dozen species are amongst the top selling products for the catering trade. The majority of products and the greatest volume is sourced from interstate and overseas.

This reliance on interstate and overseas product has evolved essentially because of the climate and the nature of the fisheries resources of the state. NSW ocean waters are not particularly rich hence there are no vast resources of any single fish species that lends itself to the production of cheap fillets all year round.

The lower prices of many interstate and overseas products work against the desire of visitors wanting local produce and it makes business difficult for the local seafood industry which is selling to a very competitive catering industry looking for cost savings. This strong reliance on seafood caught outside NSW is unlikely to change for most species in the foreseeable future.

9.2 Names and Regional Origins of Seafood

9.21 Fish Names and Identification

The multitude of names for a particular fish species has long been a problem for industry, consumers and researchers and the lack of uniform fish names presented some difficulty in this work too.

In NSW different names have been used by fishermen, the SFM sales and data management systems and the NSW Fisheries. Orange roughy is commonly sold in NSW as deep sea perch fillets while another species is sold as ocean perch (fish and fillet) but is also known to fishermen as coral cod. This situation means that landing and sales statistics for some species need to be treated with caution.

As well as the lack of uniformity on names there is still some problem with the naming of certain fish fillets by the seafood and the catering industry, eg "Pacific Dory" for imported catfish fillets.

Another interesting situation is the avoidance of the word shark and the low volume recorded in the catering survey. There is ample anecdotal evidence in the seafood industry that shark fillet is sold in the takeaway trade in significant volume, principally as boneless fish ('n' chips) but it does not appear to be acknowledged by some in the catering or seafood industry.

The lack of knowledge and uncertainty about names of the various species of whiting for example reduces the reliability of data on this product group and points to the need for better knowledge through trade education

The problems with fish names and consumers uncertainty and suspicions about fish names was noted in the 1991 National Fish Consumption Study.

The Department of Primary Industries and Energy and the Fisheries R & D Corporation released a book on marketing names in 1995 as a means of reducing or overcoming some of these problem with fish names.

While this was a commendable initiative this book alone is clearly not sufficient to bring about a standardisation of names and there appears to be a need for a more active and ongoing promotion of these (recommended) names by all sectors of the fishing and aquaculture industry and by government agencies.

The development of a new handbook on Australian seafood by the CSIRO and scheduled for completion in 1997, will also be quite useful in increasing trade knowledge about the various fish and their fillets.

9.22 Perceptions on Geographical Origins

It was evident from the catering industry interviews that many respondents have a poor understanding of the origins of many products they sell, ie where the fish was caught.

This is not surprising for species groups such as whiting which include a number of Australian and overseas products but several others are remarkable.

Twenty percent of respondents reported NSW as the origin of their Atlantic salmon but salmon is not farmed in NSW and only a negligible volume is smoked in the state. According to caterers interviewed the majority of their squid and mussels came from NSW, but NSW production is too small to account for the tonnages reported.

This problem of incorrect perceptions and poor product knowledge is best illustrated by the finding that 31% of respondents thought that hake was caught in NSW (Section 8.7 Stage 2 Report). Hake is not caught commercially in NSW and all hake fillets have long been imported in cartons clearly labelled with the country of origin.

This was a particularly remarkable finding because of the many years that imported hake has been a best seller in the Australian catering industry.

Although some of the incorrect perceptions on the regional origins of loose fresh fish, fillets or shellfish may be due to incorrect information provided by the fish supplier the origins of fresh or frozen packaged seafoods is clearly marked on cartons and many styrene cartons.

The catering industry needs to be better informed of the origins of seafood so that it can market these products more efficiently and also deal more effectively with fish suppliers providing incorrect information.

Therefore this problem regarding the knowledge of regional origins and correct fish names is one that needs to be addressed through education and training by the catering industry and the fishing industry.

9.3 Market Development of Underutilised Species

There are several species available in NSW waters that were not greatly utilised by the catering industry in 1994/5 and that could have a more important role, particularly in meeting the expressed demand for NSW caught seafood. These include yellowfin and albacore tuna, Australian salmon and ribbonfish.

The latter was not mentioned as a best seller to the catering trade as it is virtually unheard of as a "restaurant fish" however this species is exported and well regarded in Japan and Korea and does have attractive edible characteristics. It would appear to be another of Australia's underutilised species awaiting product and market development here.

The tunas are used in the catering trade with moderate success, principally the yellowfin, which is exploited at low to moderate levels according to the recent AFMA annual report. The Sydney Fish Market promoted the use of yellowfin tuna to the public through the print media in September 1996 in response to a record high intake at the market.

The record volumes earlier this year were initially followed by substantial price falls which stimulated demand and brought about a stronger interest and wider demand in tuna. This has in turn helped the SFM to clear larger volumes at prices attractive to fishermen and consumers. Yellowfin tuna can be further promoted to the catering industry as can the cheaper albacore tuna as they both offer tasty boneless fillets at moderate prices.

Australian salmon is not favoured as a table fish and is currently mostly used for canning and bait but it has flavoursome flesh that has received favourable reviews by elements of the Sydney food media and is worthy of product and market development.

All four species are available in September and warrant attention by the NSW fishing and catering industry in preparation and planning for the Olympics.

9.4 Deregulation of Fish Marketing in NSW

The deregulation of fish marketing in NSW scheduled for completion in October 1997 -- when fishermen will be permitted to sell directly to fish merchants and caterers -- represents a great deal of uncertainty for everyone in the distribution chain but particularly the smaller cooperatives.

Three cooperatives reported that they are likely to experience a significant fall in their intake but the vast majority felt that they had taken the necessary measures to ensure members' continued loyalty.

For members of the catering industry with sufficient seafood sales to pay the proposed registration fees for direct buying the greatest noticeable impact of deregulation is likely to be the opportunity to buy directly from the producer and its potential for cost saving and fresher seafood.

But the potential benefits of buying via this shorter and more direct distribution chain are unlikely to be sufficient to actually change the current seafood purchasing practices of the majority of businesses in the catering industry.

For the NSW fishing industry deregulation offers the opportunity for the more entrepreneurial individuals to do their own marketing and distribution, particularly brand marketing, but according to cooperative managers few will actually do so.

This proposed changes in fish marketing regulations is nonetheless bringing about a major assessment of the role of individual cooperatives and hopefully this report on the catering industry will further stimulate NSW cooperatives and companies to examine the benefits and costs of greater services to the catering industry and tourists.

In short the proposed deregulation seems unlikely to substantially alter the volume or prices of seafood available to the catering industry generally although it will bring about some changes in the distribution channels between the NSW producer and the consumer.

9.5 Changes in Catering Industry Sales Since 1990/91

The most notable changes in seafood use by the catering industry since 1990/91 is the decline in volume of orange roughy (sea perch fillet) and the rise in importance of Atlantic salmon. Quantitative comparisons cannot be made because of different methodology and data collection.

The following observations are also noteworthy

- the growing popularity of octopus and tuna
- and of relatively new products such as Nile perch
- and a decline in importance of snapper, lobster and scallops

The decline in importance of orange roughy is mostly a reflection of the reduced supply of this species (Table 15, below) as the Total Allowable Catch has been steadily reduced over the past few years as part of the management of the resource of this species in the South East Trawl Fishery. It does not represent any marked diminution of its popularity as such.

Table 15 Comparison of sales data 1994/5 with 1990/91

Product & origin	1990/ 91		1994/ 95	
	Tonnes	\$/kg	Tonnes	\$/kg
Snapper, NSW	380	6.47	374	6.72*
king prawns, NSW	1050	11.42	689	14.12*
lobster, NSW	87	19.44	74	> 31.0*
Oysters NSW	6100	5.14	5618	5.09
salmon Atlantic, Tas.	2650	12.00	6000	11.17
scallops, Australia	14281	2.97	12199	3.74
roughy orange,	33111	1.25	6527	3.30
flathead	2120	1.51	2127	1.35
S.E. Trawl				
hake fillet, overseas	12379	2.97	12844	3.1
octopus, NSW	296*	3.61*	442*	4.97*

Source: ABARE and SFM*

By contrast, the increasing sales of Atlantic salmon reflect the growth in production and popularity of this well regarded fish species coupled with marginal falls in prices over the past few years. Much of this success is due to the exemplary ongoing market development work of the Tasmania salmon industry.

The rising prices of lobster and scallops (domestic and imported) have been responsible for their decline from the second and fourth most important shellfish in 1990/1 (prawns were and still remain the most popular shellfish).

Local octopus, which is a mostly a by-catch of the prawn trawlers working along the north coast, has increased in volume and prices over this time period because of its growing popularity in the catering industry and for in home dining.

The apparent decline in importance of snapper to the catering industry is probably related to the greater selection of seafood available in 1994/5 compared to that four years earlier coupled with the trend to boneless fillets, products which are not easily or cheaply produced from snapper.

As shown in Table 15 the supply and price of NSW caught snapper has not changed significantly in this period, however the increasing volumes of fresh snapper coming to Sydney from Western Australia since 1991 has probably been responsible for the lack of price increase in snapper in NSW.

9.6 Fishing and Aquaculture Industry Tourism

The fishing industry in NSW has been remarkably reticent to highlight its value to the economy and promote itself and its products to tourists and local residents.

This widespread inaction or inertia is surprising given the fundamental economic importance of fishing and oyster farming to many small NSW towns, the strong pressure in several estuaries to curtail commercial fishing and the large number of people that enjoy "Blessings of the Fleet" type functions and admire the work and produce of commercial fishermen.

No fishermen's cooperatives provides special resources or informational material for the benefit of visitors at its premises and only a few promote their local seafoods in a dedicated manner although almost all sell fresh seafood to the public.

Given the ongoing debate about allocation of fish resources amongst competing parties (principally commercial and recreational fishermen) and the growing importance of tourism, the NSW fishing industry has much to gain by developing a communication and marketing strategy targeted at tourists and the public at large which relies on commercial fishing for its seafood.

The NSW aquaculture industry as a whole also has not taken up the many opportunities for public relations, promotion and added income. Yet there has been ample evidence of the value of tourism to the agriculture industry around Australia in the media.

The tourism survey in this study has demonstrated that tourists are interested in commercial fishing and aquaculture activities and prepared to pay to enjoy the products and related services offered. This expenditure is estimated at more than \$115 million for 1996 (Stage Three report).

Very few aquaculturists have capitalised on the direct economic and public relations value of tourists and tourism: there are only a dozen enterprises which do so in NSW, representing less than 1% of the active aquaculture ventures in the state.

Also, very few aquaculturists or fishing companies participate in the almost ubiquitous and perennial Harvest Festival or regional festivals organised by the local tourism or regional development body.

Half a dozen oyster farmers have substantial resources for the eating of oysters on site. One company has developed a large restaurant while another has developed a range of facilities including a farm tour, restaurant and in-house video monitor continuously screening a corporate promotional film.

Several trout farmers and inland fish hatcheries have converted their farms to tourist facilities offering a range of active and passive pursuits including fish-outs, souvenirs and take home fresh or smoked fish.

The infant silver perch industry in NSW will have a once in a lifetime opportunity to promote this relative new native fish seafood to an international audience during the lead up to the Olympics in September 2000.

The aquaculture industry generally can do much more to promote its produce, develop its markets, provide information and generally promote itself.

The widely acclaimed organisation of a Seafood Industry Award Night in June this year by Sydney Fish Market Pty Ltd showed many fishing and aquaculture business people how effective a professional approach to industry promotion can be.

This study has demonstrated that the value of tourism related to commercial fishing and aquaculture was approximately two thirds that of the seafood produced in NSW in 1994/95.

In NSW fisheries resources are limited, there is a growing interest in ecotourism, info-tainment and study tours, the baby boom generation is nearing retirement, and the supply of commercial fishing and aquaculture related tourism opportunities is rudimentary

Therefore we believe that revenue from such tourism could surpass the value of seafood produced in NSW by the year 2000 if the fishing and aquaculture industry started planning now for strong and creative development.

10. ACKNOWLEDGMENTS

Many individuals, companies and fishing and aquaculture associations around Australia, too many to list, assisted in this study with information and data and deserve our warmest thanks.

We are particularly grateful to the Sydney Fish Market Pty Ltd and to the fishermen's cooperatives which made available their records and generously offered other information.

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12. APPENDIX

Appendix 1

Telecom listings of fish wholesalers in NSW 1994

Area	Number of fish wholesalers
Sydney	134
Hunter	45
Mid N Coast	55
Richmond Tweed	24
Central West	4
Far West	1
Illawarra	47
South Eastern	18
Murray	12
ACT	7

Appendix two
Survey questionnaire

Ruello & Associates
NSW Fish Demand and Catering Study

Date...../...../95

Thank you for agreeing to participate in this study of the demand and importance of seafood to the catering and tourism industry. The results will be used to help the industry plan for developments up to the year 2000.

Business Name

RespondentsName.....

Respondents position Tel

Q1. a Are you responsible for selling seafood from this outlet only or other outlets too ? If 1 outlet go to Q.2

Q 1 b. From how many outlets do you sell ?outlets

Q2. What percentage of your total business turnover (all foods) would be accounted for by your seafood sales (ie finfish and shellfish).
..... %

Q 3. On average how many customers in the catering and restaurant trade including clubs and hotels would you serve per week?

Q. 4. On average how many customers in the takeaway trade (including fish n chips businesses) would you serve per week?

Q 5. Are all your customers located in this region of NSW ? Yes No.....
How far are they located,,,

Q 6. How many employees does the company have in this business

I would now like to ask you some questions on the main species of finfish and shellfish sold by your firm in the last financial year to restaurants, clubs, caterers take aways etc. I would like you to think about an average sort of week or month for 1994/5, considering both summer and winter. We will later convert your weekly (or monthly) sales to an annual figure. Your company's figures will remain confidential and will not appear in any reports.

Q. 7 a Name 8 of your best selling finfish to the **CATERING** sector

[illegible]

Q7b. What % of your finfish sales do these 8 account for % * fillet, cutlet, meat etc

[illegible]

Q 7d. What % of your Shellfish sales do these 8 account for % * whole, on shell, meat etc

Q 7 e. Do you sell any of the following farmed products: prawns, pacific oysters, SRO oysters, trout ? *(if not already mentioned)

[illegible]

Q. 8. Have you experienced any difficulty in getting sufficient supply of any seafood to meet the demand from the catering, restaurant, and takeaway trade in the last few years ?

.....No. *Thank you*

.....Yes. (*Go to Q 9.*)

Q.9.What sourcing problems have you had?.....

.....

.....

Q10.Any specific problems/trouble?.....

.....

.....

Q.11 Thinking of the next 5 years do you consider that demand for finfish and shellfish will increase, decrease or remain the same for you ?

..... Incr. Decr Same

Q.12. By what percentage%

Q.13. Why do you think that?.....

.....

.....

Q. 14. Do you foresee any particular product which will experience a change in demand different from the average figure you nominated

.....

Q. 15. Thinking of the next 5 years do you consider that there will be problems sourcing seafood to meet the demand in year 2000 ?.....

.....

Q16. Any particular species?.....

.....

Q17. Do you have any other observations or comments you would like to make ?

.....

.....

Thank you for taking the time to help us.

PART TWO REPORT

DEMAND FOR SEAFOOD IN THE CATERING TRADE

G Peacock and J Cooke

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APPENDIX 1: Questionnaire

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1. EXECUTIVE SUMMARY

1.1 Background to Stage 2 - Demand for Seafood in the Catering Sector

The NSW fishing industry identified a need to have a better understanding of the future demand for seafood from the catering sector and an assessment of the importance of seafood to visitors. Therefore, the primary objective of this research was:

To assess the importance of, and demand for, seafood by the catering sector and the likely future trend as perceived by the catering sector.

In total, 406 businesses in the NSW catering sector qualified for inclusion in the survey - seafood is prepared by the business. All interviews were undertaken by the Sydney field office of Yann Campbell Hoare Wheeler between the 15th September and 12th October, 1995, with the person responsible for purchasing fish and shellfish.

1.2 Key Findings

1.2.1 Characteristics of the NSW Catering Sector

- It is estimated that 14,728 catering businesses in NSW prepare seafood.
- In a year, an estimated 468 million customers are served by the NSW catering sector - 343 million are locals, 99 million are domestic visitors and 26 million are international visitors (57% reported that they do not serve international visitors).

- As a reflection of the significance of seafood to catering businesses, respondents were asked to provide an estimate of the proportion of their food turnover (all food) which would be accounted for by seafood sales. On average, seafood sales represent 30.7% of food turnover within the NSW catering sector (based on average of proportions reported by respondents).

1.2.2 Importance of Seafood to the NSW Catering Sector

- Almost one in two (47%) non-takeaway businesses in NSW actively promote local or NSW seafood on menus (eg. fish of the day).
- An upwards trend in the share of seafood meals is indicated in the table below.

	1990	Current - 1995	2000
Seafood as a % of Entrees	28.0%	30.3%	33.2%
Seafood as a % of Main Meals	25.2%	28.7%	31.6%

- In the view of those in the catering sector, 39% believe that it is extremely or very important to offer NSW caught seafood to domestic and international visiting customers.

1.2.3 Demand for Seafood from the NSW Catering Sector

- It is estimated that businesses in the NSW catering sector **bought \$625 million of seafood** in the 1994/95 financial year.
- On average, the mark-up on finfish is 87% and on shellfish it is 76%.

- If the average mark-up is assumed (80%), the **sales value of seafood bought by the NSW catering sector in the 1994/95 financial year is \$1,125 million.** Broadly this can be allocated by customers:

	Buy Value	Sell Value
Local customers	\$457 million	\$823 million
Domestic visitors	\$127 million	\$229 million
International visitors	\$41 million	\$73 million

Estimates have been produced by species (refer to Section 9.2).

- 86% of businesses in the NSW catering sector source seafood from just the one type of supplier (and in 86% of instances "local" suppliers are used - 33% source at least some seafood from a local NSW fish wholesaler).
- It is estimated that 24,000 tonne of the **main seafood species** (excluding oysters) was bought by the NSW catering sector in the 1994/95 financial year. This is not directly comparable to the estimated value figure of \$625 million - refer to Section 9.1 for an explanation.
- In the last five years, almost two in five (37%) catering businesses in NSW have found that they have not been able to buy the full amount of any particular species or product they want - often prawns (sourcing problems could be price related, rather than an absolute scarcity).

2. INTRODUCTION

A recent Queensland study has shown that seafood is an important part of the visitors' food consumption in coastal areas and there is ample anecdotal evidence that seafood is a major part of the attraction for visitors to NSW too. The supply of fish from wild fisheries is expected to remain steady while demand is bound to increase, particularly in the lead up to the Olympic Games in 2000.

The NSW fishing industry therefore needs to have a better understanding of the future demand for seafood from the catering sector and an assessment of the importance of seafood to visitors.

3. RESEARCH OBJECTIVES

The results contained in this report are of Stage 2. The primary objective of which was:

To assess the importance of, and demand for, seafood by the catering sector and the likely future trend as perceived by the catering sector.

The issues explored in the catering sector survey included:

- current usage of seafood by main species group;
- the importance and expectations that local customers and visitors have concerning the availability of locally caught fish and seafood on the menu;
- likely future trends in demand for the main seafood species by local customers and visitors; and
- the proportion of fish and seafood consumption by tourists, so that the value of NSW seafood in the catering and hospitality industries can be calculated.

4. RESEARCH METHODOLOGY

In total, 480 businesses in the NSW catering sector completed the screening questionnaire, of which 406 qualified for inclusion in the survey - seafood is prepared by the business. All interviews were undertaken by the Sydney field office of Yann Campbell Hoare Wheeler between the 15th September and 12th October, 1995, with the person responsible for purchasing fish and shellfish. The administered questionnaire is appended.

Five catering classifications qualified for inclusion in the survey as follows:

- takeaway food retailing (ASIC 4886)*
 - fish and chip shops
 - other takeaway outlets(excluding chain takeaway outlets, such as McDonalds).
- cafes and restaurants (including catering establishments) (ASIC 9231)
- pubs, taverns and bars (mainly drinking places) (ASIC 9232)
- accommodation (ASIC 9233)
 - hotel (mainly for accommodation)
 - motel
 - other accommodation place
- clubs (hospitality) (ASIC 9241, 9242, 9243, 9244)
 - social or sporting clubs

* ASIC - Australian Standard Industrial Classification

The sample was not proportional to the structure of the NSW catering sector. In fact this was controlled deliberately by establishing quotas on the basis of:

- type of catering business;
- size of catering business; and
- location of catering business.

This quota controlled design was necessary to enable those "cells" with a small population to be adequately represented in the sample - to provide reliable estimates of the volume of seafood purchased. Results have been weighted to reflect the population distribution by type, size and location of catering businesses in NSW. The structure of the catering sector population by location, according to the Australia Bureau of Statistics Business Register, March 1994, is appended.

The NSW catering sector sample and population distributions are reflected in the tables below.

NSW CATERING SECTOR SAMPLE

	Up to 9 employees	10 to 49 employees	50 or more employees	Total
Takeaway Food Retailing	70	5	-	75 (18%)
Cafe or Restaurant	54	32	5	91 (22%)
Pub, Tavern or Bar	36	30	6	72 (18%)
Accommodation	27	44	23	94 (23%)
Clubs (hospitality)	23	25	26	74 (18%)
Total	210 (52%)	136 (33%)	60 (15%)	406 (100%)

NSW CATERING SECTOR POPULATION

	Up to 9 employees	10 to 49 employees	50 or more employees	Total
Takeaway Food Retailing	4,134	598	146	4,878 (28%)
Cafe or Restaurant	4,689	1,346	87	6,122 (35%)
Pub, Tavern or Bar	915	720	38	1,673 (10%)
Accommodation	2,256	538	100	2,894 (17%)
Clubs (hospitality)	857	811	194	1,862 (10%)
Total	12,851 (74%)	4,013 (23%)	565 (3%)	17,429 (100%)

The findings of this study are presented in six sections as follows:

- understanding the NSW catering sector;
- profile of the NSW catering sector preparing seafood;
- the importance of seafood to the NSW catering sector;
- seafood supplied to the NSW catering sector;
- demand for seafood from the NSW catering sector (volume and value estimates); and
- likely future trends for seafood in the NSW catering sector.

The tables and charts prepared in this report are based on the weighted results from the 406 catering businesses who were identified as preparing seafood. In some instances, the results may not add to 100% due to rounding effects.

Where possible comparisons have been made to:

- "An Examination of Links Between Tourism, Tourist Expectations and the Importance of Seafood in Restaurants of the Cairns Region", July 1993.

Prepared for the Queensland Commercial Fisherman's Organisation by the Department of Geography, James Cook University of North Queensland.

- "National Seafood Consumption Study - Trade Supplies to the Public for Out-of-Home Consumption", April 1992.

Prepared for the Fishing Industry Research and Development Council by PA Consulting.

5. UNDERSTANDING THE NSW CATERING SECTOR

5. UNDERSTANDING THE NSW CATERING SECTOR

5.1 Structure of the NSW Catering Sector

The Australian Bureau of Statistics keeps an accurate record of the number of all businesses operating throughout Australia by employment size. Table 5.1 shows the number of NSW businesses in the catering sector by employment size.

Overall, **this survey is representing 17,429 catering businesses** broken down as follows:

- 4,878 takeaway outlets (28%);
- 6,122 cafes or restaurants (35%);
- 1,673 pubs, taverns or bars (10%);
- 2,894 accommodation places (17%); and
- 1,862 clubs (10%).

Three in four (74%) NSW catering businesses employ between 1 and 9 employees (full time, part time or casual). Another 23% employ between 10 and 49 employees and a minority (3%) of NSW catering businesses employ 50 or more employees.

5.1

STRUCTURE OF THE NSW CATERING SECTOR

Base: Catering Business

	TOTAL	EMPLOYMENT SIZE		
		1-9	10-49	50+
TAKEAWAY	4,878	4,134	598	146
CAFE/RESTAURANT	6,122	4,689	1,346	87
PUB/TAVERN/BAR	1,673	915	720	38
ACCOMMODATION	2,894	2,256	538	100
CLUBS	1,862	857	811	194
TOTAL	17,429	12,851	4,013	565

Source: Australian Bureau of Statistics, Business Register, March 1994.

5.2 Incidence of Seafood Preparation

In total, 480 catering businesses were contacted, representing the 17,429 in the catering sector. Pubs, taverns and bars, accommodation places and clubs were questioned on their preparation of food. Contact with these businesses revealed that:

- 97% of pubs, taverns and bars in NSW cook food;
- 82% of accommodation places prepare food; and
- 73% of clubs prepare food.

All 480 catering businesses were then asked if they prepare seafood (fish or shellfish) and the following was found:

- 86% of takeaway food retailing businesses prepare seafood;
- 91% of cafes and restaurants prepare seafood;
- 92% of all pubs, taverns or bars prepare seafood;
- 74% of all accommodation places prepare seafood; and
- 72% of all clubs prepare seafood.

In total, it is estimated that **14,728 catering businesses in NSW prepare seafood** - 85% of all catering businesses in NSW. These 14,728 catering businesses are represented by the 406 qualifying businesses for the survey:

- 6,733 in the Sydney area;
- 4,792 in Northern NSW; and
- 3,203 in Southern NSW.

5.2

INCIDENCE OF SEAFOOD PREPARATION

Base: All Contacts

	SAMPLE SIZE	WTD. CATERING BUSINESSES	INCIDENCE OF FOOD PREPARA- TION %	INCIDENCE OF SEAFOOD PREPARA- TION %	WTD. CATERING BUSINESSES PREPARING SEAFOOD
TAKEAWAY FOOD RETAILING	87	4,878	100	86	4,176
CAFE/RESTAURANT	99	6,122	100	91	5,547
PUB/TAVERN/BAR	79	1,673	97	92	1,537
ACCOMMODATION	113	2,894	82	74	2,132
CLUBS	102	1,862	73	72	1,336
TOTAL	480	17,429	94	85	14,728

Question S3: Is cooked food prepared by this business?

Question S4: And is seafood (fish or shellfish) prepared by this business?

**6. PROFILE OF THE NSW CATERING SECTOR
PREPARING SEAFOOD**

6. PROFILE OF THE NSW CATERING SECTOR PREPARING SEAFOOD

6.1 Number of Customers Served in an Average Week

The 406 catering businesses which prepare seafood (representing 14,728 businesses in the population), were asked to indicate how many customers (or meals) they serve in an average week. This is one measure of the size of the business. The results, weighted to the population, are shown in Table 6.1.

Just over two in five (44%) businesses in the catering sector serve up to 300 customers in an average week. Another 29% serve between 301 and 900 customers each week and 20% serve at least 1,000 customers in an average week. Seven percent were uncertain of the number of customers served per week. Excluding these businesses, the respective incidences are 47%, 31% and 22%.

On average, each catering business serves 612 customers per week and this differs by the type of catering business:

- 891 in takeaway outlets;
- 732 in clubs;
- 528 in restaurants;
- 408 in accommodation places; and
- 380 in hotels (mainly drinking places).

It is estimated that about **9 million customers are served by the NSW catering sector each week** - average multiplied by the number of businesses - distributed as follows:

- 3.7 million by takeaway outlets;
- 2.9 million by restaurants;
- 1 million by clubs;
- 0.87 million by accommodation places; and
- 0.58 million by hotels.

In a year, an estimated 468 million customers are served by the NSW catering sector.

6.1 NUMBER OF CUSTOMERS SERVED IN AN AVERAGE WEEK

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					EMPLOYMENT SIZE		
		Take-away	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	1-9	10-49	50+
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(210)	(136)	(60)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(10,514) %	(3,799) %	(415) %
1-50	9	2	8	7	26	9	12	1	-
51-100	9	1	10	19	16	9	11	6	-
101-200	16	7	24	16	13	12	16	16	-
201-300	10	8	10	16	3	22	11	9	1
301-450	9	8	12	14	5	3	9	10	1
500	10	16	5	11	7	11	9	13	6
501-900	10	14	9	3	12	7	7	18	12
1000	8	17	3	4	1	10	7	7	19
1001-2000	8	10	7	6	9	7	7	9	25
2001-9000	4	6	4	0	1	7	2	6	33
DON'T KNOW	7	12	6	3	6	2	8	4	3
TOTAL	100	100	100	100	100	100	100	100	100
AVERAGE	612	891	528	380	408	732	489	761	2201
ESTIMATE OF CUSTOMERS SERVED IN A WEEK ('000)	9,014	3,721	2,929	584	870	978	5,141	2,891	913

Question 1(a): In an average week, how many customers (or meals) would be served by the business?

6.2 Meals Served in an Average Week by Non-Takeaway Businesses

6.2.1 Entrees Served in an Average Week

Respondents in non-takeaway businesses were asked to provide an estimate of the number of entrees served in an average week. Overall, on average 158 entrees are served by each of the 10,552 businesses, equating to an **estimated 1.7 million entrees per week**.

Almost one in four (23%) of these businesses do not serve entrees. This is more common among hotels (42%) and accommodation places (32%), than restaurants (16%) or clubs (16%).

Also the smaller the business, the less likely they are to prepare entrees - 26% of those who employ up to 9 people compared with 17% of those employing 50 or more people.

6.2.1

ENTREES SERVED IN AN AVERAGE WEEK

Base: Non-Takeaway Businesses Preparing Seafood

	TOTAL	CATERING TYPE				EMPLOYMENT SIZE		
		Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	1-9	10-49	50+
RESPONDENTS	(331)	(91)	(72)	(94)	(74)	(140)	(131)	(60)
WTD. RESP.	(10,552) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(6,899) %	(3,238) %	(415) %
NONE	23	16	42	32	16	26	18	17
1-40	17	14	17	24	15	22	6	2
50-90	12	13	5	18	10	15	8	1
100	6	6	10	1	12	4	11	7
101-200	17	21	12	7	22	14	24	19
OVER 200	18	23	10	11	19	11	30	48
DON'T KNOW	6	7	4	6	6	7	4	6
TOTAL	100	100	100	100	100	100	100	100
AVERAGE	158	179	79	127	213	93	219	733
ESTIMATE OF ENTREES SERVED IN A WEEK ('000)	1,667	993	121	271	285	642	709	304

Question 1(b): Roughly how many entrees would be served by the business in an average week?

6.2.2 Main Meals Served in an Average Week

The same non-takeaway businesses were asked to provide an estimate of the number of main meals served by the business in an average week. It is estimated that an average of 454 main meals are served by each of the 10,552 non-takeaway businesses, equating to **4.8 million main meals each week - 250 million main meals each year.**

In terms of the distribution of these main meals:

- 28% serve up to 100 main meals per week;
- 28% serve between 101 and 300 main meals per week;
- 29% serve between 301 and 1000 main meals per week; and
- 9% serve over 1,000 main meals per week.

Six percent were uncertain of the number of main meals served in a week.

6.2.2

MAIN MEALS SERVED IN AN AVERAGE WEEK

Base: Non-Takeaway Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE				EMPLOYMENT SIZE		
		Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	1-9	10-49	50+
RESPONDENTS	(331)	(91)	(72)	(94)	(74)	(140)	(131)	(60)
WTD. RESP.	(10,552)	(5,547)	(1,537)	(2,132)	(1,336)	(6,899)	(3,238)	(415)
	%	%	%	%	%	%	%	%
1-40	9	5	7	23	8	14	1	-
50-90	12	8	17	19	13	16	5	-
91-100	7	9	7	3	3	9	4	-
101-200	17	23	13	10	7	18	17	1
201-300	11	10	15	5	22	11	12	2
301-500	17	18	24	12	13	15	23	6
501-1000	12	12	6	12	19	5	23	43
1001 PLUS	9	8	9	9	13	5	12	47
DON'T KNOW	6	7	3	6	2	7	3	1
TOTAL	100	100	100	100	100	100	100	100
AVERAGE	454	447	405	373	658	279	603	2021
ESTIMATE OF MAIN MEALS SERVED IN A WEEK ('000)	4,791	2,480	623	795	879	1,925	1,953	839

Question 1(b): Roughly how many main meals would be served by the business in an average week?

6.3 The Distribution of Customers Served by the NSW Catering Sector

6.3.1 The Customer Base for the NSW Catering Sector

It is estimated that **9 million customers are served by the NSW catering sector each week**. The distribution of these customers is shown in the accompanying chart.

By catering type, the following distribution is estimated:

- 41% served by takeaway outlets;
- 32% by restaurants;
- 11% by clubs;
- 10% by accommodation places; and
- 6% by hotels.

In terms of the customer type:

- 73% are local customers (they live nearby) - 6.6 million;
- 21% are domestic visitors - 1.9 million; and
- 6% are international visitors - 0.5 million.

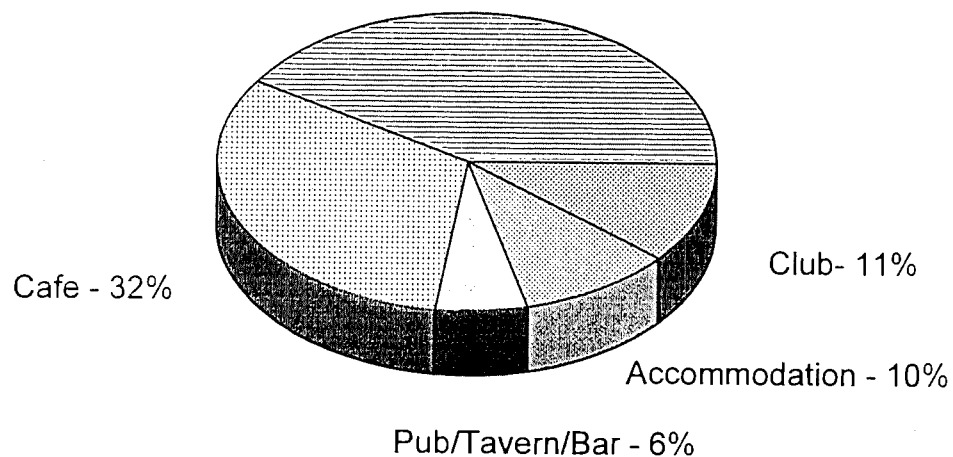
An estimated 125 million visitors are served by the NSW catering sector each year - 2.4 million per week x 52 weeks.

The Customer Base for the NSW Catering Sector

Catering Type

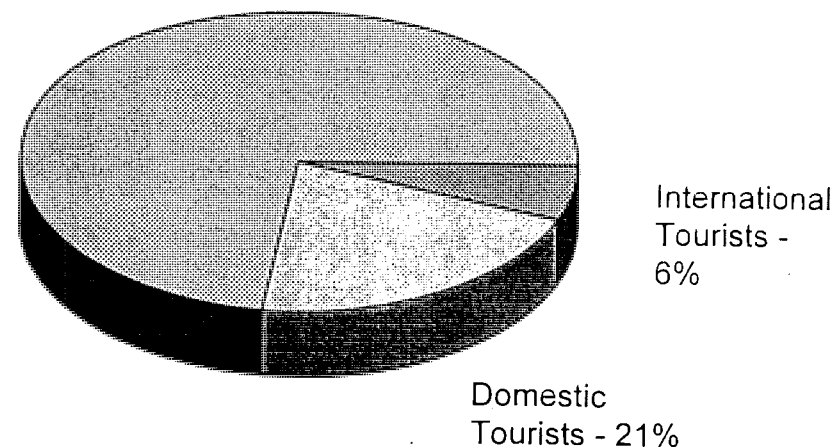
Estimated Customers Served
in a Week - 9 million

Takeaway - 41%



Customer Mix

Local Customers - 73%



6.3.2 Customers Served in an Average Week

Table 6.3.2 presents a breakdown of the customer mix by the type of catering business. As noted previously, 73% of customers served each week are locals, 21% are domestic visitors and 6% are international visitors.

As would be expected:

- takeaway outlets serve a disproportionately high number of local customers (81% compared with 73% in total); and
- accommodation places serve a disproportionately high number of domestic tourists (42% compared with 21% in total).

6.3.2**CUSTOMERS SERVED IN AN AVERAGE WEEK**

Base: Estimated Customers Served in an Average Week

	BASE	LOCAL CUSTOMERS %	DOMESTIC TOURISTS %	INTERNATIONAL TOURIST %	TOTAL %
TOTAL	(9,013,536)*	73	21	6	100
CATERING TYPE					
TAKEAWAY	(3,724,992)	81	15	4	100
CAFE/RESTAURANT	(2,928,816)	70	22	8	100
PUB/TAVERN/BAR	(584,060)	64	29	7	100
ACCOMMODATION	(869,856)	53	42	5	100
CLUB	(977,952)	74	22	4	100

* Note: Total of specific catering types is 9,085,676 due to rounding effects.

6.3.3 Distribution of Customers Served in an Average Week

By applying the total number of customers served in a week to the proportion of customers who are locals, domestic and international tourists, it is possible to ascertain an estimate of each type of customer served each week. This is presented in Table 6.3.3.

Of all catering businesses in NSW which prepare seafood:

- only 5% indicated that they do not serve locals - mainly accounted for by accommodation places;
- 17% indicated that domestic tourists are not a part of their customer base; and
- **almost three in five (57%) catering businesses do not serve international tourists:**
 - 68% of clubs;
 - 65% of hotels;
 - 61% of restaurants;
 - 49% of accommodation places; and
 - 49% of takeaway outlets.

6.3.3

DISTRIBUTION OF CUSTOMERS SERVED IN AN AVERAGE WEEK

Base: Catering Businesses Preparing Seafood

RESPONDENTS WTD. RESP.	TOTAL (406) (14,728) %	CUSTOMER MIX		
		Local (406) (14,728) %	Domestic Tourists (406) (14,728) %	International Tourists (406) (14,728) %
NONE	-	5	17	57
1-50	9	11	34	26
51-100	9	11	14	4
101-200	16	15	13	2
201-300	10	11	4	0
301-450	9	14	3	1
451-500	10	5	1	1
501-900	10	10	5	1
901-1000	8	2	0	-
1001-2000	8	7	1	0
2001-9000	4	2	0	0
DON'T KNOW	7	7	7	7
TOTAL	100	100	100	100

Question 1(a): In an average week, how many customers (or meals) would be served by the business?

Question 1(c): And over a year roughly what proportion of your customers would be....?

**7. THE IMPORTANCE OF SEAFOOD TO THE NSW
CATERING SECTOR**

7. THE IMPORTANCE OF SEAFOOD TO THE NSW CATERING SECTOR

7.1 Proportion of Food Turnover Represented by Seafood Sales

As a reflection of the significance of seafood to catering businesses, respondents were asked to provide an estimate of the proportion of their food turnover which would be accounted for by seafood sales. Their responses are shown in the accompanying chart.

On average, **seafood sales represent 30.7% of food turnover within the NSW catering sector** and by the type of catering business:

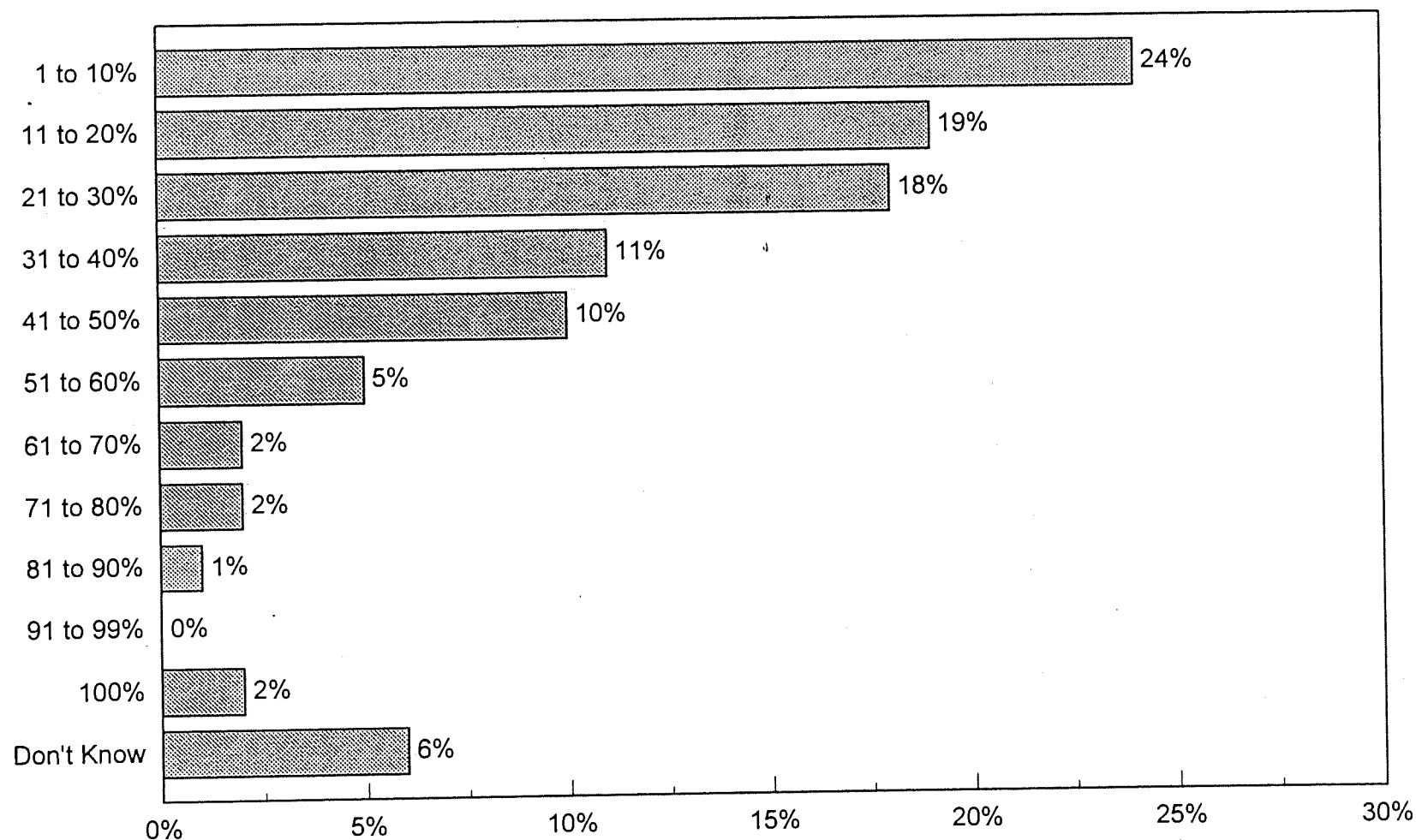
- 36% of food turnover in takeaway outlets;
- 31% of food turnover in restaurants;
- 30% of food turnover in clubs;
- 26% of food turnover in hotels; and
- 24% of food turnover in accommodation places.

Overall, seafood accounts for:

- a mere 1% to 10% of total food turnover in 24% of catering businesses in NSW (35% of takeaway outlets);
- 11% to 30% of food turnover in another 37% of businesses;
- 31% to 50% of food turnover in 21% of catering businesses; and
- in only 12% of catering business does seafood represent more than 50% of total food turnover (24% of takeaway outlets) - 13% excluding don't know responses.

Six percent of businesses were unable to provide an estimate.

Proportion of Food Turnover Represented by Seafood Sales



**On average, seafood sales represent 30.7% of food turnover
in catering businesses which prepare seafood.**

Q17: What proportion of your food turnover would be accounted for by your seafood (fish or shellfish) sales?

Base: Catering Businesses Preparing Seafood (n= 406 : N= 14,728)

8102.PRE



7.2 Active Promotion of Local or NSW Seafood on Menus by Non-Takeaway Businesses

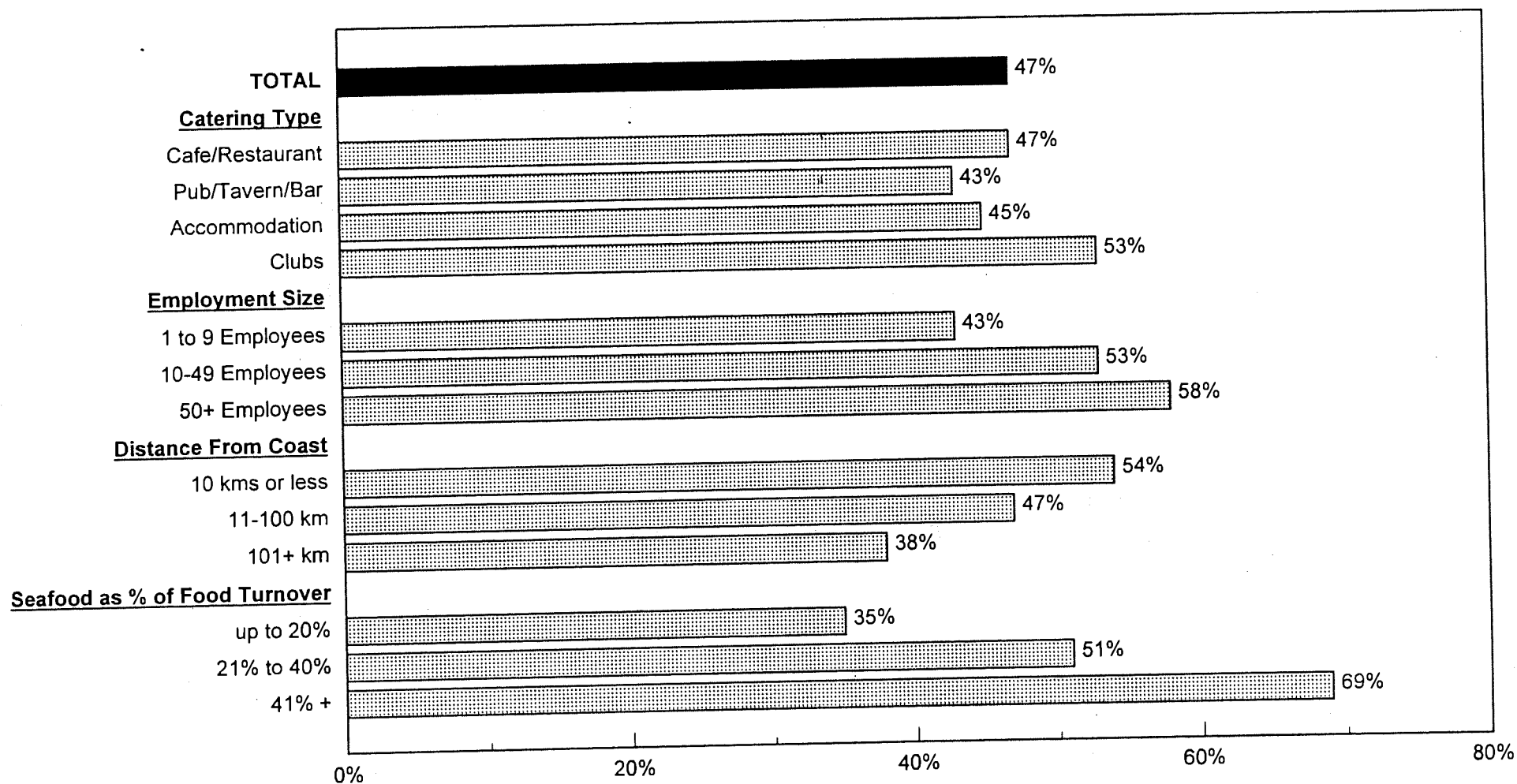
The 331 non-takeaway businesses (10,552 when weighted to the population) were asked if they actively promote local or NSW seafood on their menu. For example, if they promote a fish of the day.

Almost one in two (47%) non-takeaway businesses in NSW do, in some sense, promote local or NSW seafood to their customers. There are some interesting differences by business classification:

- larger businesses, that is, those employing 50 or more people are more likely to promote local seafood (58%) than are smaller businesses (43% of those employing up to 9 people);
- **those closer to the coast are more likely to promote local seafood - 54% of those within 10km of the coast compared with 38% of those businesses over 100km from the coast; and**
- where seafood is a fairly significant component of food turnover (ie. 41% or more) active promotion of local or NSW seafood is more prevalent (69%).

However, it would seem that active promotion of seafood by NSW catering businesses is slightly less prevalent than that for restaurants in the Cairns region (54% for coastal NSW catering businesses compared with 64% for the Cairns region).

Active Promotion of Local or NSW Seafood on Menus by Non-Takeaway Businesses



Q3: Do you actively promote local or NSW seafood on your menu (fish of the day etc.)?

8102.PRE

Base: Non-Takeaway Catering Businesses Preparing Seafood (n= 331: N = 10,552)

7.3 Proportion of Meals Served in Last Month Which Included Seafood

7.3.1 Proportion of Entrees Including Seafood

Respondents in non-takeaway businesses (331 sampled) were asked to think about the entrees prepared over the month prior to interview (for lunch and dinner) and to estimate what proportion would have included seafood, that is fish or shellfish. They were also asked to estimate the significance of seafood, in the same business, five years ago. The **distribution of responses** is shown in Table 7.3.1 - it **does not take into account the actual number of entrees** prepared by each business.

Five years ago, on average 28.0% of entrees in non-takeaway businesses were estimated to have included seafood. Today a slightly higher proportion of entrees, on average, include seafood - 30.3%.

At present, almost one in three (32%) catering businesses do not include seafood among their entrees:

- 50% of hotels;
- 39% of accommodation places;
- 27% of restaurants; and
- 23% of clubs.

Seafood accounts for:

- between 1% and 30% of entrees in one in four (25%) businesses;
- between 31% and 50% of entrees in another one in four (23%) businesses; and
- **just over one in five (21%) businesses feel that over 50% of their entrees currently include seafood.**

Seafood entrees appear slightly more important to those businesses **located closer to the coast (within 10km), where seafood based entrees represented, on average, 35.2% of entrees today.**

Applying the number of entrees served in an average week to the proportion of entrees which included seafood, for each non-takeaway catering business, provides an indication as to the **total number of seafood based entrees served in an average week. On average, 65 seafood based entrees are prepared by each of the 10,552 businesses, equating to an estimated 690,000 seafood based entrees per week.**

In comparison to the study prepared for the Cairns region, seafood based entrees appear less significant in NSW:

- 50% of entrees prepared by restaurants in the Cairns region included seafood;
- 41.1% of entrees (average of 65 seafood entrees/158 entrees) prepared by non-takeaway catering businesses in NSW included seafood - and 40% for those catering businesses located within 10km of the coast.

7.3.1

PROPORTION OF ENTREES INCLUDING SEAFOOD

Base: Non-Takeaway Catering Businesses Preparing Seafood

	5 YEARS AGO*	LAST MONTH
RESPONDENTS	(217)	(331)
WTD. RESP.	(6,771)	(10,552)
	%	%
NONE	36	32
1% TO 10%	9	8
11% TO 20%	9	8
21% TO 30%	7	9
31% TO 40%	10	7
41% TO 50%	9	16
51% TO 60%	7	8
61% TO 70%	3	2
71% TO 80%	3	5
81% TO 90%	2	2
91% TO 99%	1	1
100%	4	3
TOTAL	100	100
AVERAGE % OF ENTREES INCLUDING SEAFOOD	28.0%	30.3%

* Excludes don't know which accounted for 36% of responses.

Question 4(a): Thinking of the entrees (lunch and dinner) prepared over the last month, roughly what proportion included seafood, that is, fish or shellfish? It could be sourced from anywhere.

Question 4(c): If you were to think back to five years ago, what proportion of entrees prepared would have included seafood (fish or shellfish)?

7.3.2 Proportion of Main Meals Including Seafood

Respondents in non-takeaway businesses (331 sampled) were also asked to estimate the proportion of main meals including seafood which were prepared over the month prior to interview (for lunch and dinner) and five years ago. Responses are shown in Table 7.3.2. Again it does not take account of the absolute number of main meals prepared.

On average, five years ago 25.2% of main meals prepared by non-takeaway outlets were thought to include seafood. Today a slightly higher proportion of main meals include seafood - 28.7%. Entrees including seafood are marginally more popular than are main meals which include seafood.

Only a minority (4%) of catering business do not prepare any main meals which include seafood - of course it must be remembered that those catering businesses which do not prepare seafood were screened out of this study.

Seafood accounted for:

- 1% to 30% of main meals in almost two in three (64%) non-takeaway businesses;
- 31% to 50% of main meals in one in five (22%) businesses; and
- **over 50% of main meals in one in ten (10%) catering businesses.**

Again seafood appears slightly more important to **catering businesses located closer to the coast - within 10km - with an average of 32.6% main meals including seafood.**

Applying the number of main meals served in an average week to the proportion of main meals which included seafood, for each non-takeaway catering business, provides an indication as to the **total number of seafood based main meals served in an average week. On average, 130 seafood based main meals are prepared by each of the 10,552 businesses, equating to an estimated 1.4 million seafood based main meals per week.**

In comparison to the study prepared for the Cairns region, seafood based main meals appear less significant in NSW:

- 39% of main meals prepared by restaurants in the Cairns region included seafood;
- 28.6% of main meals (average of 130 seafood main meals/454 main meals) prepared by non-takeaway catering businesses in NSW included seafood - and 32.7% for those located within 10km of the coast.

7.3.2

PROPORTION OF MAIN MEALS INCLUDING SEAFOOD

Base: Non-Takeaway Catering Businesses Preparing Seafood

	5 YEARS AGO*	LAST MONTH
RESPONDENTS	(203)	(331)
WTD. RESP.	(6,247)	(10,552)
	%	%
NONE	14	4
1% TO 10%	22	17
11% TO 20%	18	21
21% TO 30%	16	26
31% TO 40%	9	10
41% TO 50%	13	12
51% TO 60%	3	5
61% TO 70%	2	3
71% TO 80%	1	2
81% TO 90%	1	0
91% TO 99%	0	-
100%	1	-
TOTAL	100	100
AVERAGE % OF MAIN MEALS INCLUDING SEAFOOD	25.2%	28.7%

* Excludes don't know which accounted for 41% of responses.

Question 4(b): Thinking of the main meals (lunch and dinner) prepared over the last month, roughly what proportion included seafood (i.e. fish or shellfish)?

Question 4(d): And what proportion of main meals prepared (five years ago) would have included seafood (fish or shellfish)?

7.4 Perceived Importance of NSW Caught Seafood to Customers

All 406 catering businesses were asked, in the view of your local customers how important do you think it is that you offer NSW caught seafood? The same question was repeated for those with domestic or international customers. A five point importance scale was used.

The chart on the facing page summarises the results and shows that there is little perceived difference by customer type. More detail is presented in Tables 7.4.1 and 7.4.2.

In regard to **local customers**:

- one in ten (10%) caterers consider that the offer of NSW caught seafood is extremely important to locals; and
- a further one in three (31%) consider it very important - **two in five (41%) consider it important to local customers.**

One in three (33%) believe that the offer of NSW caught seafood is not at all important to their local customers.

Similar results were found for those who serve domestic and/or international visitors:

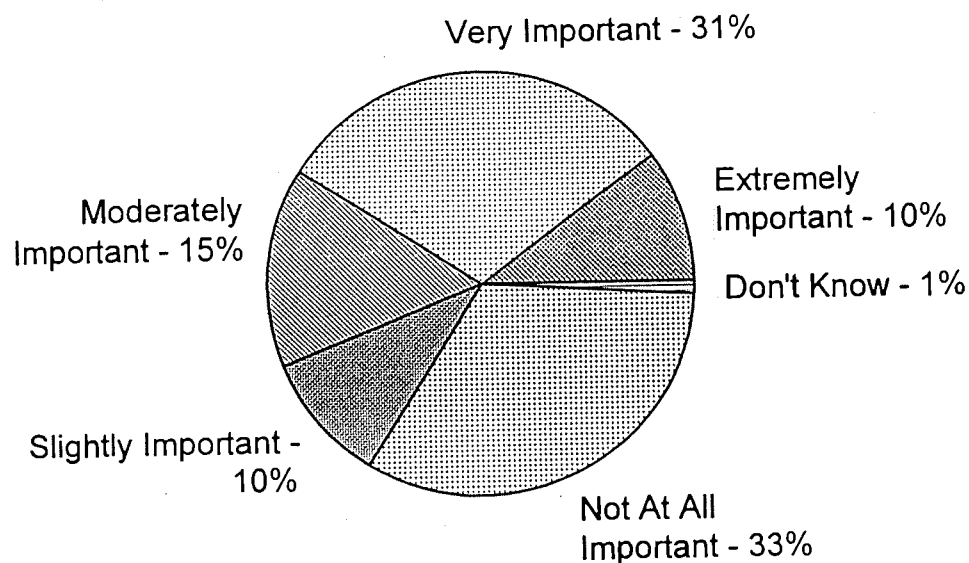
- 11% consider that offering NSW seafood is extremely important to tourists; and
- 28% consider that it is very important to offer NSW caught seafood - **39% believe that this offer is important to tourists.**

Another one in three (33%) catering businesses feel that it is not at all important to offer NSW caught seafood to tourists.

In those businesses where seafood accounts for at least 41% of their food turnover, the importance of offering NSW caught seafood increases in importance - 18% extremely important. **A disproportionately high number of respondents in takeaway outlets and clubs consider the offer of NSW caught seafood is not at all important to their customers (refer to Table 7.4.1 and 7.4.2).**

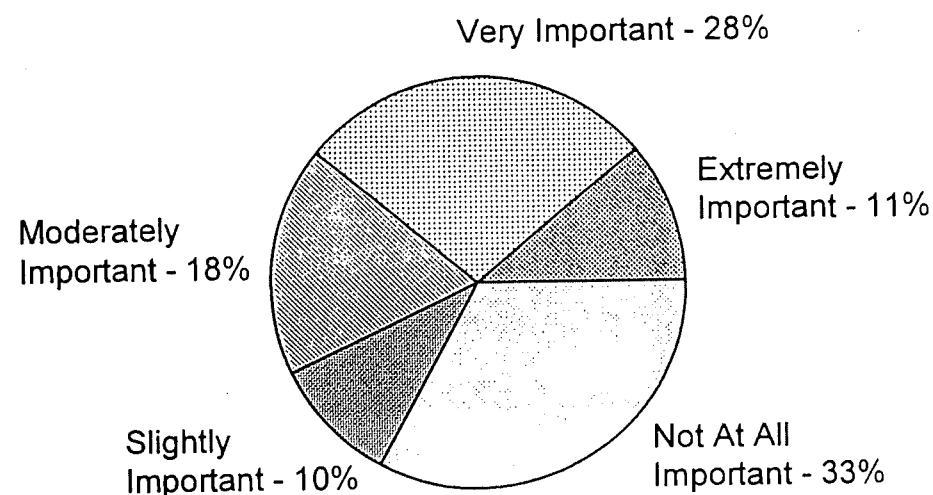
Perceived Importance of NSW Caught Seafood to Customers

Local Customers



n=406 : N=14,728

Domestic / International Tourists



n=334 : N=12,145

Q2(a): In the view of your local customers, how important do you think it is that you offer NSW caught seafood (fish and shellfish). Would you say ...?

Q2(b): In the view of your domestic and international visiting customers, how important do you think it is that you offer NSW caught seafood (fish and shellfish). Would you say ...?



7.4.1

IMPORTANCE OF OFFERING NSW CAUGHT SEAFOOD TO LOCAL CUSTOMERS

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					SEAFOOD AS A % OF FOOD TURNOVER		
		Take-away	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	Up to 20%	21% to 40%	41%+
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(174)	(121)	(88)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(6,262) %	(4,292) %	(3,332) %
EXTREMELY IMPORTANT (5)	10	13	6	10	16	9	6	12	18
VERY IMPORTANT (4)	31	27	38	30	21	29	29	32	25
SUB-TOTAL IMPORTANT	41	40	44	40	37	38	35	44	43
MODERATELY IMPORTANT (3)	15	10	16	17	16	18	15	17	12
SLIGHTLY IMPORTANT (2)	10	7	15	15	3	4	9	12	10
NOT AT ALL IMPORTANT (1)	33	43	24	27	33	40	39	27	34
DON'T KNOW	2	-	-	-	11	-	3	-	2
TOTAL	100	100	100	100	100	100	100	100	100
AVERAGE	2.8	2.6	2.9	2.8	2.8	2.7	2.5	2.9	2.8

Note: Weighting for average shown in brackets.

Question 2(a): In the view of your local customers, how important do you think it is that you offer NSW caught seafood (fish or shellfish).
Would you say...?

7.4.2

IMPORTANCE OF OFFERING NSW CAUGHT SEAFOOD TO INTERNATIONAL OR DOMESTIC TOURISTS

Base: Catering Businesses Preparing Seafood Who Serve Domestic or International Tourists

	TOTAL	CATERING TYPE					SEAFOOD AS A % OF FOOD TURNOVER		
		Take-away	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	Up to 20%	21% to 40%	41%+
RESPONDENTS	(334)	(55)	(78)	(60)	(79)	(62)	(131)	(110)	(75)
WTD. RESP.	(12,145) %	(3,114) %	(4,728) %	(1,273) %	(1,938) %	(1,092) %	(4,819) %	(3,808) %	(2,830) %
EXTREMELY IMPORTANT (5)	11	15	6	11	17	9	8	10	18
VERY IMPORTANT (4)	28	17	40	27	18	26	22	32	31
SUB-TOTAL IMPORTANT	39	32	46	38	35	35	30	42	49
MODERATELY IMPORTANT (3)	18	17	21	22	18	19	18	24	10
SLIGHTLY IMPORTANT (2)	9	8	9	15	11	6	9	9	10
NOT AT ALL IMPORTANT (1)	33	49	23	25	35	39	43	26	32
TOTAL	100	100	100	100	100	100	100	100	100
AVERAGE	2.7	2.4	3.0	2.8	2.7	2.6	2.4	2.9	2.9

Note: Weighting for average shown in brackets.

Question 2(b): In the view of your domestic and international visiting customers, how important do you think it is that you offer NSW caught seafood. Would you say....?

7.5 The Mark-up on Seafood

All respondents were asked to provide an average estimate of the mark-up they place on fish and shellfish (crustaceans and molluscs), with the view of developing a broad estimate of the value of seafood to the NSW catering sector. A guideline was provided: 100% is two times the buy price; 200% is three times the buy price; 300% is four times the buy price. If the respondent said "zero", this response was confirmed - *"Are you sure, this means that you don't add on anything to the price you buy it for?"* Roughly one in five businesses were unable to provide this information.

On average,

- **the mark-up on finfish is 87%; and**
- **the mark-up on shellfish is 76%.**

By catering type the following average mark-ups were indicated:

Finfish (87% in total)

- 107% in restaurants;
- 86% in clubs;
- 78% in hotels;
- 77% in accommodation places; and
- 69% in takeaway outlets.

Shellfish (76% in total)

- 99% in restaurants;
- 74% in hotels;
- 73% in clubs;
- 69% in accommodation places; and
- 49% in takeaway outlets.

There is quite a large variation in the distribution of the mark-up as reflected in Table 7.5.

For finfish specifically:

- 18% of catering businesses apply a mark-up of up to 30%;
- 23% apply a mark-up of between 31% and 50%;
- 16% apply a mark-up of 51% to 99%;
- 18% apply a 100% mark-up; and
- 19% place more than a 100% mark-up on finfish.

* 6% indicated no mark-up is applied.

And for shellfish specifically:

- 19% apply a mark-up of up to 30%;
- 24% apply a mark-up of between 31% and 50%;
- 10% apply a mark-up of 51% to 99%;
- 18% apply a 100% mark-up; and
- 16% mark-up shellfish by more than 100%.

* 11% indicated no mark-up is applied.

Base: Catering Business Preparing Seafood

RESPONDENTS	FINFISH*	SHELLFISH#
WTD. RESP.	(329)	(323)
	(11,786)	(11,463)
	%	%
NONE	6	11
1% TO 10%	3	3
11% TO 20%	6	7
21% TO 30%	9	9
31% TO 40%	7	10
41% TO 50%	16	14
51% TO 60%	6	3
61% TO 70%	4	3
71% TO 80%	6	4
81% TO 90%	0	0
91% TO 99%	-	-
SUB-TOTAL UNDER 100%	63	64
100%	18	18
101% TO 200%	12	11
201% TO 300%	5	2
OVER 300%	2	3
TOTAL	100	100
AVERAGE MARK-UP	87	76

* Excludes don't know which accounted for 20% of responses

Excludes don't know which accounted for 22% of responses

Question 13: On average, what mark-up do you place on....?

**8. SEAFOOD SUPPLIED TO THE NSW CATERING
SECTOR**

8. SEAFOOD SUPPLIED TO THE NSW CATERING SECTOR

8.1 Suppliers from Whom Seafood is Sourced

Respondents were asked to indicate the types of suppliers from whom they buy seafood - eight categories of supplier were read out. The results are presented in Table 8.1 in total and by catering type, location and the distance from the coast.

Fish wholesalers as a category are frequent suppliers to the trade:

- **33% of catering businesses source at least some seafood from a local NSW fish wholesaler;**
- 11% buy from other NSW fish wholesalers who are not located close to their business; and
- 6% claim to buy some seafood from the auction at the Sydney Fish Market (not from a wholesaler at the market) - it is thought that there is some misattribution.

Fifteen percent of catering businesses source seafood from a fish co-operative:

- 12% from a local co-operative; and
- 3% from another NSW co-operative.

Quite a large proportion of NSW catering businesses source seafood from general wholesalers (not seafood specific):

- **35% from a local wholesaler who has seafood;**
- 9% from another generalist wholesaler in the state; and
- 4% source seafood from wholesalers located interstate.

In 86% of instances, "local" suppliers are used.

8.1

SUPPLIERS FROM WHOM SEAFOOD IS SOURCED

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					LOCATION			DISTANCE FROM COAST		
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	Sydney	Northern NSW	Southern NSW	10km or less	11-100km	101+ km
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(198)	(105)	(103)	(147)	(142)	(117)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(6,733) %	(4,792) %	(3,203) %	(4,932) %	(5,370) %	(4,426) %
FISH CO-OPERATIVES												
LOCAL NSW CO-OPERATIVE (close by)	12	9	14	10	18	11	11	14	13	14	12	11
OTHER NSW CO-OPERATIVE	3	4	2	2	4	2	2	5	1	0	6	2
FISH WHOLESALERS												
LOCAL NSW FISH WHOLESALER (close by)	33	30	29	43	32	48	34	38	23	40	37	19
AUCTION AT THE SYDNEY FISH MARKET (rather than a wholesaler at the market)	6	6	8	5	3	3	12	-	2	8	8	2
OTHER NSW FISH WHOLESALER	11	4	19	8	6	16	10	13	13	8	10	17
OTHER FISH SUPPLIERS												
OTHER LOCAL SUPPLIER (close by)	35	43	31	38	34	26	32	33	46	37	32	37
OTHER SUPPLIERS IN NSW	9	10	10	5	11	7	8	11	11	5	9	15
INTERSTATE SUPPLIER	4	3	6	4	1	6	1	2	14	2	2	10
TOTAL	114	109	119	115	108	120	110	114	122	115	116	112

Question 5(a): From which of the following suppliers do you buy your seafood (fish and shellfish)?

There are some interesting differences by business classification as follows:

- clubs appear to be more likely to source seafood from local fish wholesalers (48% cf 33% in total);
- catering businesses located over 100km from the coast are less likely to source seafood from a local fish wholesaler (19% cf 33% in total) and more likely to buy from a general wholesaler in the state (15% cf 9% in total);
- businesses in southern NSW are more likely than those located elsewhere to source seafood from interstate suppliers (14% cf 4% in total); and
- almost all of those who claim to buy their seafood from the auction at the fish market are located in Sydney.

8.2 Share of Seafood Purchases by Supplier Type

For those suppliers from whom seafood is sourced, respondents were asked to indicate the proportion bought from each supplier (adding to 100%). Proportional responses are shown in the accompanying chart. Average responses are shown in Table 8.2 - this average is not based on the volume of seafood sourced.

In total, 86% source seafood from just the one type of supplier.

More specifically, at least one in four catering businesses source all their seafood from:

- **local suppliers who are not seafood specialists (29%); and**
- **local NSW fish wholesalers (25%).**

About one in ten satisfy all their seafood needs from:

- local NSW fish co-operatives (10%);
- NSW fish wholesalers not located close to their business (8%); and
- other general suppliers not located close to their business (8%).

Average responses are a reflection of this pattern in purchase (refer to Table 8.2):

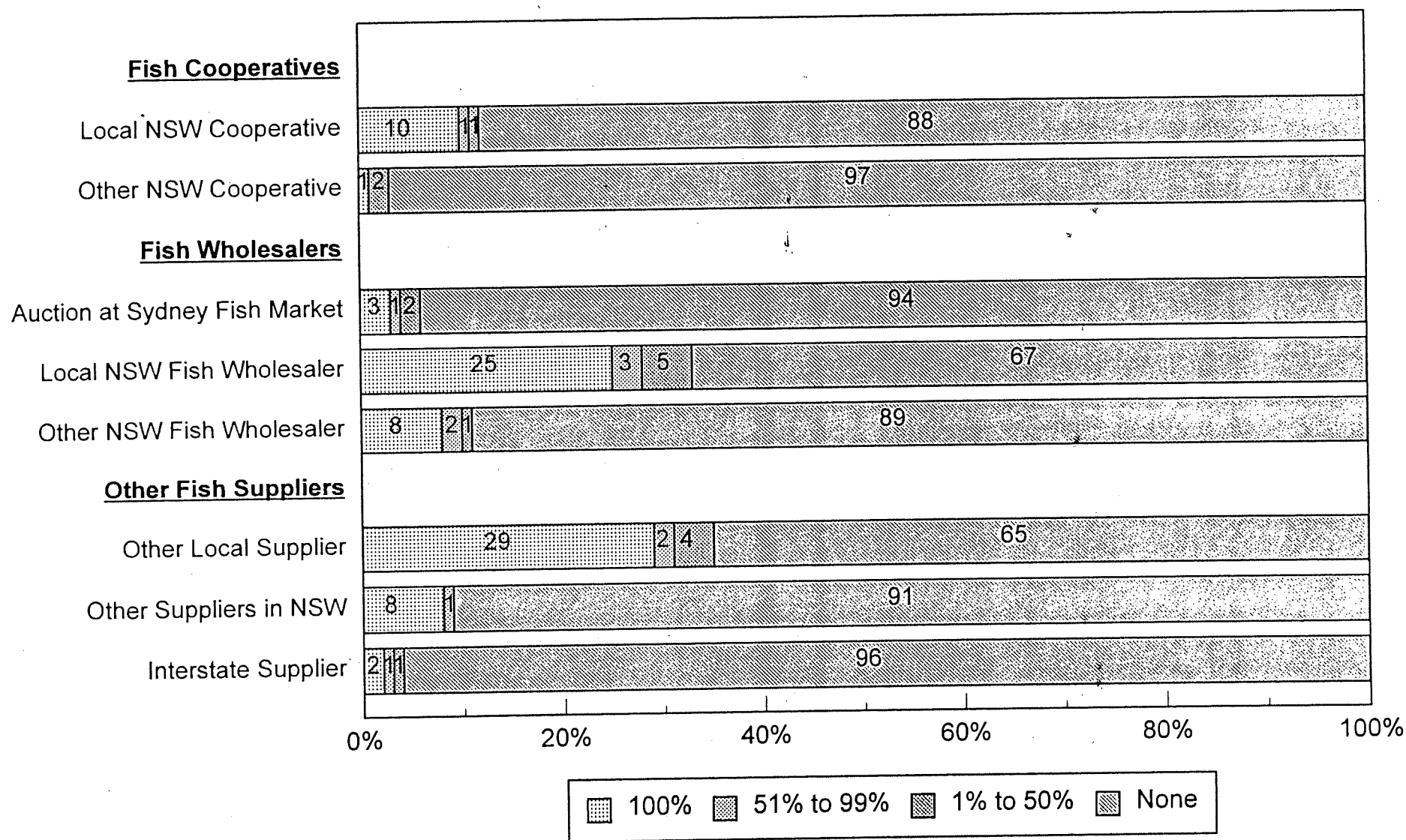
- local suppliers who are not seafood specialists (31.9%);
- local NSW fish wholesalers (28.9%);
- local NSW fish co-operatives (11.0%);
- NSW fish wholesalers not located close to their business (10.4%); and
- other general suppliers not located close to their business (8.5%).

Of note:

- takeaway outlets are more likely to source seafood from general wholesaler located close to their business (40.5% cf 31.9% in total);
- local NSW fish wholesalers are frequent suppliers to clubs (39.2%) and hotels (39.0% cf 28.7% in total), but not to those businesses located over 100km from the coast (15.7%);
- general wholesalers (not close) are more frequent suppliers to those businesses over 100km from the coast than average (14.3% cf 8.5% in total); and
- interstate suppliers are more likely to provide seafood for catering businesses in southern NSW (10.7%) and those located over 100km from the coast (7.2% cf 2.9% in total).

On average, the "local" suppliers share of seafood purchases by NSW catering businesses is 76.3% (including local co-operatives, wholesalers, Sydney fish market and other local suppliers). This is lower than that reported for the Cairns region (94%).

Share Of Seafood Purchases By Supplier Type



Q5(b): So you buy seafood from (Supplier Type), roughly what proportion would you buy from them?

Base: Non-Takeaway Catering Businesses Preparing Seafood (n= 406: N = 14728)

8102.PRE

8.2

SHARE OF SEAFOOD PURCHASES BY SUPPLIER TYPE - AVERAGES

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					LOCATION			DISTANCE FROM COAST		
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Club	Sydney	Northern NSW	Southern NSW	10km or less	11-100 km	101+ km
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(198)	(105)	(103)	(147)	(142)	(117)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(6,733) %	(4,792) %	(3,203) %	(4,932) %	(5,370) %	(4,426) %
FISH CO-OPERATIVES												
LOCAL NSW CO-OPERATIVE (close-by)	11.0	8.4	11.5	10.1	16.3	9.6	11.2	11.7	9.7	12.1	11.2	9.6
OTHER NSW CO-OPERATIVE	1.9	1.8	2.2	1.8	1.5	1.4	1.4	2.9	1.4	0.3	3.6	1.6
FISH WHOLESALERS												
LOCAL NSW FISH WHOLESALERS (close by)	28.7	27.2	23.9	39.0	30.3	39.2	30.0	33.1	19.4	36.6	32.2	15.7
AUCTION AT SYDNEY FISH MARKET (rather than a wholesaler at the market)	4.7	4.4	6.3	3.9	2.7	2.9	9.5	-	1.6	6.2	5.7	1.7
OTHER NSW FISH WHOLESALER	10.4	3.9	17.1	5.1	5.9	15.6	8.8	11.9	11.3	6.9	9.2	15.6
OTHER FISH SUPPLIERS												
OTHER LOCAL SUPPLIER (close by)	31.9	40.5	26.9	33.2	33.3	22.0	30.5	29.5	38.4	33.6	28.5	34.1
OTHER SUPPLIERS IN NSW	8.5	10.4	8.6	4.1	9.2	6.3	7.9	10.2	7.5	3.9	8.0	14.3
INTERSTATE SUPPLIER	2.9	3.3	3.4	2.8	0.8	3.0	0.8	0.7	10.7	0.4	1.6	7.2
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

Question 5(b): So you buy seafood from (READ OUT) roughly what proportion, would you buy from?

8.3 Difficulty in Sourcing Seafood in Last Five Years

In the last five years, almost two in five (37%) catering businesses in NSW have found that they have not been able to buy the amount of any particular seafood species or product they want - there has not been enough in supply.

Businesses more likely than average to experience a sourcing problem are:

- those businesses for which seafood accounts for at least 41% of their food turnover (64%);
- takeaway businesses (47%); and
- those located closer to the coast - within 10 kilometres (43%).

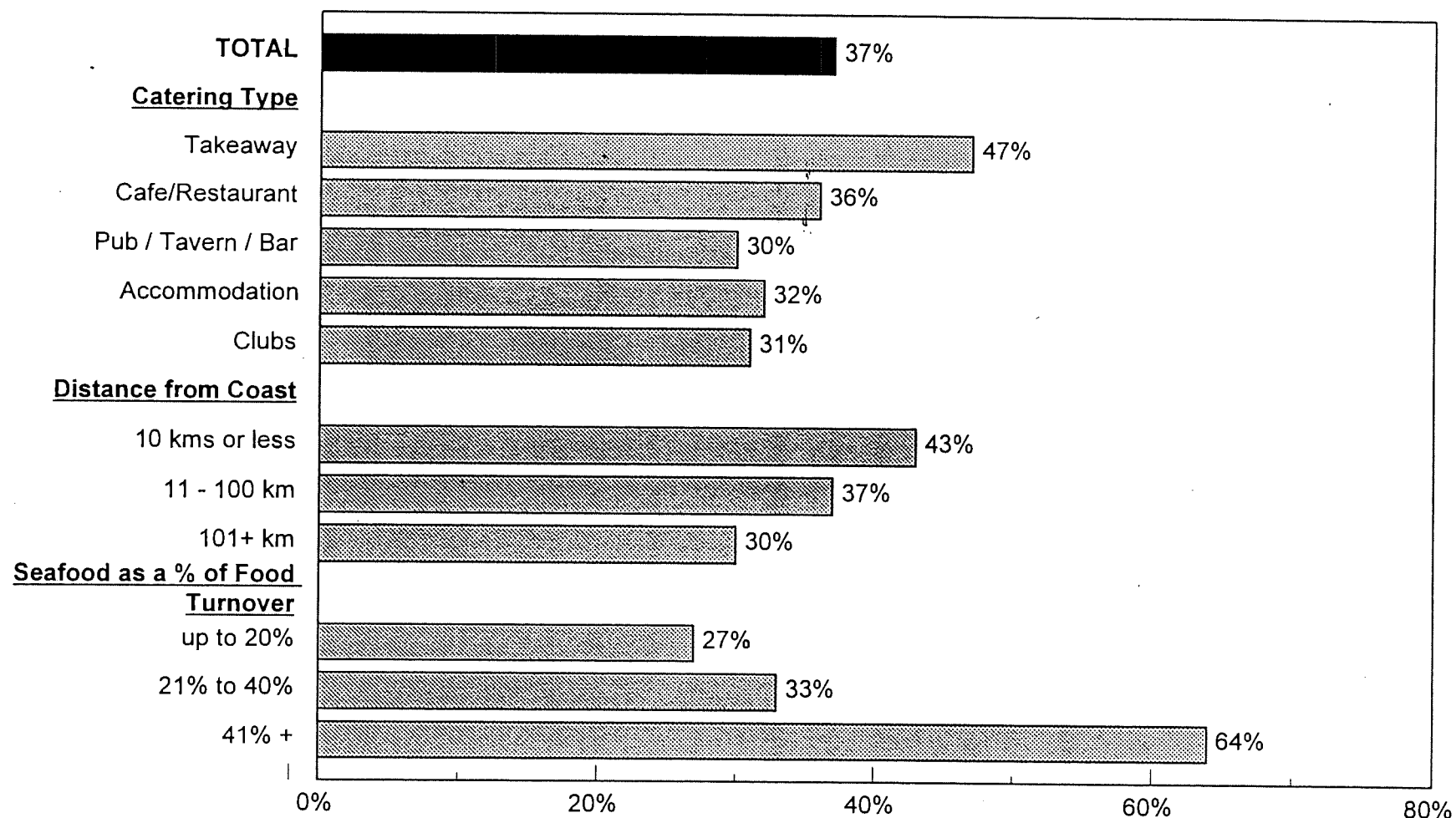
The species or products which have been most difficult to buy are

- **prawns (29%) - or 41% with all prawn mentions**
(this probably relates more so to the inability to source prawns at a price that is profitable for the business, rather than an absolute scarcity).

Followed at a distance by:

- lobster/crayfish (11%);
- hake (9%);
- snapper (8%);
- scallops (7%); and
- John Dory (7%).

Difficulty in Sourcing Seafood in Last Five Years



Q14(a): In the last five years, have you found that you have not been able to buy the amount of any particular seafood species or product you want - there is not enough in supply?

Base: Catering Businesses Preparing Seafood (n= 406 : N = 14,728)

8102.PRE



Base: Catering Businesses Which Have Found Species Difficult to Buy in Last 5 Years

RESPONDENTS	TOTAL
WTD. RESP.	(143)
	(5,481)
	%
PRAWNS	29
KING PRAWNS	5
OTHER PRAWN MENTIONS	7
LOBSTER/CRAYFISH	11
HAKE	9
SNAPPER	8
SCALLOPS	7
JOHN DORY	7
BREAM	6
OTHER DORY	6
OYSTERS	5
BARRAMUNDI	5
SEA PERCH/ORANGE ROUGHY	4
WHITING	4
LEATHER JACKET	4
CRAB	4
GEMFISH	3
BLUE EYE	3
BUGS	1
OTHER FINFISH	26
OTHER SEAFOOD	8
MULTIPLE RESPONSE ALLOWED	

Question 14(b): And which species or products have been difficult to buy?

8.4 Seafood Species Bought in the 1994/95 Financial Year

A list of 24 species of finfish and 14 shellfish species were read out to those responsible for purchasing seafood for the business. They were asked to indicate those which had been bought in the 1994/95 financial year. Table 8.4.1 - for finfish and shellfish - shows the incidence of purchase by all catering businesses and notable differences (above or below average) by catering type and location are indicated.

Seven species of finfish were bought by at least one in three catering businesses in the 1994/95 financial year. These are:

- smoked salmon (40%);
- hake (40%);
- snapper (38%);
- sea perch (37%);
- salmon (35%);
- whiting (34%); and
- bream (32%).

Another ten species have been bought by at least one in five catering businesses:

- John Dory (29%);
- farmed trout (28%);
- barramundi (28%);
- flathead (28%);
- Nile Perch (28%);
- tuna (26%);
- blue eye (24%);
- ling (23%);
- cod (22%); and
- sole (20%).

In general, takeaway outlets were less likely to have bought many of these common species and clubs were more likely to have done so than the average. In addition, catering businesses located in Sydney were disproportionately more likely to have bought many of the finfish species in the 1994/95 financial year.

Reflecting these points is Table 8.4.2 (finfish) which presents those species bought by at least one in three of the catering classifications. For example,

- just one species had been bought by at least one in three takeaway establishments- hake (56%);

contrasted with

- thirteen species being bought by at least one in three clubs.

The most popular finfish species by catering type are:

Takeaway

- hake (56%);

Cafe/Restaurant

- smoked salmon (58%);
- snapper (46%);
- salmon (43%);
- sea perch (41%); and
- whiting (40%);

Pub/Tavern/Bar

- hake (52%);
- whiting (44%);
- snapper (44%);
- bream (42%);
- sea perch (41%);

Accommodation place

- sea perch (46%);
- smoked salmon (44%);

Clubs

- hake (52%);
- Nile Perch (52%);
- smoked salmon (47%);
- snapper (47%);
- bream (46%);
- sea perch (45%); and
- flathead (45%).

The same analysis has been undertaken for the 14 shellfish products. Nine shellfish products had been bought by at least one in three catering businesses:

- squid/calamari (74%);
- wild prawns (68%);
- farm prawns (47%);
- scallops (41%);
- mussels (38%);
- Sydney rock oysters (38%);
- seafood extender (36%);
- octopus (33%); and
- crabs (32%).

Again takeaway outlets were often disproportionately low in mention and those businesses which operate in Sydney were disproportionately high in their purchase of shellfish species in the 1994/95 financial year.

The **most popular shellfish species** by catering type are:

Takeaway

- squid/calamari (69%);
- wild prawns (52%);
- seafood extender (46%);

Cafe/Restaurant

- squid/calamari (78%);
- wild prawns (78%);
- farm prawns (56%);
- mussels (53%);
- scallops (51%);
- Sydney rock oysters (47%);
- octopus (46%);

Pub/Tavern/Bar

- squid/calamari (83%);
- wild prawns (73%);

Accommodation place

- squid/calamari (65%);
- wild prawns (65%);

Clubs

- squid/calamari (73%);
- wild prawns (73%);
- farm prawns (55%);
- mussels (49%);
- Sydney rock oysters (49%);
- scallops (46%); and
- seafood extender (46%).

8.4.1

SEAFOOD SPECIES BOUGHT IN THE
1994/95 FINANCIAL YEAR - FINFISH

Base: Catering Businesses Preparing Seafood

RESPONDENTS WTD. RESP.	TOTAL (406) (14,728) %	NOTABLE DIFFERENCES	
		Catering Type	Location
SMOKED SALMON	40	Takeaway (16%) Cafe/Rest.(58%)	Sydney (57%)
HAKE	40	Cafe/Rest.(23%)	Northern NSW (60%)
SNAPPER	38	Takeaway (24%)	Sydney (48%)
SEA PERCH (ORANGE ROUGHY)	37	Takeaway (22%)	
SALMON	35	Takeaway (19%)	Sydney (45%)
WHITING	34	Accommodation (18%)	
BREAM	32	Takeaway (22%) Club (40%)	
JOHN DORY	29	Takeaway (15%) Club (40%)	Sydney (39%)
TROUT (FARMED)	28	Takeaway (13%) Club (44%)	Northern NSW (18%)
BARRAMUNDI	28	Takeaway (18%)	Sydney (37%)
FLATHEAD	28	Club (45%)	
NILE PERCH	28	Takeaway (17%) Club (52%)	
TUNA	26		Sydney (40%)
BLUE EYE	24	Takeaway (12%)	Sydney (39%)
LING	23		Northern NSW (8%)
COD	22		Sydney (32%)
SOLE	20	Takeaway (11%) Club (35%)	
FLOUNDER	19		
SARDINES	13	Cafe/Rest. (20%)	Sydney (20%)
SMOOTH (OREO) DORY	12		
SHARK	12		
TREVALLY	10		Northern NSW (4%)
MULLET	10		Southern NSW (1%)
BLACKFISH	7		
	MULTIPLE RESPONSE ALLOWED		

Question 6: In the 1994/95 financial year, did you buy....?

8.4.2

FINFISH SPECIES BOUGHT BY AT LEAST ONE IN THREE OF THE CATERING TYPES

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE				
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs
		%	%	%	%	%
SMOKED SALMON	40	-	58	-	44	47
HAKE	40	56	-	52	-	52
SNAPPER	38	-	46	44	35	47
SEA PERCH (ORANGE ROUGHY)	37	-	41	41	46	45
SALMON	35	-	43	39	37	39
WHITING	34	-	40	44	-	37
BREAM	32	-	-	42	38	46
JOHN DORY	29	-	34	38	-	40
TROUT (FARMED)	28	-	33	-	36	44
BARRAMUNDI	28	-	32	-	-	40
FLATHEAD	28	-	-	33	32	45
NILE PERCH	28	-	33	34	-	52
TUNA	26	-	33	-	-	-
BLUE EYE	24	-	33	-	-	-
SOLE	20	-	-	-	-	35
OUT OF 24 FINFISH SPECIES	-	1	11	9	7	13

Question 6: In the 1994/95 financial year, did you buy....?

8.5 Main Seafood Species Prepared in the 1994/95 Financial Year

A series of questions was asked of respondents about the main types of fish and shellfish prepared by the business, including:

- the form in which the species is bought from suppliers;
- how many kilograms are bought in a typical month;
- the average price paid per kilogram; and
- the perception of where the species is caught.

In order to ask this series of questions, it was first necessary to ascertain the main types of seafood bought by the business. Up to six finfish species and six shellfish species could have been nominated by each business. Table 8.5.1 shows the number of species nominated as "main".

On average, each catering business nominated 4.4 species, with slight differences by catering type:

- takeaway outlets (3.6 species);
- accommodation places (4.3 species);
- hotels (4.5 species);
- clubs (4.6 species); and
- restaurants (5.1 species).

In terms of the proportion who nominated a certain number of species:

- 28% cited one or two species as "main";
- 29% mentioned three or four species;
- 26% mentioned between five and seven species; and
- 14% cited between eight and twelve species as the main ones prepared by the business.

Three percent could not recall the name of certain species.

Table 8.5.2 shows the total proportion of catering businesses which bought each species and the proportion of those who considered the species as one of their top six fish or shellfish (main) species. It is these main species for which the detail has been gathered.

The one species which was bought by a high proportion of catering businesses, but which was not considered one of the main species was smoked salmon - 40% bought in the 1994/95 financial year, but only 3% considered this one of their main species.

One might be left with the impression that this is not a very good coverage of the main seafood prepared by the catering sector. However, **on average 83% of the total amount spent on all seafood in the last year (by each business) was accounted for by these nominated species (refer to chart).**

(Note this 83% average figure [for estimated contribution by main species] does not represent 83% of the aggregate expenditure of the catering industry).

In total:

- 43% felt the nominated species to represent their total seafood purchases;
- another 20%, between 81% and 99% of the total spent on seafood; and
- another 20%, of between 51% and 80% of total seafood purchases.

Just 17% considered these "main" species to account for less than one half of their total seafood purchases.

On average, there was little difference by catering type:

- accommodation places (87%);
- clubs (84%);
- takeaway outlets (83%);
- hotels (82%); and
- restaurants (80%).

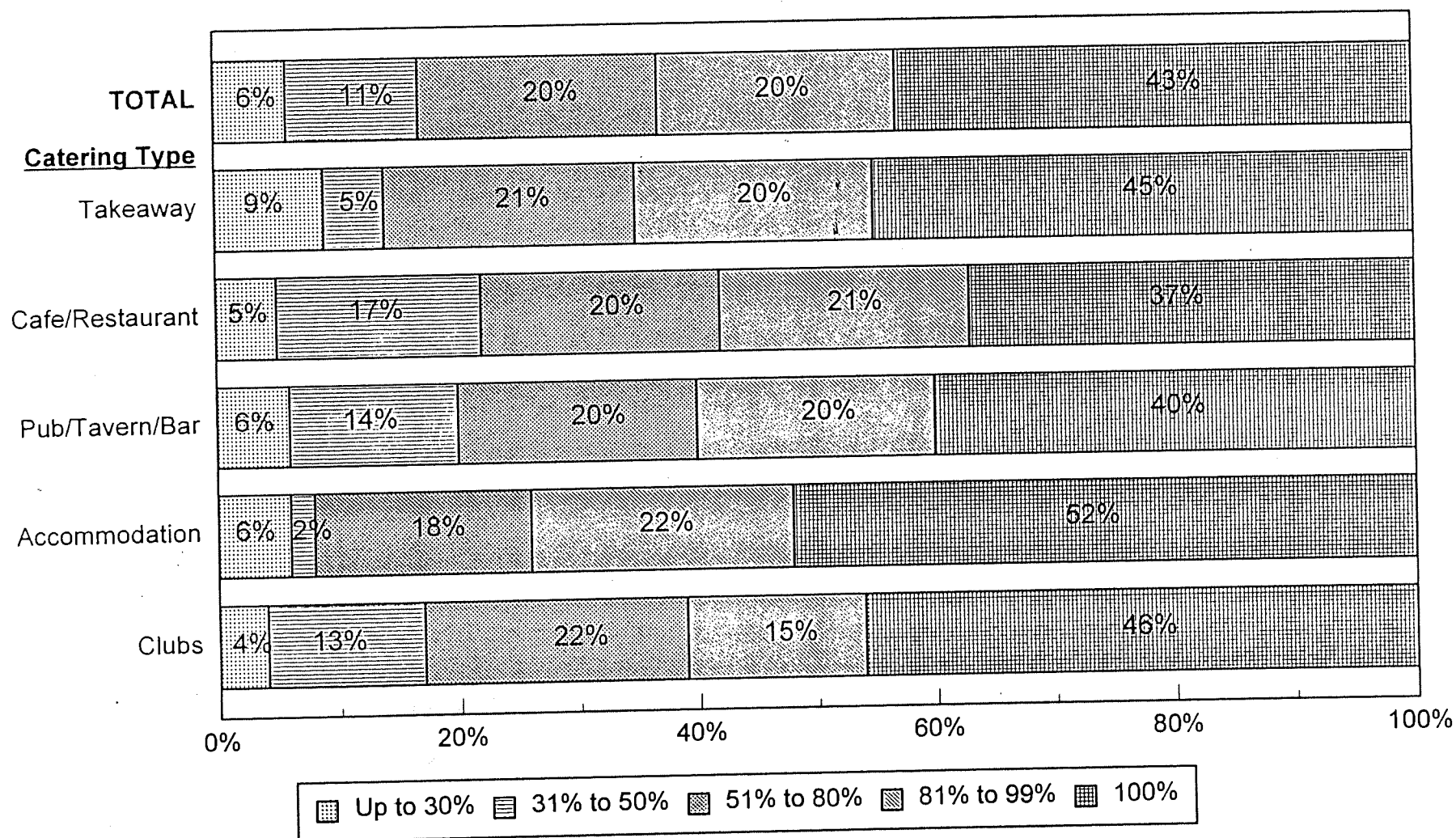
It is possible to look at some trends in those species nominated as "main" by extracting data from the 1990/91 National Seafood Consumption Study, for catering businesses in NSW.

While the data is not exactly comparable (sample structure differences and weighting), it would appear that some **species are less likely to be nominated as the "main" species now, than in 1990/91:**

- snapper;
- flathead;
- John Dory;
- bream; and
- oysters.

However, **Nile Perch appears, to some extent, to have come into favour in NSW catering businesses (more often nominated as "main").**

Proportion That Main Species Account For Of Total Seafood



Q12: Thinking of the species we have just discussed, approximately what proportion of the total amount you spent on all seafood (including fish) in the last year was accounted for by these species?

Base: Catering Businesses Preparing Seafood (n= 406: N = 14,728)

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8.5.1

THE NUMBER OF MAIN SEAFOOD SPECIES PREPARED IN THE 1994/95 FINANCIAL YEAR

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE				
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %
ONE	12	21	8	8	14	3
TWO	16	23	13	13	11	21
THREE	17	18	18	19	15	12
FOUR	12	12	8	19	17	15
FIVE	11	5	16	15	8	8
SIX	9	8	6	9	17	16
SEVEN	6	6	7	8	3	10
EIGHT	3	1	4	-	1	6
NINE	2	1	1	2	4	3
TEN	4	1	8	1	0	2
ELEVEN	1	-	1	4	1	-
TWELVE	4	4	6	1	3	0
DON'T KNOW THE NAME	3	-	5	1	5	4
TOTAL	100	100	100	100	100	100
AVERAGE SPECIES	4.4	3.6	5.1	4.5	4.3	4.6
AVERAGE % OF TOTAL SEAFOOD PURCHASE	83	83	80	82	87	84

Question 7: In the 1994/95 financial year what were the top six types of main fish/shellfish species served?

8.5.2

**MAIN SEAFOOD SPECIES BOUGHT IN THE
1994/95 FINANCIAL YEAR - SHELLFISH**

Base: Catering Businesses Preparing Seafood

RESPONDENTS WTD. RESP.	TOTAL BOUGHT (406) (14,728) %	TOTAL MAIN (406) (14,728) %
SQUID/CALAMARI	74	31
PRAWNS (WILD)	68	63
FARM PRAWNS	47	INCL. ABOVE
SCALLOPS	41	15
MUSSELS	38	15
SYDNEY ROCK OYSTERS	38	26 (OYSTERS)
SEAFOOD EXTENDER	36	6
OCTOPUS - EIGHT LONG TENTACLES	33	9
CRABS	32	9
MARINARA MIX	30	4
LOBSTER/CRAYFISH	27	11
PACIFIC OYSTERS	20	INCL. ABOVE
BUGS	19	6
CUTTLEFISH	12	1
MULTIPLE RESPONSE ALLOWED		

Question 7(b): And what were the top six types of shellfish (crustaceans and molluscs) prepared by this business?

8.6 Forms in Which Common Seafood Species are Bought

The species nominated as "main" by at least 40 catering businesses are presented in Table 8.6 and it shows the form in which these are bought (in mentions not by volume). As would be expected, these species also featured among those bought by the highest proportion of businesses in the catering sector (see Table 8.5.2).

Of the ten **finfish** species, six are **very frequently (4 in 5 times)** bought in fillet form:

- bream (96%);
- Nile Perch (91%);
- sea perch (88%);
- John Dory (86%);
- hake (85%); and
- whiting (78%).

Snapper and salmon are more often bought whole (69% and 55% respectively). One in four (25%) also buy salmon cutlets.

While fillets of flathead and barramundi are the most common form bought (67% and 59% respectively), at least one in three who nominated these species as "main" buy them whole (32% and 38% respectively).

Shellfish species more commonly bought whole are:

- oysters - on the shell (92%);
- mussels (81%);
- lobster/crayfish (72%);
- prawns (68%) - 27% buy cutlets and 19% buy just the meat.

Just the meat of squid and scallops is most commonly bought (64% and 60% respectively).

There appears to be some small level of misattribution of the form bought to some species, for example, "live" mentions.

Base: Catering Businesses Preparing Seafood

RESPONDENTS WTD. RESP.	TOTAL (406) (14,728) %	Respondents	WTD. RESP.	FORM								Total
				Live	Whole	Fillet	Cutlet	Head & Gutted	Just The Meat	Other	Frozen	
				%	%	%	%	%	%	%	%	%
FINFISH												
HAKE	30	(128)	(4,381)	-	4	85	2	3	-	4	6	103
SEA PERCH (ORANGE ROUGHY)	21	(91)	(3,068)	-	7	88	1	-	-	-	1	103
SNAPPER	17	(79)	(2,566)	0	69	39	3	2	-	-	-	113
WHITING	14	(56)	(2,096)	-	19	78	3	-	-	-	-	100
FLATHEAD	13	(64)	(1,897)	0	32	67	-	0	-	1	-	100
BARRAMUNDI	12	(55)	(1,754)	-	38	59	9	-	-	-	-	107
SALMON	11	(55)	(1,606)	-	55	24	25	6	-	-	-	109
NILE PERCH	10	(52)	(1,426)	4	5	91	-	-	-	-	-	100
JOHN DORY	10	(41)	(1,409)	-	17	86	-	5	-	-	-	109
BREAM	9	(40)	(1,335)	4	-	96	4	1	-	-	-	104
SHELLFISH												
PRAWNS	63	(245)	(9,274)	2	68	-	27	1	19	1	-	116
SQUID/CALAMARI	31	(108)	(4,493)	5	21	2	5	3	64	2	2	103
OYSTERS	26	(132)	(3,783)	7	92	-	-	-	0	-	-	100
SCALLOPS	15	(61)	(2,258)	1	38	-	3	0	60	-	-	102
MUSSELS	15	(75)	(2,237)	11	81	-	-	-	9	-	-	100
LOBSTER/CRAYFISH	11	(40)	(1,584)	17	72	-	3	-	5	5	-	101

Note: Only species which were nominated by at least 40 catering businesses are presented. More detail can be found in the computer printout if required.

Question 7: In the 1994/95 financial year what were the top six types of main fish/shellfish species served?

Question 8: In what form did you buy (READ OUT SPECIES)....?

8.7 Perceptions of Where Common Seafood Species Bought by the Catering Sector are Caught

For each "main" seafood species, respondents were asked to estimate the proportion of the total volume which they bought in the last year as being caught in NSW, interstate and overseas waters. It is therefore their perception of where the species is caught. Table 8.7 shows the average mentions for each of the main species bought - by at least 40 catering businesses.

On average, more "main" seafood species are thought to be mainly caught in NSW than interstate or overseas waters.

Those **species most often thought to be caught in NSW waters** include:

- flathead (93.8%);
- oysters (92.8%);
- bream (85.5%);
- snapper (77.6%);
- John Dory (77.4%);
- whiting (66.3%);
- prawns (57.1%);
- squid/calamari (50.3%) - 42.2% imported; and
- sea perch (45.2%).

Those more frequently perceived as coming from **interstate waters**, on average, are:

- salmon (73.6%);
- scallops (60.7%);
- barramundi (60.7%); and
- lobster/crayfish (44.9%) - 38.2% from NSW waters.

And those species more often thought to be **imported** are:

- Nile Perch (84.8%);
- hake (62.8%) - 30.8% from NSW waters; and
- mussels (45.0%) - 43.9% from NSW waters.

It is worthwhile commenting on a number of species where it appears that the average proportion caught in NSW waters is high. The average result has been influenced by a group who believe that 100% of what they have sourced comes from NSW waters - there is also a reasonably high proportion who couldn't say where the species is caught. The species of note are:

	% Indicating 100% Caught in NSW Waters	% Who Don't Know
Hake	20%	27%
Sea Perch (Orange Roughy)	29%	29%
Barramundi	20%	19%
Salmon	14%	23%
Nile Perch	10%	26%
Squid/Calamari	34%	28%
Scallops	20%	10%
Mussels	38%	11%
Lobster/Crayfish	26%	17%

8.7

**PERCEPTIONS OF WHERE COMMON SEAFOOD SPECIES
BOUGHT BY THE CATERING SECTOR ARE CAUGHT - AVERAGE**

Base: Catering Businesses Preparing Seafood

	TOTAL	Respondents	WTD. Resp.	CAUGHT		
				NSW	Interstate	Imported
RESPONDENTS	(406)					
WTD. RESP.	(14,728)					
	%			%	%	%
FINFISH						
HAKE	30	(128)	(4,507)	30.8	6.9	62.8
SEA PERCH (ORANGE ROUGHY)	21	(91)	(3,174)	45.2	32.1	22.7
SNAPPER	17	(81)	(2,898)	77.6	12.8	9.4
WHITING	14	(56)	(2,096)	66.3	14.8	18.9
FLATHEAD	13	(65)	(1,903)	93.8	1.7	4.6
BARRAMUNDI	12	(55)	(1,870)	26.3	60.7	11.2
SALMON	11	(55)	(1,750)	19.5	73.6	6.9
NILE PERCH	10	(52)	(1,426)	14.4	0.7	84.8
JOHN DORY	10	(41)	(1,539)	77.4	16.7	5.5
BREAM	9	(41)	(1,384)	85.5	9.1	5.4
SHELLFISH						
PRAWNS	63	(249)	(10,780)	57.1	20.5	22.2
SQUID/CALAMARI	31	(110)	(4,646)	50.3	7.4	42.2
OYSTERS	26	(132)	(3,783)	92.8	5.7	1.5
SCALLOPS	15	(61)	(2,313)	25.2	60.7	14.1
MUSSELS	15	(76)	(2,241)	43.9	11.1	45.0
LOBSTER/CRAYFISH	11	(42)	(1,594)	38.2	44.9	16.9

Note: Based on mentions, not volume bought.

Question 11: Thinking about where (SPECIES) is caught. What proportion of what you bought last year was caught in NSW, interstate and overseas (i.e. imported) waters?

8.8 Buy Price for Common Seafood Species

For each "main" seafood species, respondents were asked to indicate the average price they paid per kilogram in 1994/95. The variability in price by species was quite large, therefore, to reduce the information to a manageable level, the most common price paid (not adjusted for don't know responses) and the overall average price is indicated in Table 8.8. Over all species, the price per kilogram was unknown 19% of the time.

In terms of the finfish species, the average buy price, from highest to lowest is:

- salmon - \$18.01 per kilogram;
- John Dory - \$14.08 per kilogram;
- barramundi - \$12.95 per kilogram;
- whiting - \$12.30 per kilogram;
- sea perch - \$11.74 per kilogram*;
- snapper - \$11.46 per kilogram;
- bream - \$8.48 per kilogram;
- flathead - \$6.84 per kilogram;
- Nile Perch - \$6.59 per kilogram; and
- hake - \$6.08 per kilogram.

* While the average price per kilogram seems low for sea perch (Orange Roughy), the most frequently mentioned price is as expected - within \$15.01 to \$18.00 (20%).

And for the main shellfish species:

- lobster/crayfish - \$37.28 per kilogram;
- prawns - \$17.98 per kilogram (likely to be a great deal of variability in quality);
- scallops - \$17.26 per kilogram;
- squid/calamari - \$7.07 per kilogram;
- oysters - \$6.55 per dozen; and
- mussels - \$5.83 per kilogram.

Base: Catering Businesses Preparing Seafood

RESPONDENTS WTD. RESP.	TOTAL (406) (14,728) %	Respondents	WTD Resp.	Common prices paid %	Average Price Per kg
FINFISH					
HAKE	30	(128)	(4,507)	Up to \$5.00 (26%)	\$6.08
SEA PERCH (ORANGE ROUGHY)	21	(91)	(3,174)	\$15.01 to \$18.00 (20%)	\$11.74
SNAPPER	17	(81)	(2,898)	\$8.01 to \$9.00 (18%)	\$11.46
WHITING	14	(56)	(2,096)	\$9.01 to \$10.00 (18%)	\$12.30
FLATHEAD	13	(65)	(1,903)	Up to \$5.00 (23%)	\$6.84
BARRAMUNDI	12	(55)	(1,870)	\$10.01 to \$12.00 (27%)	\$12.95
SALMON	11	(55)	(1,750)	\$15.01 to \$18.00 (32%): \$18.01 to \$20.00 (20%)	\$18.01
NILE PERCH	10	(52)	(1,426)	\$6.01 to \$7.00 (32%): \$5.01 to \$6.00 (25%)	\$6.59
JOHN DORY	10	(41)	(1,539)	\$12.01 to \$15.00 (23%)	\$14.08
BREAM	9	(41)	(1,384)	\$7.01 to \$8.00 (19%)	\$8.48
SHELLFISH					
PRAWNS	63	(249)	(10,780)	\$15.01 to \$18.00 (20%)	\$17.98
SQUID/CALAMARI	31	(110)	(4,646)	\$6.01 to \$7.00 (17%): \$7.01 to \$8.00 (16%)	\$7.07
OYSTERS	26	(132)	(3,783)	\$5.01 to \$6.00 (31%): \$6.01 to \$7.00 (26%)	\$6.55 (per dozen)
SCALLOPS	15	(61)	(2,313)	\$20.01 to \$25.00 (20%): \$18.01 to \$20.00 (18%)	\$17.26
MUSSELS	15	(76)	(2,241)	Up to \$5.00 (31%): \$6.01 to \$7.00 (24%)	\$5.83
LOBSTER/CRAYFISH	11	(42)	(1,594)	\$25.01 plus (81%)	\$37.28

Note: Of all fish forms bought, an average price per kg was not known in 19% of cases.

Question 10: And what was the average price you paid per kilogram?

**9. DEMAND FOR SEAFOOD FROM THE NSW CATERING
SECTOR**

9. DEMAND FOR SEAFOOD FROM THE NSW CATERING SECTOR

9.1 Estimated Volume and Value of Seafood Bought By the NSW Catering Sector

Through a series of questions it has been possible to broadly estimate the value of seafood bought by the NSW catering sector. The questions of relevance are:

- the kilograms of specific species bought in a typical month;
- the average price paid per kilogram for that species; and
- the proportion of the total amount spent on all seafood which was accounted for by the main species (for which volume and value information was collected).

This data was processed on an individual case basis. All results were then totalled to produce the estimate which follows.

It is estimated that businesses in the NSW catering sector bought \$625 million of seafood in the 1994/95 financial year. This is distributed by catering type as follows:

- 73% of the value of all seafood is bought by restaurants (est. \$456 million);
- 10% of seafood is bought by takeaway outlets (est. \$63 million);
- 8% by clubs (est. \$50 million);
- 5% by accommodation places (est. \$31 million); and
- 4% by pubs, taverns or bars (est. \$25 million).

By then using an individual businesses response to the proportion of customers who are locals, domestic visitors and international tourists, the value of seafood bought for different types of customers can be estimated:

- 73% is bought for local customers;
- 20% is bought for domestic tourists; and
- 7% is bought for international tourists.

It is possible to broadly estimate the total volume of seafood bought by the NSW catering sector by analysing the kilograms bought for each of the main fish and seafood prepared by the business (up to six of each). Using this data **it is estimated that 24,000 tonne of the main seafood species (excluding oysters) was bought by the NSW catering sector in the 1994/95 financial year.** However, this result is not directly comparable to the total value estimate because it has not been possible to then weight this up for those species for which volume information was not collected - ie. another question was asked to estimate total value (*"Approximately what proportion of the total amount you spent on all seafood in the last year was accounted for by these species?"*).

It is estimated that businesses in the NSW catering sector bought \$625 million of seafood in the 1994/95 financial year. Assuming an average mark-up of 80%, the value of seafood sold by the NSW catering sector is \$1,125 million.

Overall, it is estimated that the demand for seafood sourced in NSW and elsewhere is valued at:

	Buy Value	Sell Value
Local Customers	\$457 million	\$823 million
Domestic Visitors	\$127 million	\$229 million
International Visitors	\$41 million	\$73 million

It is estimated that 24,000 tonne of the **main seafood species** (excluding oysters) was bought by the NSW catering sector in the 1994/95 financial year.

9.2 Estimated Volume and Value of Specific Seafood Species Bought by the NSW Catering Sector

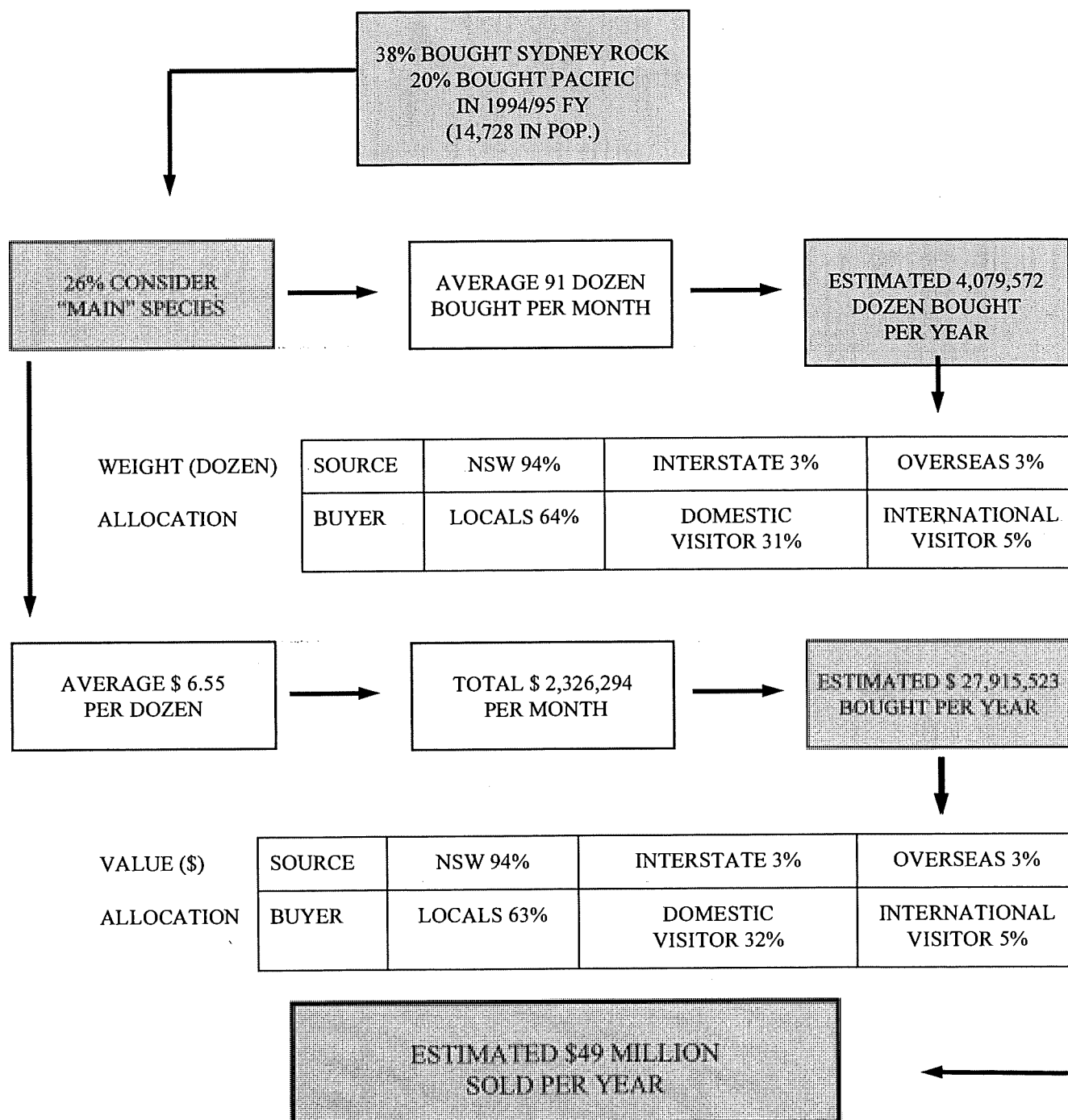
Broad estimates of the volume and value of specific seafood species bought by the NSW catering sector are shown in the accompanying summary charts. It is emphasised that these are very broad estimates which have been developed on the basis of between 41 and 249 respondents (refer to the sample size - $n=x$ - at the base of each chart).

A summary of the estimated volume and value, by species, for the 1994/95 financial year is presented below.

	Estimated Kg Bought Per Year	Estimated Value Bought Per Year	Estimated Value Sold Per Year*
Prawns	3,389,000 kg	\$63.1 million	\$111 million
Oysters	4 million dozen	\$27.9 million	\$49 million
Hake	4,380,000 kg	\$31.5 million	\$59 million
Squid/Calamari	1,377,000 kg	\$11.1 million	\$19.5 million
Sea Perch (Orange Roughy)	777,000 kg	\$9.4 million	\$17.6 million
Snapper	730,000 kg	\$8.4 million	\$15.7 million
Mussels	863,000 kg	\$5.3 million	\$9.3 million
Flathead	757,000 kg	\$6.9 million	\$12.9 million
Scallops	272,000 kg	\$4.7 million	\$8.3 million
Whiting	520,000 kg	\$6.1 million	\$11.4 million
Salmon	833,000 kg	\$18.5 million	\$34.6 million
Barramundi	620,000 kg	\$9.7 million	\$18.1 million
Nile Perch	737,000 kg	\$4.8 million	\$9 million
Lobster/Crayfish	52,000 kg	\$23.4 million	\$41 million
John Dory	470,000 kg	\$7.8 million	\$14.6 million
Bream	365,000 kg	\$3.8 million	\$7.1 million

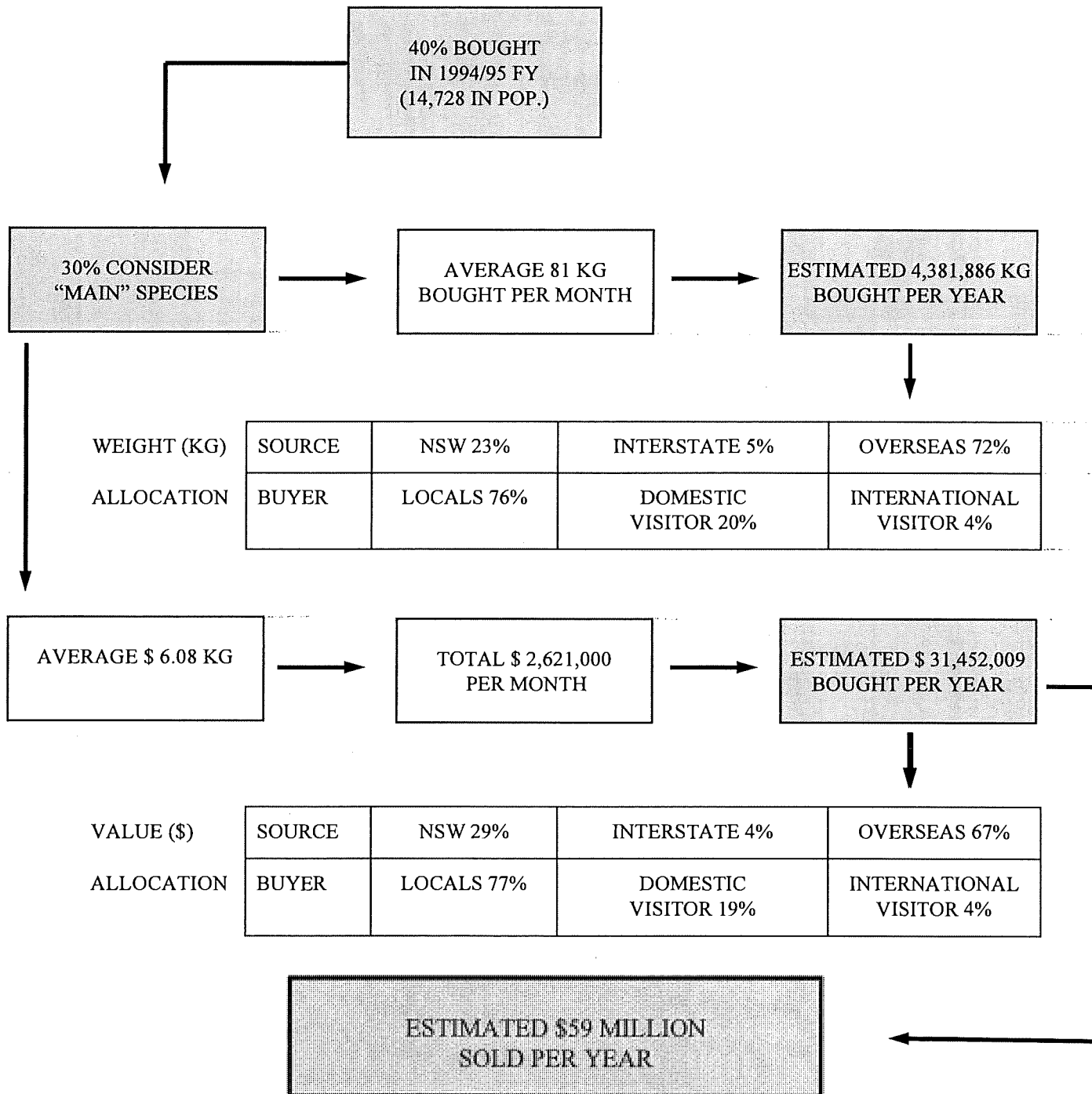
* Applying the average mark-up of 87% for finfish and 76% for shellfish.

ESTIMATED VOLUME AND VALUE OF OYSTERS BOUGHT BY THE NSW CATERING SECTOR



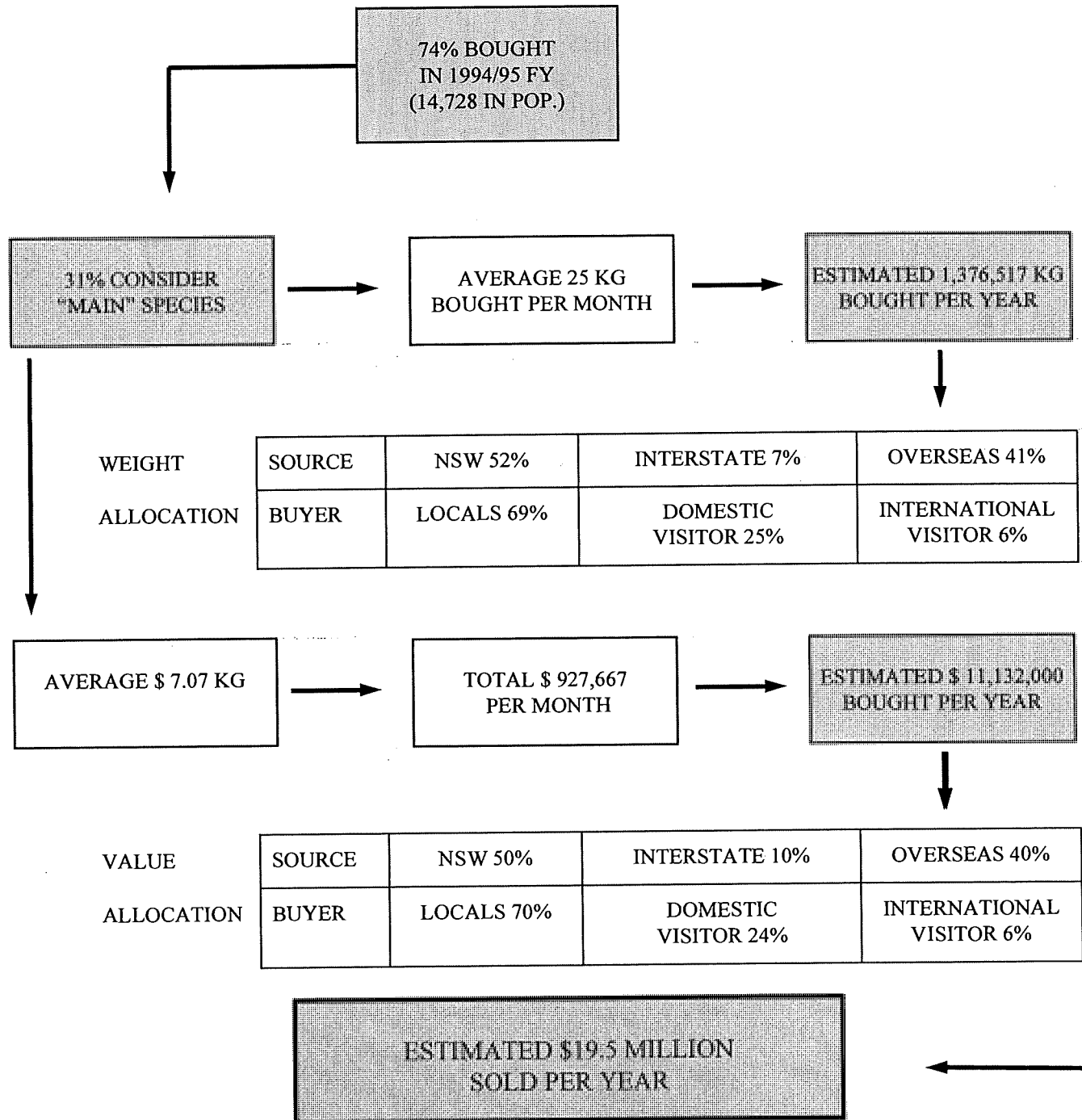
Base: NSW Catering Business Who Consider This A Main Species (n = 132)

ESTIMATED VOLUME AND VALUE OF HAKE BOUGHT BY THE NSW CATERING SECTOR



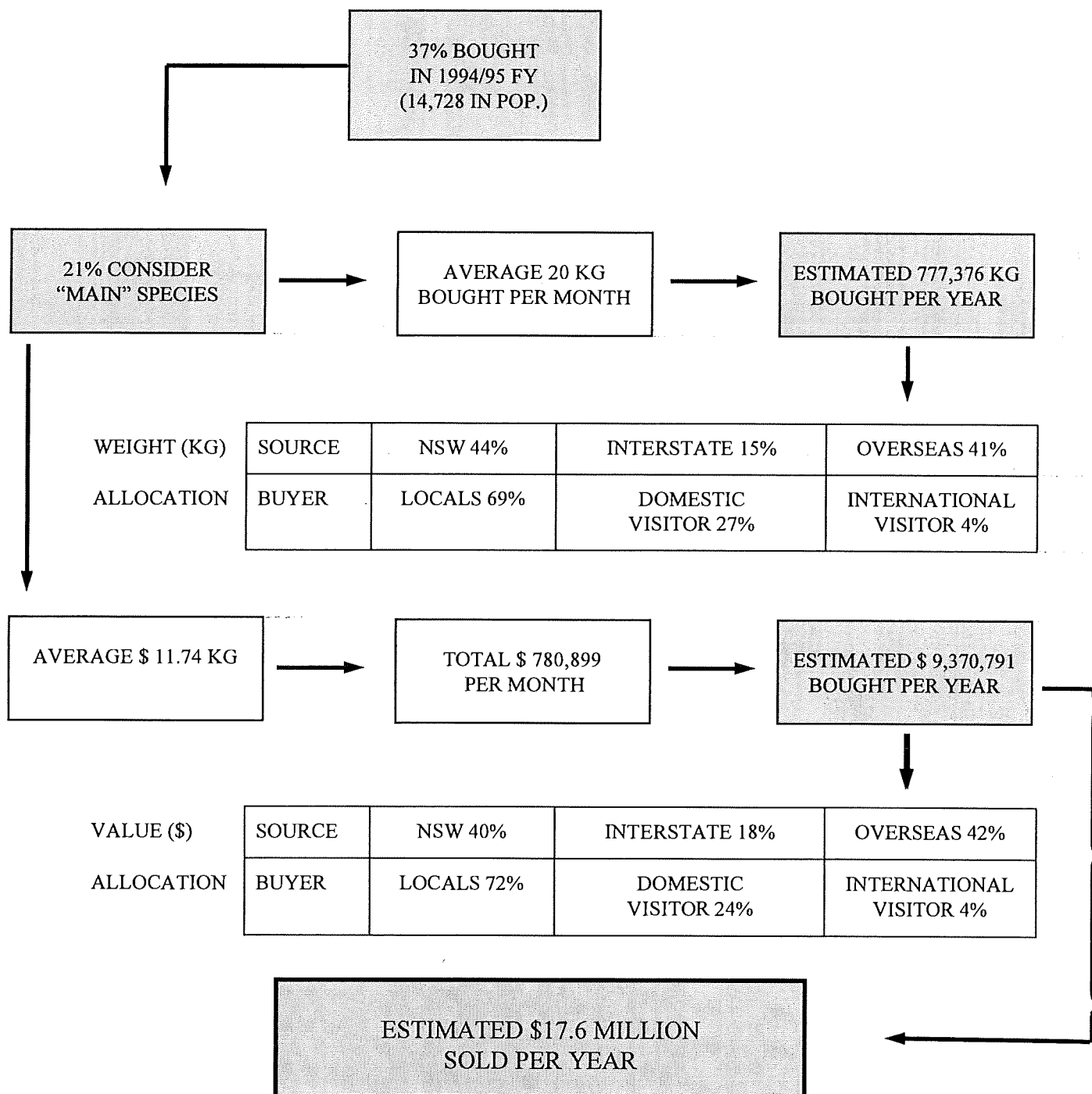
Base: NSW Catering Business Who Consider This A Main Species (n = 128)

ESTIMATED VOLUME AND VALUE OF SQUID/CALAMARI BOUGHT BY THE NSW CATERING SECTOR



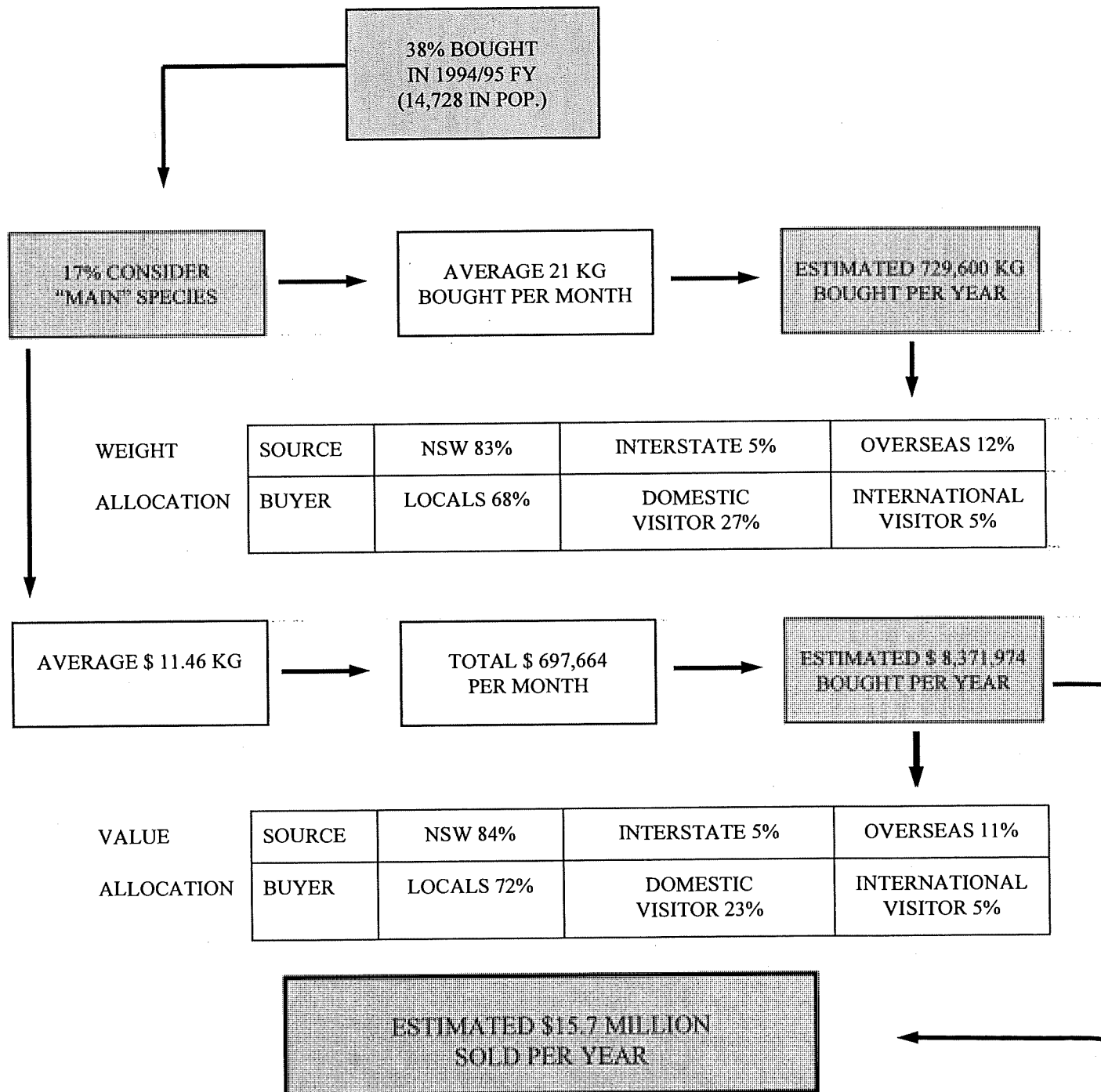
Base: NSW Catering Business Who Consider This A Main Species (n = 110)

ESTIMATED VOLUME AND VALUE OF SEA PERCH (ORANGE ROUGHY) BOUGHT BY THE NSW CATERING SECTOR



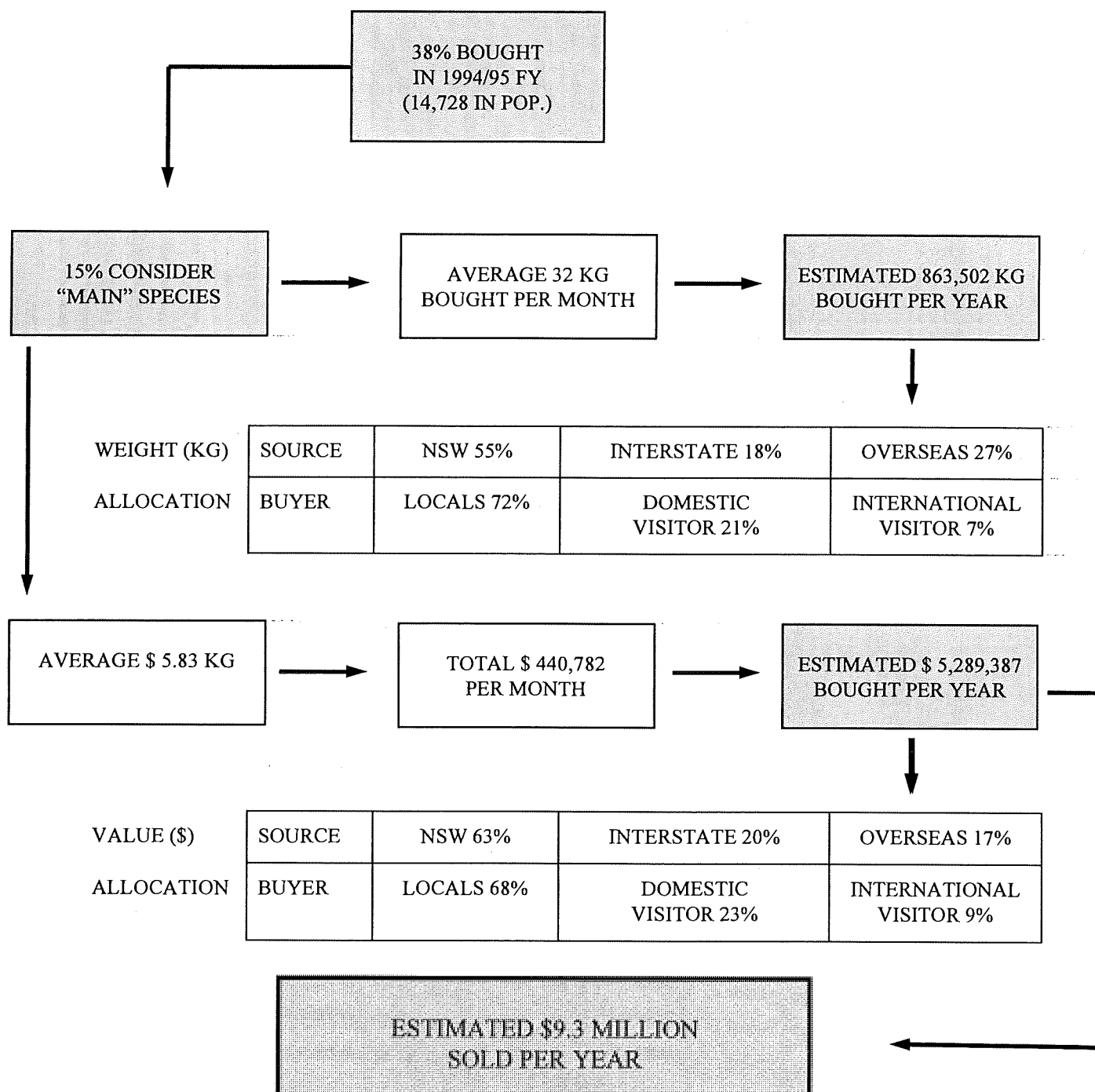
Base: NSW Catering Business Who Consider This A Main Species (n = 91)

ESTIMATED VOLUME AND VALUE OF SNAPPER BOUGHT BY THE NSW CATERING SECTOR



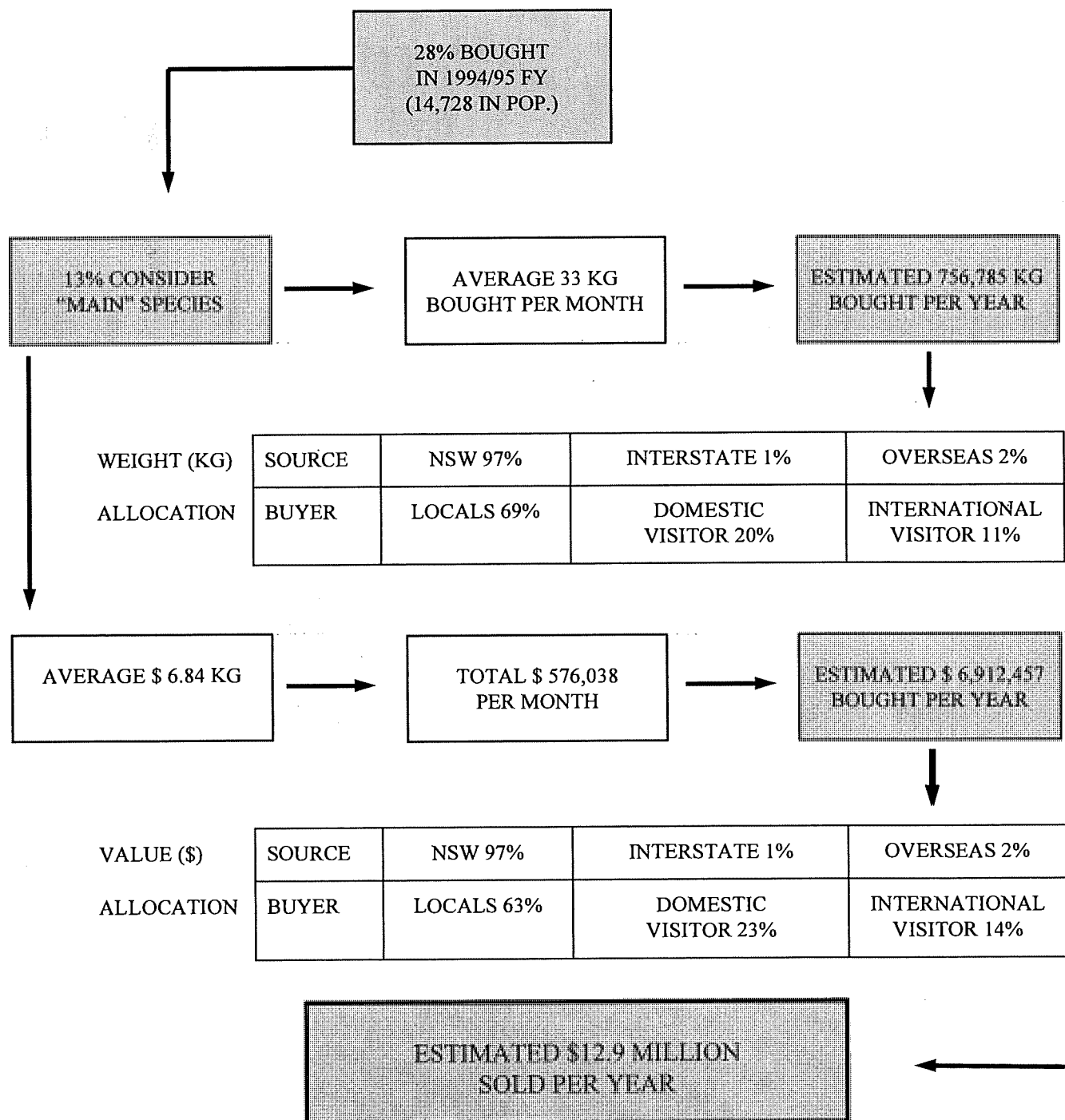
Base: NSW Catering Business Who Consider This A Main Species (n = 81)

ESTIMATED VOLUME AND VALUE OF MUSSELS BOUGHT BY THE NSW CATERING SECTOR



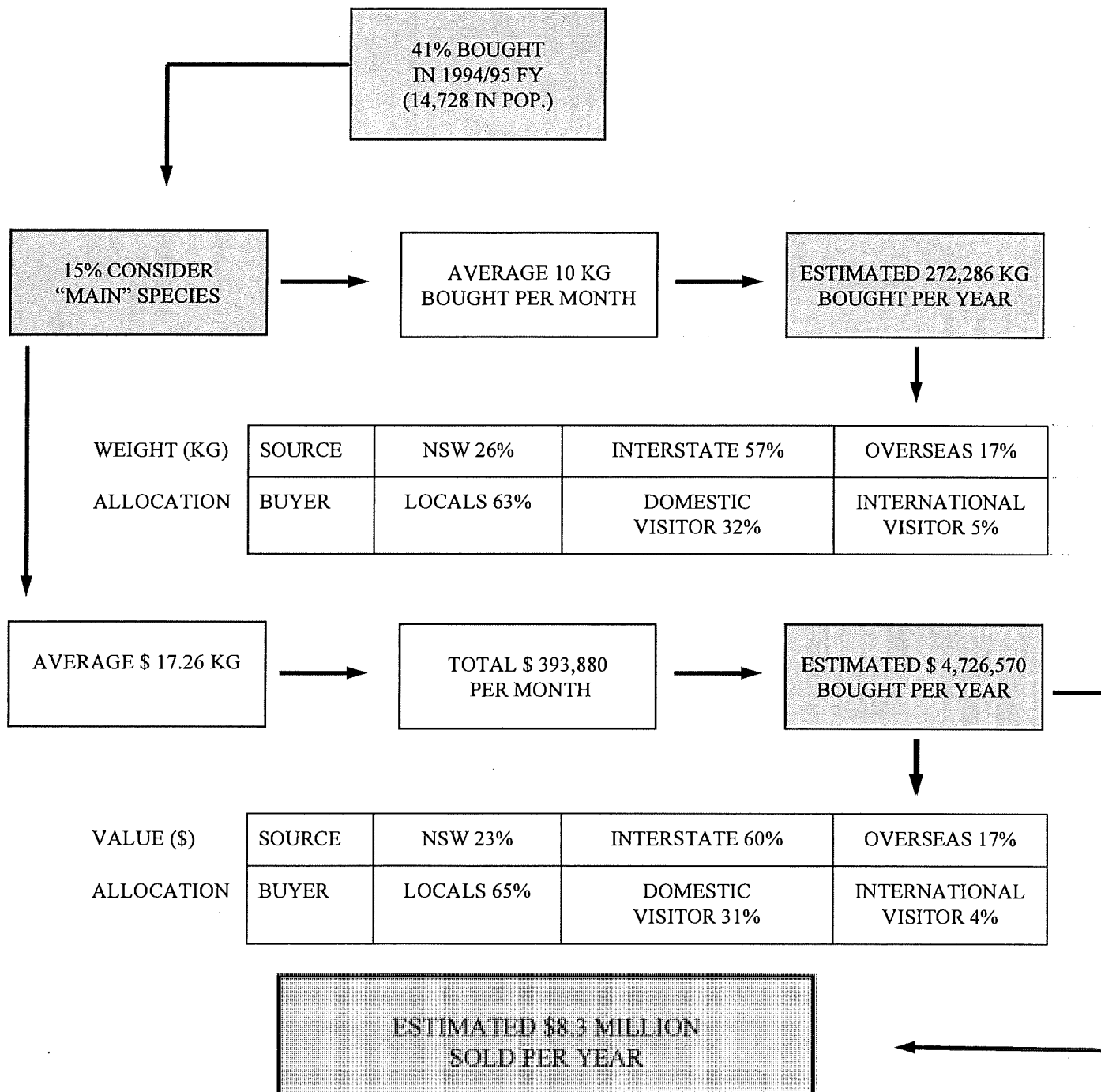
Base: NSW Catering Business Who Consider This A Main Species (n = 76)

ESTIMATED VOLUME AND VALUE OF FLATHEAD BOUGHT BY THE NSW CATERING SECTOR



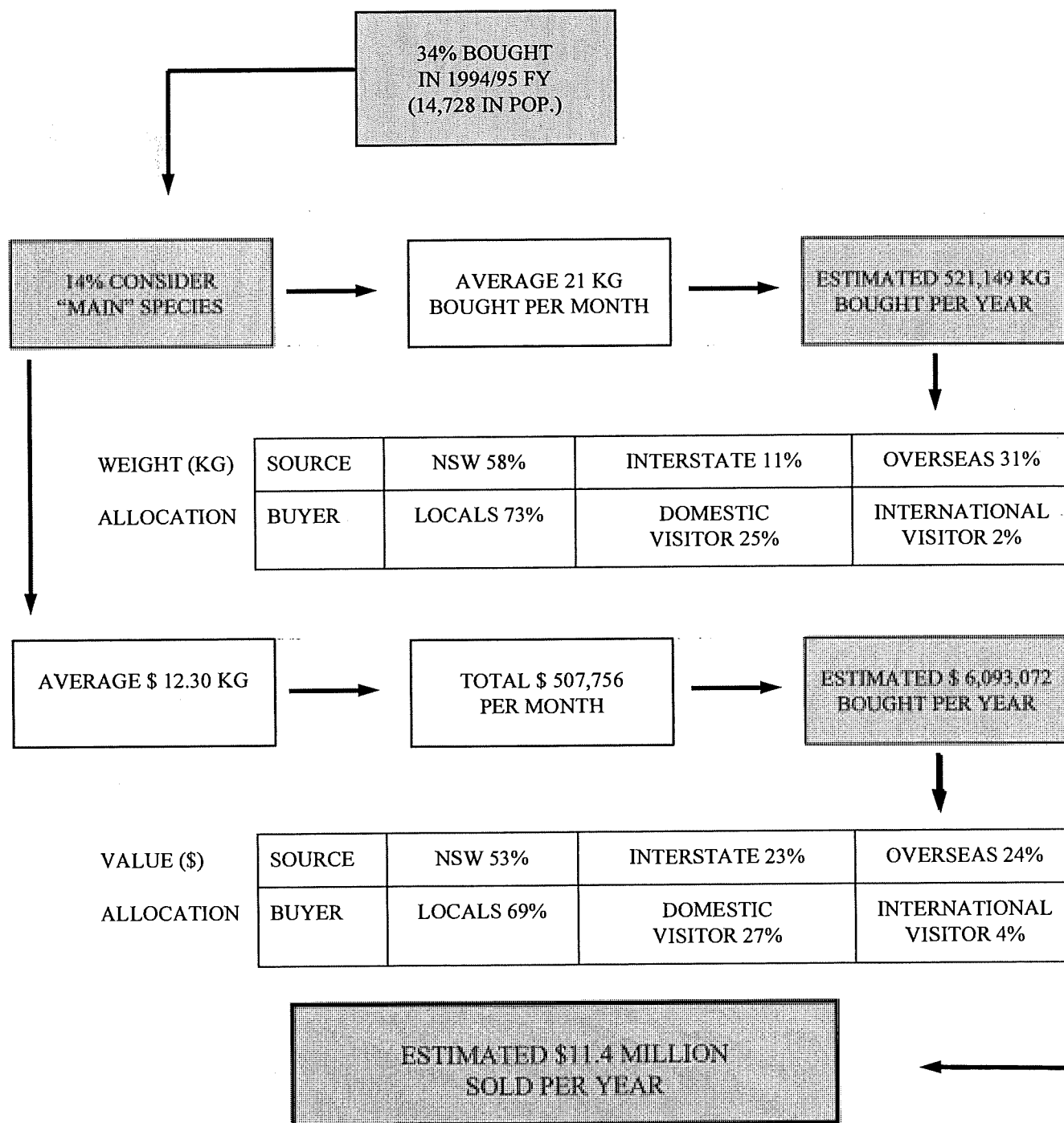
Base: NSW Catering Business Who Consider This A Main Species (n = 65)

ESTIMATED VOLUME AND VALUE OF SCALLOPS BOUGHT BY THE NSW CATERING SECTOR



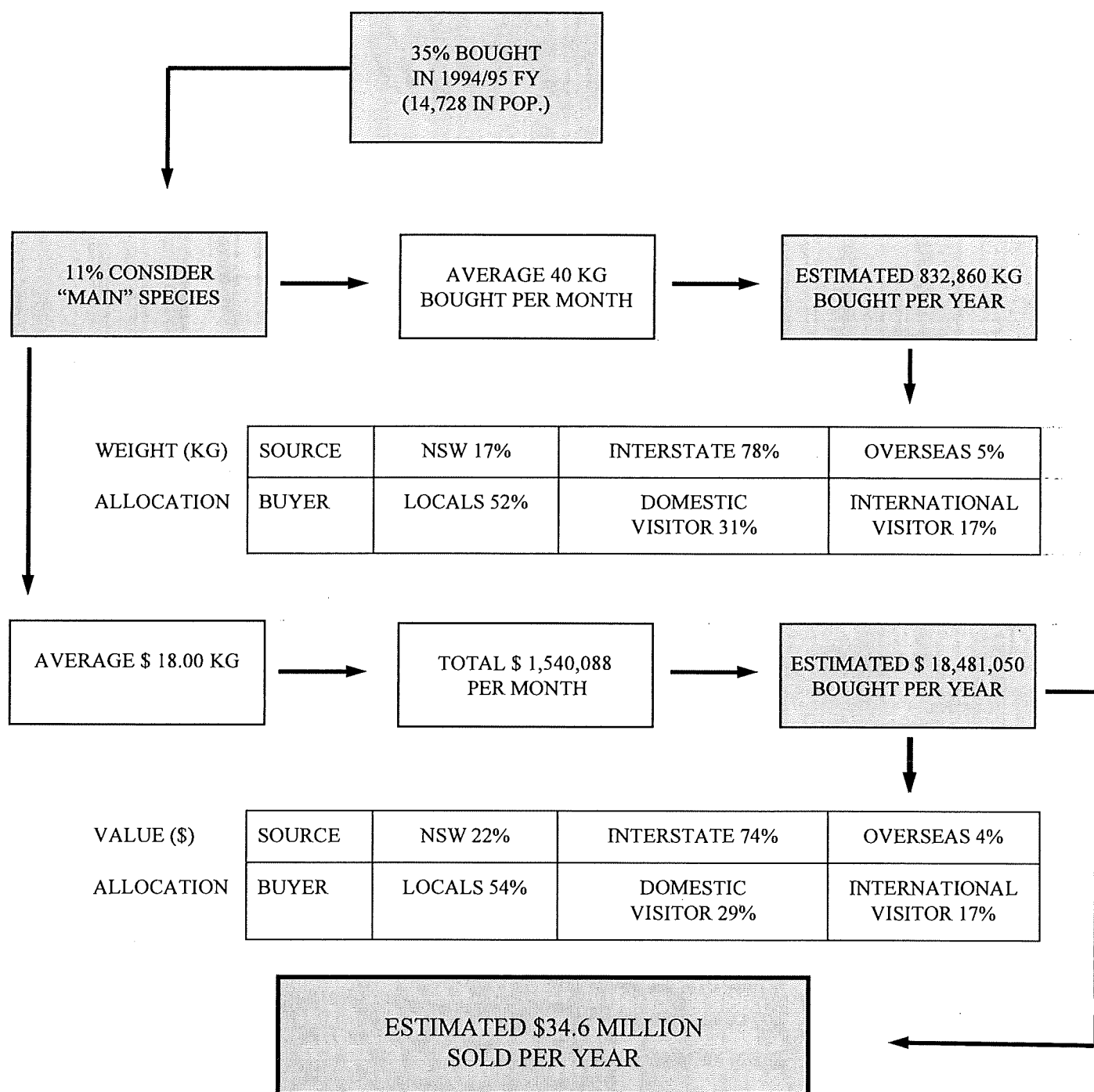
Base: NSW Catering Business Who Consider This A Main Species (n = 61)

ESTIMATED VOLUME AND VALUE OF WHITING BOUGHT BY THE NSW CATERING SECTOR



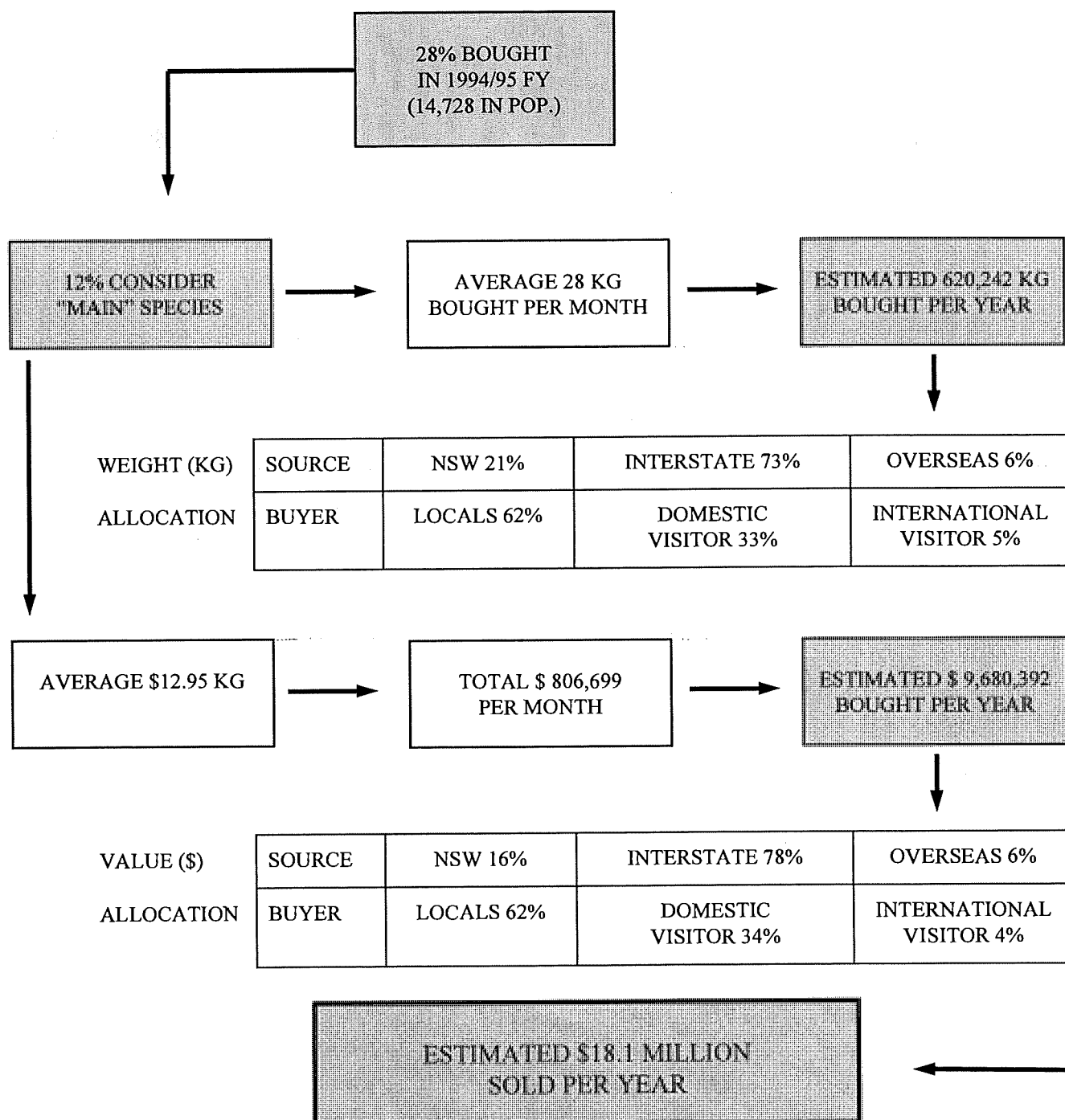
Base: NSW Catering Business Who Consider This A Main Species (n = 56)

ESTIMATED VOLUME AND VALUE OF SALMON BOUGHT BY THE NSW CATERING SECTOR



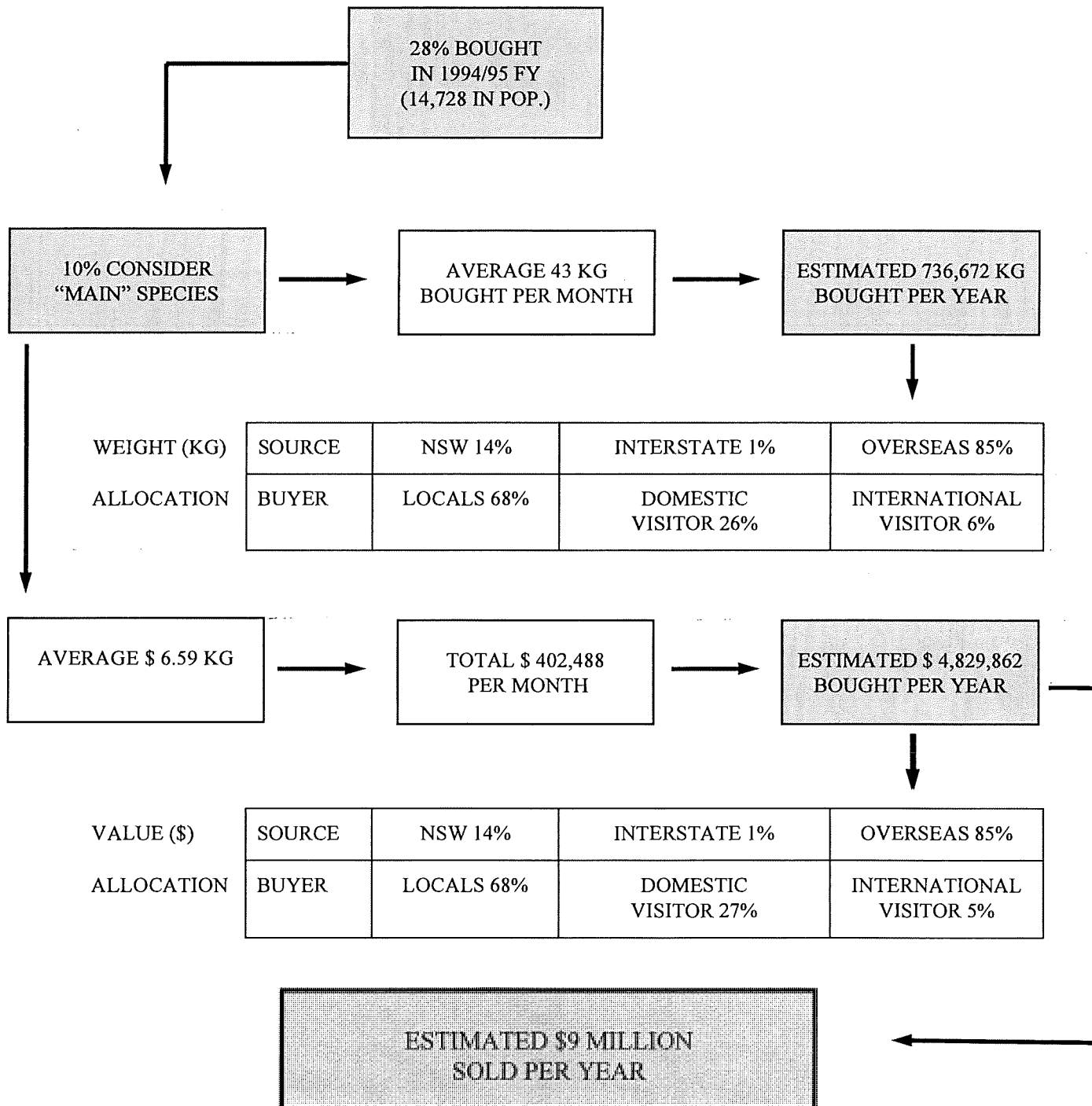
Base: NSW Catering Business Who Consider This A Main Species (n = 55)

ESTIMATED VOLUME AND VALUE OF BARRAMUNDI BOUGHT BY THE NSW CATERING SECTOR



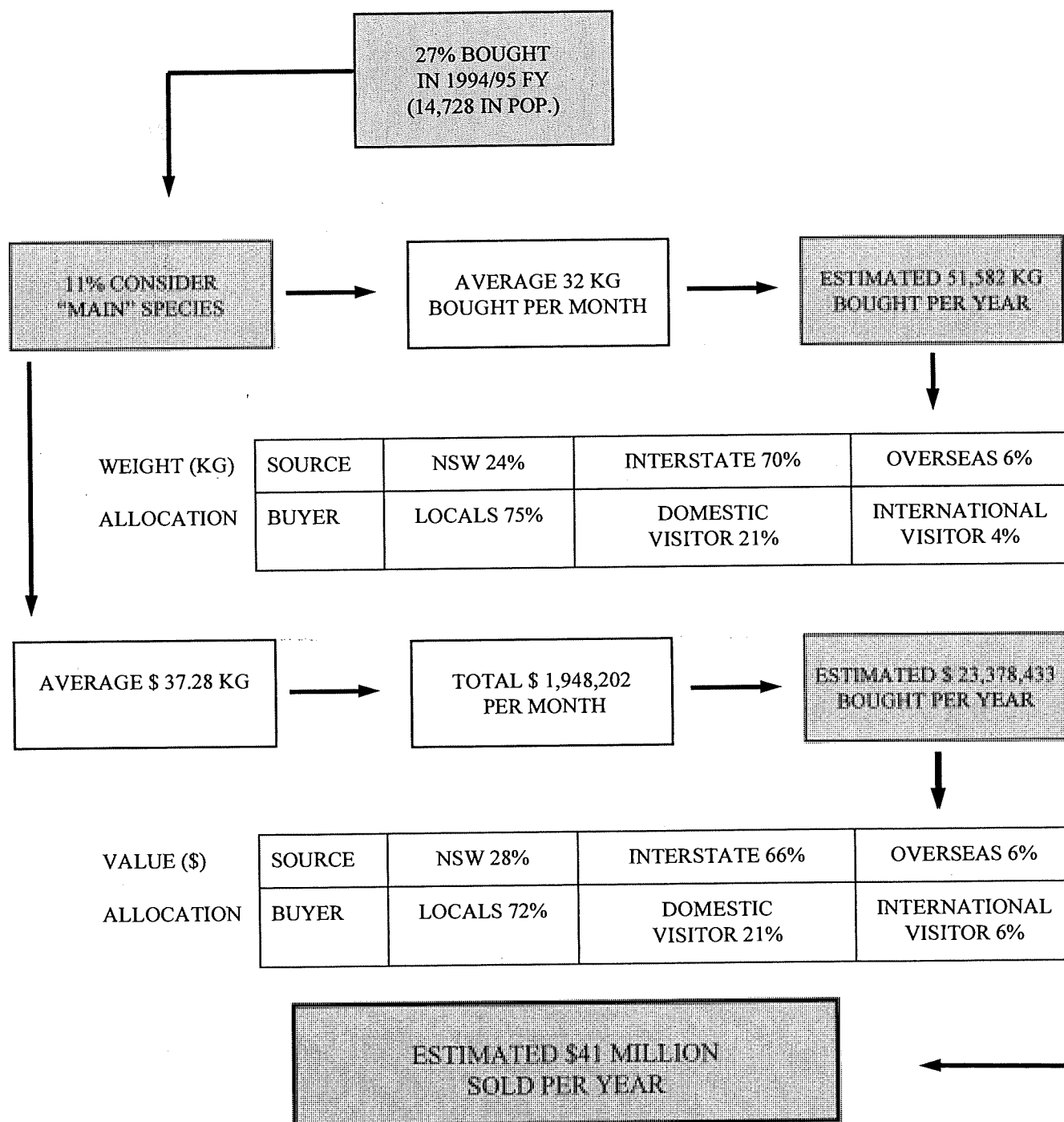
Base: NSW Catering Business Who Consider This A Main Species (n = 55)

ESTIMATED VOLUME AND VALUE OF NILE PERCH BOUGHT BY THE NSW CATERING SECTOR



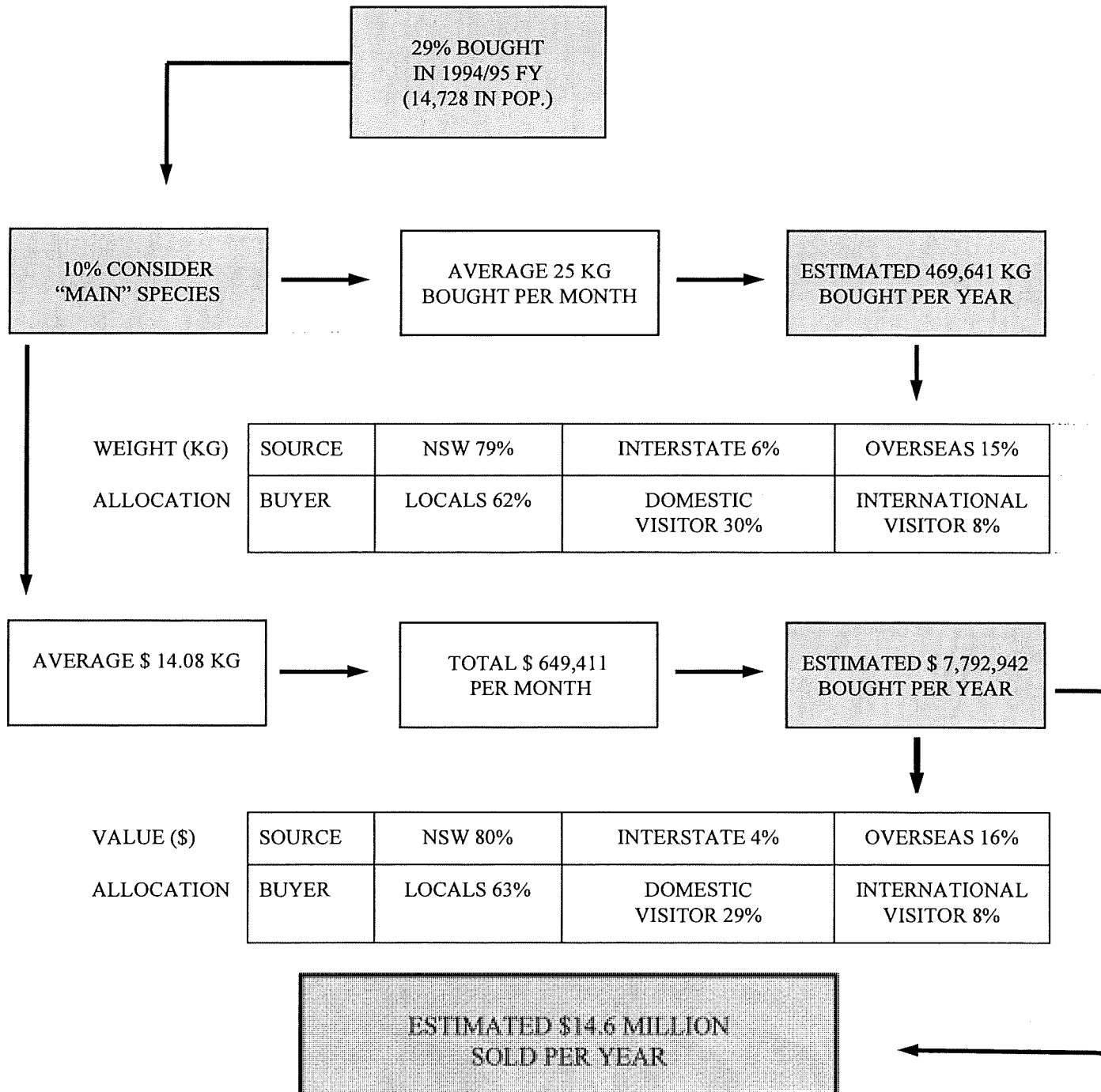
Base: NSW Catering Business Who Consider This A Main Species (n = 52)

ESTIMATED VOLUME AND VALUE OF LOBSTER/CRAYFISH BOUGHT BY THE NSW CATERING SECTOR



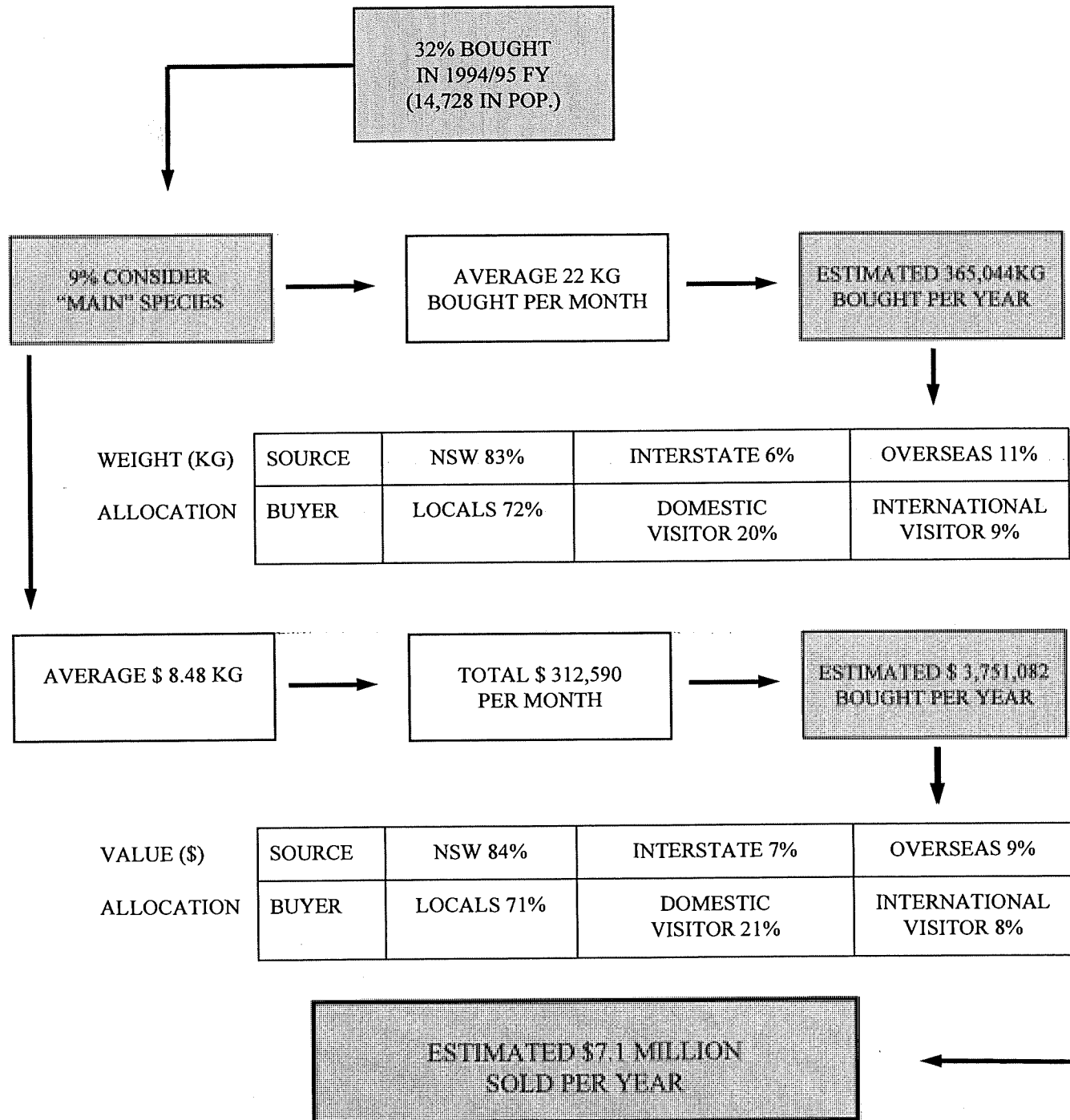
Base: NSW Catering Business Who Consider This A Main Species (n = 42)

ESTIMATED VOLUME AND VALUE OF JOHN DORY BOUGHT BY THE NSW CATERING SECTOR



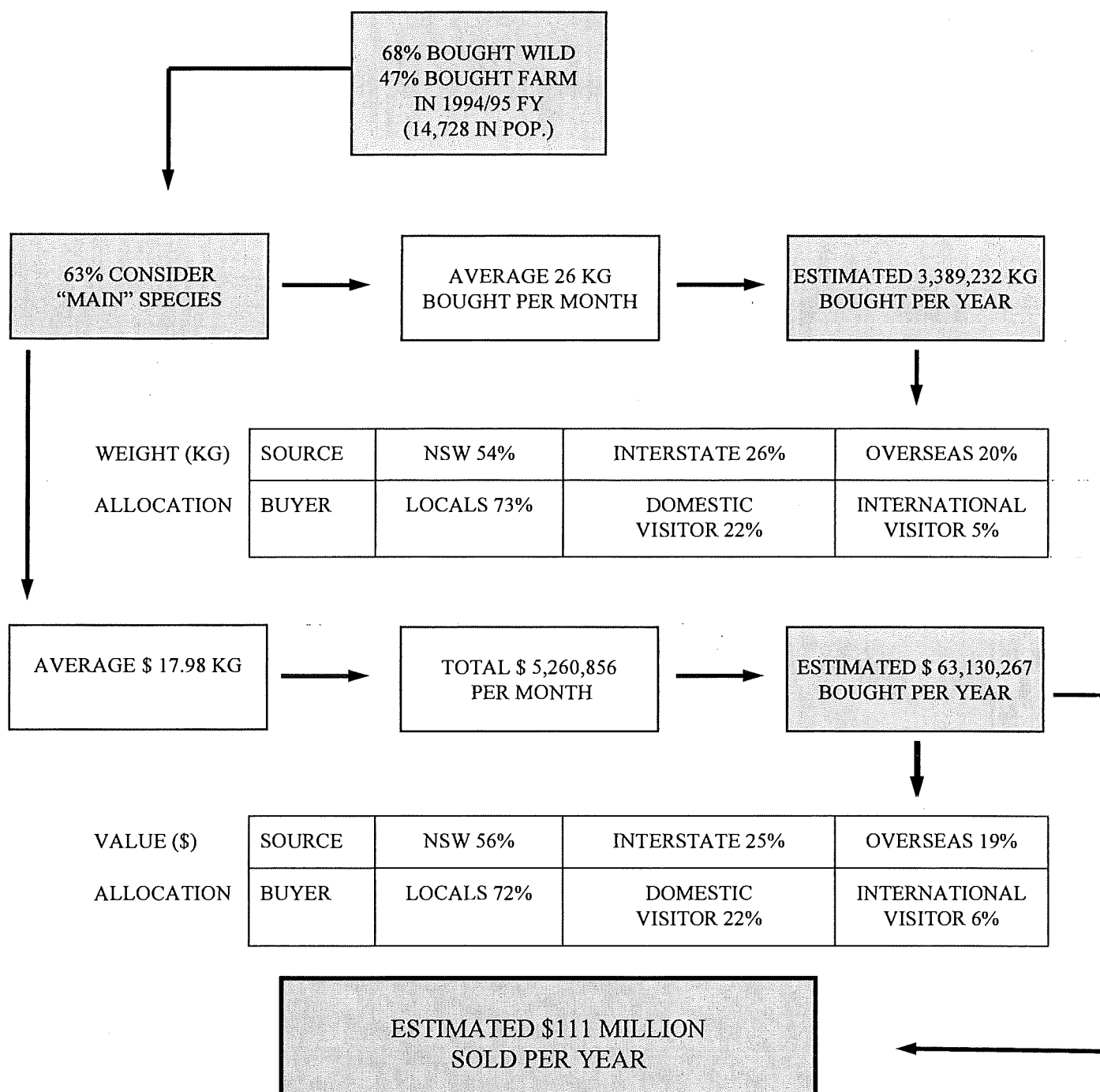
Base: NSW Catering Business Who Consider This A Main Species (n = 41)

ESTIMATED VOLUME AND VALUE OF BREAM BOUGHT BY THE NSW CATERING SECTOR



Base: NSW Catering Business Who Consider This A Main Species (n = 41)

ESTIMATED VOLUME AND VALUE OF PRAWNS BOUGHT BY THE NSW CATERING SECTOR



Base: NSW Catering Business Who Consider This A Main Species (n = 249)

**10. LIKELY FUTURE TRENDS FOR SEAFOOD IN THE NSW
CATERING SECTOR**

10. LIKELY FUTURE TRENDS FOR SEAFOOD IN THE NSW CATERING SECTOR

10.1 Anticipated Seafood Sales Trend in the Next Five Years

In an overall sense, the outlook for seafood sales in the NSW catering sector is very positive (see Table 10.1.1).

One in two (49%) businesses believe that their seafood sales (not NSW specific) will increase over the next five years. On average, 28% growth is anticipated. This growth is more likely to come from those in the catering sector employing 50 or more people (63%).

Another 30% feel that seafood sales will stay about the same in five years time as they are now. And **13% anticipate a decline in seafood sales** in this time frame - on average, 25% decline in sales. Eight percent could not predict which way seafood sales will move.

Takeaway outlets were more likely than any other group to feel that seafood sales will decline in the next five years (21% cf 13% in total).

Increases in seafood sales (49%) are mainly attributed to an increasing health consciousness in the community - 23% mentioned that seafood is healthier, 16% noted a decline in red meat sales and 14% felt that more people are eating fish.

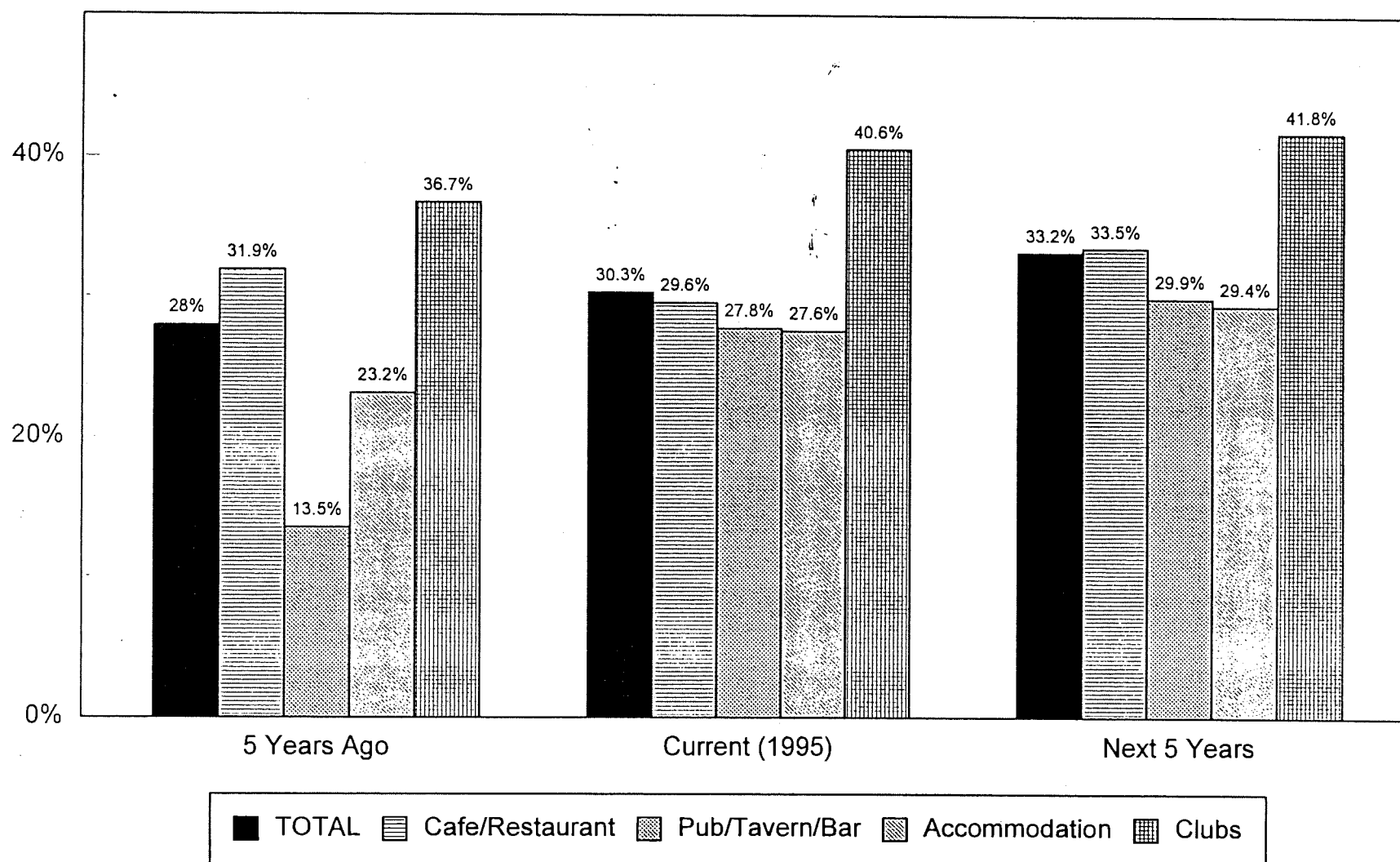
Those who anticipate a decline in seafood sales in the next five years (13%) hold this view mainly because they believe seafood will become too expensive (53%) - see Table 10.1.2.

The same question was asked in the 1990/91 National Seafood Consumption Study and the results are remarkably similar as reflected in the table below.

	Restaurants/ Pubs/Accommodation/Clubs		Takeaway Outlets	
	1990/91	1995	1990/91	1995
Increase	63%	54%	56%	52%
Decrease	9%	11%	16%	22%
Stay the Same	28%	35%	28%	26%
Total	100%	100%	100%	100%

Note: Table has been re-percentaged excluding don't know responses.

Likely Trend in Proportion of Entrees Including Seafood



Q15(a): In the next five years, what proportion of entrees (lunch and dinner) do you think will include seafood (fish or shellfish) from anywhere?

Base: Non-Takeaway Catering Businesses Preparing Seafood (n= 331; N = 10,552)

8102.PRE



10.1.1

ANTICIPATED SEAFOOD SALES TREND IN NEXT FIVE YEARS

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					EMPLOYMENT SIZE		
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Club	1-9	10-49	50+
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(210)	(136)	(60)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(10,514) %	(3,799) %	(415) %
INCREASE	49*	49	52	46	43	46	47	52	63
STAY ABOUT THE SAME	30	25	24	40	39	42	29	34	14
DECREASE	13#	21	12	9	9	7	15	9	18
DON'T KNOW	8	5	12	6	9	5	10	4	5
TOTAL	100	100	100	100	100	100	100	100	100

* Average percentage of change is 28%

Average percentage of change is 25%

Question 16(a): Overall, in five years do you think seafood (fish or shellfish) sales will increase, stay about the same or decrease?

10.1.2

REASONS FOR ANTICIPATED CHANGE IN SEAFOOD SALES

Base: Catering Businesses Preparing Seafood

RESPONDENTS	INCREASE	DECREASE
WTD. RESP.	(202)	(46)
	(7,173)	(1,946)
	%	%
GOOD FOR YOU/HEALTHIER	23	-
MORE HEALTH CONSCIOUS/LESS RED MEAT	16	-
MORE PEOPLE EATING FISH/SEAFOOD DEMAND INCREASING	14	-
NOT EXPENSIVE/CHEAPER THAN MEAT	8	-
LOW IN FAT/NO FAT/LIGHT	7	-
OVERSEAS/VISITORS/TOURISM	7	-
POPULAR/MORE POPULAR NOW	6	-
PEOPLE MORE AWARE OF FISH/PROMOTED MORE	6	-
PEOPLE LIKE FISH/SEAFOOD	6	-
GOOD FOR DIET	5	-
OLYMPIC GAMES BRING MORE PEOPLE	4	-
GENERAL TREND	4	-
PRICES WILL INCREASE/TOO EXPENSIVE	3	53
SHORTAGE/NOT REGULARLY AVAILABLE	3	16
NOT MUCH FISH AROUND/FISHED OUT	-	11
OTHER COMMENTS	29	31
DON'T KNOW	1	2
	MULTIPLE RESPONSE ALLOWED	

Question 16(b): And what are the main reasons for thinking it will.....?

10.2 Likely Trend in the Proportion of Meals Including Seafood

10.2.1 Likely Trend in the Proportion of Entrees Including Seafood

An **upwards trend in the proportion of entrees including seafood** is likely in the next five years - in non-takeaway catering businesses (see accompanying chart).

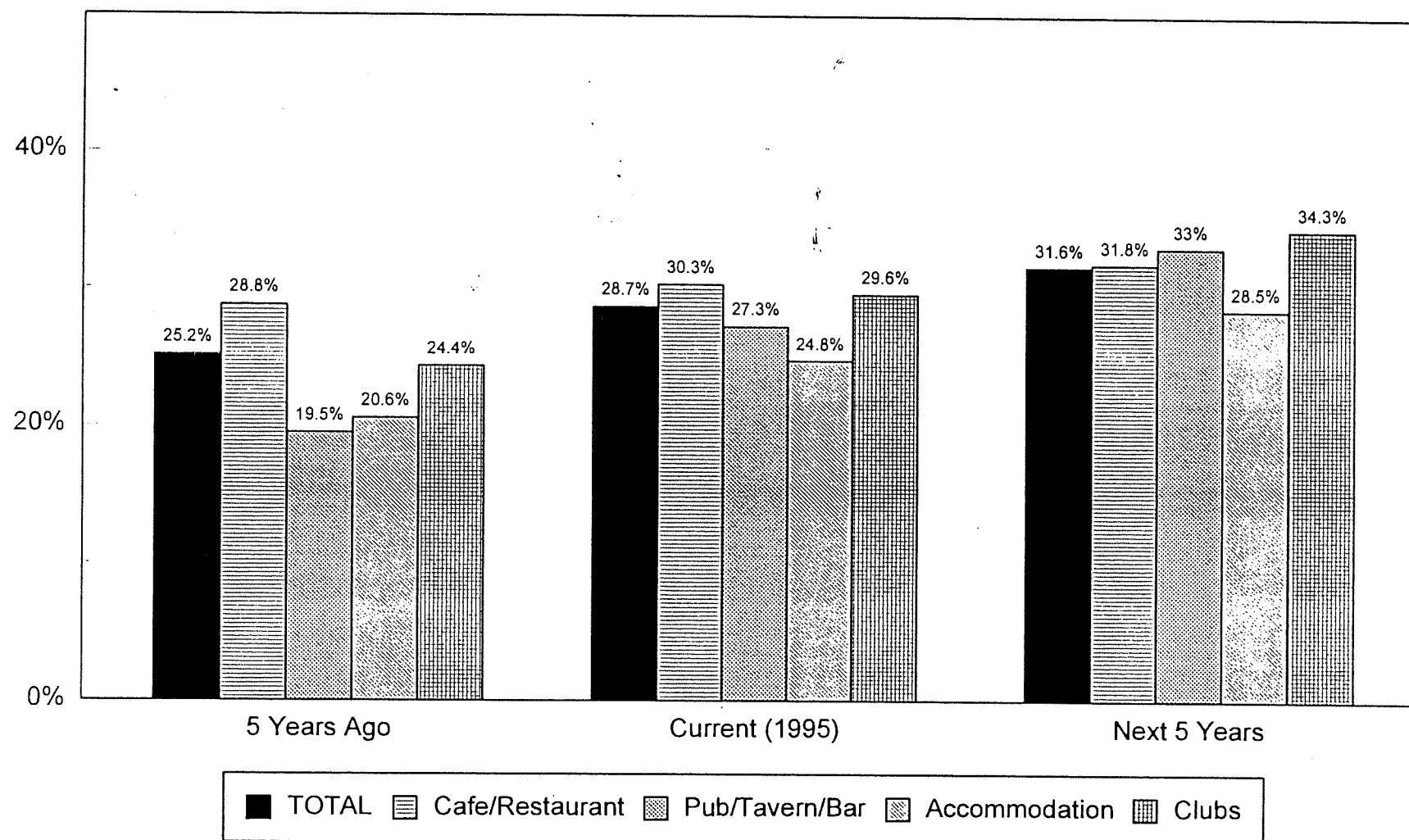
On average, seafood entrees represent 30.3% of all entrees currently, but in **five years time this is estimated to increase to 33.2%**. Growth is thought likely in all catering classifications.

Just over one in five (23%) non-takeaway catering businesses do not think they will serve any entrees including seafood (32% currently).

Those closer to the coast (within 10km) continue to perceive seafood based entrees as being more significant to their business than those further away:

- 37.2% for those within 10km of the coast;
- 31.5% for those within 11 to 100km of the coast; and
- 30.4% for those over 100km from the coast.

Likely Trend in Proportion of Main Meals Including Seafood



Q15(b): And what proportion of main meals prepared in five years time do you think will include seafood (fish or shellfish) from anywhere?

Base: Non-Takeaway Catering Businesses Preparing Seafood (n= 331; N = 10,552)

8102.PRE



10.2.2 Likely Trend in the Proportion of Main Meals Including Seafood

In the **next five years, on average 31.6% of main meals** served by non-takeaway catering businesses are thought likely to **include seafood**. This is an increase from 28.7% - the current situation (see accompanying chart).

Again, on average, increases are thought likely across all catering classifications.

Catering businesses closer to the coast (within 10km) continue to perceive seafood as a more substantial part of their main meal business:

- 36.0% for those within 10km of the coast;
- 29.2% for those within 11 to 100km of the coast; and
- 29.2% for those over 100km from the coast.

10.3 Anticipated NSW Seafood Sales Trend in the Next Five Years

Far more businesses in the **NSW catering sector think that the demand for NSW caught seafood will increase than decrease in the future:**

- 43% anticipate an increase; and
- 9% anticipate a decrease.

Another one in three (34%) believe that demand will stay about the same.

Thirteen percent were uncertain which way the demand for NSW caught seafood will move.

This anticipated growth has obvious implications in terms of sourcing locally caught species for use by the NSW catering sector.

Base: Catering Businesses Preparing Seafood

	TOTAL	CATERING TYPE					EMPLOYMENT SIZE		
		Takeaway	Cafe/ Restaurant	Pub/ Tavern/ Bar	Accom- modation	Clubs	1-9	10-49	50+
RESPONDENTS	(406)	(75)	(91)	(72)	(94)	(74)	(210)	(136)	(60)
WTD. RESP.	(14,728) %	(4,176) %	(5,547) %	(1,537) %	(2,132) %	(1,336) %	(10,514) %	(3,799) %	(415) %
INCREASE	43	43	45	39	46	37	44	41	52
STAY ABOUT THE SAME	34	24	36	52	34	34	32	39	33
DECREASE	9	12	9		7	12	11	3	9
DON'T KNOW	13	20	9	9	13	15	12	17	7
TOTAL	100	100	100	100	100	100	100	100	100

Question 16(c): And do you think the demand for NSW caught seafood (fish or shellfish) will increase, stay about the same or decrease?

APPENDIX 1

QUESTIONNAIRE

AREA:
SYDNEY 01
OUTER SYDNEY02

NORTHERN NSW	
HUNTER	03
MID NORTH COAST	04
RICHMOND - TWEED	05
NORTHERN	06
NORTH WESTERN	07
CENTRAL WEST	08
FAR WEST	09

SOUTHERN NSW	
ILLAWARRA	10
SOUTH EASTERN	11
MURRUMBIDGEE	12
MURRAY	13
ACT	14

JOB NO: 8102

Good morning/afternoon/evening. My name is from Yann Campbell Hoare Wheeler Market Research. Today/tonight we are speaking with people in the catering sector about seafood (fish and shellfish). The purpose is to ascertain demand now and in the future by the catering sector. The results will be used in planning the supply of NSW seafood to the catering sector - to make sure you can access enough seafood in the future, particularly with the forthcoming Olympics.

S.1		Firstly how would you describe this business. Is it a.....? SINGLE RESPONSE ONLY							
		A	B	C	D	E	F	G	H
[FISH & CHIP SHOP	1	1	1	1	1	1	1	1
	OTHER TAKE-AWAY OUTLET	2	2	2	2	2	2	2	2
	CAFE OR RESTAURANT (INCL. CATERERS)	3	3	3	3	3	3	3	3
	PUB, TAVERN OR BAR (MAINLY DRINKING PLACE)	4	4	4	4	4	4	4	4
[HOTEL (MAINLY FOR ACCOMMODATION)	5	5	5	5	5	5	5	5
	MOTEL	6	6	6	6	6	6	6	6
	OTHER ACCOMMODATION PLACE	7	7	7	7	7	7	7	7
	SOCIAL OR SPORTING CLUB	8	8	8	8	8	8	8	8
	NONE	9	9	9	9	9	9	9	9
IF NONE (CODE 9) TERMINATE									

[illegible]

	A	B	C	D	E	F	G	H
YES	1	1	1	1	1	1	1	1
NO	2	2	2	2	2	2	2	2
IF NO (CODE 2) TERMINATE								

	A	B	C	D	E	F	G	H
YES	1	1	1	1	1	1	1	1
NO	2	2	2	2	2	2	2	2

IF NO (CODE 2) TERMINATE

- S.5 Could I please speak with the person responsible for purchasing fish and shellfish? CONTINUE _____ YES 1
MAKE CALL-BACK _____ NO/NOT AVAILABLE 2
APPOINTMENT

CALL BACK:

NAME: _____

DATE/TIME: _____

IF A NEW RESPONDENT COMES TO PHONE, REPEAT INTRODUCTION

- Q.1(a) In an average week, how many customers (or meals) would be served by the business? WRITE IN: _____

IF CODE 3 TO 8 IN S1 ASK Q.1(b): IF CODE 1 OR 2 GO TO Q.1(c)

- Q.1(b) Roughly how many (READ OUT) would be served by the business in an average week?

ENTREES: _____

MAIN MEALS: _____

- Q.1(c) And over a year roughly what proportion of your customers would be? CRITICAL
- | | |
|------------------------------------|---------|
| LOCALS (LIVE NEARBY) | _____ % |
| DOMESTIC VISITORS OR TOURISTS | _____ % |
| INTERNATIONAL VISITORS OR TOURISTS | _____ % |
| MUST TOTAL | 100% |

- Q.2(a) In the view of your local customers, how important do you think it is that you offer NSW caught seafood (fish and shellfish). Would you say.....? READ OUT

IF IN Q.1(c) DOMESTIC OF INTERNATIONAL VISITORS ASK Q.2(b): IF NOT GO TO Q.3

- Q.2(b) In the view of your domestic and international visiting customers, how important do you think it is that you offer NSW caught seafood. Would you say.....? READ OUT

	Q.2(a)	Q.2(b)
EXTREMELY IMPORTANT	1	1
VERY IMPORTANT	2	2
MODERATELY IMPORTANT	3	3
SLIGHTLY IMPORTANT	4	4
NOT AT ALL IMPORTANT	5	5
DON'T KNOW	6	6

IF CODE 3 TO 8 IN S.1 ASK Q.3: IF CODE 1 OR 2 GO TO Q.5

- Q.3 Do you actively promote local or NSW seafood on your menu (fish of the day, etc.)? YES 1
NO 2

- Q.4(a) Thinking of the entrees (lunch and dinner) prepared over the last month, roughly what proportion included seafood, that is, fish or shellfish? It could be sourced from anywhere. _____ %

- Q.4(b) Thinking of the main meals (lunch and dinner) prepared over the last month, roughly what proportion included seafood (i.e. fish or shellfish)? _____ %
- Q.4(c) If you were to think back to five years ago, what proportion of entrees prepared would have included seafood (fish or shellfish)? _____ %
- Q.4(d) And what proportion of main meals prepared (five years ago) would have included seafood (fish or shellfish)? _____ %

Q.5(a) From which of the following suppliers do you buy your seafood (fish and shellfish)? READ OUT. RECORD BELOW.

Q.5(b) So you buy seafood from (READ OUT FROM Q.5(a)) roughly what proportion would you buy from (READ OUT EACH SUPPLIER TYPE IN TURN FROM Q.5(a))? RECORD BELOW.

	Q.5(a)	Q.5(b)
LOCAL (close by) NSW CO-OPERATIVE	1	_____ %
OTHER NSW CO-OPERATIVE	2	_____ %
(expect few to say this) * THE AUCTION AT THE SYDNEY FISH MARKET (rather than a wholesaler at the market)	3	_____ %
LOCAL (close by) NSW FISH WHOLESALER	4	_____ %
OTHER NSW FISH WHOLESALER	5	_____ %
OTHER LOCAL (close by) SUPPLIER	6	_____ %
OTHER SUPPLIERS IN NSW	7	_____ %
INTERSTATE SUPPLIER	8	_____ %
		100%

Q.6 In the 1994/95 financial year, did you buy....? READ OUT. ROTATE TO ASTERISK.

FISH	SHELLFISH	
Barramundi	01 Bugs	24
Blackfish	02 Crab	25
Bream	03 Cuttlefish	26
Cod	04 Lobster/Crayfish	27
John Dory	05 Mussels	28
Smooth (Oreo) Dory	06 Octopus (not squid) - eight long tentacles	29
Blue Eye	07 Sydney Rock Oysters	30
Flathead	08 Pacific Oysters	31
Flounder	09 Prawns (caught at sea)	32
Hake	10 Farm Prawns	33
Ling	11 Scallops	34
Nile Perch	12 Squid/Calamari (long tube, short tentacles)	35
Mullet	38	
Sea Perch (Orange Roughy)	13 Seafood Extender (imitation Crab Meat)	36
Sardines	14 Marinara Mix	37
Salmon	15	
Smoked Salmon	16	
Shark	17	
Snapper	18	
Sole	19	
Trevally	20	
Trout (farmed)	21	
Tuna	22	
Whiting	23	

NSW SEAFOOD PURCHASING

[illegible]

I would now like to ask you some questions about the main types of fish and shellfish which are prepared by this business. Please think about both fresh and frozen products.

Q.7(a) In the 1994/95 financial year what were the top six types of fish prepared by this business? PROBE FOR SIX, BUT FEWER ACCEPTABLE.

1	_____	4	_____	
2	_____	5	_____	
3	_____	6	_____	NONE 001

Q.7(b) And what were the top six types of shellfish (crustaceans and molluscs) prepared by this business? PROBE FOR SIX, BUT FEWER ACCEPTABLE.

1	_____	4	_____	
2	_____	5	_____	
3	_____	6	_____	NONE 001

FOR EACH SPECIES IN Q.7 ASK Q.8 TO Q.11

Q.8 In what form did you buy (READ OUT SPECIES).....

FOR FISH READ OUT:

Would it be live, whole, filleted, cutlet, headed and gutted, or in some other form?

FOR SHELLFISH READ OUT:

Would it be live, whole, a cutlet or just the meat?

(e.g. whole = oysters or mussel with both shell or half shell; prawns head and tail on.
cutlet = prawns head off and tail on.
meat = prawn no head, tail or shell; calamari tubes/rings).

WRITE IN SPECIES UNDER Q.7. MULTIPLES ALLOWED BUT RECORD EACH CODE ON SEPARATE LINE.

Q.9(a) In a typical month of 1994/95, how many kilograms of (READ OUT SPECIES AND FORM) was bought? PROBE FOR BEST ESTIMATE. RECORD DOZENS IF THEY SAY THIS. IF THEY BUY BY THE BOX KG SHOULD BE LABELLED ON THE BOX.

IF SAY SUMMER/WINTER DIFFERENT:

What would be the average for a month taking into account seasonal differences?

IF S1 CODE 1 OR 2 ASK Q.9(b): IF NOT GO TO Q.10

Q.9(b) What proportion of that would have been cooked for customers (as opposed to selling 'wet')?

Q.10 And what was the average price you paid per kilogram for (READ OUT SPECIES AND FORM)? PROBE FOR BEST ESTIMATE - DOLLARS AND CENTS.

Q.11 Thinking about where (READ OUT SPECIES AND FORM) is caught. What proportion of what you bought last year was caught in NSW, interstate and overseas (i.e. imported) waters? TOTAL MUST BE 100%

Q.12 Thinking of the species we have just discussed, approximately what proportion of the total amount you spent on all seafood (including fish) in the last year was accounted for by these species? PROBE FOR BEST ESTIMATE _____ %

Q.13 On average, what mark-up do you place on....? READ OUT.
IF RELUCTANT TO ANSWER: We need to ask this to establish what the value of seafood is to the NSW catering sector and your individual answer will remain confidential.

IF SAY 0%: Are you sure, this means that you don't add on anything to the price you buy it for?

100% = 2 TIMES BUY PRICE
200% = 3 TIMES BUY PRICE
300% = 4 TIMES BUY PRICE

FISH _____ %

SHELLFISH (CRUSTACEANS AND MOLLUSCS) _____ %

Q.14(a) In the last five years, have you found that you have not been able to buy the amount of any particular seafood species or product you want - there is not enough in supply?

YES 1

GO TO Q.15(a) _____ NO 2

_____ DON'T KNOW 3

Q.14(b) And which species or products have been difficult to buy?

IF CODE 3 TO 8 IN S.1 ASK Q.15: IF CODE 1 OR 2 GO TO Q.16

Q.15(a) In the next five years, what proportion of entrees (lunch and dinner) do you think will include seafood (fish or shellfish) from anywhere? _____ %

Q.15(b) And what proportion of main meals prepared in five years time do you think will include seafood (fish or shellfish) from anywhere? _____ %

Q.16(a) Overall, in five years do you think seafood (fish or shellfish) sales will increase, stay about the same or decrease? IF INCREASE/DECREASE: By what proportion do you think it will increase/decrease?

INCREASE 1 _____ %

STAY ABOUT THE SAME 2 _____ %

DECREASE 3 _____ %

DON'T KNOW 4 _____ %

Q.16(b) And what are the main reasons for thinking it will (READ OUT FROM Q.16(a))?

Q.16(c) And do you think the demand for NSW caught seafood (fish or shellfish) will increase, stay about the same or decrease ?

INCREASE 1

STAY ABOUT THE SAME 2

DECREASE 3

DON'T KNOW 4

Q.17 What proportion of your food turnover would be accounted for by your seafood (fish or shellfish) sales?
IF SAY 100%: Are you sure, this means that you don't sell any other food but seafood?

_____%

Q.18 Lastly, how many kilometres are you from the coast of NSW. We just want a rough estimate? PROBE FOR BEST ESTIMATE.
DO NOT ACCEPT DON'T KNOW.

____KM

THANK YOU VERY MUCH FOR YOUR HELP. AS I SAID, I AM FROM YANN CAMPBELL HOARE WHEELER MARKET RESEARCH. IF YOU WOULD LIKE TO CHECK THE BONA FIDES OF THIS COMPANY, PLEASE CALL OUR COMPANY ON (03) 9534-2236 DURING OFFICE HOURS.

I certify this is a true, accurate and complete interview, conducted in accordance with IQCA standards and the ICC/ESOMAR code of conduct. I also agree to hold in confidence and not disclose to any other person the content of this questionnaire or any other information relating to this project.

INTERVIEWER SIGNATURE: _____ DATE: _____

--	--

--	--

INTERVIEWER NUMBER: _____

Day

Month

THANK YOU FOR YOUR HELP.

NAME: _____ COMPANY NAME: _____

SUBURB: _____ PHONE: _____

APPENDIX 2

CATERING SECTOR POPULATION - ABS

APPENDIX 2
NSW CATERING SECTOR BY LOCATION

TOTAL	CATERING TYPE					
	TAKEWAY	CAFE/ RESTAURANT	PUB/ TAVERN BAR	ACCOM- MODATION	CLUBS	
SYDNEY	8685	2806	3672	656	771	780
NORTHERN NSW	5042	1196	1331	651	1228	636
HUNTER	1565	455	446	187	261	216
MID NORTH COAST	951	202	258	74	320	97
RICHMOND-TWEED	663	157	198	56	189	63
NORTHERN	665	154	154	100	169	88
NORTH WESTERN	475	85	111	76	137	66
CENTRAL WEST	590	112	146	121	122	89
FAR WEST	133	31	18	37	30	17
SOUTHERN NSW	3701	876	1119	366	894	446
ILLAWARRA	931	242	300	62	217	110
SOUTH EASTERN	951	150	256	97	358	90
MURRUMBIDGEE	505	108	114	97	102	84
MURRAY	495	103	98	72	155	67
ACT	819	273	351	38	62	95
TOTAL NSW	17428	4878	6122	1673	2893	1862

Source: Australian Bureau of Statistics, Business Register, March 1994

PART THREE REPORT

**Importance of commercial fishing, aquaculture and seafood
to the catering and tourism industry in NSW**

G. Peacock and J. Cooke

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APPENDIX 1: Questionnaire

1. EXECUTIVE SUMMARY

1.1 Background to Stage 3 - Importance of Fishing, Aquaculture and Seafood to Tourists

The NSW fishing industry identified a need to have a better understanding of the future demand for seafood from the catering sector and an assessment of the importance of seafood to visitors. Therefore, the primary objective of the research was:

To assess the expectations of tourists regarding commercial fishing, aquaculture and local seafood and the importance of seafood and other industry products, such as sightseeing, educational and photo opportunities to visitors.

Two separate surveys were undertaken:

- Domestic Visitor Survey; and
- International Visitor Survey.

Domestic Visitor Survey

Questions were included in a telephone omnibus study, Newspoll, over three weekends - 16th February to 3rd March, 1996. The study was conducted nationally among 3,600 respondents aged 18 years and over and data were weighted to the population.

International Visitor Survey

In total, 602 personal interviews were undertaken with international visitors aged 15 years and over. All interviewing was conducted by experienced Yann Campbell Hoare Wheeler interviewers at key tourist locations throughout Sydney from the 15th March to the 15th April, 1996 - visitors were intercepted at some point within their travel in NSW. Quotas were applied by country of residence and the data have not been weighted.

1.2 Key Findings

1.2.1 Characteristics of Visitors to NSW

Domestic Visitors

- Overall, 20% of Australians aged 18 years and over had taken a trip between the 22nd December, 1995 to the 2nd March, 1996, of at least 4 nights where that trip included some travel in NSW. This equates to 2,645,000 people aged 18 years and over having taken a trip of this type.
- Overall, 8.7% of Australians aged 18 years and over had taken a trip between the 2nd February and 2nd March, 1996, of between 1 and 3 nights where that trip included at least 1 night in NSW. This equates to 1,099,000 people aged 18 years and over.
- From the Domestic Tourism Monitor (DTM) it is known that 15,543,000 net visits were undertaken within NSW in 1993/94 by Australians aged 14 years and over.
- Tourism New South Wales estimates that 16,800,000 domestic trips will be taken in NSW in 1998/99.

International Visitors

- The number of international visitors to NSW aged 15 years and over has been steadily increasing - 1,794,600 in 1993, 2,083,700 in 1994 and 2,163,270 in 1995 (source IVS).
- The Tourism Forecasting Council estimates that there will be 3,885,000 international visitors to NSW in the Year 2000. Assuming that 93% are aged 15 years and over, this equates to 3,613,050 international visitors.

1.2.2 Importance of Seafood to NSW Visitors

- Both domestic and international visitors were asked how important is the **opportunity** to eat local or NSW caught fish or seafood while in NSW - they don't have to have eaten it. While international visitors place more importance on the availability of locally caught species, it is also important to domestic visitors. A five point importance scale was used.

Importance of opportunity to eat local seafood	International Visitors	Domestic Visitors In NSW	
		Last Trip 4 Nights or More	Last Trip 1 to 3 Nights
Extremely Important	6%	7%	10%
Very Important	28%	14%	12%
Moderately Important	20%	17%	10%

- Those who had eaten seafood while in NSW were also asked how important was the actual eating of local or NSW caught fish or seafood in contributing to the **enjoyment** of their visit in NSW. Again the importance of local species is indicated for both international and domestic visitors.

Importance of eating experience in contributing to visitor enjoyment	International Visitors	Domestic Visitors In NSW	
		Last Trip 4 Nights or More	Last Trip 1 to 3 Nights
Extremely Important	4%	7%	10%
Very Important	25%	19%	17%
Moderately Important	27%	24%	22%

- Two in three (67%) international visitors will talk about some aspect of the seafood meal(s) they have eaten while in NSW.
- Almost all international visitors who had eaten seafood are either very or fairly satisfied with seafood meals served for their freshness, flavour and presentation. However, of all aspects, it is the presentation which international visitors are most critical - just 64% are very satisfied. Japanese in particular record the lowest level of satisfaction with the presentation of seafood meals - 48% very satisfied.

1.2.3 Demand for Seafood from NSW Visitors

Domestic Visitors

- Almost three in five (58%) domestic visitors who had taken a trip of at least 4 nights, where that trip included some travel in NSW, had eaten seafood. This equates to 1,539,000 domestic visitors to NSW in the period from the 22nd December, 1995 to 2nd March, 1996 - 10 weeks. On average, each domestic visitor in this time frame had eaten 1.38 seafood meals on their last visit.
- Two in five (42%) domestic visitors who had taken a trip of between 1 and 3 nights which included at least 1 night in NSW had eaten a seafood meal while in NSW. This equates to 462,000 domestic visitors to NSW from the 2nd February to 2nd March, 1996 - 4 weeks. On average, each of these domestic visitors in this time frame had eaten 0.70 seafood meals on their last visit.
- It is estimated that domestic visitors (18 years or more) will eat 17.0 million seafood meals in NSW (1996).
- Based on the projected number of domestic visitors in 1999/2000 an estimated 18.7 million seafood meals will be eaten in NSW by domestic visitors.

International Visitors

- Of all 602 international visitors, three in five (61%) had eaten a fish or seafood meal while in NSW (at the point of contact which was on average, half way through their planned stay). On average, 2.6 seafood meals had been eaten by each international visitor.
- In 1995, it is estimated that international visitors (15 years or more) ate 6.7 million seafood meals while in NSW.
- Based on the projected number of international visitors in 2000, an estimated 11.2 million seafood meals will be eaten in NSW.

1.2.4 Participation in Commercial Fishing and Aquaculture Related Activities

Domestic Visitors

- Domestic visitors who had taken a trip in NSW within the last 2 months (since Christmas 1995) were asked about their participation in commercial fishing activities. One in four (24% or 718,000) had participated in at least one activity:
 - 15% had looked at commercial fishing boats or fleets at a jetty or marina (454,000 visitors);
 - 12% had visited a wholesale or retail fish market or co-operative (369,000 visitors);
 - 3% had visited a commercial fish farm or oyster farm (79,000 visitors); and
 - 1% had attended an oyster festival or a commercial fishing festival such as the blessing of the fleet (20,000 visitors).
- Of the 718,000 domestic visitors who participated in some commercial fishing activity in that 2 month period:
 - 30% took at least one photo;
 - they took 2,577,000 photos in the 2 months;
 - 3.8 for each domestic visitor who participated in some commercial fishing activity.

(Estimated 15.5 million photos in a year)

- 45% spent some money while there;
- they spent \$18,000,000 in total;
- \$25.60 for each domestic visitor who participated in some commercial fishing activity.

(Estimated \$107.6 million in a year)

International Visitors

- International visitors were also asked about their participation or likely participation in commercial fishing activities:
 - 11% had participated in at least one commercial fishing activity (estimated 237,959 international visitors in a year);
 - 9% had visited a wholesale or retail fish market or cooperative;
 - 3% had looked at commercial fishing boats or fleets at a jetty or marina;
 - 1% had visited a commercial fish farm or oyster farm; and
 - 35% had, or believed that they would undertake at least one commercial fishing activity (estimated 757,144 international visitors in a year).

- A very broad estimate of the number of photos taken and expenditure at commercial fishing activities has been made for a year:
 - between 1.3 million and 1.8 million photos in 1996; and
 - \$7.1 million and \$8.3 million on commercial fishing activities.

2. INTRODUCTION

The demand for seafood in NSW has been growing steadily for the past five years as a result of increasing international tourism activities, a growing domestic population and increased frequency of dining out and the great attention focussed on the health benefits of eating seafood.

In 1994 the commercial fishing industry in NSW recognised that the demand for seafood in the State will increase due to population growth, eating preferences and increasing tourism, particularly leading up to the time of the Sydney 200 Olympics.

The expectations of tourists in regard to local seafood supplies has not been the subject of much research in Australia, and there has been no prior attempt to assess the importance of other products such as sightseeing, educational and photographic opportunities provided by the fishing and aquaculture industry.

The NSW fishing industry therefore needs to have a better understanding of the future demand for seafood from the catering sector and an assessment of the importance of seafood to visitors.

3. RESEARCH OBJECTIVES

The results contained within this report are of Stage 3. The primary objective of which was:

To assess the expectations of tourists regarding commercial fishing, aquaculture and local seafood and the importance of seafood and other industry products, such as sightseeing, educational and photo opportunities to visitors.

The issues explored in the domestic and international visitor surveys included:

- the importance of having the opportunity to eat local or NSW caught fish or seafood;
- the incidence of fish and seafood consumption by visitors;
- the importance of eating local or NSW caught seafood in contributing to the visitation experience in NSW; and
- the incidence of tourists undertaking other commercial fishing or aquaculture related activities in NSW - and the contribution to the industry.

4. RESEARCH METHODOLOGY

The survey of domestic and international visitors was undertaken as two distinct studies.

Domestic Visitor Survey

In order to best represent domestic visitation to NSW, a series of questions were included in a telephone omnibus study, Newspoll. The benefit being that tourists to the state can be represented, not just a number of areas on the coast (where an ad hoc study could have been undertaken) - ie. the sample is not biased.

The study was **conducted nationally among 3,600 respondents aged 18 years and over.**

Respondents were selected by means of a stratified random sample process which includes:

- A quota set for each city and non-city area within each state.
- Random selection of household telephone numbers drawn from current Telecom telephone directories for each area. This system ensures that each area is represented in the final sample in proportion to the size of the telephone directory, and thereby the population.
- Random selection of an individual in each household by a "last birthday" screening question.

Interviewing was conducted by telephone on the weekends of the:

- 16th-18th February, 1996;
- 23rd-25th February, 1996; and
- 1st-3rd March, 1996.

Interviewers were fully trained and personally briefed on the requirements for this study.

To ensure the sample included those people who tend to spend a lot of time away from their homes (which is particularly pertinent in regard to travel), a system of call backs and appointments was incorporated.

To reflect the population distribution, this data has been weighted by a combination of age, age left school, sex and area.

International Visitor Survey

The methodology adopted for the international visitor survey was different to that outlined above. Ideally the series of questions would have been included on the International Visitor Survey (IVS), which is an omnibus study conducted with international visitors at the time of departure from Australia. However, the inclusion of extra questions on the omnibus is dependent upon availability - all space had been pre-booked well in advance.

The alternative was to undertake personal interviews with international visitors while still travelling. From IVS data it is known that 97% of all international visitors to NSW, actually visit Sydney. Therefore, a good representation of international visitors could be achieved by completing interviews in key tourist locations throughout Sydney - Bondi Beach, The Rocks, Circular Quay, NSW Art Gallery and Taronga Park Zoo.

In total, **602 interviews were completed with international visitors aged 15 years and over** distributed by country of residence as follows:

	Number of Respondents	% of Respondents	% of International Visitors to NSW in 1993*
Japan	85	14%	27%
Other Asia	81	13%	19%
USA/Canada	103	17%	14%
New Zealand	81	13%	12%
UK/Ireland	106	18%	10%
Other Europe	106	18%	12%
Other Country	40	7%	5%

* Source: 1993 BTR Estimates (based on IVS and OAD data) - all visitors.

The sample of international visitors was quota controlled to provide an adequate sample of visitors from each of the major countries, thus enabling comparison to be made. This distribution does not proportionally reflect visitors to NSW.

Interviewing was conducted by experienced bi-lingual Yann Campbell Hoare Wheeler interviewers between 15th March and 15th April, 1996. This data have not been weighted.

The findings of these studies are presented in two sections as follows:

- the significance of commercial fishing to domestic visitors in NSW; and
- the significance of commercial fishing to international visitors in NSW.

The tables and charts presented in this report may not always add to 100% which is due to rounding.

Definitions:

In both the **domestic and international surveys, those who qualified could be travelling for pleasure, business or any other reason** - they are visitors to NSW.

- **Domestic Visitor to NSW (aged 18 years or more):**
 - Travelled at least 40 kilometres away from home in the last 2 months and stayed away from home for at least 4 nights and/or stayed away from between 1 and 3 nights in the last 2 weeks, where that trip included some travel in NSW.
- **International Visitor to NSW (aged 15 years or more):**
 - Plan to stay in Australia for less than 12 months.

**5. THE SIGNIFICANCE OF COMMERCIAL FISHING TO
DOMESTIC VISITORS IN NSW**

5. THE SIGNIFICANCE OF COMMERCIAL FISHING TO DOMESTIC VISITORS IN NSW

5.1 Characteristics of Domestic Tourism in NSW

5.1.1 Domestic Tourism Within NSW

In total, 3,600 Australian residents aged 18 years and over were interviewed on the weekends of the:

- 16th-18th February, 1996;
- 23rd-25th February, 1996; and
- 1st-3rd March, 1996.

When weighted to the population, this equates to 13,425,000 people aged 18 years and over in all states of Australia with the exception of the Northern Territory.

These 3,600 residents were asked to consider their travel within NSW for pleasure, business or for any other reason, over two specific time periods. The questions were as follows:

In the last 2 months, that is since last Christmas, how many times have you travelled at least 40 kilometres away from your home and stayed away for at least 4 nights, where that trip included some travel in NSW?

Trip period from 22nd December, 1995, to 2nd March, 1996
- 10 weeks

In the last 2 weeks, that is since (date), how many times have you travelled at least 40 kilometres away from your home and stayed away for between 1 and 3 nights, where that trip included at least 1 night in NSW?

Trip period from 2nd February to 2nd March, 1996
- 4 weeks

Overall, **20% of Australians aged 18 years and over had taken a trip between the 22nd December, 1995, to 2nd March, 1996, of at least 4 nights where that trip included some travel in NSW.** This equates to **2,645,000 people** aged 18 years and over having taken a trip of this type, including NSW. The specific number of trips of 4 nights or more is:

- one trip in NSW of 4 nights or more;
- two trips in NSW;
- three trips in NSW;
- four trips in NSW;
- five trips in NSW;
- six trips or more in NSW.

In regard to shorter trips in NSW, overall **8.7% of Australians aged 18 years and over had taken a trip between the 2nd February and 2nd March, 1996, of between 1 and 3 nights where that trip included at least 1 night in NSW.** This equates to **1,099,000 people** aged 18 years and over having taken a trip of this type. The specific number of trips of between 1 and 3 nights is:

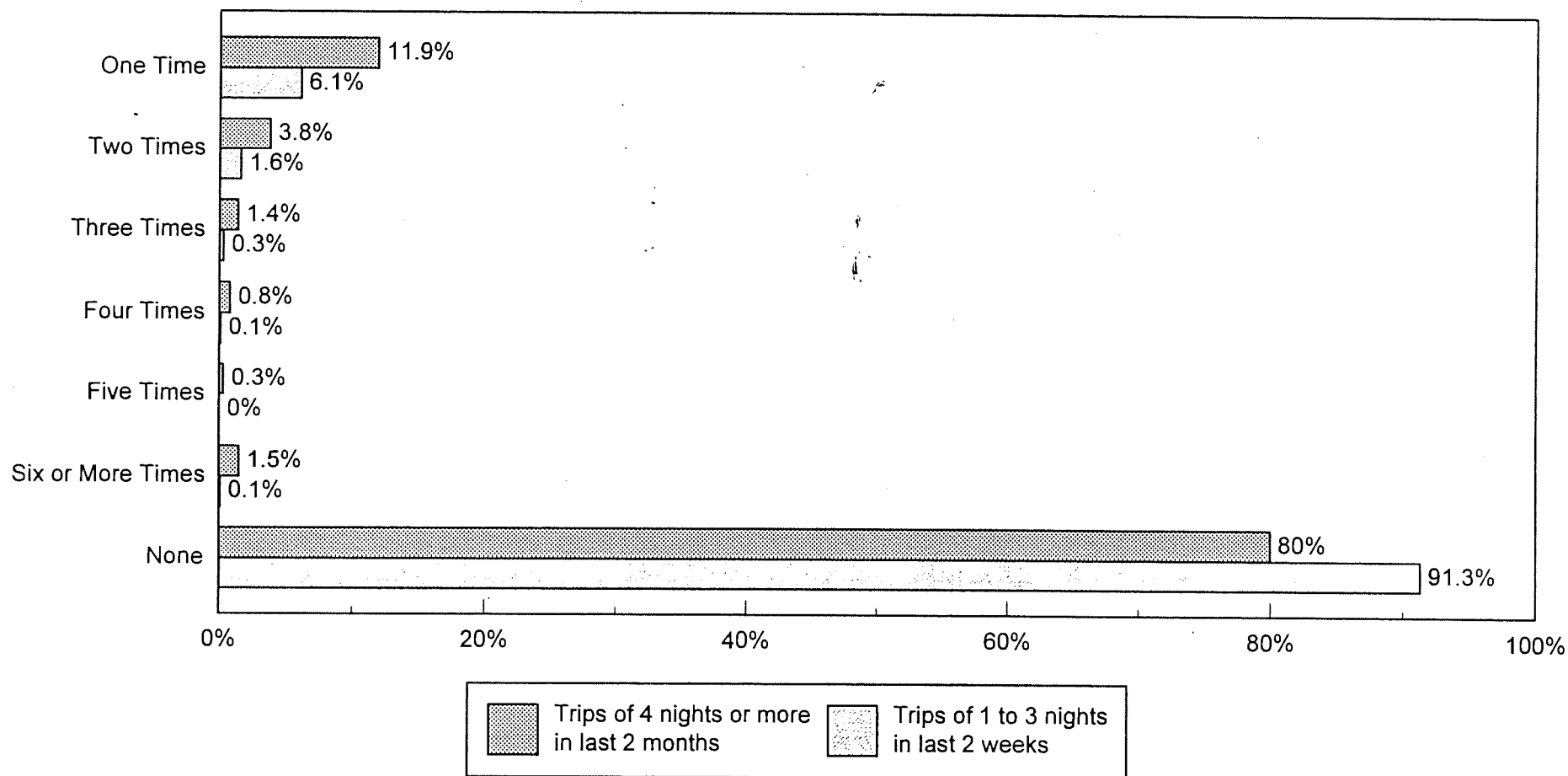
- one trip in NSW of between 1 and 3 nights;
- two trips in NSW;
- three trips in NSW;
- four trips in NSW;
- six trips or more in NSW.

These results are shown in the accompanying chart.

There is a **high level of confidence in the reliability of the research results** as this data has been compared with the on-going Domestic Tourism Monitor (DTM) undertaken by the Bureau of Tourism Research (BTR). The conclusion of the BTR was:

"I believe that your results are equivalent to those which could be achieved by the DTM". (2nd July, 1996 facsimile).

Domestic Tourism Within NSW



Q1: Now thinking about travel within NSW for pleasure, for business, or for any other reason. In the last 2 months, that is since last Christmas, how many times have you travelled at least 40 kilometres away from your home and stayed away for at least 4 nights, where that trip included some travel in NSW?

Q2: In the last two weeks, that is since the 9th of February, how many times have you travelled at least 40 kilometres away from your home and stayed away for between 1 and 3 nights, where that trip included at least one night in NSW?

Base: Australians aged 18 years and over (n=3,600; N=13,425,000)

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5.1.2 Profile of Domestic Visitors to NSW

A profile of those who are more and less likely to have taken a trip in NSW is presented in Table 5.1.2.

In total, 20% of Australians (aged 18 years and over) had taken a trip of 4 nights or more within the last 2 months, which included some travel in NSW. On average, 0.38 trips of 4 nights or more had been taken by each of the 13,425,000 Australians.

But those more likely to have taken such a trip in NSW:

- live in NSW
 - 36% had taken a trip;
 - 0.74 times, on average, for every person who lives in NSW;
- have a household income of \$50,000 or more
 - 25% had taken a trip;
 - 0.53 times, on average, for each person with a household income of \$50,000 or more.

In total, 9% of Australians (aged 18 years and over) had taken a trip of between 1 and 3 nights within the last 2 weeks, which included at least 1 night in NSW. On average, 0.11 trips had been taken of between 1 and 3 nights by each of the 13,425,000 Australians.

But those more likely to have taken a trip of 1 to 3 nights in NSW:

- live in NSW
 - 18% had taken a trip;
 - 0.24 times, on average, for every person who lives in NSW;
- are aged 18 to 24 years
 - 14% had taken a trip;
 - 0.19 times, on average, for every person aged 18 to 24 years;
- have a household income of \$50,000 or more
 - 14% had taken a trip;
 - 0.19 times, on average, for each person with a household income of \$50,000 or more.

5.1.2

PROFILE OF DOMESTIC VISITORS TO NSW

Base: Australians Aged 18 Years and Over

	TRIPS OF 4 OR MORE NIGHTS IN LAST 2 MONTHS*		TRIPS OF 1 TO 3 NIGHTS IN LAST 2 WEEKS*	
	% WHO HAVE TAKEN TRIP (3,600) (13,425) %	AVG. TIMES (3,600) (13,425)	% WHO HAVE TAKEN TRIP (3,600) (13,425) %	AVG. TIMES (3,600) (13,425)
RESPONDENTS WTD RESP ('000)				
TOTAL	20	0.38	9	0.11
<u>STATE OF RESIDENCE</u>				
NSW	36	0.74	18	0.24
VICTORIA	14	0.23	4	0.06
QUEENSLAND	14	0.22	4	0.04
SOUTH AUSTRALIA	7	0.08	2	0.02
WESTERN AUSTRALIA	3	0.02	1	0.01
TASMANIA	5	0.05	2	0.02
<u>SEX</u>				
MALE	21	0.44	11	0.15
FEMALE	19	0.32	7	0.08
<u>AGE</u>				
18 - 24 YEARS	25	0.56	14	0.19
25 - 34 YEARS	19	0.37	10	0.11
35 - 49 YEARS	20	0.35	8	0.10
50+ YEARS	18	0.33	7	0.09
<u>HOUSEHOLD INCOME</u>				
LESS THAN \$30,000	15	0.29	6	0.07
\$30,000 TO \$49,999	21	0.36	7	0.09
\$50,000 OR MORE	25	0.53	14	0.19

* Survey period - 3 weekends from 16th February to 3rd March 1996.

Questions 1/2: Now thinking about travel within New South Wales for pleasure, for business, or for any other reason. In the last 2 months, that is since last Christmas, how many times have you travelled at least 40 kilometres away from your home and stayed away for at least 4 nights, where that trip included some travel in NSW?

In the last 2 weeks, that is since the (X) of February, how many times have you travelled at least 40 kilometres away from your home and stayed away for between 1 and 3 nights, where that trip included at least 1 night in NSW?

5.1.3 Area Spent Most Nights in on Last NSW Trip

Those who had taken a trip in NSW, as defined previously, were asked a series of questions about:

- the last trip of 4 nights or more which included some travel in NSW (647 in the sample, weighted to 2,645,000); and/or
- the last trip of 1 to 3 nights in NSW (250 in the sample, weighted to 1,099,000).

The area in NSW in which these domestic visitors spent most nights during their last trip (in the time period) is shown in the accompanying chart.

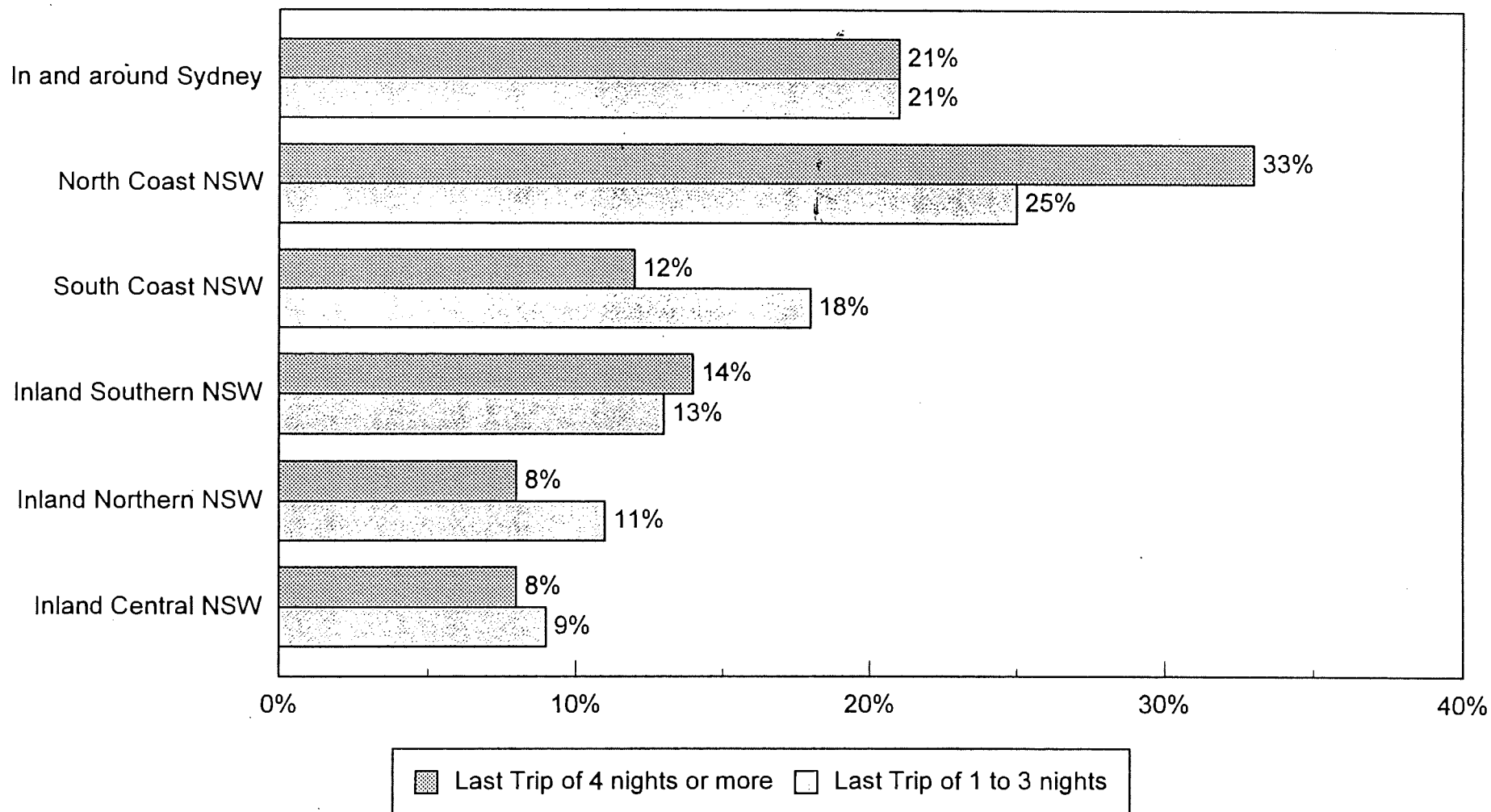
In regard to the last trip taken by domestic visitors of 4 nights or more which included NSW :

- 21% spent most of the nights in and around Sydney;
- 33% spent most nights on the NSW coast north of Sydney;
- 12% spent most nights on the NSW coast south of Sydney;
- 14% spent most nights in inland southern NSW;
- 8% spent most nights in inland northern NSW; and
- 8% spent most nights in inland central NSW.

Shorter trips, of between 1 and 3 nights in NSW, showed a similar distribution as longer trips:

- 21% spent most of the nights in and around Sydney;
- 25% spent most nights on the NSW coast north of Sydney;
- 18% spent most nights on the NSW coast south of Sydney;
- 13% spent most nights in inland southern NSW;
- 11% spent most nights in inland northern NSW; and
- 9% spent most nights in inland central NSW.

Area Spent Most Nights In On Last NSW Trip



Q5: In which one of the following areas of NSW did you spend most nights during that trip?

Base: Last Domestic Trip to NSW of 4 Nights or More (n=647 : N=2,645,000)

Last Domestic Trip to NSW of 1-3 Nights (n=250 : N=1,099,000)

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5.2 Main Purpose of Last Trip Within NSW

Visitors to NSW (in the defined time period) were asked to indicate the main purpose of the last trip in NSW. The results are shown in the accompanying chart.

The main reasons for both long and short trips in NSW are for a holiday, followed closely by visiting friends and relatives. Combined, these accounted for at least two in three trips.

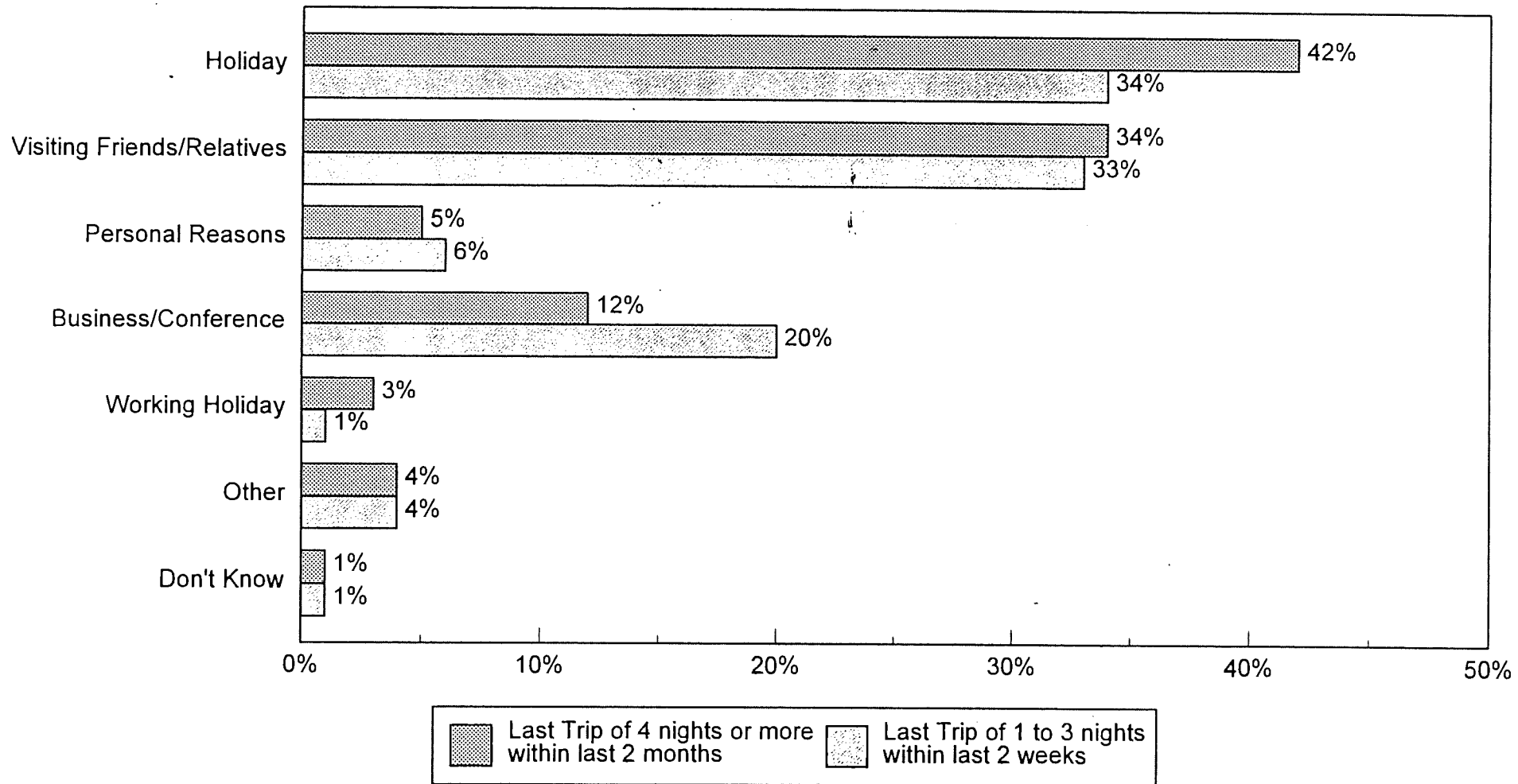
More specifically, in terms of the **last trip of 4 nights or more in NSW** taken by domestic visitors:

- 42% went for a holiday;
- 34% went to visit friends and/or relatives;
- 5% went for other personal reasons;
- 12% went for business reasons or to a conference;
- 3% were on a working holiday; and
- 4% went to NSW for some other reason.

Shorter trips are less likely to be for a holiday and more likely to be for business reasons. For the **last trip of between 1 and 3 nights to NSW** taken by domestic visitors:

- 34% *went for a holiday*;
- 33% went to visit friends and/or relatives;
- 6% went for other personal reasons;
- 20% *went for business reasons or to a conference*;
- 1% were on a working holiday; and
- 4% went to NSW for some other reason.

Main Purpose of Last Trip Within NSW



Q3(a): Thinking of your most recent (TRIP OF 4 NIGHTS OR MORE/TRIP OF BETWEEN 1 AND 3 NIGHTS) that included travel in NSW. What was the main purpose of that trip?

Base: Last Domestic Trip to NSW of 4 Nights or More (n=647 : N=2,645,000)

Last Domestic Trip to NSW of 1-3 Nights (n=250 : N=1,099,000)

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5.3 Seafood Consumption by Domestic Visitors

5.3.1 Frequency of Seafood Consumption by Domestic Visitors

Each domestic visitor to NSW (in the defined period) was asked how many times they personally ate a fish or seafood meal while on the last trip in NSW. Their response is shown in the accompanying chart.

Overall, **almost three in five (58%) domestic visitors who had taken a trip of at least 4 nights**, where that trip included some travel in NSW, had **eaten a fish or seafood meal on the last trip**. This equates to **1,539,000 domestic visitors to NSW** in the period from 22nd December to 2nd March - 10 weeks. The specific number of seafood meals eaten is:

- 24% had eaten seafood just once on the last trip in NSW;
- 15% had eaten seafood twice;
- 7% had eaten a seafood meal three times;
- 5% had eaten seafood four times; and
- 6% had eaten seafood five times or more on the last trip of 4 nights or more in NSW.

Less chance exists to have eaten a seafood meal in **trips of between 1 and 3 nights** and this is reflected in the results. Even so, **two in five (42%) domestic visitors had eaten a fish or seafood meal** on their last trip in NSW. This equates to **462,000 domestic visitors to NSW** in the period from 2nd February to 2nd March, 1996 - 4 weeks. More specifically:

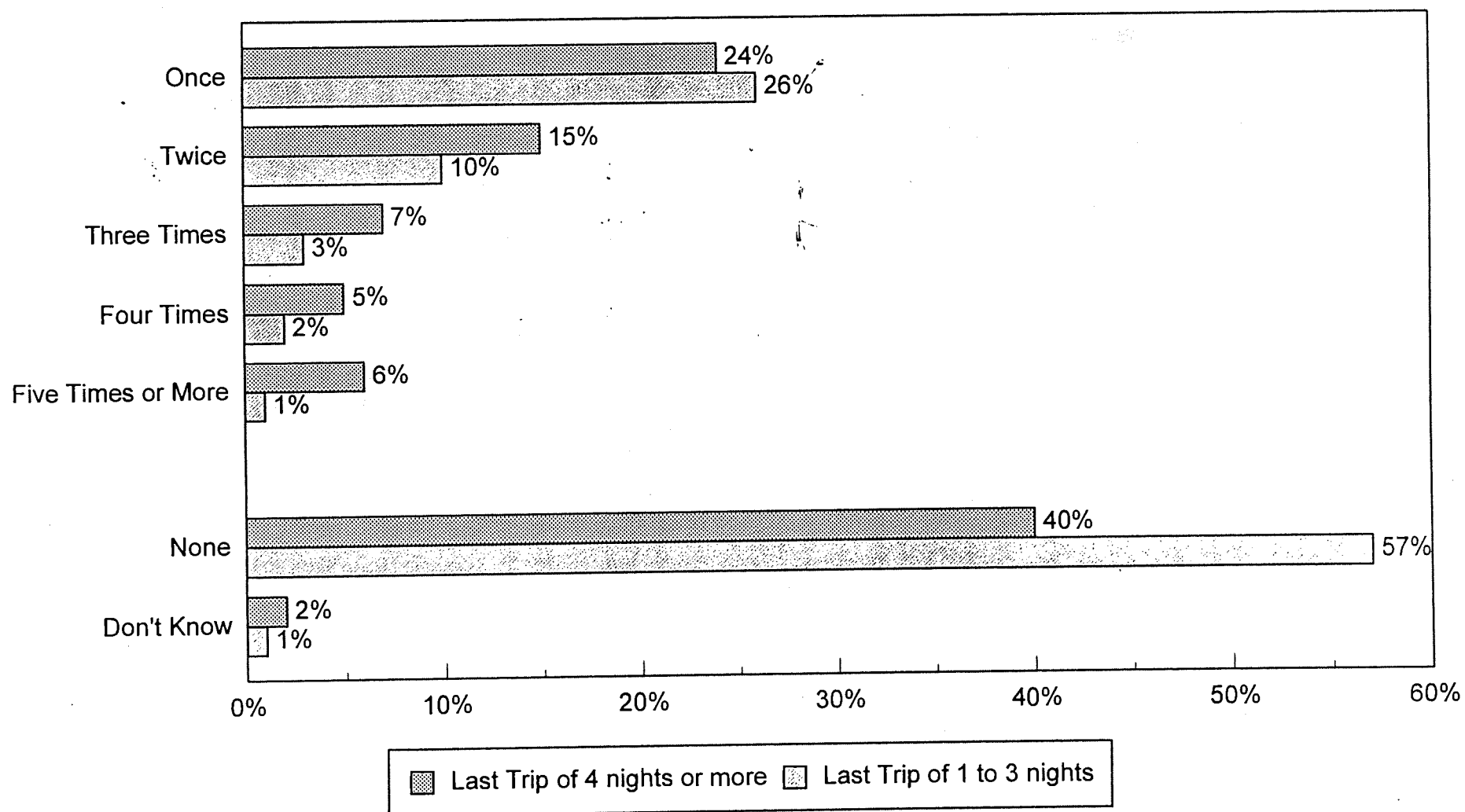
- 26% had eaten a seafood meal just once on the last trip in NSW;
- 10% had eaten seafood twice;
- 3% had eaten a seafood three times;
- 2% had eaten seafood four times; and
- 1% had eaten seafood five times or more on that last trip in NSW of between 1 and 3 nights.

In summary:

Almost three in five (58%) domestic visitors who had taken a trip of at least 4 nights, where that trip included some travel in NSW, had eaten a fish or seafood meal on the last trip. This equates to 1,539,000 domestic visitors to NSW in the period from 22nd December to 2nd March - 10 weeks.

Two in five (42%) domestic visitors had eaten a fish or seafood meal on their last trip of between 1 and 3 nights in NSW. This equates to 462,000 domestic visitors to NSW in the period from 2nd February to 2nd March, 1996 - 4 weeks.

Frequency of Seafood Consumption by Domestic Visitors



Q4: How many times did you personally eat a fish or seafood meal while on that trip in NSW?

Base: Last Domestic Trip to NSW of 4 Nights or More (n=647 : N=2,645,000)

Last Domestic Trip to NSW of 1-3 Nights (n=250 : N=1,099,000)

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5.3.2 Profile of Domestic Visitors Eating Seafood

A profile of those domestic visitors who are more and less likely to have eaten a seafood meal while on their last trip in NSW (for a defined period of time) is presented in Table 5.3.2.

As indicated previously, **58% of domestic visitors** (who had taken a trip of **4 nights or more** within the last 2 months, and where that trip included some travel in NSW) had **eaten at least one seafood meal on their last trip**. On average, each domestic visitor, in this time period, had **eaten 1.38 seafood meals**.

But those **more likely to have eaten a seafood meal** are:

- those who spent most nights on the north or south coast of NSW
 - 69% had eaten a seafood meal on that last trip;
 - on average, they ate 1.73 seafood meals;
- residents of NSW
 - 60% had eaten a seafood meal on that last trip;
 - on average, they ate 1.41 seafood meals;
- aged 50 years and over
 - 64% had eaten a seafood meal on that last trip;
 - on average, they ate 1.58 seafood meals.

And seafood eaters are **less likely** to be:

- mainly visiting friends and/or relatives
 - 51% had eaten a seafood meal;
 - on average, they ate 1.12 seafood meals.

Two in five (42%) domestic visitors had eaten a fish or seafood meal on their last trip in NSW of **between 1 and 3 nights in the last 2 weeks**. On average, each domestic visitor, in this time period, had **eaten 0.70 seafood meals**.

5.3.2

PROFILE OF DOMESTIC VISITORS EATING SEAFOOD

Base: Domestic Visitors to NSW

	LAST TRIP OF 4 OR MORE NIGHTS		LAST TRIP OF 1 TO 3 NIGHTS	
	% WHO HAVE EATEN SEAFOOD	AVG. TIMES	% WHO HAVE EATEN SEAFOOD	AVG. TIMES
RESPONDENTS	(647)	(647)	(250)	(250)
WTD RESP ('000)	(2,645)	(2,645)	(1,999)	(1,099)
	%		%	
TOTAL	58	1.38	42	0.70
<u>AREA SPENT MOST NIGHTS</u>				
IN AND AROUND SYDNEY	53	1.26	54	0.91
NORTH/SOUTH COAST NSW	69	1.73	40	0.63
INLAND NSW	48	0.99	35	0.71
<u>MAIN PURPOSE OF TRIP</u>				
HOLIDAY	66	1.69	51	0.92
VISITING FRIENDS/RELATIVES	51	1.12	41	0.73
BUSINESS/CONFERENCE	63	1.53	37	0.47
<u>STATE OF RESIDENCE</u>				
NSW	60	1.41	40	0.65
VICTORIA	53	1.20	53*	1.05
QUEENSLAND	54	1.38	40*	0.55
<u>AGE</u>				
18 - 24 YEARS	49	1.08	42	0.72
25 - 34 YEARS	55	1.30	35	0.67
35 - 49 YEARS	60	1.40	41	0.64
50+ YEARS	64	1.58	49	0.75

*NOTE: LOW BASE

Question 4: How many times did you personally eat a fish or seafood meal while on that trip in NSW?

5.3.3 Estimated Seafood Meals Eaten by Domestic Visitors in NSW

Using data collected through this survey and published visitor statistics from the Domestic Tourism Monitor (DTM), it is possible to estimate the number of seafood meals eaten in a year by domestic visitors in NSW.

Based on survey results the following has been established:

- 5,101,500 trips ($0.38 \times 13,425,000$) had been taken by Australian residents (aged 18 years or more) between the 22nd December, 1995 and 2nd March, 1996, of at least 4 nights where that trip included some travel in NSW - 10 weeks;

☞ Over a year it is estimated that 26,527,800 trips of 4 nights or more were taken.

- 1,476,750 trips ($0.11 \times 13,425,000$) had been taken between 2nd February and 2nd March, 1996, of between 1 and 3 nights where that trip included at least 1 night in NSW - 4 weeks;

☞ Over a year it is estimated that 19,197,550 trips of between 1 and 3 nights were taken.

☞ In total, it is estimated that 45,725,750 trips were taken in NSW. However, this is overstating the number of trips taken as this survey was conducted in the peak travel period. The 1993/94 DTM estimated that 15,543,000 net visits were taken in NSW. This survey is overestimating the trips by a factor of 2.94.

- Multiplying the number of seafood meals, on average, by estimated trips, provides an estimate of seafood meals eaten:

$$\begin{aligned} & 26,527,800 \times 1.38 \text{ seafood meals (for trips of 4 nights or more)} \\ & = 36,608,364 \end{aligned}$$

$$\begin{aligned} & 19,197,750 \times 0.70 \text{ seafood meals (for trips of 1 to 3 nights)} \\ & = 13,438,425 \end{aligned}$$

☞ 50,046,789 seafood meals in 1996.

Estimates must be "down-weighted" as the number of visits in this survey is overestimated:

$$\begin{aligned} & 50,046,425 \text{ seafood meals in 1996} / 2.94 \\ = & 17,022,717 \text{ seafood meals in 1996.} \end{aligned}$$

- The total number of domestic trips by Australian residents is forecast by the Tourism Forecasting Council to increase by an average growth rate of 1.7% over the next five years. Tourism New South Wales estimates that in 1998/99 there will be 16,800,00 trips made in NSW. Yann Campbell Hoare Wheeler has applied the same factor, estimating that there will be 17,100,000 trips made in NSW in 1999/2000. Applying the same rationale as above (and assuming that the number of seafood meals remains constant) it is estimated that 18,716,036 seafood meals will be eaten in NSW by domestic visitors in 1999/2000.

It is estimated that domestic visitors (18 years or more) will eat 17,022,717 seafood meals in NSW (1996).

Based on the projected number of domestic visitors in 1999/2000 an estimated 18,716,036 seafood meals will be eaten in NSW.

5.4 Importance of NSW Seafood

5.4.1 Importance of Local or NSW Caught Seafood to Domestic Visitors

All domestic visitors were asked how important to them personally was the opportunity to eat local or NSW caught fish or seafood when staying in the area of NSW where they spent most nights. A five point importance scale was used.

Among the 20% of respondents who had taken a **trip of 4 nights or more**, within the last 2 months, which included some travel in NSW:

- 7% considered it extremely important that they could eat local or NSW caught seafood;
- 14% considered it very important;
- 17% considered this opportunity to be moderately important;

☞ **38% considered it at least moderately important**
(equating to 1,004,000 people aged 18 years and over)

- 7% thought it to be slightly important; and
- just over one in two (53%) did not consider it important to have the opportunity to eat local or NSW caught seafood.

Among those who had taken a **shorter trip in NSW (between 1 and 3 nights)**, equating to 9% of Australians, slightly less importance was placed on the opportunity to eat local or NSW caught seafood:

- 10% considered it extremely important that they had the opportunity to eat local or NSW caught seafood;
- 12% considered it very important;
- 10% considered it to be moderately important;

☞ **32% considered it at least moderately important**
(equating to 351,000 people aged 18 years and over)

- 7% thought it to be slightly important; and
- 56% did not consider it important to have the opportunity to eat local or NSW caught seafood.

Therefore overall, **at least one in three domestic visitors considered it at least moderately important that they had the opportunity to eat local or NSW caught fish or seafood while in NSW.**

Table 5.4.1 shows the importance of the opportunity to eat local or NSW caught seafood among those who had taken a trip of 4 nights or more which included some travel in NSW (sample of 647 and weighted to 2,645,000).

Domestic visitors more likely to consider the opportunity to eat local seafood extremely or very important than the sample overall (21%) are those:

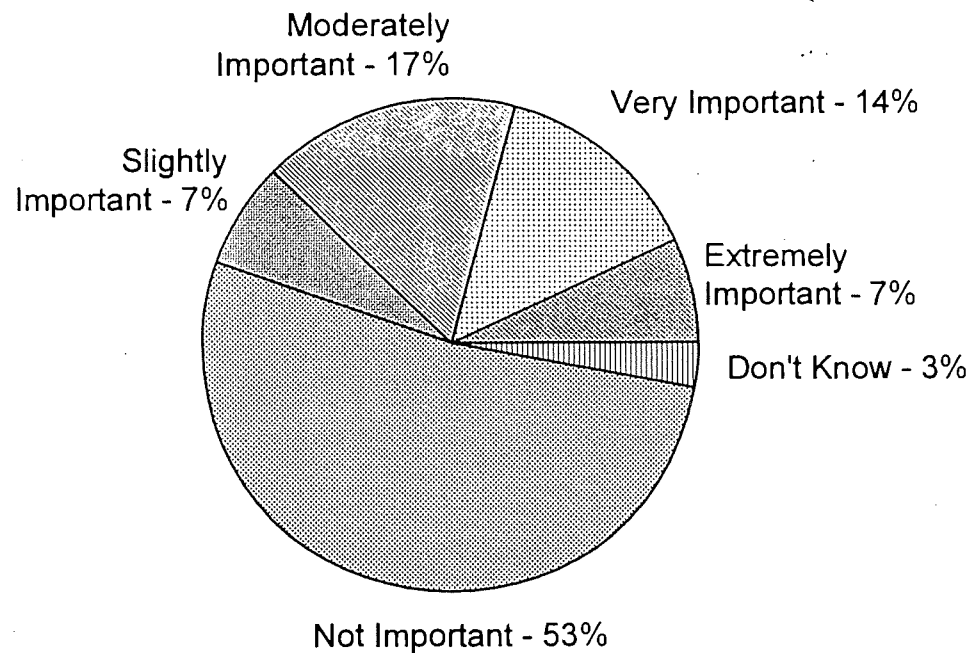
- who spent most nights on the north or south coast of NSW (32%);
- mainly on a holiday (26%); and
- who reside in NSW (27%).

And those more likely to say that this opportunity is not at all important (53% in total) are:

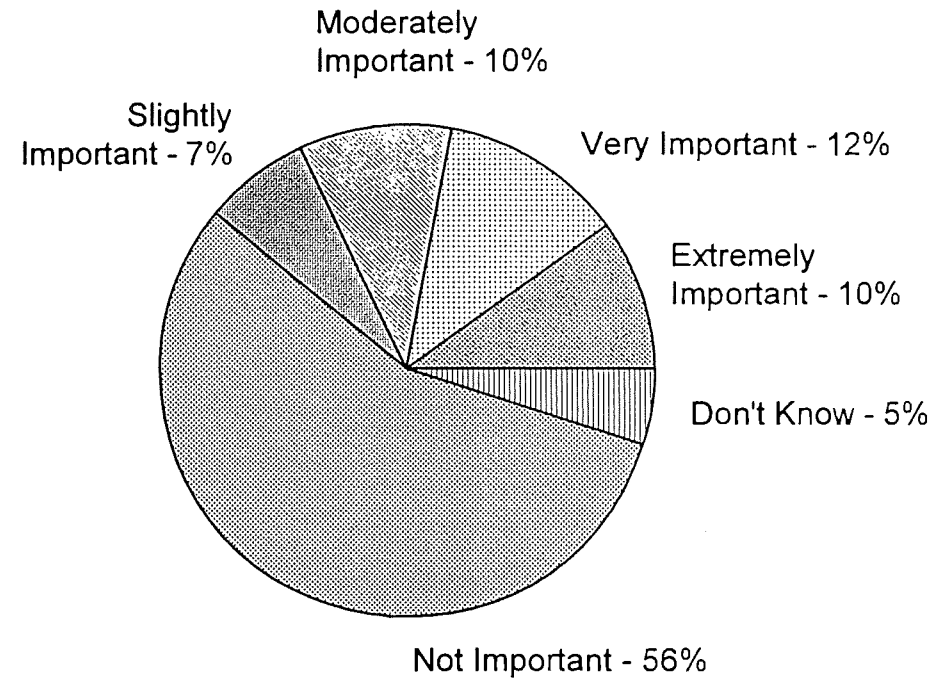
- those who spent most nights in and around Sydney (61%) or in inland NSW (66%);
- visitors who reside in Victoria (61%) or Queensland (70%); and
- younger visitors - 18 to 24 years (61%) and 25 to 34 years (61%).

Importance of Local or NSW Caught Seafood to Domestic Visitors

Last Trip of 4 Nights or More



Last Trip of 1 to 3 Nights



Q6: How important to you personally was the opportunity to eat local or NSW caught fish or seafood when staying in that area of NSW on that trip?

Base: Last Domestic Trip to NSW of 4 Nights or More (n=647 : N=2,645,000)
Last Domestic Trip to NSW of 1-3 Nights (n=250 : N=1,099,000)

5.4.1

IMPORTANCE OF LOCAL OR NSW CAUGHT SEAFOOD TO DOMESTIC VISITORS - LAST TRIP OF 4 NIGHTS OR MORE -

Base: Domestic Visitors to NSW

	RESPONDENT BASE	EXTREMELY/ VERY IMPORTANT %	MODERATELY/ SLIGHTLY IMPORTANT %	NOT IMPORTANT %
TOTAL	(647)	21	24	53
<u>AREA SPENT MOST NIGHTS</u>				
IN AND AROUND SYDNEY	(150)	13	23	61
NORTH/SOUTH COAST NSW	(278)	32	27	39
INLAND NSW	(199)	12	19	66
<u>MAIN PURPOSE OF TRIP</u>				
HOLIDAY	(266)	26	23	48
VISITING FRIENDS/RELATIVES	(218)	20	22	55
BUSINESS/CONFERENCE	(86)	14	27	58
<u>STATE OF RESIDENCE</u>				
NSW	(385)	27	25	46
VICTORIA	(126)	13	19	61
QUEENSLAND	(85)	8	22	70
<u>AGE</u>				
18 - 24 YEARS	(86)	17	19	61
25 - 34 YEARS	(126)	22	17	61
35 - 49 YEARS	(234)	20	28	49
50+ YEARS	(201)	23	26	46

Question 7: How important to you personally was the opportunity to eat local or NSW caught fish or seafood when staying in that area of NSW on that trip? Would you say it was....?

5.4.2 Importance of Seafood Consumption in Contributing to Domestic Visitor Enjoyment

Domestic visitors who had eaten fish or seafood on their last trip in NSW were asked how important was the actual eating of local or NSW caught fish or seafood, in contributing to their enjoyment of their visit to the main area visited in NSW. However, the results presented in the accompanying chart and table are based on all domestic visitors of long and short trips (as per the definition).

In terms of the **last trip to NSW of 4 nights or more** (taken by 20% of Australians):

- 4% considered the actual eating of local seafood as an extremely important contribution to the enjoyment of their visit;
- 11% rated it as very important in contributing to their enjoyment;
- 14% considered it moderately important;
- 7% said that it was of only slight importance in contributing to their enjoyment; and
- 22% did not attribute any enjoyment of their visit to the eating of local seafood.

Another 42% did eat any seafood on the last visit.

Among those who had taken a **shorter trip in NSW (between 1 and 3 nights)**, taken by 9% of Australians:

- 4% considered the actual eating of local seafood as an extremely important contribution to the enjoyment of their visit;
- 7% thought it to be very important in contributing to their enjoyment;
- 9% considered it moderately important;
- 7% rated it of only slight importance in contributing to their enjoyment; and
- 14% did not attribute any enjoyment to the eating of local seafood.

Another 58% did eat any seafood on the last visit of 1 and 3 nights.

Among domestic visitors who had taken a trip of 4 nights or more which included some travel in NSW (sample of 647 and weighted to 2,645,000), those more likely to say that eating local seafood was extremely or very important in contributing to the enjoyment of their visit in NSW were:

- those who spent most nights on the north or south coast of NSW (24%);
- NSW residents (20%); and
- visitors aged 50 or more (20%).

If the relative proportions are based on **just those who had eaten fish or seafood** on their last domestic visit in NSW, the following frequency of importance emerges:

Base: Domestic Visitors Who Had Eaten Seafood	Last Trip of 4 Nights or More With Last 2 Months	Last Trip of 1 to 3 Nights Within Last 2 Weeks
Extremely Important Part of Visit	7%	10%
Very Important Part of Visit	19%	17%
Moderately Important Part of Visit	24%	22%
Slightly Important Part of Visit	12%	17%
Not Important Part of Visit	38%	34%
TOTAL	100%	100%

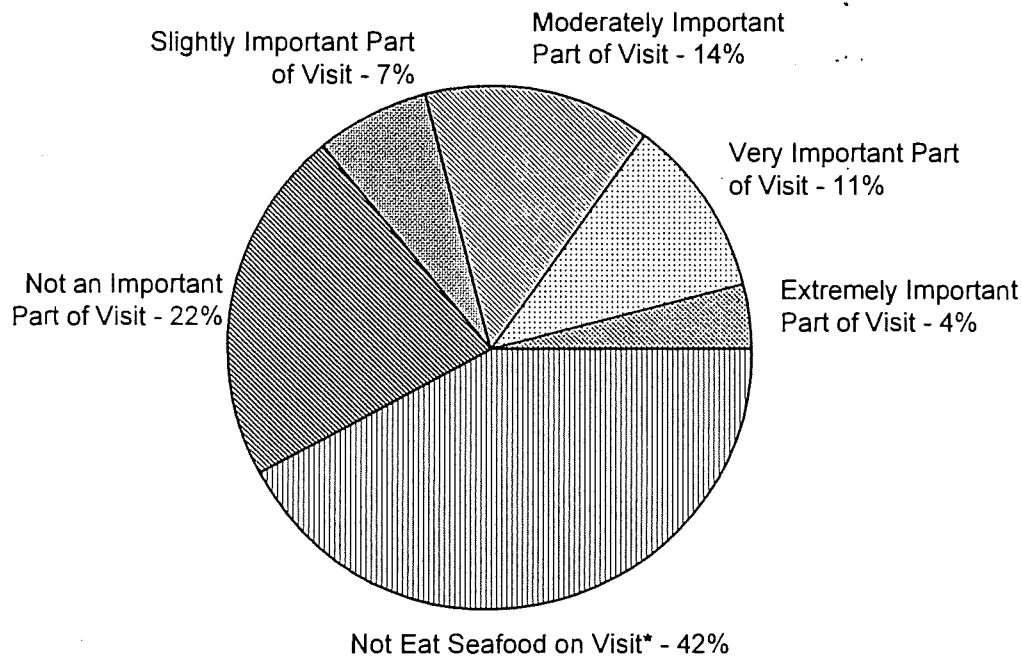
Therefore, **one in two domestic visitors who had eaten seafood on their last trip in NSW indicated that the consumption experience was at least moderately important in contributing to the enjoyment of their visit:**

- 50% of those who had taken a trip of 4 nights or more in NSW; and
- 49% of those who had taken a trip of between 1 and 3 nights in NSW.

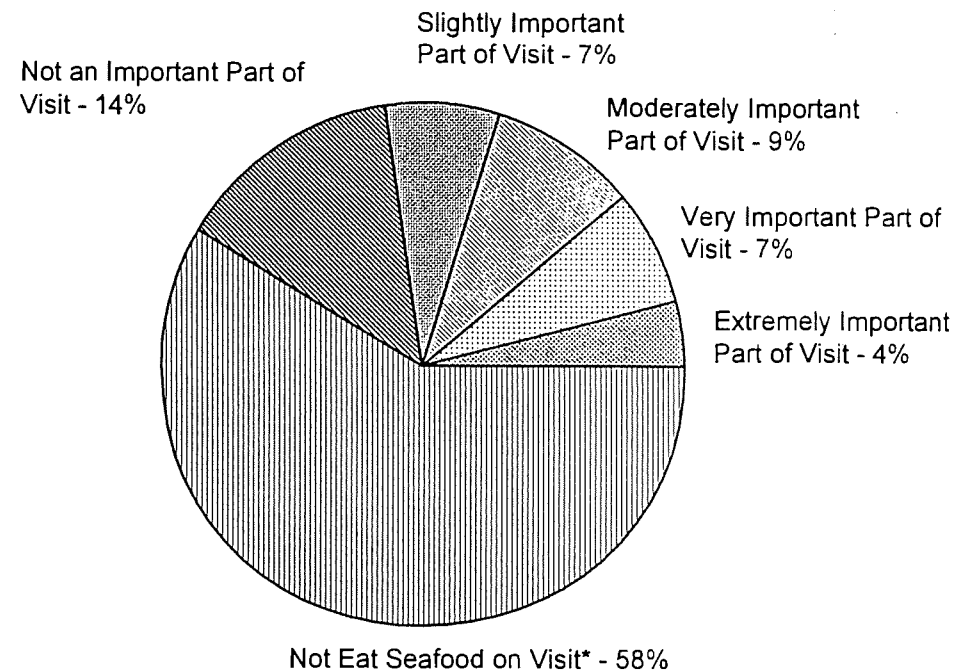
These results can be compared to international visitors (see Section 6.2.4) - 56% considered it at least moderately important in contributing to their enjoyment.

Importance of Seafood Consumption In Contributing to Domestic Visitor Enjoyment

Last Trip of 4 Nights or More



Last Trip of 1 to 3 Nights



* Also includes a small percentage who didn't know if they had eaten seafood.

Q7: How important was the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to that area of NSW?

Base: Last Domestic Trip to NSW of 4 Nights or More (n=647 : N=2,645,000)

Last Domestic Trip to NSW of 1-3 Nights (n=250 : N=1,099,000)

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5.4.2

IMPORTANCE OF SEAFOOD CONSUMPTION IN CONTRIBUTING TO DOMESTIC VISITOR ENJOYMENT - LAST TRIP OF 4 NIGHTS OR MORE -

Base: Domestic Visitors to NSW

	RESPONDENT BASE	EXTREMELY/ VERY IMPORTANT PART OF VISIT %	MODERATELY/ SLIGHTLY IMPORTANT PART OF VISIT %	NOT IMPORTANT PART OF VISIT %	NOT EAT SEAFOOD ON VISIT %
TOTAL	(647)	15	21	22	42
<u>AREA SPENT MOST NIGHTS</u>					
IN AND AROUND SYDNEY	(150)	10	17	27	47
NORTH/SOUTH COAST NSW	(278)	24	26	18	31
INLAND NSW	(199)	5	18	24	52
<u>MAIN PURPOSE OF TRIP</u>					
HOLIDAY	(266)	18	25	23	34
VISITING FRIENDS/RELATIVES	(218)	14	19	18	49
BUSINESS/CONFERENCE	(86)	9	28	26	37
<u>STATE OF RESIDENCE</u>					
NSW	(385)	20	20	18	40
VICTORIA	(126)	8	21	24	47
QUEENSLAND	(85)	2	26	26	46
<u>AGE</u>					
18 - 24 YEARS	(86)	6	19	24	51
25 - 34 YEARS	(126)	14	18	23	45
35 - 49 YEARS	(234)	15	23	22	40
50+ YEARS	(201)	20	24	19	36

Question 7: How important was the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to that area of NSW? Would you say it was....?

5.5 Participation in Commercial Fishing Activities by Domestic Visitors

Overall, 23% of the population had taken a trip in NSW within the last 2 months, that is, since Christmas 1995 (according to the definition of a short and long trip - see Section 5.1.1). This equates to 3,063,000 visitors aged 18 years or more.

These domestic visitors were then asked if, on any of these trips, they had undertaken four commercial fishing related activities primarily for fun or education. **One in four (24% or 718,000 domestic visitors) had participated in at least one of the commercial fishing related activities.** More specifically:

- 15% had looked at commercial fishing boats or fleets at a jetty or marina (454,000 visitors);
- 12% had visited a wholesale or retail fish market or co-operative (369,000 visitors);
- 3% had visited a commercial fish farm or oyster farm (79,000 visitors); and
- 1% had attended an oyster festival or a commercial fishing festival such as the blessing of the fleet (20,000 visitors).

Domestic visitors who had participated in some commercial fishing activity were then asked how many photos they took and how much they spent on things like entrance fees, souvenirs, or other goods.

Three in ten (30%) took at least one photo:

- 14% took between 1 and 5 photos;
- 5% took between 6 and 10 photos;
- 4% took between 11 and 20 photos; and
- 6% took more than 20 photos.

These domestic visitors took 2,577,000 photos in the 2 months, or 3.8 for each domestic visitor who participated in some commercial fishing activity.

Of the remaining 70% of domestic visitors, 65% definitely did not take a photo and 5% were unsure.

Almost one in two (45%) domestic visitors who participated in some commercial fishing related activity spent some money while there:

- 18% spent between \$5 and \$20;
- 15% spent between \$21 and \$50; and
- 12% spent between \$51 and \$300.

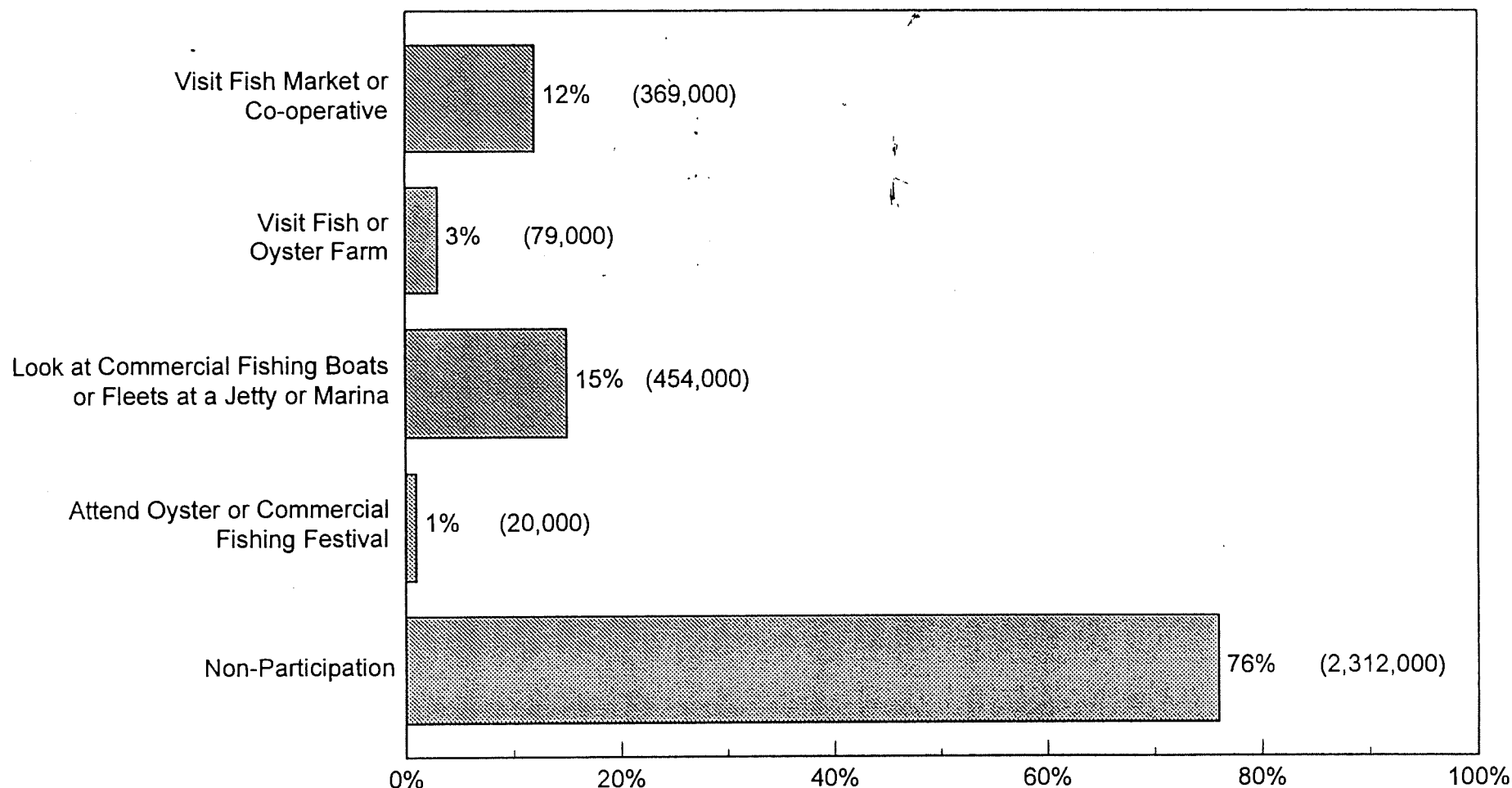
These domestic visitors spent \$17,926,000 in total, or \$25.60 for each domestic visitor who participated in some commercial fishing activity in the 2 month period - it is thought likely that the purchase of fish or seafood was included.

One in four (24%) domestic visitors had participated in at least one commercial fishing related activity in a two month period from Christmas 1995 - 718,000 domestic visitors.

It is estimated that in a year:

15.5 million photos were taken by domestic visitors;
\$107.6 million was spent by domestic visitors.

Participation in Commercial Fishing Activities by Domestic Visitors



Q8: During any of the trips you have taken in the last 2 months, that is since last Christmas, which, if any, of the following activities did you do primarily for fun or education?

Base: Domestic Visitors to NSW in Last 2 Months (Since Christmas 1995) - n=743 : N=3,063,00

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**6. THE SIGNIFICANCE OF COMMERCIAL FISHING TO
INTERNATIONAL VISITORS IN NSW**

6. THE SIGNIFICANCE OF COMMERCIAL FISHING TO INTERNATIONAL VISITORS IN NSW

6.1 Characteristics of International Visitors in NSW

6.1.1 Profile of International Visitors to NSW

In order to qualify as an international visitor, the person intercepted for this survey had to be aged 15 years or over and planned to stay in Australia for less than 12 months.

As noted in the Research Methodology (Section 4), specific quotas were applied in this survey by country of residence. Hence the difference in the proportion of international visitors who were intercepted for this survey (602 visitors) and the distribution found through the International Visitor Survey (IVS) conducted on behalf of the Bureau of Tourism Research (BTR). **The major difference being the under representation of Japanese visitors to NSW in this survey (14% compared with 27% in the 1993 IVS).** This must be **remembered when reviewing the results of this survey** which have not been weighted to the population of international visitors.

This sample of 602 international visitors does **fairly represent international visitors by gender and age** - there is little difference between the proportions in this sample compared with the IVS.

From the IVS the following is known:

- **there were 1,866,700 international visitors to NSW in 1993;**
- **there were 1,807,300 international visitors to Sydney in 1993 (97%);**
- **in 1993, 93% of international visitors to NSW were aged 15 years or more (BTR estimate);**
- **the number of international visitors to NSW aged 15 years and over has been steadily increasing:**
 - 1,794,600 in 1993;
 - 2,083,700 in 1994; and
 - 2,163,270 in 1995.

The Tourism Forecasting Council estimates that in the **Year 2000 there will be 3,885,000 international visitors to NSW** (not including the Olympics). If it is assumed that 93% of these visitors are aged 15 years or more, in 2000 there will be an estimated 3,613,050 international visitors to NSW aged 15 years or more.

From 1993 to 2000, the number of international visitors to NSW is anticipated to double.

This has obvious implications for the NSW fishing industry in the supply of seafood for international visitors to the state.

6.1.1

PROFILE OF INTERNATIONAL VISITORS

Base: International Visitors in NSW

	TOTAL (602) %	IVS* ALL VISITORS 1993 (1,866,700) %
<u>COUNTRY OF RESIDENCE</u>		
JAPAN	14	27
OTHER ASIA	13	19
USA/CANADA	17	14
NEW ZEALAND	13	12
UK/IRELAND	18	10
OTHER EUROPE	18	12
OTHER COUNTRY	7	5
<u>GENDER</u>		
MALE	56	51
FEMALE	43	49
<u>AGE</u>		
15-24 YEARS	20	17#
25-34 YEARS	26	29
35-44 YEARS	15	17
45-54 YEARS	18	18
55+ YEARS	21	17

Repercentaged to exclude those aged 14 years and under

*Source: BTR Estimates (based on IVS and OAD data)

6.1.2 Previous Visits to Australia

As another point of comparison between this sample and that produced for the BTR, visitors were asked if this is their first visit to Australia. **Seven in ten (70%) of international visitors in the sample indicated that this is in fact the first time they have visited Australia.** This is close to the BTR estimate of 63%.

By country of residence, those from "other countries" are least likely to have visited Australia before (85% first time) and New Zealanders are most likely to have been to Australia before (26% first time: 74% visited before).

In order of least to most familiarity with Australia:

- "other country" (85% first time);
- "other European country" (83% first time);
- UK/Ireland (78% first time);
- USA/Canada (77% first time);
- Japan (73% first time);
- "other Asia" (70% first time); and
- New Zealand (26% first time).

6.1.2

PREVIOUS VISITS TO AUSTRALIA

Base: International Visitors in NSW

	PERCENTAGE FIRST VISIT (602) %	PERCENTAGE FIRST VISIT IVS 1993* %
TOTAL	70	63
<u>COUNTRY OF RESIDENCE</u>		
JAPAN	73	86
OTHER ASIA	70	59
USA/CANADA	77	69
NEW ZEALAND	26	11
UK/IRELAND	78	57
OTHER EUROPE	83	68
OTHER COUNTRY	85	52

*Source: BTR Estimates (based on IVS and OAD data)

Question 1: Is this your first visit to Australia?/Is this your first return visit to Australia?

6.1.3 Main Reason for Visit

All 602 international visitors were asked what was the one main reason for coming to Australia - as they indicated on their incoming passenger card. Their responses are shown in total and by country of residence in Table 6.1.3.

Just over three in five (62%) of the 602 international visitors came to Australia for a holiday. Visitors from "other European countries" are more likely to nominate this as their main reason for visitation (75%).

Another one in six (16%) are in Australia to visit friends and/or relatives. Those from New Zealand and UK/Ireland are more likely to be in Australia for this reason than those from other countries (31% and 30% respectively).

Other reasons for travel accounted for the remaining one in five international visitors:

- 9% for business (but 17% of those from USA/Canada);
- 2% for a convention or conference;
- 2% for employment;
- 6% for education (mainly Japanese and other Asian visitors - 13% and 19% respectively);
- 2% for another main reason.

6.1.3

MAIN REASON FOR VISIT

Base: International Visitors in NSW

	TOTAL (602) %	COUNTRY OF RESIDENCE						
		JAPAN (85) %	OTHER ASIA (81) %	USA/ CANADA (103) %	NEW ZEALAND (81) %	UK/ IRELAND (106) %	OTHER EUROPE (106) %	OTHER COUNTRY (40) %
HOLIDAY	62	64	48	63	49	66	75	68
VISITING FRIENDS/RELATIVES	16	1	15	11	31	30	11	13
BUSINESS	9	9	14	17	10	1	5	10
CONVENTION/CONFERENCE	2	-	5	1	1	-	5	3
EMPLOYMENT	2	5	-	1	5	3	2	3
EDUCATION	6	13	19	8	-	-	3	5
OTHER	2	8	-	-	4	-	-	-
TOTAL	100	100	100	100	100	100	100	100

Question 2: When you arrived in Australia and completed your INCOMING PASSENGER CARD, which one of these did you mark as your main reason for coming to Australia?

6.1.4 Visitor Nights in NSW and Australia

International visitors were intercepted at some point within their visit to NSW (and Australia). To ascertain the point at which this occurred a series of questions was asked:

- the number of nights they have stayed in NSW so far;
- the total number of nights they plan to stay in NSW; and
- the total number of nights they will spend in Australia.

On average, international visitors to NSW:

- **had spent 12 nights in NSW at the time of interview;**
- **plan to spend 26 nights in total in NSW; and**
- **plan to stay in Australia for 50 nights.**
- **International visitors were, on average, intercepted half way (52%) through their stay in NSW** (average based on the average of individual cases).
- On average, international visitors plan to stay three fifths (61%) of their time in NSW (nights in NSW as a proportion of nights in Australia - average based on individual cases).

Each of these figures is presented in Table 6.1.4 by the visitor's country of residence and purpose of visit. Most interestingly:

- holiday visitors plan to spend 19 nights in NSW (on average);
- those visiting friends or relatives also plan to stay for a similar amount of time (21 nights);
- those in NSW for business, a conference or employment plan to stay in NSW for 36 nights; and
- visitors for educational purposes will spend the longest, on average, in NSW (79 nights).

These points should be kept in mind while reviewing results specific to the demand and importance of seafood sourced in NSW and elsewhere to the catering and tourism industries in NSW.

6.1.5 Planned Visits to Other Areas in NSW

Three in four (75%) international visitors plan to visit an area outside of Sydney, such as the Blue Mountains. They are more likely to be visitors aged 15 to 24 years (84%).

6.1.4

AVERAGE LENGTH OF STAY IN NSW AND AUSTRALIA

Base: International Visitors in NSW

	BASE (n=) %	AVERAGE NIGHTS			AVERAGE % OF TIME STAYED IN NSW %	AVERAGE % OF TIME PLAN TO STAY IN NSW %
		NSW AT POINT OF INTERVIEW %	NSW TOTAL %	AUSTRALIA %		
TOTAL	(602)	12	26	50	52	61
<u>COUNTRY OF RESIDENCE</u>						
JAPAN	(85)	16	35	66	61	66
OTHER ASIA	(81)	15	36	46	48	74
USA/CANADA	(103)	6	15	30	47	54
NEW ZELAND	(81)	12	25	33	57	84
UK/IRELAND	(106)	10	24	60	49	48
OTHER EUROPE	(106)	11	21	60	52	43
OTHER COUNTRY	(40)	13	43	54	49	72
<u>PURPOSE OF VISIT</u>						
HOLIDAY	(374)	9	19	43	52	55
VISITING FRIENDS & RELATIVES	(98)	11	21	34	53	69
CONFERENCE/BUSINESS/EMPLOYMENT	(81)	15	36	56	50	74
EDUCATION/OTHER	(49)	32	79	121	53	70

Question 3(a): How many nights have you stayed in NSW so far?

Question 3(b): In total, how many nights do you plan to stay in NSW?

Question 3(c): In total, how many nights will you spend in Australia including NSW?

6.2 Importance and Significance of Seafood Consumption While in NSW

6.2.1 Importance and Significance of NSW Seafood to International Visitors

All 602 international visitors were asked, how important is it to have the opportunity to eat local or NSW caught fish or seafood while staying in NSW. It was explained that it is just their perception which matters - they don't have to have eaten fish or seafood. A five point importance scale was used as in the catering sector survey.

Overall, one in three (34%) international visitors considers it extremely (6%) or very important (28%) to have the opportunity to eat local or NSW caught fish or seafood while staying in NSW. Another 20% considers it moderately important. Therefore, over one in two (54%) international visitors considers such availability at least moderately important

Just over one in three (36%) international visitors do not consider it important at all to have the opportunity to eat locally caught fish or seafood.

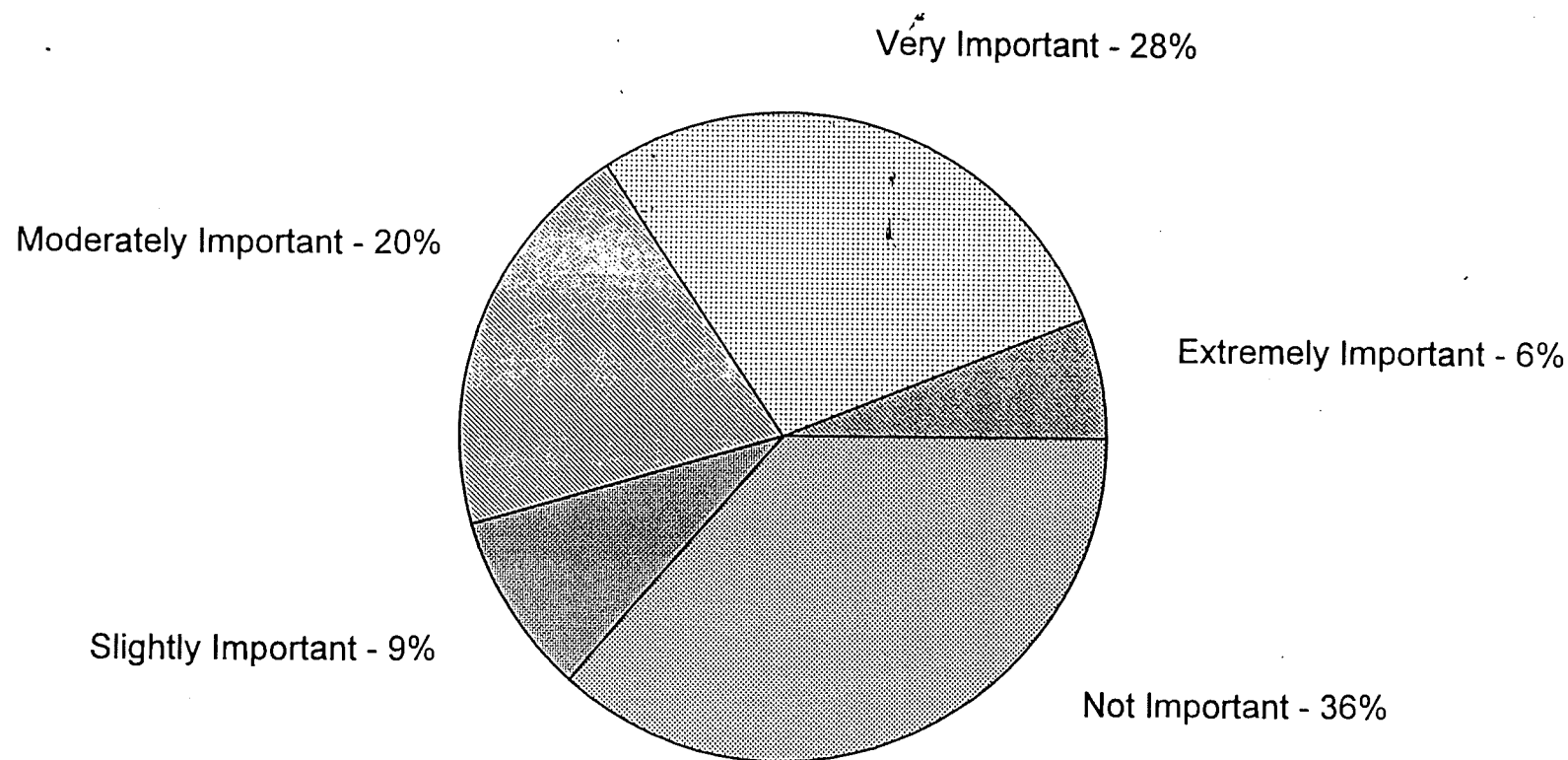
Those from Japan, other Asian countries and the USA/Canada are most likely to think that it is important to have access to locally caught product (44%, 42% and 44% respectively considers it extremely or very important). New Zealanders place the least importance on locally caught product (56% not important).

In summary, the majority (54%) of international visitors do have an expectation (considers it at least moderately important) that they will be able to eat locally caught seafood while in NSW.

These results are remarkably consistent with the perception of tourist expectations (international and domestic) conveyed by those in the catering sector (refer to Stage 2 report):

- 11% extremely important;
- 28% very important;
- 18% moderately important;
- 9% slightly important; and
- 33% not at all important.

Importance of NSW Caught Seafood to International Visitors



Q4: How important to you personally is it to have the opportunity to eat local or NSW caught fish or seafood while staying in NSW? It's just your perception which matters. You don't have to have eaten it.

Base: International Visitors in NSW (n=602)

8102.PRE



6.2.1

IMPORTANCE OF NSW CAUGHT SEAFOOD TO INTERNATIONAL VISITORS

Base: International Visitors in NSW

	TOTAL (602) %	COUNTRY OF RESIDENCE						
		JAPAN (85) %	OTHER ASIA (81) %	USA/ CANADA (103) %	NEW ZEALAND (81) %	UK/ IRELAND (106) %	OTHER EUROPE (106) %	OTHER COUNTRY (40) %
EXTREMELY IMPORTANT (5)	6	1	5	7	5	8	8	5
VERY IMPORTANT (4)	28	42	37	37	12	25	22	20
SUB-TOTAL AT LEAST VERY IMPORTANT	34	44	42	44	17	33	29	25
MODERATELY IMPORTANT (3)	20	20	25	25	20	16	17	15
SLIGHTLY IMPORTANT (2)	9	9	9	8	7	8	11	8
NOT IMPORTANT (1)	36	25	23	22	56	42	41	53
DON'T KNOW	1	2	1	1	-	-	2	-
TOTAL	100	100	100	100	100	100	100	100
AVERAGE	2.6	2.9	2.9	3.0	2.0	2.5	2.4	2.2

Note: Weighting for average shown in brackets.

Question 4: How important to you personally is it to have the opportunity to eat local or NSW caught fish or seafood while staying in NSW? It's just your perception which matters. You don't have to have eaten it.

6.2.2 Frequency of Seafood Consumption by International Visitors

Of all international visitors, at the time of interview **three in five (61%) had eaten a fish or seafood meal while in NSW on this visit.** And it must be remembered that on average, international visitors were intercepted for interview half way through their stay in NSW (Section 6.1.4).

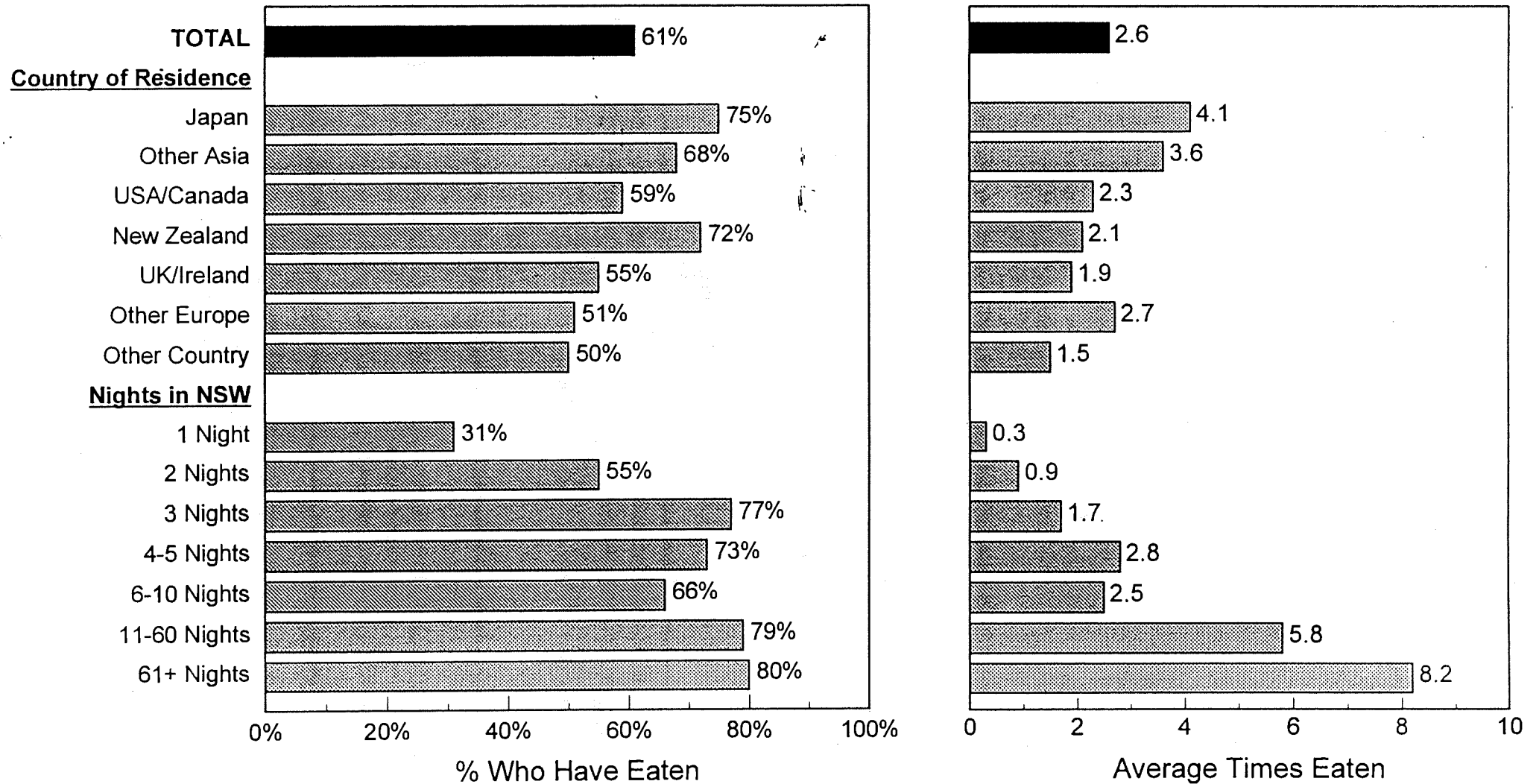
As would be expected, the likelihood of having eaten a seafood meal increases with the visitors length of stay:

- 31% of those who had stayed for just 1 night compared with
- 80% of those who had stayed for over 60 nights in NSW.

International visitors from Asian countries had eaten more seafood meals, on average, while in NSW:

- **2.6 seafood meals had been eaten by each international visitor;**
but
 - 4.1 seafood meals had been eaten by each Japanese visitor; and
 - 3.6 seafood meals by each visitor from another Asian country.

Frequency of Seafood Consumption by International Visitors



Q5: So far, how many times have you personally eaten a fish or seafood meal while in NSW on this trip?

Base: International Visitors in NSW (n=602)

8102.PRE



6.2.3 Satisfaction with Aspects of the Seafood Meal

The 369 international visitors who had eaten seafood while in NSW (61%) were asked to rate three aspects of the fish or seafood meals. The criteria were:

- freshness;
- presentation; and
- flavour.

Overall, **almost all international visitors are either very or fairly satisfied** with the seafood meals served for their freshness, flavour and presentation.

However, when one focuses on those who are very satisfied with these particular aspects, areas for improvement are highlighted:

- **three in four (76%) are very satisfied with the freshness** of the seafood meals;
- **seven in ten (70%) are very satisfied with the flavour** of the seafood meals; and
- **just under two in three (64%) are very satisfied with the presentation** of the seafood meals in NSW.

The Japanese in particular are most likely to express dissatisfaction with the presentation and flavour of the seafood meals eaten while in NSW:

- presentation - 48% very satisfied and 22% dissatisfied;
- flavour - 63% very satisfied and 16% dissatisfied.

Those businesses in the catering sector which serve a large proportion of Japanese visitors should take note and look to ways to improve the presentation of seafood meals and consider why their expectations of flavour are not being met.

One in three international visitors are indicating that the presentation of seafood meals can be improved - (they are not "very satisfied").

6.2.3

SATISFACTION WITH ASPECTS OF SEAFOOD MEAL

Base: International Visitors in NSW Who Have Eaten Seafood

	FRESHNESS (369) %	PRESENTATION (369) %	FLAVOUR (369) %
VERY SATISFIED	76	64	70
FAIRLY SATISFIED	20	29	24
SUB-TOTAL SATISFIED	96	93	93
NOT SO SATISFIED	3	7	6
VERY DISSATISFIED	1	0	1
SUB-TOTAL DISSATISFIED	4	7	7
TOTAL	100	100	100
DISSATISFIED JAPANESE	5	22	16

Question 6: In general, how satisfied have you been with the (READ OUT) of your fish or seafood meal(s)?

6.2.4 Importance of Seafood Consumption in Contributing to International Visitor Enjoyment

Over one in two (56%) international visitors who have eaten seafood indicate that the consumption experience is at least a moderately important part of the visit to NSW:

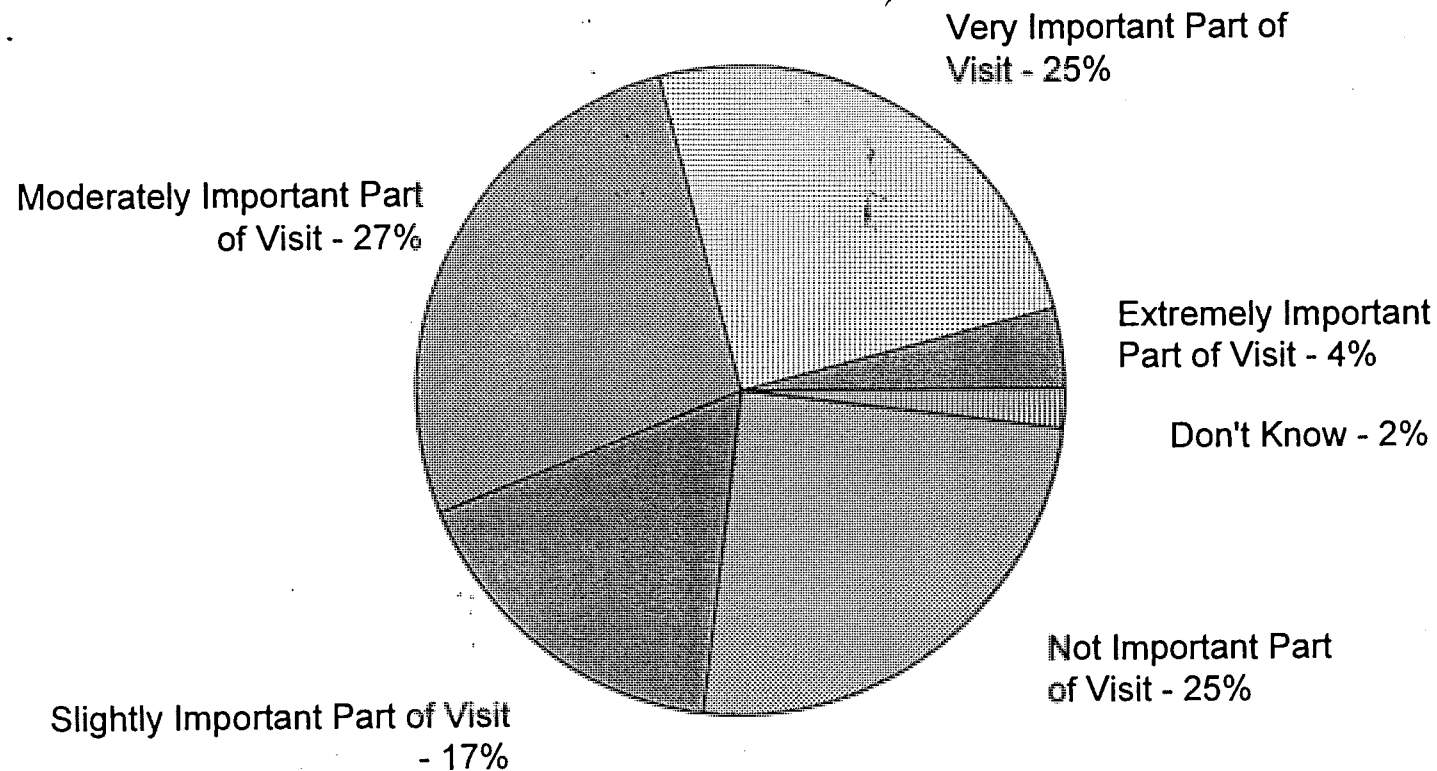
- 4% consider the eating of local or NSW caught seafood an extremely important part of the visit in contributing to their enjoyment;
- 25% consider it very important; and
- 27% consider the seafood eating experience moderately important in contributing to their enjoyment of their visit to NSW.

Another 42% of those who have eaten seafood while in NSW rate the eating experience, of slight or no importance, in contributing to the enjoyment of their visit to NSW.

Compared with the total sample (25%), New Zealanders and those from "other European countries" are most likely to indicate that eating local or NSW caught fish or seafood plays no importance in contributing to visitor enjoyment (40% and 41% respectively); as do those who have just had one seafood meal (40%).

The actual consumption of local or NSW caught seafood does impinge on an international visitor's enjoyment of their visit to NSW
- to just over one in two (56%) it is moderately important.

Importance of Seafood Consumption in Contributing to International Visitor Enjoyment



Q7: How important is the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to NSW?

Base: International Visitors in NSW Who Have Eaten Seafood (n=369)

8102.PRE



6.2.4 IMPORTANCE OF SEAFOOD CONSUMPTION IN CONTRIBUTING TO VISITOR ENJOYMENT

Base: International Visitors in NSW Who Have Eaten Seafood

	TOTAL (369) %	COUNTRY OF RESIDENCE						
		JAPAN (64) %	OTHER ASIA (55) %	USA/ CANADA (60) %	NEW ZEALAND (58) %	UK/ IRELAND (58) %	OTHER EUROPE (54) %	OTHER COUNTRY (20) %
EXTREMELY IMPORTANT PART OF VISIT (5)	4	2	2	7	5	3	7	5
VERY IMPORTANT PART OF VISIT (4)	25	33	38	28	10	22	13	30
SUB-TOTAL AT LEAST VERY IMPORTANT	29	34	40	35	16	26	20	35
MODERATELY IMPORTANT PART OF VISIT (3)	27	31	25	28	28	28	22	30
SLIGHTLY IMPORTANT PART OF VISIT (2)	17	22	24	12	17	17	13	10
NOT IMPORTANT PART OF VISIT (1)	25	11	9	22	40	29	41	25
DON'T KNOW	2	2	2	4	-	-	4	2
TOTAL	100	100	100	100	100	100	100	100
AVERAGE	2.7	2.9	3.0	2.9	2.2	2.5	2.3	2.8

Note: Weighting for average shown in brackets

Question 7: How important is the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to NSW?

6.2.5 Word of Mouth About Seafood Eating Experience

As another measure of the importance of the actual seafood eating experience, visitors were asked if when they return home they will tell any of their relatives or friends about any particular fish or seafood meal they have had while in NSW.

Two in three (67%) international visitors will talk about some aspect of the seafood meal(s) they have had while in NSW. Indicating that seafood is indeed one talking point about the visit in NSW. Four in five (80%) Japanese visitors will tell others about their seafood meal(s) in NSW.

Those aspects of the seafood meal which they will tell others about are detailed in Table 6.2.5 - spontaneous mentions. The most frequent talking points will be about:

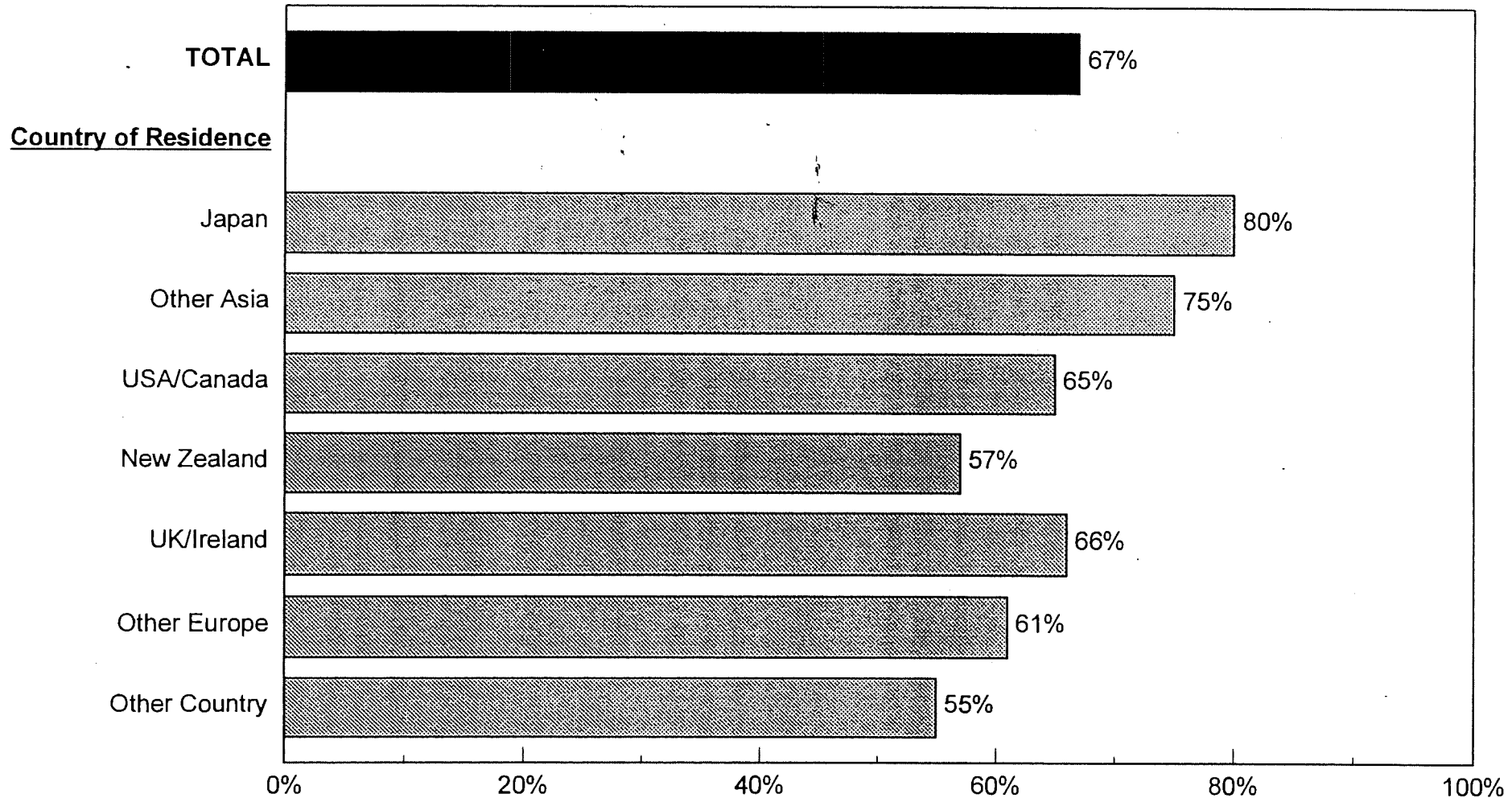
- the **freshness** of the seafood (41%);
 - less often mentioned by Japanese and New Zealand visitors and more so by those from other Asian countries;
- the **taste and flavour** of the seafood (37%);
- that it is **very enjoyable** (33%);
- that seafood in NSW is **good value for money** (20%); and
- that there is a good **variety** of seafood in NSW (17%).

The species which international visitors are most likely to mention are:

- **prawns** (19%) - particularly New Zealanders (33%);
- **lobster** (15%) - but 31% of Japanese; and
- **oysters** (9%).

One in ten Japanese feel that they will mention the mud crabs and crabs eaten while in NSW.

Word of Mouth About Seafood Eating Experience



Q8(a): When you return home do you think you will tell any of your relatives or friends about any particular fish or seafood meal you have had in NSW?

Base: International Visitors in NSW who have eaten seafood (n=369)

8102.PRE



6.2.5

ASPECTS OF SEAFOOD MEAL WHICH WILL TELL RELATIVES OR FRIENDS ABOUT

Base: International Visitors Who Have Eaten Seafood and Will Tell others Back Home About that Meal

	TOTAL (246) %	NOTABLE DIFFERENCES
<u>GENERAL COMMENTS</u>		
FRESH	41	Japan (27%); Other Asia (71%); New Zealand (21%)
TASTY/GOOD TASTE/DELICIOUS/FLAVOURS	37	
ENJOYABLE/LOVELY/GOOD EXPERIENCE	33	
GOOD VALUE/AFFORDABLE/NOT EXPENSIVE/CHEAP	20	
VARIETY/PLENTY OF VARIETY	17	
SUPERB/TERRIFIC/GREAT	13	UK/Ireland (29%)
WELL PRESENTED/EXCELLENT PRESENTATION	10	Japan (0%); UK/Ireland (24%)
BIG/GENEROUS PROPORTIONS/ENORMOUS	10	
THE WAY IT'S COOKED/PREPARED	9	
NOT AS GOOD AS OTHER COUNTRIES	4	Japan (12%)
TOO OILY	4	Japan (18%)
VERY HAPPY	4	
RECOMMENDED/EXPECT TO BE THE BEST	4	USA/Canada (15%)
DIFFERENT IN OTHER COUNTRIES	4	
BETTER THAN OTHER COUNTRIES	3	
EXPENSIVE	2	
<u>SPECIES COMMENTS</u>		
PRAWNS	19	New Zealand (33%)
LOBSTERS	15	Japan (31%)
OYSTERS	9	
OCTOPUS	5	
BALMAIN BUGS	5	
SHRIMP	4	
SALMON	4	
FISH AND CHIPS	4	
MUD CRABS	4	Japan (10%)
MUSSELS	3	
CRAB	3	Japan (10%)
PERCH	2	
SEAFOOD PLATTER/BASKET	2	
CRAYFISH	2	
SNAPPER	2	
BIG/LARGE FISH	2	
BARRAMUNDI	2	
SQUID	2	
OTHER POSITIVE COMMENTS	5	
OTHER NEGATIVE COMMENTS	11	
OTHER COMMENTS	11	

MULTIPLE RESPONSE ALLOWED

Question 8(b): What will you tell them about the fish or seafood you have eaten while in NSW?

6.3 Importance of Other Commercial Fishing Activities

6.3.1 Participation in Commercial Fishing Activities by International Visitors

All international visitors were asked about their participation or likely participation in commercial fishing activities while in NSW, namely:

- visits to a wholesale or retail fish market or co-operative;
- visits to a commercial fish farm or oyster farm;
- looking at commercial fishing boats or fleets at a jetty or marina; and
- attendance at an oyster or commercial fishing festival.

At the time of interview, 11% had participated in at least one of these activities:

- 9% had visited a wholesale or retail fish market or co-operative primarily for fun or education purposes;
- 3% had looked at commercial fishing boats; and
- 1% had visited a commercial fish farm or oyster farm for fun or education.

More international visitors believe that they will undertake one of these activities.

Overall, one in three (35%) international visitors believe that they will participate in some commercial fishing activity. Those from UK/Ireland are least likely to do so (22%) and those from another Asian country are most likely to do so (54%).

In terms of the specific activities which been and are likely to be undertaken:

- one in three (33%) believe that they will visit a fish market or co-operative primarily for fun or education;
- 7% think that they will look at commercial fishing boats or fleets at a jetty or marina;
- 4% consider a visit to a commercial fish farm or oyster farm likely; and
- 1% think they will attend an oyster festival or commercial fishing festival such as the blessing of the fleet while in NSW.

6.3.1 PARTICIPATION IN COMMERCIAL FISHING ACTIVITIES BY INTERNATIONAL VISITORS

Base: International Visitors in NSW

	HAVE DONE (602) %	PLAN TO DO (602) %	TOTAL PARTICIPATION (602) %	COUNTRY OF RESIDENCE						
				JAPAN (85) %	OTHER ASIA (81) %	USA/ CANADA (103) %	NEW ZEALAND (81) %	UK/ IRELAND (106) %	OTHER EUROPE (106) %	OTHER COUNTRY (40) %
VISITED A WHOLESALE OR RETAIL FISH MARKET OR CO-OPERATIVE	9	23	33	35	54	22	31	18	40	33
VISITED A COMMERCIAL FISH FARM OR OYSTER FARM	1	3	4	2	7	6	2	2	6	3
LOOKED AT COMMERCIAL FISHING BOATS OR FLEETS AT JETTY OR MARINA	3	4	7	5	5	12	9	6	7	8
ATTENDED AN OYSTER FESTIVAL OR COMMERCIAL FISHING FESTIVAL	-	1	1	-	2	1	2	2	1	3
NONE	89	72	65	66	46	73	65	78	62	60

MULTIPLE
RESPONSE
ALLOWED

Question 9: While in NSW, have you done any of the following activities primarily for fun or education?

Question 12: For the rest of your stay in NSW, do you think you will....(read out if not in Q.9) for fun or education?

6.3.2 Photo Taking of Commercial Fishing Activities

In total, 11% of international visitors had visited or looked at some commercial fishing activity while in NSW (66 respondents). These visitors were asked to estimate the number of photos they had taken of these activities - as a guide to the "value" of commercial fishing activities.

Just over one in two (53%) had taken at least one photo of some commercial fishing activity:

- 17% had taken 1 to 3 photos;
- 9% had taken 4 or 5 photos;
- 12% had taken 6 to 10 photos;
- 14% had taken 12 to 50 photos; and
- 2% had taken 90 photos.

On average, these 66 international visitors had taken 7.6 photos each of commercial fishing activities.

6.3.3 Expenditure on Other Commercial Fishing Activities

The 11% of international visitors who had visited or looked at a commercial fishing activity were also asked approximately how much they had spent on things like entrance fees, souvenirs or other goods.

On average, each of these international visitors spent \$35 on commercial fishing activities, distributed as follows:

- 35% did not buy anything;
- 17% spent \$2 to \$10;
- 21% spent \$14 to \$25;
- 12% spent \$30 to \$50; and
- 14% spent over \$50 (up to \$370).

6.4 Demand for Seafood from International Visitors

6.4.1 Estimated Seafood Meals Eaten by International Visitors in NSW

Using data collected through this survey and published visitor statistics produced by the BTR, it is possible to develop an estimate of the number of seafood meals eaten in a year by international visitors.

Based on the 602 international visitors the following is known:

- at the time of interview they had spent a total of 7,026 visitor nights in NSW;
- at the time interview they had eaten 1,588 seafood meals;

☞ 22.6% of nights equates to 1 seafood meal.

According to the IVS, in 1995 there were 29,566,000 visitor nights spent in NSW by visitors to the state aged 15 years and over. Therefore, it is possible to estimate the number of seafood meals eaten:

☞ $29,566,000 \text{ visitor nights} \times .226$
 $= 6,681,916 \text{ seafood meals in 1995}$
eaten by international visitors in NSW.

In 1995, on average each visitor aged 15 years and over spent 13.67 nights in NSW (29,566,000 visitor nights / 2,163,270 visitors). It is estimated that there will be 3,613,050 visitors to NSW aged 15 years or more in the Year 2000. If they each stay for 13.67 nights, this equates to 49,380,538 international visitor nights in the Year 2000:

☞ $49,380,538 \text{ visitor nights} \times .226$
 $= 11,160,000 \text{ seafood meals in 2000}$
eaten by international visitors in NSW.

In 1995, it is estimated that international visitors (15 years or more)
ate 6,681,916 seafood meals in NSW.

Based on the projected number of international visitors in 2000
an estimated 11,160,000 seafood meals will be eaten in NSW.

6.4.2 Estimated Number of International Visitors Participating in Commercial Fishing Activities

The 1995 IVS indicates that there were 2,163,270 international visitors to NSW aged 15 years and over. Applying this number to those who have (or plan to) participate in commercial fishing activities provides an estimate of the number of international visitors involved in such activities. The estimates are shown in the table below.

	Have Done		Total Participation*	
	%	Number	%	Number
TOTAL PARTICIPATION	11%	237,959	35%	757,144
Visit w/sale or retail fish market	9%	194,694	33%	713,879
Visit a commercial fish farm	1%	21,633	4%	86,531
Look at commercial fishing boats	3%	64,898	7%	151,429
Attend a commercial fishing festival	-	-	1%	21,633

* Could be over-estimated given that it is based on a perception of activities which will be undertaken.

A very broad estimate of the number of photos and amount spent on such activities can be made:

Photos

- 1.8 million photos were taken of commercial fishing activities by international visitors in 1996;

(237,959 x 7.6 average photos each - which does include two outliers (50 and 90 photos))

☞ **more conservative (assuming no more than 48 photos were taken - as for domestic visitors)**

- 1.3 million photos were taken of commercial fishing activities by international visitors in 1996;

(237,959 x 5.6 average photos each)

Expenditure

- \$8.3 million was spent on commercial fishing activities by international visitors in 1996;
- (237,959 x \$35 average expenditure each - which does include five outliers)

☞ **more conservative (assuming no more than \$300 was spent - as for domestic visitors)**

- \$7.1 million was spent on commercial fishing activities by international visitors in 1996;
(237,959 x \$29.83 average expenditure each)

APPENDIX 1

QUESTIONNAIRE

SECTION E - ASK ALL RESPONDENTS

E1 Now thinking about travel within New South Wales for pleasure, for business, or for any other reason. In the last **2 months**, that is since last Christmas, how many times have you travelled at least 40 kilometres away from your home and stayed away for at least 4 nights, where that trip included some travel in NSW?

RECORD UNDER 4 NIGHTS +

E2 In the last **2 weeks**, that is since the 9th of February, how many times have you travelled at least 40 kilometres away from your home and stayed away for between 1 and 3 nights, where that trip included at least 1 night in NSW?

RECORD UNDER 1-3 NIGHTS

	-----E1----- 4 NIGHTS +	-----E2----- 1-3 NIGHTS
ONE	1	1
TWO	2	2
THREE	3	3
FOUR	4	4
FIVE	5	5
SIX OR MORE	6	6

NONE	7	7
DON'T KNOW	8	8

ASK IF HAVE MADE A TRIP IE CODE 1-6 IN E1 OR E2. OTHERS GO TO NEXT SECTION

ASK E3-E7 FOR MOST RECENT TRIP IN EACH TIME PERIOD. IF TAKEN BOTH TYPES OF TRIP ASK E3-E7 FOR TRIP OF 4+ NIGHTS FIRST -

E3 Thinking about your most recent (TRIP OF 4 NIGHTS OR MORE/TRIP OF BETWEEN 1 AND 3 NIGHTS) that included travel in NSW. What was the **main** purpose of that trip? Was it....?

READ OUT 1-6 AND ROTATE 1-5 AND RECORD UNDER APPROPRIATE COLUMN

	4 NIGHTS +	1-3 NIGHTS
A HOLIDAY FOR PLEASURE	1	1
TO VISIT FRIENDS AND RELATIVES	2	2
FOR PERSONAL REASONS	3	3
FOR BUSINESS OR A CONFERENCE	4	4
FOR A WORKING HOLIDAY	5	5
OR, FOR SOME OTHER REASON (SPECIFY)	6	6

DON'T KNOW	7	7

E4 How many times did you personally eat a fish or seafood meal while on that trip in NSW?

	4 NIGHTS +	1-3 NIGHTS
ONCE	1	1
TWICE	2	2
THREE TIMES	3	3
FOUR TIMES	4	4
FIVE TIMES OR MORE	5	5

NONE	6	6
DON'T KNOW	7	7

E5 In which **one** of the following areas of NSW did you spend most nights during that trip?

READ OUT 1-6

	4 NIGHTS +	1-3 NIGHTS
	<u>SR</u>	<u>SR</u>
IN AND AROUND SYDNEY	1	1
NSW COAST NORTH OF SYDNEY	2	2
NSW COAST SOUTH OF SYDNEY	3	3
INLAND NORTHERN NSW	4	4
INLAND CENTRAL NSW	5	5
INLAND SOUTHERN NSW	6	6
DON'T KNOW	7	7

E6 How important to you personally was the **opportunity** to eat local or NSW caught fish or seafood when staying in that area of NSW on that trip? Would you say it was?

READ OUT AND ROTATE 1-5 AND 5-1 ONLY

	4 NIGHTS +	1-3 NIGHTS
EXTREMELY IMPORTANT	1	1
VERY IMPORTANT	2	2
MODERATELY IMPORTANT	3	3
SLIGHTLY IMPORTANT	4	4
NOT IMPORTANT	5	5
DON'T KNOW	6	6



ASK IF FISH/SEAFOOD EATEN IE CODE 1-5 IN E4. CODE 6-7 GO TO E3/E8

E7	How important was the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to that area of NSW? Would you say it was?		4 NIGHTS + 1-3 NIGHTS	
		EXTREMELY IMPORTANT	1	1
		VERY IMPORTANT	2	2
		MODERATELY IMPORTANT	3	3
		SLIGHTLY IMPORTANT	4	4
		NOT IMPORTANT	5	5
		DON'T KNOW	6	6

READ OUT AND ROTATE 1-5 AND 5-1 ONLY

REPEAT E3-E7 FOR TRIP OF 1-3 NIGHTS IF NECESSARY

ASK ALL MADE A TRIP IE CODE 1-6 IN E1 OR E2

E8	During any of the trips you have taken in NSW in the last 2 months, that is since last Christmas, which, if any, of the following activities did you do primarily for fun or education?	VISIT A WHOLESALE OR RETAIL FISH MARKET OR CO-OPERATIVE	1	* *
		VISIT A COMMERCIAL FISH FARM OR OYSTER FARM	2	* E9
		LOOK AT COMMERCIAL FISHING BOATS OR FLEETS AT A JETTY OR MARINA	3	*
		ATTEND AN OYSTER FESTIVAL OR A COMMERCIAL FISHING FESTIVAL SUCH AS THE BLESSING OF THE FLEET	4	* *
		NONE	5	# NEXT
		DON'T KNOW	6	# SECT

READ OUT AND ROTATE 1-4

ASK IF VISITED A FISHING ACTIVITY IE CODE 1-4 IN E8. CODE 5-6 GO TO NEXT SECTION

E9	Approximately how many photos in total did you take, if any, on the occasions you visited those fishing or aquaculture activities? GAIN BEST ESTIMATE	WRITE IN NUMBER	
		48 OR MORE	48
		DON'T KNOW	49
E10	And approximately how much, if anything, did you spend on things like entrance fees, souvenirs, or other goods purchased at those fishing or aquaculture activities? GAIN BEST ESTIMATE. RECORD TO NEAREST WHOLE \$	\$	
		\$299 OR MORE	299
		DON'T KNOW	300

DEMOGRAPHICS

1	Are you aged under or over 40? Into which of the following age groups do you belong? READ OUT 01-05 IF UNDER 40 OR 06-10 IF OVER 40	18-20	01	40-44	06
		21-24	02	45-49	07
		25-29	03	50-54	08
		30-34	04	55-59	09
		35-39	05	60+	10
				REFUSED	11
2	RECORD SEX			MALE	1
				FEMALE	2
3	Are you the person in the household who is most responsible for doing the weekly food shopping?			YES	1
				NO	2
				---4(a)---	---- 4(b)----</td
				<u>ADULTS</u>	<u>CHILDREN</u>
4(a)	How many people aged 18 years or over, including yourself, live in your household?	ONE	1	1	
		TWO	2	2	
		THREE	3	3	
		FOUR	4	4	
4(b)	And how many children aged 17 years or younger live in your household?	FIVE	5	5	
		SIX +	6	6	
		NONE	7	7	
		REFUSED/DON'T KNOW	8	8	
5	Do you work full time, part time or not at all?			FULL TIME	1
				PART TIME	2
				NOT AT ALL	3
6	How old were you when you completed your school education, excluding any technical, college or university studies?	DID NOT ATTEND	01	17 YEARS	07
		12 YEARS OR LESS	02	18 YEARS	08
		13 YEARS	03	19+ YEARS	09
		14 YEARS	04	STILL AT SCHOOL	10
		15 YEARS	05	REFUSED	11
		16 YEARS	06		
7	Which of the following best describes your present marital status? READ OUT 1-6			NEVER MARRIED	1
				DEFACTO OR LIVE TOGETHER	2
				MARRIED	3
				SEPARATED BUT NOT DIVORCED	4
				DIVORCED	5
				WIDOWED	6
8	Could I please have the occupation of the main income earner of your household?				
	Could I also have the position or job title of the main income earner of your household?				
9	Are you yourself the main income earner in your household or is someone else the main income earner?			SELF	1
				SOMEONE ELSE	2
				DON'T KNOW	3
10	Is your household's combined annual income from all sources, before tax, under or over \$30,000? PAUSE Which one of the following groups best describes your household's combined annual income? READ OUT 1-2 IF UNDER \$30,000 OR 3-6 IF OVER \$30,000			LESS THAN \$20,000	1
				\$20,000-\$29,999	2

				\$30,000-\$39,999	3
				\$40,000-\$49,999	4
				\$50,000-\$69,999	5
				\$70,000 OR MORE	6

				REFUSED	7
				DON'T KNOW	8
	INTERVIEWER INFORMATION				
	UNDER \$20,000 PA IS UNDER \$385 PER WEEK				
	\$20,000-\$29,999 PA IS \$385-\$576 PER WEEK				
	\$30,000-\$39,999 PA IS \$577-\$768 PER WEEK				
	\$40,000-\$49,999 PA IS \$769-\$961 PER WEEK				
	\$50,000-\$69,999 PA IS \$962-\$1,346 PER WEEK				
	OVER \$70,000 PA IS OVER \$1,346 PER WEEK				



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TERMINATIONS	S1	NOT INT. VISITOR 15+YRS	
	S2	STAY 12 MONTHS+	
	S3	COUNTRY LIVE	

INTERNATIONAL VISITOR SURVEY

JOB NO: 8102(3)

Good morning/afternoon/evening. My name is ... from Yann Campbell Hoare Wheeler Market Research. We are conducting a short survey with international visitors 15 years and over about trips taken in NSW/Sydney and we would very much like to include your opinions.

S.1	Are you an international visitor aged 15 years or over?	YES	1
	TERMINATE	NO	2

S.2	Do you plan to stay in Australia for ...? [READ OUT]	LESS THAN 12 MONTHS	1
	TERMINATE	12 MONTHS OR MORE	2

S.3	Which country do you live in?	JAPAN	1
		OTHER ASIAN COUNTRY	2
		USA/CANADA	3
		NEW ZEALAND	4
		UK/IRELAND	5
		OTHER EUROPE	6
		OTHER COUNTRY	7

CHECK QUOTA

Q.1	Is this your first visit to Australia? (IF ANSWER IS 'BORN IN AUSTRALIA' ASK:) Is this your first return visit to Australia?	YES	1
		NO	2

	<u>SHOW CARD 1 (IF ENGLISH SPEAKING)</u>		
	<u>READ OUT IF NON-ENGLISH SPEAKING</u>		
Q.2	When you arrived in Australia and completed your INCOMING PASSENGER CARD, which <u>one</u> of these did you mark as your main reason for coming to Australia? [SINGLE RESPONSE]	HOLIDAY	1
		VISITING FRIENDS/RELATIVES	2
		CONVENTION/CONFERENCE	3
		BUSINESS	4
		EMPLOYMENT	5
		EDUCATION	6
	OTHER (SPECIFY):		
			7

Q.3(a) How many nights have you stayed in NSW so far? [PROBE FOR BEST ESTIMATE. SHOW MAP OF NSW IF NEEDED - AND EXPLAIN SYDNEY IS THE CAPITAL OF NSW]

_____ NIGHTS

Q.3(b) In total, how many nights do you plan to stay in NSW? [PROBE FOR BEST ESTIMATE]

_____ NIGHTS

Q.3(c) In total, how many nights will you spend in Australia including NSW? [PROBE FOR BEST ESTIMATE]

_____ NIGHTS

SHOW MAP

Q.3(d) Besides the Sydney region, have you, or are you planning to visit any other areas in NSW (eg. Blue Mountains)?

YES	1
NO	2
DON'T KNOW	3

I'm now going to ask you some questions about fish and seafood.

SHOW CARD 2

Q.4 How important to you personally is it to have the opportunity to eat local or NSW caught fish or seafood while staying in NSW? It's just your perception which matters. You don't have to have eaten it. [READOUT IF NON ENGLISH SPEAKING]

EXTREMELY IMPORTANT	1
VERY IMPORTANT	2
MODERATELY IMPORTANT	3
SLIGHTLY IMPORTANT	4
NOT IMPORTANT	5
DON'T KNOW	6

Q.5 So far, how many times have you personally eaten a fish or seafood meal while in NSW on this trip? [GET BEST ESTIMATE AND USE MAP IF NEEDED]

RECORD BEST ESTIMATE _____

GO TO Q.9	NONE	00
	DON'T KNOW	99

FISH/SEAFOOD EATERS

SHOW CARD 3

Q.6 In general, how satisfied have you been with the (READ OUT ROTATED) of your fish or seafood meal(s)? [READ OUT IF NON-ENGLISH SPEAKING]

	VERY SATISFIED	FAIRLY SATISFIED	NOT SO SATISFIED	VERY DISSATISFIED	DON'T KNOW
FRESHNESS	1	2	3	4	5
PRESENTATION	1	2	3	4	5
FLAVOUR	1	2	3	4	5

SHOW CARD 4

Q.7 How important is the actual eating of local or NSW caught fish or seafood in contributing to your enjoyment of your visit to NSW? [READ OUT IF NON-ENGLISH SPEAKING]

EXTREMELY IMPORTANT PART OF VISIT	1
VERY IMPORTANT PART OF VISIT	2
MODERATELY IMPORTANT PART OF VISIT	3
SLIGHTLY IMPORTANT PART OF VISIT	4
NOT IMPORTANT PART OF VISIT	5
DON'T KNOW	6

Q.8(a) When you return home do you think you will tell any of your relatives or friends about any particular fish or seafood meal you have had in NSW?

YES	1
NO	2
GO TO Q.9	3
DON'T KNOW	3

Q.8(b) What will you tell them about the fish or seafood you have eaten while in NSW? [PROBE FULLY]

ALL RESPONDENTS

Q.9 While in NSW, have you done any of the following activities primarily for fun or education? [READ OUT]

VISITED A WHOLESALE OR RETAIL FISH MARKET OR CO-OPERATIVE (LIKE THE SYDNEY FISH MARKET)	1
VISITED A COMMERCIAL FISH FARM OR OYSTER FARM	2
LOOKED AT <u>COMMERCIAL</u> FISHING BOATS OR FLEETS AT A JETTY OR MARINA	3
ATTENDED AN OYSTER FESTIVAL OR A COMMERCIAL FISHING FESTIVAL SUCH AS THE BLESSING OF THE FLEET	4
GO TO Q.12	5
NONE	5

Q.10 On the occasions you visited (READ OUT FROM Q.9), approximately how many photos, if any, did you take? [GAIN BEST ESTIMATE AND RECORD "0" IF NONE]

DON'T KNOW 99

Q.11 And approximately how much, if anything, did you spend on things like entrance fees, souvenirs, or other goods purchased at (READ OUT FROM Q.9)? [GAIN BEST ESTIMATE AND RECORD "0" IF NONE. RECORD TO NEAREST \$]

\$ _____
DON'T KNOW 99

Q.12 For the rest of your stay in NSW, do you thing you will ...
(READ OUT IF NOT IN Q.9) for fun or education? [ASK FOR EACH ONE IN TURN]

VISIT A WHOLESALE OR RETAIL FISH MARKET OR CO-OPERATIVE (LIKE THE SYDNEY FISH MARKET)	1
VISIT A COMMERCIAL FISH FARM OR OYSTER FARM	2
LOOK AT <u>COMMERCIAL</u> FISHING BOATS OR FLEETS AT A JETTY OR MARINA	3
ATTEND AN OYSTER FESTIVAL OR A COMMERCIAL FISHING FESTIVAL SUCH AS THE BLESSING OF THE FLEET	4
NONE	5

CLASSIFICATION

Q.13 RECORD SEX	MALE	1
	FEMALE	2

Q.14	<u>SHOW CARD 5</u>	15 - 19 YEARS	01
	Which of these age groups do you fall within? [IF REFUSE, ESTIMATE AGE. DO NOT LEAVE BLANK]	20 - 24 YEARS	02
		25 - 29 YEARS	03
		30 - 34 YEARS	04
		35 - 39 YEARS	05
		40 - 44 YEARS	06
		45 - 49 YEARS	07
		50 - 54 YEARS	08
		55 - 59 YEARS	09
		60 - 64 YEARS	10
		65 AND OVER	11

THANK YOU VERY MUCH FOR YOUR HELP. AS I SAID, I AM FROM YANN CAMPBELL HOARE WHEELER
MARKET RESEARCH. IF YOU WOULD LIKE TO CHECK THE BONA FIDES OF THIS COMPANY, PLEASE CALL
OUR COMPANY ON (02) 9927 0150 DURING OFFICE HOURS.

I certify this is a true, accurate and complete interview, conducted in accordance with IQCA standards and the
ICC/ESOMAR code of conduct. I also agree to hold in confidence and not disclose to any other person the content of
this questionnaire or any other information relating to this project.

INTERVIEWER SIGNATURE: _____ DATE:

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Day Month

INTERVIEWER NUMBER: _____

THANK YOU FOR YOUR HELP.

LOCATION OF INTERVIEW:

BONDI BEACH	01	QUEEN VICTORIA BUILDING	07
MANLY CORSO	02	SYDNEY DOMAIN	08
DARLING HARBOUR	03	LADY MACQUARIE'S CHAIR	09
THE ROCKS	04	CENTREPOINT TOWER	10
CIRCULAR QUAY	05	TOORONGA PARK ZOO	11
NSW ART GALLERY	06	OTHER (Specify): _____	12