

# 17 AIRLIE BEACH TRC

The Airlie Beach TRC consists of the main urban centre of Airlie Beach, Cannonvale and Proserpine. Figure 17.1 shows the geographic location of this TRC.

## BUSINESS PROFILES

### Location and Use of Ports

Table 17.1 shows the number of licence holders within the Airlie Beach TRC and the number of survey respondents who reported having homeports within the TRC. On the basis of the sample count, it is estimated that there are 14 commercial fishers within this TRC and that we can be 95% confident that the population count of commercial fishers within the TRC is between 7 and 21.

Table 17.1  
Location of Homeports

Town	Adj. Database Count	Sample Count	Estimated Count	Percent within TRC
Airlie Beach	9	3	7	50.0
Midge Point	0	2	5	35.7
Proserpine	6	1	2	14.3
Cannonvale	2	0	0	0.0
Total TRC	17	6	14	100.0
95% Confidence Interval for Estimated TRC Count				7-21
Percent of Total Active Licence Holders in QLD				0.6%

Note: Adjusted database count is based on the postal address as recorded in the licencing information, which may not be the homeport of the fishing business. The adjusted database count reduces the count for latent licence holders (8.8%). The estimated count adjusts the sample count by the sampling fraction of 2.444.

In addition to the use of Airlie Beach as a homeport, a limited number of fishing businesses used Airlie Beach and the Whitsunday Islands when travelling to or from fishing areas. These fishing businesses were found to have their homeports in Bowen, Sandgate and Mackay.

### Fishing Activity and Type

Table 17.2 shows the type of fishing activity undertaken within the last year by fishing businesses within this TRC. Line fishing (83%) is the primary fishing activity by businesses from the Airlie Beach TRC, followed by netting (50%), crabbing (50%) and trawling (33%).

Table 17.2  
Type of Fishing Activity (During the last 12 months)

Fishing Type	Sample Count	Percent within TRC
Line fishing	5	83.3
Netting	3	50.0
Crabbing	3	50.0
Trawling	2	33.3
Total Sample	6	100.0

Note: This is a multiple response table where all rows are independent.

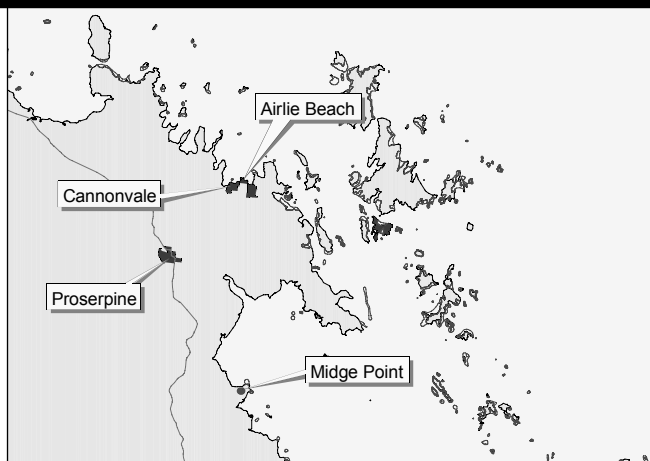


Figure 17.1 Location of the Airlie Beach TRC

As shown in Table 17.3, line fishing co-occurs predominantly with netting (60%). Trawling co-occurs with line fishing (100%) and crabbing (100%), crabbing co-occurs with line fishing (67%) and trawling (67%), while netting co-occurs with line fishing (100%).

Table 17.3  
Co-occurrence of Fishing Activities

	Line Fishing	Trawling	Crabbing	Netting
Line fishing	5 <i>100.0</i>	2 <i>40.0</i>	2 <i>40.0</i>	3 <i>60.0</i>
Trawling	2 <i>40.0</i>	2 <i>100.0</i>	2 <i>100.0</i>	1 <i>33.3</i>
Crabbing	2 <i>40.0</i>	2 <i>100.0</i>	3 <i>100.0</i>	1 <i>33.3</i>
Netting	3 <i>60.0</i>	1 <i>50.0</i>	1 <i>33.3</i>	3 <i>100.0</i>

Note: The co-occurrence table should be read by column. Column percentages are given as italics.

Although based on a very limited sample count, Table 17.4 suggests the peak months for fishing activity within the TRC may be between May and November.

Table 17.4  
Peak Fishing Months During Past 12 Months

Months	Sample Count	Percent within TRC	Percent of QLD Fishery
January	0	0.0	24.5
February	0	0.0	29.7
March	0	0.0	43.9
April	0	0.0	42.8
May	1	20.0	38.1
June	1	20.0	33.5
July	1	20.0	23.9
August	1	20.0	19.9
September	1	20.0	23.5
October	2	40.0	24.8
November	1	20.0	26.2
December	0	0.0	21.4

Table 17.5 provides a more detailed description of the seasonal variation in fishing activities by businesses. Line fishing is most common between May and October, crabbing between January and May, while netting appears reasonably distributed throughout the year (Table 17.5).

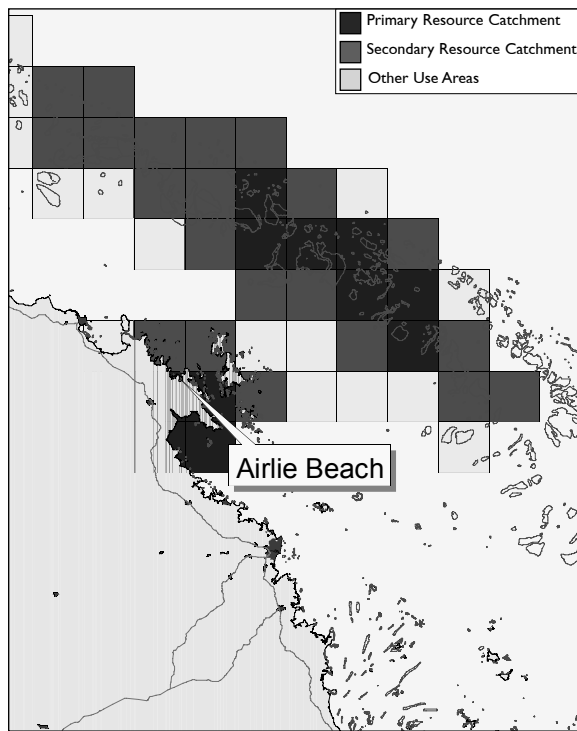


Figure 17.2 Airlie Beach TRC: Location of Resource Use

Table 17.5 Seasonal Variations in Fishing Activity

Months	Sample Count	Percent within TRC	Percent of Fishery
<b>Line Fishing</b>			
January	2	40.0	64.6
February	2	40.0	64.3
March	2	40.0	68.1
April	2	40.0	70.4
May	4	80.0	74.7
June	5	100.0	78.7
July	5	100.0	82.0
August	5	100.0	80.8
September	4	80.0	79.7
October	4	80.0	79.7
November	2	40.0	78.2
December	2	40.0	70.6
<b>Crabbing</b>			
January	2	100.0	74.7
February	2	100.0	79.0
March	2	100.0	75.1
April	2	100.0	69.4
May	2	100.0	67.2
June	1	50.0	58.5
July	1	50.0	52.0
August	0	0.0	50.2
September	0	0.0	53.3
October	0	0.0	55.9
November	0	0.0	66.4
December	0	0.0	72.1
<b>Netting</b>			
January	1	25.0	57.5
February	3	75.0	72.9
March	3	75.0	73.9
April	2	50.0	74.2
May	2	50.0	77.6
June	2	50.0	79.9
July	1	25.0	75.9
August	2	50.0	73.9
September	2	50.0	69.6
October	3	75.0	64.2
November	3	75.0	55.9
December	2	50.0	54.5

Note: Sample size for trawl is too small to allow meaningful analyses.

## Location of Resource Use

Figure 17.2 shows the location of resource use by commercial fishing operations in the Airlie Beach TRC. Two primary resource catchments can be identified in Figure 17.2. One is located in the coastal areas of Repulse Bay and the Whitsunday Passage, while the second is located on reefal areas between Edgell Reef in the south and Elizabeth Reef in the north. The secondary catchment includes areas surrounding the Whitsunday Islands group and those reefal areas between Bax Reef in the south and Viper Reef in the north.

## Fishing Industry Employees

Table 17.6 identifies the number of employees of commercial fishing businesses within this TRC for both peak and off-peak seasons. The majority of businesses within peak and off-peak seasons had between one and three full-time employees with little if any part-time or casual employment. The average number of employees per business during the peak season was 2.5 and in the off-peak season it was 1.9. It is estimated that during the peak season there were 35 full-time equivalent employees, while during the off-peak season there were an estimated 27 full-time equivalent employees.

## Business Ownership and Size

Table 17.7 shows the number of years the current owner or operator has owned the fishing business. On average, businesses within this TRC had been owned for an average of 18.2 years, with 50% of businesses being owned by the current owner for less than 10 years.

Table 17.7 Number of Years Ownership of the Fishing Business

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	2	33.3	33.3
6-10	1	16.7	50.0
11-15	0	0.0	50.0
16-20	0	0.0	50.0
21-25	0	0.0	50.0
26-30	1	16.7	66.7
31+	2	33.3	100.0
Total	6	100.0	

Mean Number of Years owned or operated 18.2  
Difference of TRC mean to QLD mean (14.6) +3.6

Note: Standard errors for number of years ownership (sample = 6.3; QLD population = 0.37).

The average number of years the business had been operating was 18.2 years (Table 17.8), which was the same as the average for all Queensland fishing businesses (18.2 years).

Table 17.8. Number of Years Business has been Operating

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	2	33.3	33.3
6-10	1	16.7	50.0
11-15	0	0.0	50.0
16-20	0	0.0	50.0
21-25	0	0.0	50.0
26-30	1	16.7	66.7
31+	2	33.3	100.0
Total	27	100.0	

Mean Number of Years owned or operated 18.2  
Difference of TRC mean to QLD mean (18.2) 0.0

Note: Standard errors for number of years operated (sample = 6.3; QLD population = 0.46)

Table 17.6  
Number of Employees

Number of Employees	Full-Time Count	Full-Time Percent	Part-Time Count	Part-Time Percent	Casual Count	Casual Percent
<b>Peak Season</b>						
Nil	0	0.0	6	100.0	5	83.3
1	2	33.3	0	0.0	0	0.0
2-3	3	50.0	0	0.0	1	16.7
4-5	1	16.7	0	0.0	0	0.0
6-7	0	0.0	0	0.0	0	0.0
8-9	0	0.0	0	0.0	0	0.0
Total Businesses	6	100.0	6	100.0	6	100.0
Total Employees	14		0		1	
Mean Number of Employees per Business (Peak)		2.5				
Estimated Number Employed within the TRC		35				
<b>Off-Peak</b>						
Nil	0	0.0	6	100.0	5	83.3
1	2	33.3	0	0.0	1	16.7
2-3	4	66.6	0	0.0	0	0.0
4-5	0	0.0	0	0.0	0	0.0
6-7	0	0.0	0	0.0	0	0.0
8-9	0	0.0	0	0.0	0	0.0
Total Businesses	6	100.0	6	100.0	6	100.0
Total Employees	11		0		0.5	
Mean Nos Employees per Business (Off-Peak)		1.9				
Estimated Number Employed within the TRC		27				

Note: Part-time and casual employment is recorded as 0.5 when contributing to total employment.  
Total number of employees includes the owner-operator and is the number of full-time equivalent employees.  
Estimates of total employment based on an estimated 14 fishing businesses (Table 17.1)

Table 17.9 shows that the majority of fishing businesses within this TRC operated one boat (67%).

Table 17.9  
Number of Boats Operated by Fishing Businesses

Number of Boats	Sample Count	Percent within TRC
1	4	66.7
2	0	0.0
3	2	33.3
4	0	0.0
5	0	0.0
6+	0	0.0
Total Number of Businesses	6	100.0
Mean Number of Boats Operated		1.7
Difference of TRC mean to QLD mean (1.7)		0.0

Note: Standard errors for number of boats operated (sample = 0.3; QLD population = 0.05)

Table 17.10 shows the frequency distribution for length of boats, with 61% of boats being between 3 and 6 metres and a further 38% of boats being between 7 and 10 metres. The mean length of all boats and the mean length of the largest boat were also lower than that of all boats in Queensland.

Table 17.10  
Length of Boats Operated by Fishing Businesses

Length of Boat (metres)	Sample Count	Percent within TRC
3-6	8	61.5
7-10	5	38.5
11-14	0	0.0
15-18	0	0.0
19-22	0	0.0
23+	0	0.0
Total Number of Boats	13	100.0
Mean Length of Boats Operated (metres)		5.9
Difference of TRC mean to QLD mean (9.9)		-4.0
Mean Length of Largest Boat Operated (metres)		8.1
Difference of TRC mean to QLD mean (11.4)		-3.3

Note: As mean length of boats is a multiple response, standard errors cannot be computed. Standard errors for mean length of largest boat (sample = 0.8; QLD population=0.14)

### Value of Production and Location of Sales

Table 17.11 shows for the 12 months prior to the survey, the wholesale value of all products sold by fishing businesses within the Airlie Beach TRC. In the Airlie Beach TRC the majority of businesses have production values of less than \$100,000 per annum. In addition, the median GVP for the Airlie Beach TRC is significantly lower than the Queensland median GVP.

Within the Airlie Beach TRC it is estimated that the 14 fishing businesses had a gross value of production of approximately \$0.3 million, which is approximately 0.1% of the total value of production of the Queensland commercial fishing industry.

Table 17.11  
Wholesale Value of Product (Annual value)

Wholesale Value (\$,000)	Sample Count	Sample Percent	Queensland Percent
Less than \$100	4	66.7	42.8
\$101 - \$200	2	33.3	21.4
\$201 - \$300	0	0.0	16.2
\$301 - \$400	0	0.0	8.5
\$401 - \$500	0	0.0	3.8
\$501 - \$600	0	0.0	1.8
\$601 - \$700	0	0.0	1.3
\$701 - \$800	0	0.0	0.4
\$801 - \$900	0	0.0	1.0
\$901 - \$1,000	0	0.0	0.3
Over \$1,000	0	0.0	2.3
Total	6	100.0	100.0

Median GVP for TRC	\$23,750
Estimated Total GVP for TRC	\$333,000
Median GVP for QLD Population	\$128,629
Estimated Total GVP for QLD Population	\$314,241,000
Percent of Total Queensland Production	0.1%

Note: Estimated TRC population total is based on an estimate of 14 businesses within the TRC, with a median GVP of \$23,750. Queensland total GVP based on 2,444 businesses (2,679 licenced businesses with 8.8% latency) with a median GVP of \$128,629.

Table 17.12 shows the value of sales to specific locations within Australia for the sample of six businesses in the sample and the percentage of sales to each location. The sample percent of sales to each location has been used directly to estimate the total value of business sales to all locations. From Table 17.12, and as shown in Figure 17.3, 50% of sales (\$0.2 million) occur directly to Brisbane, with only \$0.1 million occurring within Airlie Beach.

Table 17.12  
Town Location of Sales (\$'000)

Location of Sales	Sample Value of Sales	Percent of Sample	Estimated Sales
Brisbane	179	50.4	168
Airlie Beach	94	26.5	88
Proserpine	29	8.2	27
Mackay	26	7.3	24
Bowen	22	6.2	21
Cannonvale	5	1.4	5
Total Sales (Australia)	355	100.0	333
Total Sales (Overseas)	0	0.0	0
Total Sales	355	100.0	333

Note: The sample value of sales is based on GVP as reported by businesses in the survey. The estimated value of business sales (Table 17.12) is proportionally distributed to all locations on the basis of sample percentages.

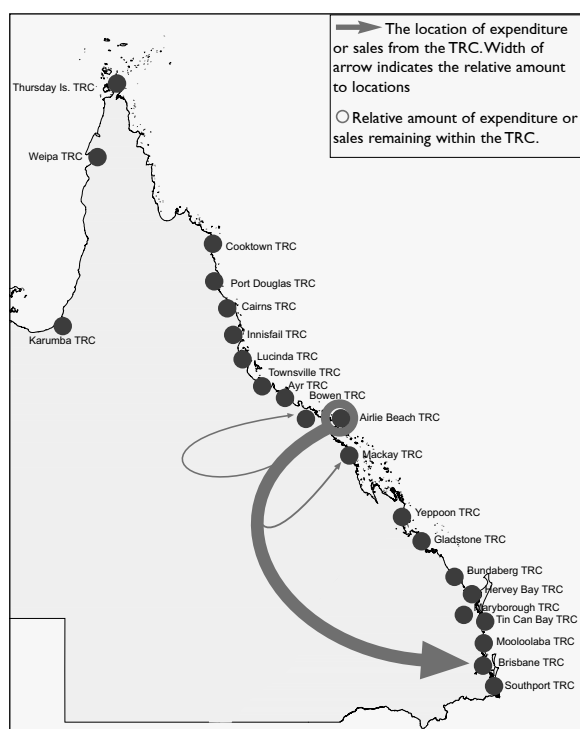


Figure 17.3 Airlie Beach TRC: Location of Business Sales

### Business Expenditure and Debt Levels

Table 17.13 and Figure 17.4 show that approximately \$0.2 million was spent by businesses in this TRC within the previous year on business goods and services (excluding salaries and wages). The majority of this expenditure occurred in the town of Airlie Beach (\$0.1 million).

Table 17.13  
Town Location of Business Expenditure (All costs, excluding salaries and wages)

Location of Expenditure	Sample Value of Expenditure (\$'000)	Percent of Sample	Estimated Expenditure (\$'000)
Airlie Beach	99	51.0	88
Proserpine	39	20.1	35
Brisbane	26	13.4	23
Midge Point	26	13.4	23
Bowen	3	1.6	3
Mackay	1	0.5	1
Total Expenditure	194	100.0	173

Note: Business expenditure includes all non labour expenditure (ie., fuel, equipment, repairs etc). Coefficients from the QLD input-output table for 1992-1993 indicate that expenditure on local intermediate purchases and imports, accounted for 52.1% of total revenue. The amount of business expenditure occurring within specific locations is based on 52.1% of the estimated GVP for the business.

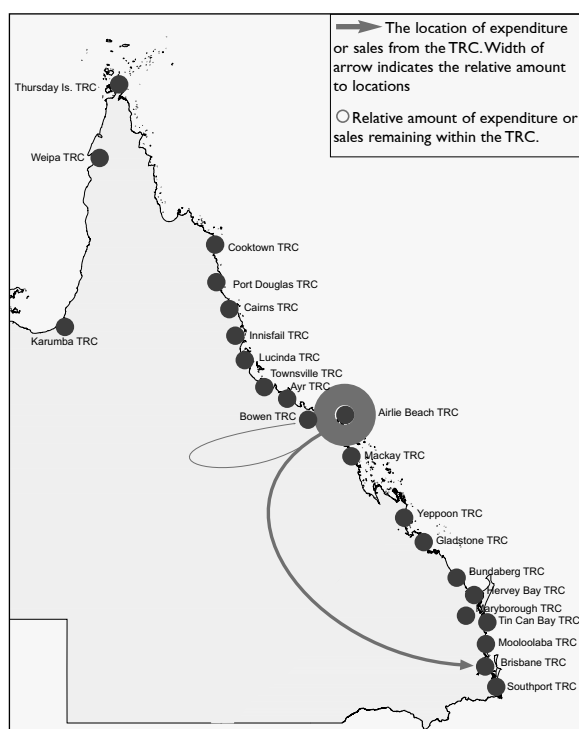


Figure 17.4 Airlie Beach TRC: Location of Business Expenditure

Asking each business operator, what percentage of their business assets were not owned outright by their business, identified for the purpose of this study the level of business debt. Table 17.14 shows that 75% of businesses within the Airlie Beach TRC had no debt. The mean debt level within the TRC was 1.2% of business assets, which was significantly lower than the Queensland industry average of 16.6%.

Table 17.14  
Business Debt Levels

Percent of Assets Not Owned	Sample Count	Sample Percent	Queensland Percent
Nil	3	75.0	60.1
1 – 10%	1	25.0	6.4
11 – 20%	0	0.0	5.2
21 – 30%	0	0.0	6.4
31 – 40%	0	0.0	3.3
41 – 50%	0	0.0	9.6
51 – 60%	0	0.0	1.8
61 – 70%	0	0.0	1.2
71 – 80%	0	0.0	1.1
81 – 90%	0	0.0	1.6
91 – 100%	0	0.0	3.3
Total	4	100.0	100.0

Mean Debt Level for TRC 1.2%  
Median Debt Level for QLD Population 16.6%  
Difference of TRC Mean to QLD Mean (16.6) -15.3%

Note: Debt level defined as the percentage of total business assets not owned outright by the business.

## EMPLOYEE PROFILES

### Town of Residence

Table 17.15 indicates that the majority of employees reside within Airlie Beach (33%) and Proserpine (33%).

Table 17.15  
Town of Residence

Town of Residence	Sample Count	Percent of Sample
Airlie Beach	5	33.3
Proserpine	5	33.3
Cannonvale	2	13.3
Bloomsbury	1	6.7
Midge Point	1	6.7
Whitsunday	1	6.7
Total	15	100.0

### Months Employed in the Fishing Industry

Table 17.16 shows that during the past 12 months the majority of owner/operators and employees within this TRC were employed in the fishing industry between August and October.

Table 17.16  
Months Employed in the Fishing Industry During the Past 12 Months

Months	Owner/Operators	Employee	Total Within TRC	All QLD Employees
January	87.5	71.4	80.0	80.7
February	87.5	57.1	73.3	82.3
March	87.5	71.4	80.0	86.1
April	87.5	42.9	66.7	86.8
May	100.0	42.9	73.3	87.3
June	100.0	42.9	73.3	87.8
July	100.0	57.1	80.0	86.7
August	100.0	71.4	86.7	86.3
September	100.0	71.4	86.7	86.8
October	100.0	71.4	86.7	85.4
November	75.0	71.4	73.3	84.4
December	87.5	71.4	80.0	82.3

Note: Owner/operator sample of 7; employee sample of 7.

### Location of Household Expenditure

Table 17.17 shows the location of household expenditure related to individual income derived from employment in the fishing industry. Proserpine attracts 57% (\$0.4 million) of all annual employee household expenditure from within the TRC.

Table 17.17  
Town Location of Household Expenditure (all commodities and services)

Location of Household Expenditure	Sample Value of Expenditure (\$'000)	Percent of Sample	Estimated Expenditure (\$'000)
Proserpine	149	57.3	401
Cannonvale	50	19.2	134
Airlie Beach	38	14.6	102
Whitsunday	20	7.7	54
Mackay	3	1.2	8
Total Expenditure	260	100.0	699

Note: The gross individual annual income of fishers within this TRC was estimated as \$32,818 (Table 17.19). The Household Expenditure Survey for Queensland: 1993-1994 (ABS, 1996) indicates that for households in non-metropolitan areas 79% of gross weekly income was related to commodity and service purchases. Furthermore, of the total expenditure on commodities and services purchased by households, Queensland Input-Output tables indicate that 77% of expenditure occurs within Queensland, with the balance contributing to taxes and imports from outside Queensland. Applying these percentages to the gross individual annual income of employees indicates that direct employee expenditure on household commodities and services to be \$19,963, with total household expenditure across all 35 (Table 17.6) employees to be \$0.7 million (Table 17.19)

### School and Employment Locations of Family Members

The towns in which family members attend school and are employed are shown in Table 17.18. As might be expected, Airlie Beach (35%) and Proserpine (35%) are the primary towns for school and employment.

Table 17.18  
School and Employment Locations of Family Members

Location of Employment or School	Sample Count	Percent of Sample
Airlie Beach	11	35.5
Proserpine	11	35.5
Midge Point	3	9.7
Bloomsbury	2	6.4
Other towns and interstate	4	12.9
Total Family Members	31	0.0

Note: Counts and percentages based on all family members.  
Other towns includes all towns with a frequency of one.

### Employee Social and Demographic Profiles

Table 17.19 provides profile information about employees within the TRC. Information is provided separately for owner-operators and non owner-operator employees within the TRC. For comparative purposes, information is also provided for all employees throughout Queensland.

---

Table 17.19. Owner-Operator and Employee Profiles

Profile	Owner/ Operators <sup>a</sup>	Employee	Total Within TRC	All QLD Employees
Estimated Number of Employees <sup>b</sup>	14	21	35	7,088
Mean age of fisher	49.6	30.1	40.5	37.3
Age range	33-66	17-45	17-66	15-79
Percent males	100.0	100.0	100.0	94.8
Mean years resident in town	23.3	19.7	21.6	19.1
Mean number of years in fishing industry	20.5	7.6	14.5	12.6
Median hours per week in fishing industry	55.0	80.0	60.0	60.0
Percent moved town to retain employment	12.5	28.6	20.0	20.5
Percent currently employed in other industry	25.0	42.9	33.3	34.2
Percent previously employed in other industry	85.7	57.1	71.4	69.2
<b>Housing tenure</b>				
Rent	0.0	42.9	20.0	33.6
Mortgage	25.0	0.0	13.3	20.1
Own home	62.5	28.6	46.7	31.1
Other (eg, live with parents, on boat)	12.5	28.6	20.0	15.2
<b>Educational</b>				
Year completed school				
Primary school	25.0	0.0	13.3	5.2
Year 8	0.0	0.0	0.0	8.0
Year 9	0.0	28.6	13.3	11.9
Year 10	25.0	28.6	26.7	44.4
Year 11	0.0	14.3	6.7	10.1
Year 12	50.0	28.6	40.0	20.2
Percent completed trade or TAFE certificate	50.0	57.1	53.3	37.7
Percent completed industry or business course	25.0	0.0	13.3	15.2
Percent with business plan <sup>c</sup>	12.5	—	12.5	22.9
Percent active fishing group member	37.5	14.3	26.7	25.7
<b>Marital Status</b>				
Percent married or relationship	87.5	71.4	80.0	62.0
Percent with partner employed in business <sup>d</sup>	50.0	—	50.0	56.1
Median hours per week employed in business	10.0	—	10.0	20.0
<b>Partners Income<sup>de</sup></b>				
Full-time employment	20.0	0.0	10.0	28.3
Part-time employment	0.0	20.0	10.0	18.5
Casual employment	0.0	0.0	0.0	11.6
Not employed	80.0	80.0	80.0	41.5
<b>Family Composition</b>				
Mean family size	2.9	3.3	3.1	2.6
Estimated number of total family members	41	69	109	18,429
<b>Dependency Ratios</b>				
Age Dependency Ratio <sup>f</sup>	35.2	77.0	53.3	33.4
Elderly Dependency Ratio	5.9	0.0	3.3	2.3
Child Dependency Ratio	29.4	77.0	50.0	31.2
Family Member Industry Dependency Ratio <sup>g</sup>	40.0	0.0	25.0	23.9
<b>Gross Individual Income</b>				
Less than \$16,000	14.3	50.0	27.3	34.6
\$16,000 - \$26,000	14.3	25.0	18.2	19.6
\$26,000 - \$36,000	28.6	0.0	18.2	22.1
\$36,000 - \$52,000	28.6	0.0	18.2	11.7
\$52,000 - \$78,000	12.5	0.0	9.1	6.6
Over \$78,000	0.0	25.0	9.1	5.4
Average Income (\$)	34,857	29,250	32,818	27,471

Note: <sup>a</sup> Owner/operator sample of 7, employee sample = 7.

<sup>b</sup> Based on peak estimates derived in Table 17.6

<sup>c</sup> Percentages for owner-operators only.

<sup>d</sup> Percentage based on those fishers with partners.

<sup>e</sup> Includes partners income from all sources.

<sup>f</sup> The age dependency ratio is the number of children (below 15 years) and elderly persons (above 65 years) to every 100 persons in the population.

<sup>g</sup> The industry dependency ratio is the number of persons in the family who are over 15 years of age and working in the fishing industry (excluding the direct industry employee) as a proportion of all family members over 15 years of age.

All Queensland employees includes all owner-operators and employees. Value is the weighted sample of owner-operators (2.43) and employees (8.68).

