

10 MOOLOOLABA TRC

The Mooloolaba TRC consists of the main urban centres of Mooloolaba, Maroochydore, Tewantin, Noosa, Nambour, Caloundra and Kawana Waters.

BUSINESS PROFILES

Location and Use of Ports

Table 10.1 shows the number of license holders within the Mooloolaba TRC and the number of survey respondents who reported having homeports within this TRC. On the basis of the sample count, it is estimated that there were 12 commercial harvesters and that we can be 95% confident that the correct population count of commercial harvesters within the TRC is between 7 and 21. Figure 10.1 shows the geographic location of this TRC.

Table 10.1 Location of Homeports

Town	Adj. Database Count	Sample Count	Estimated Count	Percent TRC
Maroochydore/				
Mooloolaba UC	4	3	5	41.2
Tewantin-Noosa UC	4	2	3	25.0
Caloundra UC	0	1	2	16.7
Coolum Beach UC	3	1	2	16.7
Kawana Waters UC	1	0	0	0.0
Eumundi	1	0	0	0.0
Glasshouse Mountains	1	0	0	0.0
Mudjimba	1	0	0	0.0
Cooroy	1	0	0	0.0
Other towns	3	0	0	0.0
Total TRC	18	7	12	100.0
95% CI for Estimated TRC Count				7-21
Percent of Total Active License Holders in QLD				7.8%

Note: Tewantin-Noosa UC includes Tewantin, Noosa Heads, Noosaville and Noosa. Maroochydore-Mooloolaba UC includes Mooloolaba, Maroochydore, Mountain Creek and Alexandra Headland. Kawana Waters UC includes Buddina, Minyama, Warana, Wirtulla, Bokarina, Bokarina Beach and Kawana Waters. Caloundra UC includes Caloundra, Currimundi, Aroona, Moffat Beach and Golden Beach.

Adjusted database count is based on the postal address as recorded in the licencing information, which may not be the homeport of the harvesting businesses. The estimated count adjusts the sample count by the sampling fraction of 1.525

Other harvesters in Queensland did not visit the port of Mooloolaba on their way to or way back from their harvesting locations.

Harvesting Activity and Type

Table 10.2 shows the type of harvesting activity undertaken within the last year by harvesting businesses within the Mooloolaba TRC. The collection of aquarium fish, coral, shells and/or grit (66.7%) was the primary harvesting activity, followed by sand worms (33%). Bloodworms, tubeworms and yabbies, trochus and seacucumber were not collected by harvesters within this TRC.

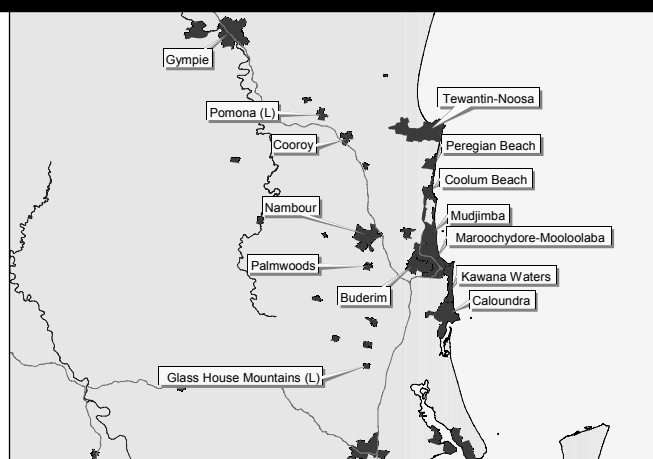


Figure 10.1 Location of the Mooloolaba TRC

Table 10.2 Type of Harvesting Activity

Harvest Type	Sample Count	Percent Count
Aquarium fish, coral, shells, grit	4	66.7
Sandworms	2	33.3
Trochus and/or seacucumber	0	0.0
Bloodworms, yabbies, tube worms	0	0.0
Total Sample	6	100.0

Source: CRC Reef (2000).

Table 10.3 shows the peak months for harvesting activity within the Mooloolaba TRC. December and January were the main months, which is a shorter peak season than the Queensland season, from October to January.

Table 10.3 Peak Harvesting Months During Past 12 Months

Months	Sample Count	Percent within TRC	Percent of QLD Fishery
January	2	28.6	37.6
February	0	0.0	18.8
March	1	14.3	15.3
April	1	14.3	21.2
May	1	14.3	12.9
June	0	0.0	18.8
July	1	14.3	28.2
August	0	0.0	31.8
September	0	0.0	28.2
October	1	14.3	30.6
November	1	14.3	34.1
December	3	42.9	48.2

No detailed description of the seasonal variation for each product harvested is provided for this TRC due to the low sample size.

Figure 10.2 shows the location of resource use by commercial harvesting operations in the Mooloolaba TRC. The location of resource use is the coastal area directly adjacent to Mooloolaba.

Harvesting Industry Employment

Table 10.4 identifies the number of harvesters in the Mooloolaba TRC. The majority of businesses had between one (57.1%) and three (28.6%) full-time harvesters (including the owner-operator). There appeared to be little part-time (28.6%) or casual (14.3%) employment by these businesses. The average number of fulltime equivalent harvesters per business was 1.7. In total it is estimated that there were 21 harvesters in the Mooloolaba TRC.

Business Ownership and Size

Table 10.5 shows the number of years the current owner-operator has owned the harvesting business. On average, businesses within this TRC had been owned for 15.1 years. These businesses had been owned for longer than the average Queensland business (12.0 years). Some 57.1% of businesses were currently owned for less than 10 years, however.

Table 10.5 Number of Years of Current Ownership of the Harvesting Business

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	0	0.0	0.0
6-10	4	57.1	57.1
11-15	1	14.3	71.4
16-20	1	14.3	85.7
21-25	0	0.0	0.0
26-30	0	0.0	0.0
31+	1	14.3	100.0
Total	7	100.0	100.0

Mean Number of Years owned or operated 15.1
 Difference of TRC Mean to QLD Population Mean (12.0) +3.1

Note: Standard errors for number of years ownership (sample = 2.1; QLD population = 0.9).

Table 10.6 shows the number of years the business has been operating, regardless of ownership. The average number of years was 19.3 years, which was significantly greater than that for all Queensland harvesting businesses (12.4 years). One business had been in operation for over 31 years.

Table 10.4 Number of Employees

Number of Employees	Full-Time Count	Full-Time Percent	Part-Time Count	Part-Time Percent	Casual Count	Casual Percent
0	1	14.3	5	71.4	6	85.7
1	4	57.1	1	14.3	1	14.3
2-3	2	28.6	1	14.3	0	0.0
4-5	0	0.0	0	0.0	0	0.0
6-10	0	0.0	0	0.0	0	0.0
10+						
Total Businesses	7	100.0	7	100.0	7	100.0
Total Harvesters	10		3		1	
Mean Number of Harvesters per Business		1.7				
Estimated Number Employed within the TRC		21				

Note: Part-time and casual employment is recorded as 0.5 when contributing to total employment. Total number of harvesters includes the respondent.

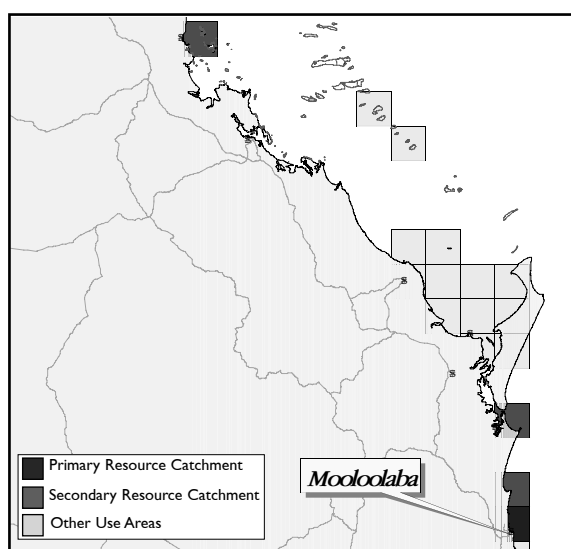


Figure 10.2 Mooloolaba TRC: Location of Resource Use

Table 10.6 Number of Years Business has been Operating

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	0	0.0	0.0
6-10	3	42.9	42.9
11-15	1	14.3	57.1
16-20	1	14.3	71.4
21-25	0	0.0	0.0
26-30	0	0.0	0.0
31+	2	28.6	100.0
Total	7	100.0	100.0
Mean Number of Years owned or operated			19.3
Difference of Mean to Population Mean (12.4)			+6.9

Note: Standard errors for number of years operated (sample = 2.1; QLD population = 1.0)

Table 10.7 shows that the majority of harvesting businesses within the Mooloolaba TRC operated one boat (57%). Over 14% of harvesters did not use a boat, and 14.3% used over 4 boats. The average number of boats used was 1.4, which is the same as the Queensland average (1.4 boats).

Table 10.7 Number of Boats Operated by Harvesting Businesses

Number of Boats	Sample Count	Percent TRC
0	1	14.3
1	4	57.1
2	1	14.3
3	0	0.0
4+	1	14.3
Total Number of Businesses	7	100
Mean Number of Boats Operated		1.4
Difference of Mean to QLD Population Mean (1.4)		0

Note: Standard errors for number of boats operated (sample = 0.1)

Table 10.8 displays the lengths of boats used by harvesters in the Mooloolaba TRC. The majority of boats (60%) were small, and varied in length between 2-6 metres. Only one vessel was greater than 11m in length. The average length (6.5m) and the average length of the largest vessel (6.7m) were less than the Queensland averages (7.4m and 7.6m respectively).

Table 10.8 Length of Boats Operated by Harvesting Businesses

Length of Boat (metres)	Sample Count	Percent within TRC
2-6	6	60.0
7-10	3	30.0
11-14	1	10.0
15-18	0	0.0
18-24	0	0.0
24+	0	0.0
Total Number of Boats	10	100.0
Mean Length of Boats Operated (metres)		6.5
Difference of Mean to QLD Population Mean (7.4)		-0.9
Mean Length of Largest Boat Operated (metres)		6.7
Difference of Mean to QLD Population Mean (7.6)		-0.9

Note: Standard errors for mean length of boats (sample = 0.8 QLD population=0.4)
Standard errors for mean length of largest boats (sample = 0.9; QLD population=0.4)

Value of Production and Location of Sales

Table 10.9 shows the wholesale value of all products sold by harvesting businesses in the Mooloolaba TRC for the 12 months prior to the survey. The profile shows that the wholesale value for each sampled business was less than \$75,000. This is markedly different to the overall profile for Queensland, in which 21.4% of businesses harvested more than \$75,000.

Harvest businesses in the Mooloolaba TRC had an estimated gross value of production of \$0.5 million, which is approximately 3.2% of the total value of production of the Queensland commercial harvesting industry.

Table 10.9 Wholesale Value of Product (Annual value)

Wholesale Value (\$,000)	Sample Count	Sample Percent	Queensland Percent
Less than \$25	3	42.6	45.9
\$25-50	1	14.3	24.5
\$50-75	2	28.6	8.2
\$75-100	0	0.0	5.1
\$100-125	0	0.0	5.1
\$125-150	0	0.0	0.0
\$150-175	0	0.0	2.0
\$175-200	0	0.0	2.0
\$200+	0	0.0	7.2
Total	7	100.0	100.0

Median GVP for TRC	\$37,136
Estimated Total GVP for TRC	\$472,000
Estimated Total GVP for QLD Population	\$14,554,000
Percent of Total Queensland Production	3.2%

Note: Estimated TRC population total is based on an estimate of 12 businesses within the TRC, with a median GVP of \$37,136.
Queensland total GVP based on sampled GVP from all TRCs multiplied by the sampling fraction of 1.52

Table 10.10 shows the value and location of sales from the Mooloolaba TRC. Forty-three percent of products were exported overseas, estimated at \$170,500. Most of the product sold in Australia was sold in Maroochydore (27.8%), Mooloolaba (22.2%) and Sydney (10.4%). The amount of product sold in Australia was estimated at \$269,000.

Table 10.10 Sales to Customers

Location of Sales	Sample Value of Sales (\$,000)	Mean Percent of Sample	Estimated of all Sales (\$,000)
Maroochydore	50	27.8	76
Mooloolaba	30	17.4	48
Sydney	18	10.4	28
Brisbane	15	8.7	23
Gold Coast	15	8.7	23
Melbourne	12	7.0	19
Kawana	11	6.1	16
Coolum	11	6.1	16
Caloundra	8	4.4	12
Hervey Bay	3	1.7	4
Tewantin	3	1.7	4
Total Sales (in Aust.)	176	57.0	269
Total Sales (Overseas)	133	43.0	203
Total Sales	310	100.0	472

Note: The sample value of sales is based on GVP as reported by businesses in the survey.

Business Expenditure

Table 10.11 shows that approximately \$246,000 was spent by businesses on goods and services (excluding salaries and wages) within the Mooloolaba TRC. The expenditure was widely distributed within Queensland, especially to Maroochydore (18.9%), Coolum (16.5%), Tewantin (10.5%), Bundaberg (10.4%) and Brisbane (9.1%). Interestingly, only 6.7% was spent within Mooloolaba

Table 10.11 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)
Maroochydore	30	18.9	46
Coolum	26	16.5	40
Tewantin	17	10.5	26
Bundaberg	17	10.4	26
Brisbane	15	9.1	22
Nambour	13	8.0	20
Mooloolaba	11	6.7	16
Other towns (12) (<5%)	32	19.9	49
Total Expenditure	161,500	100.0	246

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.

HARVESTER PROFILES

Town of Residence

Table 10.12 indicates that harvesters in the Mooloolaba TRC resided primarily within the towns of Tewantin (33%) and Coolum (33%).

Table 10.12 Town of Residence

Town of Residence	Sample Count	Percent of Sample
Tewantin	2	33.3
Coolum	2	33.3
Dickey Beach	1	16.7
Noosa	1	16.7
Total	6	100.0

Months Employed in the Harvesting Industry

Table 10.13 shows that fewer harvesters were employed in each month than in the rest of Queensland. July and August were the busiest months for harvesters in the Mooloolaba TRC.

Table 10.13 Months Employed in the Harvesting Industry

Months	Owner/ Operators	All QLD Harvesters
January	71.4	85.4
February	71.4	91.3
March	71.4	84.4
April	71.4	82.3
May	71.4	85.4
June	71.4	82.3
July	85.7	86.5
August	85.7	87.5
September	71.4	89.6
October	71.4	87.5
November	71.4	90.6
December	71.4	90.6

Location of Household Expenditure

Table 10.14 shows the location of household expenditure derived from the harvesting industry in the Mooloolaba TRC. It is estimated that \$283,000 was spent on household items. Mooloolaba, interestingly, was not a focal point for the purchase of household items. Tewantin received nearly 33% (estimated at \$92,000) of the household expenditure, and Noosa and Maroochydore received 13% and 11%, respectively. Twelve other towns received the remaining 43.7% of expenditure on household items.

Table 10.14 Town Location of Household Expenditure
(all commodities and services)

Location of Expenditure	Sample Value of Expenditure (\$,000)	Percent Expenditure	Estimated Expenditure (\$,000)
Tewantin	60	32.6	92
Noosa	23	12.6	35
Maroochydore	20	11.1	31
Coolum	16	8.9	25
Caloundra	14	7.7	22
Coolum Beach	14	7.7	22
Other towns (9) (<5%)	36	19.4	55
Total Expenditure	\$185	100.0	\$283

Note: The sample total personal income for the Mooloolaba TRC was \$241,144. The Household Expenditure Survey for Queensland: 1993-1994 (ABS, 1996) indicates that for households in non-metropolitan areas 79% of gross income 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. The sample value of expenditure was therefore calculated to be \$185,700. Estimated value of expenditure was calculated by multiplying the sample value of expenditure by 1.525

School and Employment Locations of Family Members

The town locations in which family members attended school or were employed are shown in Table 10.15. Most family members were employed or attended school in Coolum (47%), Tewantin (14.3%), or Noosa (9.5%). There were a total of 21 family members from the Mooloolaba TRC.

Table 10.15 School and Employment Locations of Family Members

Location	Sample Count	Percent Sample
Coolum	10	47.6
Tewantin	3	14.3
Noosa	2	9.5
Brisbane	1	4.8
Burpengary	1	4.8
Currimundi	1	4.8
Maroochydore	1	4.8
Mooloolaba	1	4.8
Total Family Members	20	100.0

Note: Counts and percentages based on all family members.

Owner-Operator Social and Demographic Profiles

Table 10.16 provides profile information of harvesters from the Mooloolaba TRC. For comparative purposes information is also provided for all harvesters throughout Queensland. Harvesters from the Mooloolaba TRC were relatively older, newer to their resident town, longer in the industry, had moved towns more often for employment, were less likely to be in other employment or have worked elsewhere, were more likely to own their own home, were more likely to have completed their schooling, had larger families, and earned slightly less than the Queensland average.

Table 10.16 Owner-Operator Profiles for the Mooloolaba TRC

Profile	Owner/ Operators	All QLD Employees
Estimated Number of Active Harvesters	12	163
Mean age of fisher	51.5	46.9
Age range	38-67	21-72
Percent males	100.0	93.9
Mean years resident in town	12.3	19.5
Mean number of years in harvesting industry	22.2	16.4
Median hours per week in harvesting industry	31.5	29.0
Percent moved town to retain employment	33.3	14.4
Percent currently employed in other industry	16.7	37.8
Percent previously employed in other industry	66.7	87.6
Housing tenure (%)		
Rent	16.7	33.0
Mortgage	33.3	24.7
Own home	50.0	42.3
Other (eg, live with parents, on boat)	0.0	0.0
Educational		
Year completed school (%)		
Primary school	16.7	13.7
Year 8	0.0	6.3
Year 9	0.0	10.5
Year 10	33.7	27.4
Year 11	0.0	9.5
Year 12	50.4	32.7
Percent completed trade or TAFE certificate	33.3	34.7
Percent completed industry or business course	0.0	11.9
Percent with business plan	0.0	29.6
Marital Status		
Percent married or relationship	66.7	64.3
Partner' Income*		
Full-time employment	50.0	39.1
Part-time employment	0.0	25.0
Casual employment	0.0	9.4
Not employed	50.0	26.6
Family Composition		
Mean family size	2.6	2.1
Estimated number of total family members	18	215
Dependency Ratios		
Age Dependency Ratio	25.0	19.6
Elderly Dependency Ratio	4.2.0	2.3
Child Dependency Ratio	20.8	17.3
Family Member Industry Dependency Ratio	8.3	14.7
Gross Individual Income (%)		
Less than \$16,000	16.7	25.0
\$16,000 - \$26,000	66.7	19.3
\$26,000 - \$36,000	0.0	15.9
\$36,000 - \$52,000	0.0	23.9
\$52,000 - \$78,000	0.0	8.0
Over \$78,000	16.7	8.0
Average Income (\$)	\$30,000	33,602

Note: * Percentage based on those fishers with partners. Includes partner's income from all sources.

**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.

***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.