

9 HERVEY BAY TRC

The Hervey Bay TRC consists of the main urban centre of Hervey Bay.

BUSINESS PROFILES

Location and Use of Ports

Table 9.1 shows the number of license holders within the Hervey Bay 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 were eight commercial harvesters within this TRC. It is 95% likely that the correct population count of commercial harvesters within the TRC is between 3 and 13. Figure 9.1 shows the geographic location of this TRC.

Table 9.1 Location of Homeports

Town	Adj. Database Count	Sample Count	Estimated Count	Percent within TRC
Hervey Bay	11	4	6	75.0
Howard	2	1	2	25.0
Fraser Island	1	0	0	0.0
Rainbow Beach	2	0	0	0.0
Torbanlea	1	0	0	0.0
Total TRC	17	5	8	100.0
95% Confidence Interval for Estimated TRC Count				3-13
Percent of Total Active Licence Holders in QLD				5.2%

Note: Hervey Bay UC includes Point Vernon, Scarness, Urangan. 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 adjusted database count reduces the count for latent licence holders (22.5%) The estimated count adjusts the sample count by the sampling fraction of 1.525

Source: CRC Reef (2000).

Other harvesters in Queensland did not use the port of Hervey Bay when travelling to or from harvesting areas.

Harvesting Activity and Type

Table 9.2 shows the type of harvesting activities undertaken over the last year by harvesting businesses within the Hervey Bay TRC. The collection of aquarium products (fish, coral, shells and grit) (50%) was the primary harvesting activity, followed by bloodworm, tubeworm, and yabbie harvesting (33%). Some harvesting of a tourist nature was also undertaken, which is omitted from further analysis.

Table 9.2 Type of Harvesting Activity (During the last 12 months)

Harvest Type	Sample Count	Percent TRC
Aquarium fish, coral, shells, grit	3	50.0
Bloodworms, yabbies, tube worms	2	33.3
Trochus &/or seacucumber	0	0.0
Sand worms	0	0.0
Tourist collections	1	16.7
Total Sample	6	100.0

Note: This is a multiple response table where all rows are independent.
Source: CRC Reef (2000).

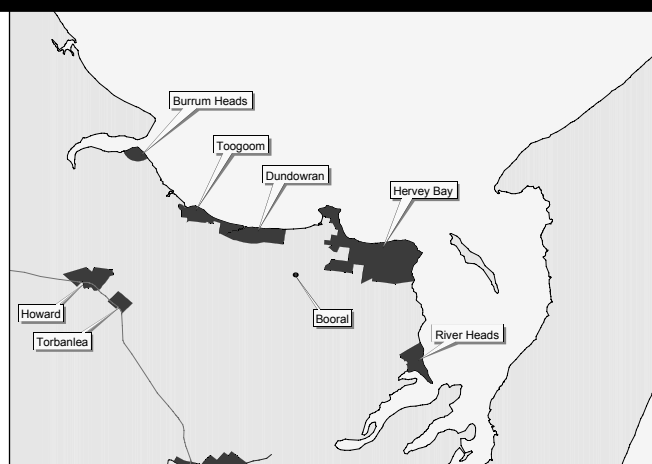


Figure 9.1 Location of the Hervey Bay TRC

Table 9.3 shows the peak month for harvesting activity within the Hervey Bay TRC to be January. This is a shorter season than the overall Queensland harvest fishery, which has its peak season between October and January.

Table 9.3 Peak Harvesting Months During Previous 12 Months

Months	Sample Count	Percent within TRC	Percent of QLD Fishery
January	2	40.0	37.6
February	1	20.0	18.8
March	0	0.0	15.3
April	1	20.0	21.2
May	1	20.0	12.9
June	1	20.0	18.8
July	1	20.0	28.2
August	1	20.0	31.8
September	1	20.0	28.2
October	1	20.0	30.6
November	1	20.0	34.1
December	1	20.0	48.2

Source: CRC Reef (2000).

No detailed description of the seasonal variation in harvesting is provided due to the low sample size for this TRC.

Location of Resource Use

Figure 9.2 shows the location of resource use by commercial harvesting operations in the Hervey Bay TRC. The location of resource use was mostly along the coastline of Hervey Bay, including Fraser Island.

Harvesting Industry Employment

Table 9.4 identifies the number of harvesters within the Hervey Bay TRC. The majority of businesses had one (80%), two or three (20%) full-time harvesters (including the owner or operator). There appeared to be little part-time (20%) or casual (20%) employment by businesses in this TRC. The average number of harvesters per business was 1.8. In total it is estimated that there were 14 harvesters.

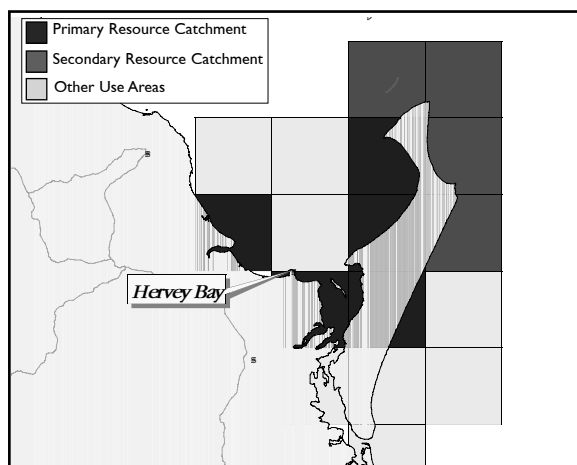


Figure 9.2 Hervey Bay TRC: Location of Resource Use

Business Ownership and Size

Table 9.5 shows the number of years the current owner-operator has owned the harvesting business. Eighty percent of businesses were owned by the current owner for less than 10 years. On average, businesses within the Hervey Bay TRC had been owned for an average of 7.2 years, substantially less than the Queensland average of 17.0 years.

Table 9.5 Number of Years of Current Ownership of the Harvesting Business

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	2	40.0	40.0
6-10	2	40.0	80.0
11-15	1	20.0	100.0
16-20	0	0.0	0.0
21-25	0	0.0	0.0
26-30	0	0.0	0.0
31+	0	0.0	0.0
Total	5	100.0	100
Mean Number of Years owned or operated			7.2
Difference of TRC Mean to QLD Mean (12.0)			-4.8

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

Table 9.6 displays the number of years the harvest business has been operating, regardless of ownership. The average number of years was 10.0 years, which is 2.4 years less than the average Queensland harvesting business (12.4 years).

Table 9.4 Number of Employees

Number of Employees	Full-Time		Part-Time		Casual	
	Count	Percent	Count	Percent	Count	Percent
Nil	0	0.0	4	80.0	4	80.0
1	4	80.0	0	0.0	0	0.0
2-3	1	20.0	1	20.0	1	20.0
4-5	0	0.0	0	0.0	0	0.0
6-10	0	0.0	0	0.0	0	0.0
10+	0	0.0	0	0.0	0	0.0
Total Businesses	5	100.0	5	100.0	5	100.0
Total Harvesters	7		2		2	
Mean Number of Harvesters per Business		1.8				
Estimated Number Employed within the TRC		17				

Note: Part-time and casual employment is recorded as 0.5 when contributing to total employment.
Total number of harvesters includes the respondent.
Estimates of total employment based on an estimated 8 harvesting businesses (Table 9.1)

Table 9.6 Number of Years Business has been Operating

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	3	60.0	60.0
6-10	1	20.0	80.0
11-15	1	20.0	100.0
16-20	0	0.0	0.0
21-25	0	0.0	0.0
26-30	0	0.0	0.0
31+	0	0.0	0.0
Total	9	100.0	100
Mean Number of Years owned or operated			10.0
Difference of Mean to Population Mean (12.4)			-2.4

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

Table 9.7 shows the number of boats operated by harvesting businesses within the Hervey Bay TRC. Twenty percent of businesses did not have a boat, and the majority of businesses operated two boats (40%). The average number of boats used by businesses in this TRC was 1.6, similar to the Queensland average (1.4).

Table 9.7 Number of Boats Operated by Harvesting Businesses

Number of Boats	Sample Count	Percent within TRC
0	1	20.0
1	1	20.0
2	2	40.0
3	1	20.0
4+	0	0.0
Total Number of Businesses	5	100.0
Mean Number of Boats Operated		1.6
Difference of Mean to QLD Mean (1.4)		+0.2

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

Table 9.8 displays the lengths of boats operated by harvesting businesses in the Hervey Bay TRC. The majority of boats (55.6%) are small and varied in length between 2-6 metres. One vessel (11.1%) was larger than 24 metres, which skewed the mean length to be larger than the Queensland average (7.4m). The mean length of the largest vessel in the Hervey Bay TRC (11.9m) was also much larger than the largest Queensland average (7.6m).

Table 9.8 Length of Boats Operated by Harvesting Businesses

Length of Boat (metres)	Sample Count	Percent TRC
2-6	5	55.6
7-10	3	33.3
11-14	0	0.0
15-18	0	0.0
18-24	0	0.0
24+	1	11.1
Total Number of Boats	9	100.0
Mean Length of Boats Operated (metres)		8.9
Difference of Mean to QLD Mean (7.4)		+1.5
Mean Length of Largest Boat Operated (metres)		11.9
Difference of Mean to QLD Mean (7.6)		+4.3

Note: Standard errors for mean length of boats (sample = 2.7 QLD population=0.4) Standard errors for mean length of largest boats (sample = 4.6; QLD population=0.4)

Value of Production and Location of Sales

Table 9.9 displays the wholesale value of all products sold by harvesting businesses within the Hervey Bay TRC for the 12 months prior to the survey. The profile for the Hervey Bay TRC shows that all sampled businesses had production values below \$50,000. Businesses in this TRC were smaller than the Queensland average.

Harvest businesses in the Hervey Bay TRC had an estimated gross value of production of \$0.1 million, which is approximately 0.6% of the total value of production of the Queensland commercial harvesting industry.

Table 9.9 Wholesale Value of Product (Annual value)

Wholesale Value (\$,000)	Sample Count	Sample Percent	Queensland Percent
Less than \$25	2	66.6	45.9
\$25-50	1	33.3	24.5
\$50-75	0	0.0	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	3	100.0	100.0

Median GVP for TRC	\$18,566
Estimated Total GVP for TRC	\$85,000
Estimated Total GVP for QLD Population	\$14,554,000
Percent of Total Queensland Production	0.6%

Note: Estimated TRC population total is based on the sample GVP total multiplied by the sampling fraction of 1.524 Queensland total GVP based on sampled GVP from all TRCs multiplied by the sampling fraction of 1.524

Table 9.10 shows the value and location of sales for the Hervey Bay TRC. The value of sales within Australia was estimated at \$68,000. Some 20% of products were exported overseas, estimated at less than \$20,000 (\$17,800). Sydney (25%), Brisbane (19%), Hervey Bay (15%), Bribie Island (12.5%), and the Gold Coast (12.5%) were the biggest customers of harvesting products from the Hervey Bay TRC.

Table 9.10 Sales to Customers

Sales	Sample Value of Sample (\$'000)	Percent Sales	Estimated Value (\$'000)
Sydney	12	25.0	18
Brisbane	8	18.7	14
Hervey Bay	6	15.0	10
Bribie Island	6	12.5	8
Gold Coast	5	12.5	8
Melbourne	3	6.3	4
Maroochydore	2	5.0	3
Noosa	2	5.0	3
Total Sales (within Aust)	44	80.0	68
Total Sales (Overseas)	11	20.0	17
Total Sales	56	100.0	85

Note: The sample value of sales is based on GVP as reported by businesses in the survey. The estimated value of business sales (Table 2.12) is proportionally distributed to all locations on the basis of sample percentages.

Business Expenditure

Table 9.11 shows the location of business expenditure (excluding salaries and wages) for the Hervey Bay TRC over the previous year. An estimated \$44,300 was spent by businesses on business goods and services. The majority of this expenditure occurred in Hervey Bay (90.9%).

Table 9.11 Town Location of Business Expenditure

Location of Expenditure	Sample Value of Expenditure (\$'000)	Percent of Sample	Estimate Value (\$'000)
Hervey Bay	26	90.9	40
Bundaberg	1	4.2	2
Brisbane	1	4.2	2
Other towns	>0	0.7	>0
Total Expenditure	29	100.0	44

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 9.12 indicates that harvesters in the Hervey Bay TRC resided primarily within Hervey Bay (60%). Some harvesters lived on Bribie Island (20%) and in Howard (20%).

Table 9.12 Town of Residence

Town of Residence	Sample Count	Percent of Sample
Hervey Bay	3	60.0
Bribie Island	1	20.0
Howard	1	20.0
Total	5	100.0

Months Employed in the Harvesting Industry

Table 9.13 shows that during the past 12 months all harvest owner-operators within the Hervey Bay TRC were employed in January. Most months were relatively busy for Hervey Bay harvesters.

Table 9.13 Months Employed in the Harvesting Industry During Past 12 Months

Months	Owner Operators	All QLD Harvesters
January	100.0	85.4
February	80.0	91.3
March	60.0	84.4
April	60.0	82.3
May	60.0	85.4
June	80.0	82.3
July	80.0	86.5
August	80.0	87.5
September	60.0	89.6
October	60.0	87.5
November	60.0	90.6
December	80.0	90.6

Location of Household Expenditure

Table 9.14 shows the location of household expenditure for harvesters in the Hervey Bay TRC. The estimated value of expenditure on household items was \$84,500. Hervey Bay received nearly 75%, and Bribie Island received nearly 15%. The remaining 10% was spent in several other Queensland towns.

Table 9.14 Town Location of Household Expenditure (all commodities and services)

Location of Expenditure	Sample Value of Expenditure (\$'000)	Percent Expenditure	Estimated Value Expenditure (\$'000)
Hervey Bay	41	74.4	63
Bribie Island	8	14.4	12
Brisbane	1	2.4	2
Burrum Heads	1	2.4	2
Howard	1	1.6	1
Redcliffe	1	1.6	1
Other towns (<1.0%)	2	3.2	3
Total Expenditure	55	100.0	84

Note: The sample total personal income for the Hervey TRC was \$72,000. 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. The sample value of expenditure was therefore calculated to be \$55,440. Estimated value of expenditure was calculated by multiplying the sample value of expenditure by 1.525

School and Employment Locations of Family Members

The locations in which family members attended school or were employed are shown in Table 9.15. Family members within this TRC were predominately employed or attended school in Hervey Bay (33.3%) and Bribie Island (33.3%). Some family members also attended school or were employed in Urangan (22.2%) and Howard (11.1%).

Table 9.15 School and Employment Locations of Family Members

Location	Sample Count	Percent of Sample
Hervey Bay	3	33.3
Bribie Island	3	33.3
Urangan	2	22.2
Howard	1	11.1
Total Family Members	9	100.0

Note: Counts and percentages based on all family members.

Owner-Operator Social and Demographic Profiles

Table 9.16 provides profile information of harvesters from the Hervey Bay TRC. For comparative purposes information is also provided for all harvesters throughout Queensland. Hervey Bay harvesters were relatively younger, all male, newer residents to their towns and harvesting, more likely to be renting and not own their own home, had less formal education, had a business plan, had spouses that were not employed, and earned considerably less than the average Queensland harvester.

Table 9.16. Owner-Operator Profiles

Profile	Owner/ Operators	All QLD Harvesters
Estimated Number of Harvesters	8	163
Mean age of fishers	39.0	46.9
Age range	28-53	21-72
Percent males	100.0	93.9
Mean years resident in town	7.8	19.5
Mean number of years in harvesting industry	10.2	16.4
Median hours per week in harvesting industry	30.0	29.0
Percent moved town to retain employment	20.0	14.4
Percent currently employed in other industry	40.0	37.8
Percent previously employed in other industry	100.0	87.6
Housing tenure (%)		
Rent	80.0	33.0
Mortgage	20.0	24.7
Own home	0.0	42.3
Other (eg, live with parents, on boat)	0.0	0.0
Educational		
Year completed school (%)		
Primary school	0.0	13.7
Year 8	0.0	6.3
Year 9	40.0	10.5
Year 10	60.0	27.4
Year 11	0.0	9.5
Year 12	0.0	32.7
Percent completed trade or TAFE certificate	40.0	34.7
Percent completed industry or business course	0.0	11.9
Percent with business plan	60.0	29.6
Marital Status		
Percent married or relationship	60.0	64.3
Partner' Income*		
Full-time employment	33.3	39.1
Part-time employment	0.0	25.0
Casual employment	0.0	9.4
Not employed	66.7	26.6
Family Composition		
Mean family size	1.4	2.1
Estimated number of total family members	7	215
Dependency Ratios		
Age Dependency Ratio**	8.3	19.6
Elderly Dependency Ratio	0.0	2.3.0
Child Dependency Ratio	8.3	17.3
Family Member Industry Dependency Ratio***	8.3	14.7
Gross Individual Income (%)		
Less than \$16,000	60.0	25.0
\$16,000 - \$26,000	40.0	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	0.0	8.0
Average Income (\$)	\$14,400	33,600

Note: * Percentage based on those fishers with partners. Includes partners 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.

