



Department of Fisheries
Government of Western Australia



Fish for the future

FISHERIES

OCCASIONAL PUBLICATION

DEPARTMENT OF FISHERIES COMMUNITY SURVEY 2005

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By Tara Baharthah
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ABSTRACT

A telephone survey of the Western Australian public was conducted to assess the level of success of programs implemented by the Department of Fisheries. The sample comprised of 700 interviews, 422 in the metropolitan area and 278 in regional areas throughout the State.

This community survey was used to determine the level of recall and awareness of the Department of Fisheries, the understanding and support of the community for the Department of Fisheries' management strategies and to examine key aspects of community participation in recreational fishing.

It is estimated that the overall participation rate for recreational fishing in Western Australia is 537,587 individuals or 31.1 per cent of the total population.

An overall satisfaction-scoring index has been developed to measure and monitor the satisfaction of recreational fishers in Western Australia. The satisfaction index is a combination of knowledge, management, and confidence. The satisfaction index for recreational fishing was 74.6 per cent.

The satisfaction rating of the broader community relates to their perceptions of the extent to which the Department of Fisheries is achieving sustainable fisheries management objectives. The Department of Fisheries was given a satisfaction rate of 83.7 per cent by the Western Australian public.

1.0 INTRODUCTION

A community survey of the Western Australian public was conducted to assess the level of success of programs implemented by the Department of Fisheries.

The objectives of the research were to:

- Assess the level of recall and awareness of the Department of Fisheries' informational and promotional activities.
- Assess the understanding and support of the community for the Department of Fisheries' management strategies across all programs (Recreational Fisheries, Commercial Fisheries, Fish and Fish Habitat Protection, and Aquaculture and Pearling).
- Examine key aspects of community fishing such as satisfaction with the quality of recreational fishing and knowledge of the rules that apply.

2.0 METHOD

The survey was conducted by telephone during May 2005. The fieldwork was conducted by Asset Research. Telephone numbers were selected randomly from the DTMS white pages on CD-ROM. Respondents were males and females older than 17 years and residing in Western Australia. The sample comprised:

- 422 metropolitan interviews; and
- 278 regional interviews.

The same questionnaire (Appendix A) and answer sheet (Appendix B) were used for all respondents.

All data was entered into a Microsoft Access database. Analysis was performed using Microsoft Excel. Graphs were produced using SigmaPlot.

3.0 RESULTS

3.1 Participation rate in recreational fishing

Recreational fishing in Western Australia includes angling, crabbing, prawning, spearfishing, fishing for rock lobsters, as well as the collection of shellfish such as abalone or aquarium fish. It is estimated that the overall participation rate for recreational fishing in Western Australia is 536,368 individuals or 31.0 per cent of the total population.

The 2005 participation rate for recreational fishing is calculated as follows:

Metropolitan area:

| | | |
|---|---|-------|
| Sample size for males in Perth metropolitan area | = | 208 |
| The participation rate for metropolitan males (Table 4) | = | 0.303 |
| Sample size for females in Perth metropolitan area | = | 214 |
| The participation rate for metropolitan females (Table 4) | = | 0.206 |

Regional areas (non metropolitan areas):

| | | |
|---|---|-------|
| Sample size for males in regional areas | = | 140 |
| The participation rate for regional males (Table 4) | = | 0.550 |
| Sample size for females in regional areas | = | 138 |
| The participation rate for regional females (Table 4) | = | 0.370 |

Assumption: Persons aged from 0 to 4 years do not participate in recreational fishing.

ABS population figures 2001 (Australian Bureau of Statistics 2002):

| | | |
|--|---|---------|
| Number of males in the Perth metropolitan area | = | 656,798 |
| Number of females in the Perth metropolitan area | = | 683,195 |
| Number of males in regional areas | = | 265,470 |
| Number of females in regional areas | = | 245,789 |
| Males aged 0 – 4 in metropolitan area | = | 43,879 |
| Females aged 0 – 4 in metropolitan area | = | 41,504 |
| Males aged 0 – 4 in regional areas | = | 19,197 |
| Females aged 0 – 4 in regional areas | = | 18,129 |

Hence the number of persons participating in recreational fishing is calculated as follows:

$$\begin{aligned}
 &+ 0.303 (656,798 - 43,879) \\
 &+ 0.206 (683,195 - 41,504) \\
 &+ 0.550 (265,470 - 19,197) \\
 &+ 0.370 (245,789 - 18,129) \\
 &= 537,587
 \end{aligned}$$

The participation rate is calculated as follows:

$$\begin{aligned}
 &\text{Number of persons participating / population aged 5 years and over} \\
 &= 537,587 / 1,728,543 \\
 &= 0.311
 \end{aligned}$$

Hence, the overall participation rate in recreational fishing for residents of Western Australia was 31.1 per cent.

95 per cent confidence interval for participation rate and number participating

The 95 per cent confidence interval for the participation rate in recreational fishing is between 27.7 per cent and 34.5 per cent. The 95 per cent confidence interval for the number of persons participating in recreational fishing is between 478,806 and 596,347.

Comparison of participation rate with previous years

The participation rate was 31 per cent in 2005 (Table 1). The variation in the estimates of participation rate is largely due to the different way that the data was collected and the participation rate calculated (Figure 1).

Table 1: Participation rate for recreational fishing

| Source | Year | Participation Rate % | Mean No. of days/trips per year |
|--------------------|------|----------------------|---------------------------------|
| ABS | 1987 | 27 | |
| Patterson Research | 1994 | 35 | 9.5 trips |
| Reark Research | 1996 | 51 | |
| Reark Research | 1997 | 36 | 19 days |
| Right Marketing | 1998 | 45 | 25 days |
| Research Division | 1999 | 34 | 18 days |
| Research Division | 2000 | 35 | 19 days |
| Research Division | 2001 | 37 | 16 days |
| Research Division | 2002 | 34 | 18 days |
| Research Division | 2003 | 35 | 16 days |
| Research Division | 2004 | 31 | 13 days |
| Asset Research | 2005 | 31 | 6 days |

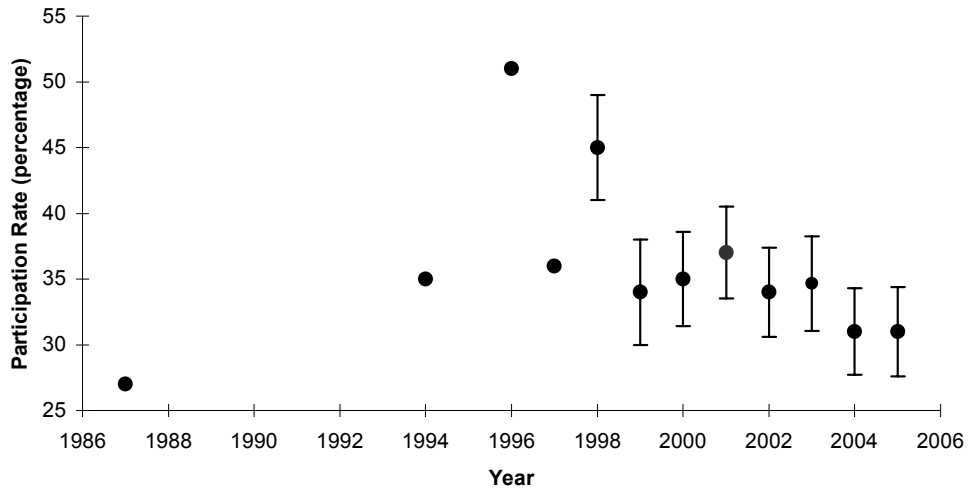


Figure 1: Participation rate for recreational fishing

Days Fished

The number of days fished by recreational fishers in the last twelve months ranges from one to 60 days. The mean number of days fishing was six days and the median three days. The majority of recreational fishers in Western Australia fished between one and five days. However, some fished for considerably more days giving a skewed frequency distribution (Figure 2). It is likely that the number of days fished has been overstated due

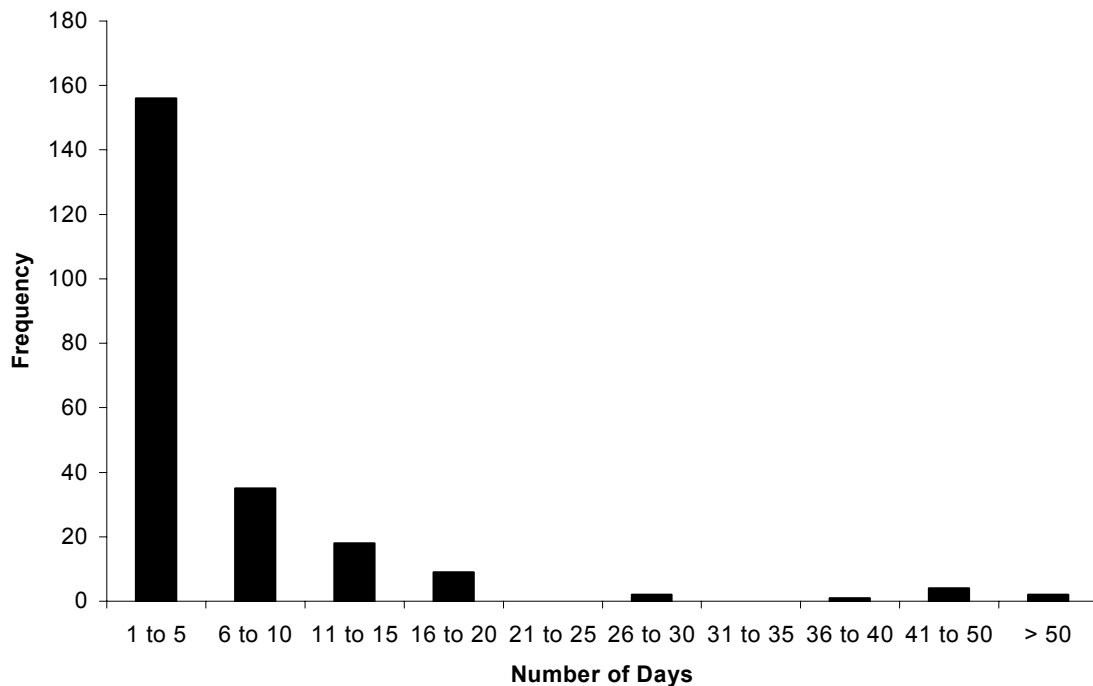


Figure 2: Frequency distribution of number of days fished

to the inability of respondents to accurately recall past fishing trips over a 12-month period.

The median number of days fished by recreational fishers in the last twelve months was three days (Figure 3). The median number of days fished appears to be lower than in previous years, however, the trend will become apparent in future years when more data is available.

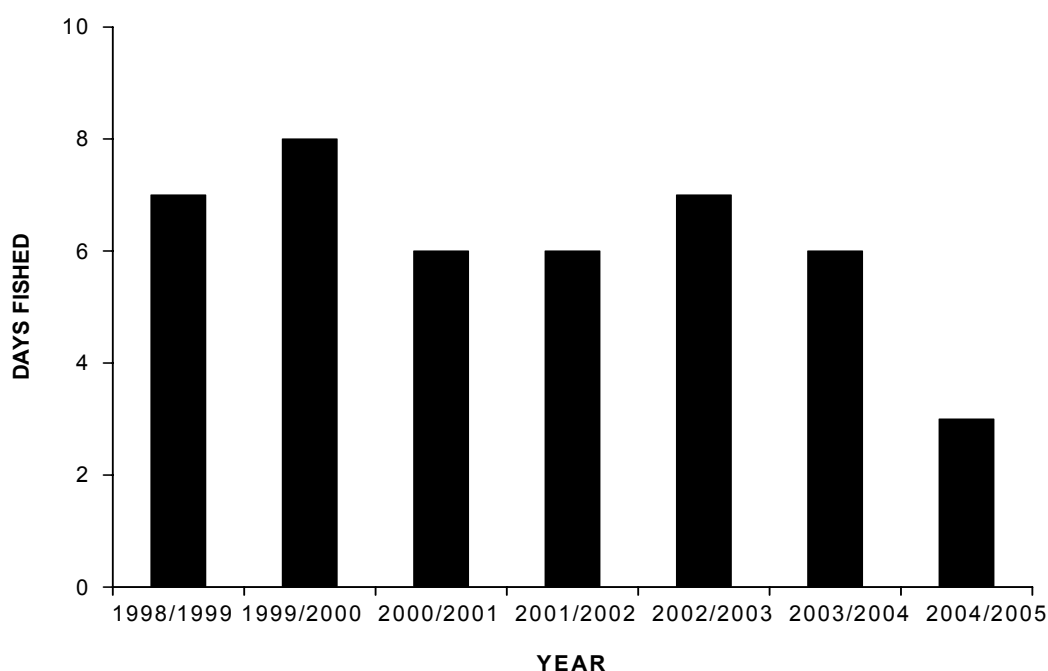


Figure 3: Median number of days fished

3.2 Satisfaction Index

An overall satisfaction-scoring index has been developed to measure and monitor the satisfaction of recreational fishers in Western Australia.

The satisfaction rate is a combination of *Knowledge*, *Management*, and *Confidence*.

Knowledge = the level of the person's awareness of biology and behaviour of fish and the best way to catch fish.

Management = the level of the person's awareness of rules and regulations.

Confidence = the level of the person's satisfaction with the number, size and variety of fish caught on their last trip and satisfaction with the overall fishing trip.

$$\begin{aligned}
 \text{Satisfaction Index} &= \text{Mean}(\text{Knowledge} + \text{Management} + \text{Confidence}) \\
 &= (q9 + q10 \text{ (a to c)} + q11 \text{ (a to e)}) / 9 \\
 &= (0.918 + 0.671 + 0.754 + 0.786 + 0.615 + 0.612 + 0.599 + 0.919 + 0.842) / 9 \\
 &= 0.746 \\
 &= 74.6\%
 \end{aligned}$$

(Note: Responses of the "can't say"/ "neither" type were excluded from the calculation of the satisfaction rate)

Table 2: Satisfaction Index

| | Number Respondents | of Satisfaction % | |
|------------------------------------|-------------------------------|------------------------------|---------------|
| Knowledge | | | |
| Habitat and behaviour | 219 | 0.671 | Knowledgeable |
| Ways to catch fish | 224 | 0.754 | Knowledgeable |
| Management | | | |
| Bag and size limits | 224 | 0.786 | Knowledgeable |
| Awareness of rules and regulations | 695 | 0.918 | Knowledgeable |
| Confidence | | | |
| Number of fish caught | 221 | 0.615 | Satisfied |
| Variety of fish caught | 214 | 0.612 | Satisfied |
| Size of fish caught | 217 | 0.599 | Satisfied |
| Environment where fishing | 222 | 0.919 | Satisfied |
| Overall fishing trip | 221 | 0.984 | Satisfied |
| Satisfaction Index | | 0.746 | |

The satisfaction index for recreational fishing was 74.6 per cent (Table 2) with a 95 per cent confidence interval between 72.8 per cent and 76.4 per cent. The satisfaction index is significantly lower than the value of 81.4 per cent reported by the 2004 Community Survey (Baharthah, 2004).

This was primarily due to a decrease in the proportion of respondents who were very satisfied with the number, variety and size of their catch and the environment where fishing and a decrease in the proportion of respondents who were very knowledgeable about the habitat and ways to catch fish. It is also due to a decrease in the proportion of respondents who were very satisfied with the overall fishing trip.

3.3 Satisfaction Rate

The satisfaction rating of the broader community relates to their perceptions of the extent to which the Department of Fisheries is achieving sustainable fisheries management objectives.

Satisfaction Rate = Mean (*Managing commercial fishing*
 + *Managing recreational fishing*
 + *Protection of fish habitat*
 + *Managing aquaculture and pearling*
 + *Fair allocation of resources between groups*)

$$\begin{aligned}
 &= (q4b + q5b + q6b + q7b + q8) / 5 \\
 &= (0.867 + 0.818 + 0.799 + 0.915 + 0.789) / 5 \\
 &= 0.837 \\
 &= 83.7\%
 \end{aligned}$$

(Note: Responses of the “can’t say”/ “neither” type were excluded from the calculation of the satisfaction rate)

The following results are from the 53.5 per cent of respondents who knew the Department of Fisheries was responsible for one or more of the four sub-programs.

Table 3: Satisfaction Rate

| | Number of respondents | Satisfaction % |
|--------------------------|------------------------------|-----------------------|
| Commercial Fisheries | 196 | 0.867 |
| Recreational Fishing | 181 | 0.818 |
| Fish Habitat Protection | 139 | 0.799 |
| Aquaculture and Pearling | 94 | 0.915 |
| Allocation of Resources | 199 | 0.789 |
| Satisfaction Rate | | 0.837 |

The Department of Fisheries was given a satisfaction rate of 83.7 per cent by the Western Australian public (Table 3). The 95 per cent confidence interval for the satisfaction rate is between 81.2 per cent and 86.3 per cent. The satisfaction rate is not significantly different to the value of 83.9 per cent reported by the 2004 Community Survey (Baharthah, 2004).

Overall, in terms of recreational fishing, commercial fishing, aquaculture and fish habitat protection, 83.7 per cent of the community rated the Department of Fisheries’ performance as good.

3.4 General fishing background

Question 1

In question 1, respondents were asked: “Thinking back over the last twelve months, have you done any recreational fishing, including angling, crabbing, prawning, spearfishing, collecting abalone or aquarium fish?”

Male respondents in regional areas were most likely to participate in recreational fishing during the last twelve months (Table 4).

Table 4: Participation in recreational fishing

| | Male | Female |
|-------------------------|-------|--------|
| Perth metropolitan area | 0.303 | 0.206 |
| Regional areas | 0.550 | 0.370 |

3.5 Fishing involvement during the last twelve months

Question 2

In question 2, respondents were asked: “In the last 12 months, in what areas have you been fishing? How many days did you go fishing?”

Around 84 per cent of fishers went fishing in the West Coast bioregion, which includes the Perth metropolitan area, totalling around 5.5 million days’ fishing effort (Table 5).

Table 5: Fishing effort in Bioregions

| Bioregion | Mean Days Fished | % Participating | Effort (days) | % Effort |
|----------------------------------|------------------|-----------------|------------------|------------|
| South Coast – Marine | 5 | 27 | 760,500 | 11 |
| Southern Inland - Freshwater | 4 | 6 | 138,500 | 2 |
| West Coast (inc. PMA) | 12 | 85 | 5,502,000 | 80 |
| Gascoyne | 7 | 7 | 252,000 | 4 |
| Pilbara / Kimberley – Marine | 7 | 4 | 161,000 | 2 |
| Pilbara / Kimberley – Freshwater | 4 | 3 | 52,000 | 1 |
| Total | | | 6,866,000 | 100 |

The Perth Metropolitan area attracted 50 per cent of fishers (Table 6).

Table 6: Fishing effort in West Coast

| Area | Mean Days Fished | % Participating | Effort (days) | % Effort |
|------------------------------------|------------------|-----------------|------------------|-----------|
| Perth Metropolitan Area (PMA) only | 12 | 40 | 2,481,000 | 36 |
| West Coast other than PMA only | 10 | 35 | 1,884,000 | 27 |
| Both PMA and West Coast | 22 | 10 | 1,137,000 | 17 |
| Total | | | 5,502,000 | 80 |

It is likely that the mean number of days fished has been overstated due to the inability of respondents to accurately recall past fishing trips over a 12-month period.

The fishing effort in days will also be overstated since it is calculated from the mean number of days fished. The percentage effort column provides a more meaningful breakdown of recreational fishing effort by bioregion.

All Areas of the State

The number of days fished by recreational fishers in the last twelve months ranges from one to 60 days. The mean number of days fished was 6 days and the median was three days. Around 68.7 per cent of fishers went fishing between one and five days and 15.4

per cent fished between six and ten days. However, some fished for considerably more days giving a skewed distribution.

3.6 Viewing fish and the marine environment

Question 3

In question 3, respondents were asked: “Also, thinking back over the last twelve months, have you gone snorkelling or diving just to look at fish and the marine environment rather than to capture fish or other animals?”

Around 24 per cent of respondents went snorkelling or diving just to view fish and the marine environment (Table 7).

Table 7: Viewing fish and the marine environment

| | Count | % |
|--------------|------------|------------|
| Yes | 165 | 23.6 |
| No | 532 | 76.1 |
| Can't Say | 2 | 0.3 |
| Total | 699 | 100 |

3.7 Awareness and impression of the Department of Fisheries

Question 4a

In question 4a, respondents were asked: “Who, if anyone, do you think is responsible for managing commercial fishing in Western Australia?”

The Department of Fisheries was recognised by 45.1 per cent as responsible for managing commercial fishing in Western Australia and 28.8 per cent of respondents did not know who was responsible (Table 8).

Multiple responses were accepted.

Table 8: Organisations responsible for commercial fishing

| | Count | % |
|---------------------------|-------|------|
| Department of Fisheries | 315 | 45.1 |
| Don't Know | 201 | 28.8 |
| State Government | 153 | 21.9 |
| Other | 21 | 3.0 |
| CALM | 20 | 2.9 |
| Department of Agriculture | 8 | 1.1 |
| Marine & Harbours | 4 | 0.6 |
| Local council/shire | 3 | 0.4 |

There has been a significant decrease ($p < 0.05$) in the percentage of respondents that did not know who was responsible for the management of commercial fisheries over the past year and a significant increase in the percentage that said that the State Government and the Department of Fisheries was responsible (Figure 4).

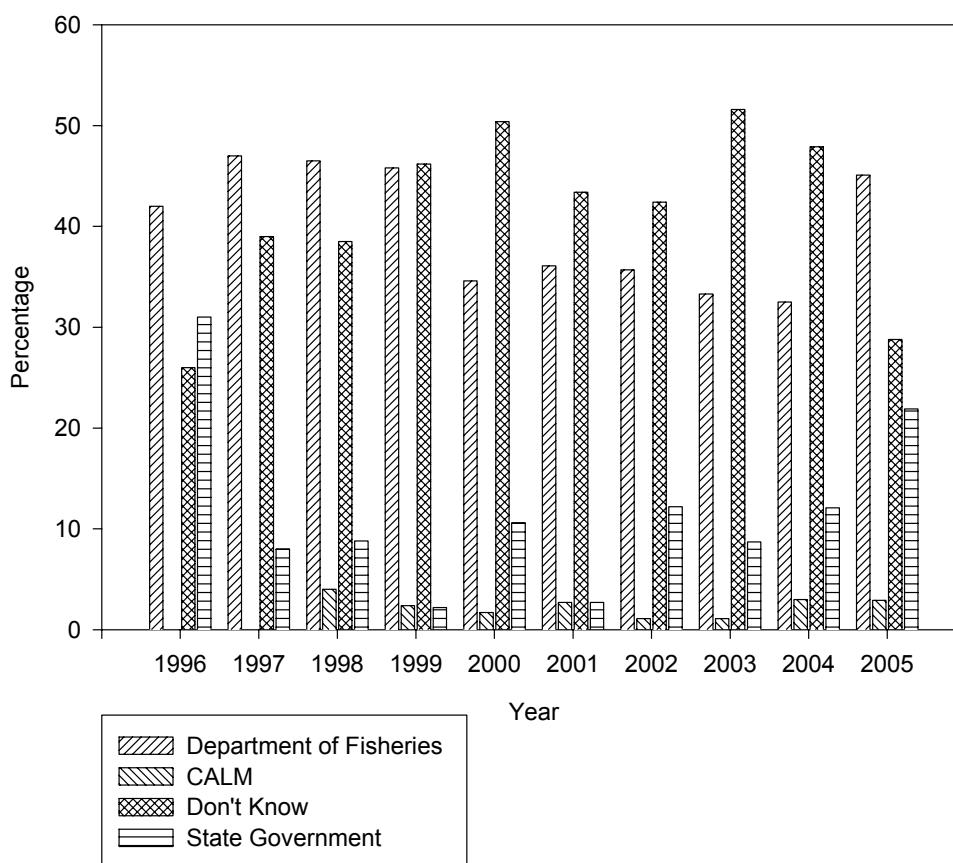


Figure 4: Organisations responsible for commercial fishing

Question 4b

“There are a number of rules and regulations in place, which limits catch size, allowable fishing days and designated areas to fish.”

In question 4b, respondents were asked: “How would you rate the Department of Fisheries in their management of commercial fisheries?”

Of the respondents that knew that the Department of Fisheries was responsible for the management of commercial fisheries, 55.2 per cent gave a good or very good rating (Table 9).

Table 9: Management of commercial fisheries

| | Count | % |
|--------------|------------|------------|
| Very Good | 20 | 6.5 |
| Good | 150 | 48.7 |
| Poor | 17 | 5.5 |
| Very Poor | 9 | 2.9 |
| Neither | 6 | 2.0 |
| Can't Say | 106 | 34.4 |
| Total | 308 | 100 |

Over the last year, there was a significant decrease ($p < 0.05$) in the proportion of very good responses and an increase in the proportion of good responses in the rating of the management of commercial fisheries (Figure 5).

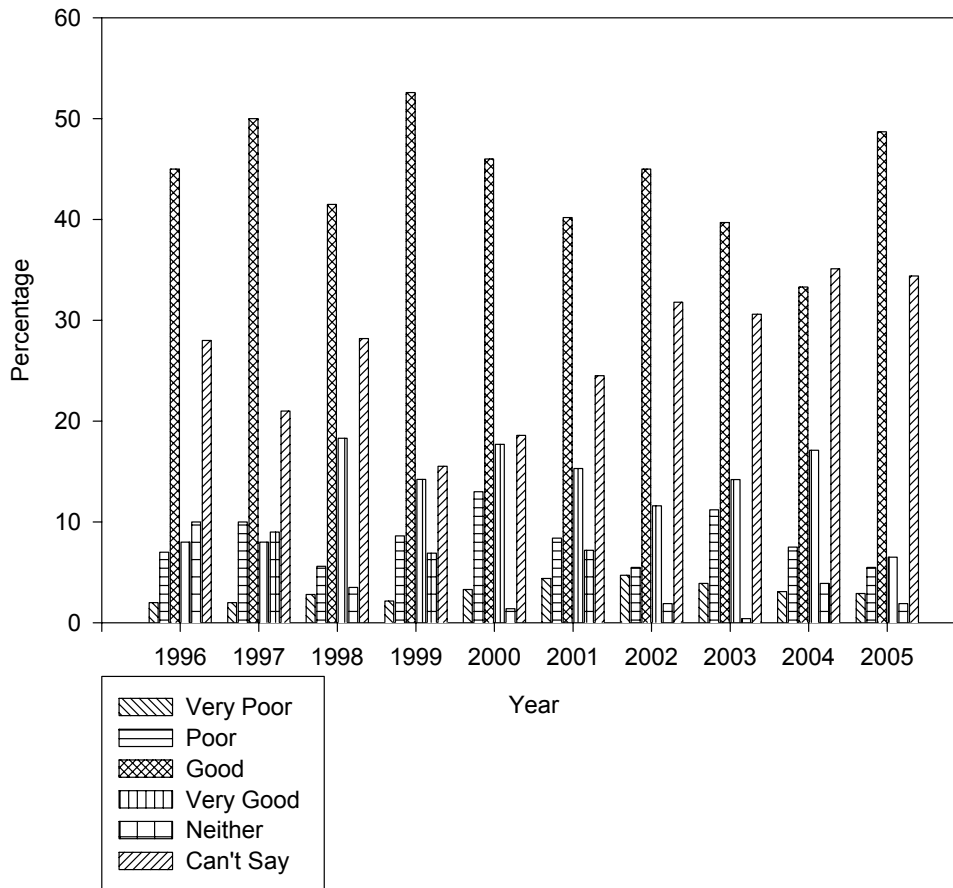


Figure 5: Management of commercial fisheries

Question 5a

In question 5a, respondents were asked: “Who, if anyone, is responsible for managing recreational fishing in Western Australia?”

The Department of Fisheries was recognised by 39.1 per cent of respondents as responsible for managing recreational fishing in Western Australia and 31.2 per cent of respondents did not know who was responsible (Table 10).

Multiple responses were accepted.

Table 10: Organisations responsible for recreational fishing

| | Count | % |
|----------------------------|-------|------|
| Department of Fisheries | 273 | 39.1 |
| Don't Know | 218 | 31.2 |
| State Government | 156 | 22.3 |
| Other | 36 | 5.2 |
| CALM | 20 | 2.9 |
| Local council/shire | 11 | 1.6 |
| Recfishwest | 7 | 1.0 |
| Department of Agriculture | 3 | 0.4 |
| Waters & Rivers Commission | 1 | 0.3 |
| Marine & Harbours | 1 | 0.1 |

There has been a significant increase ($p < 0.05$) in the percentage of persons that said that the state government was responsible for managing recreational fishing (Figure 6).

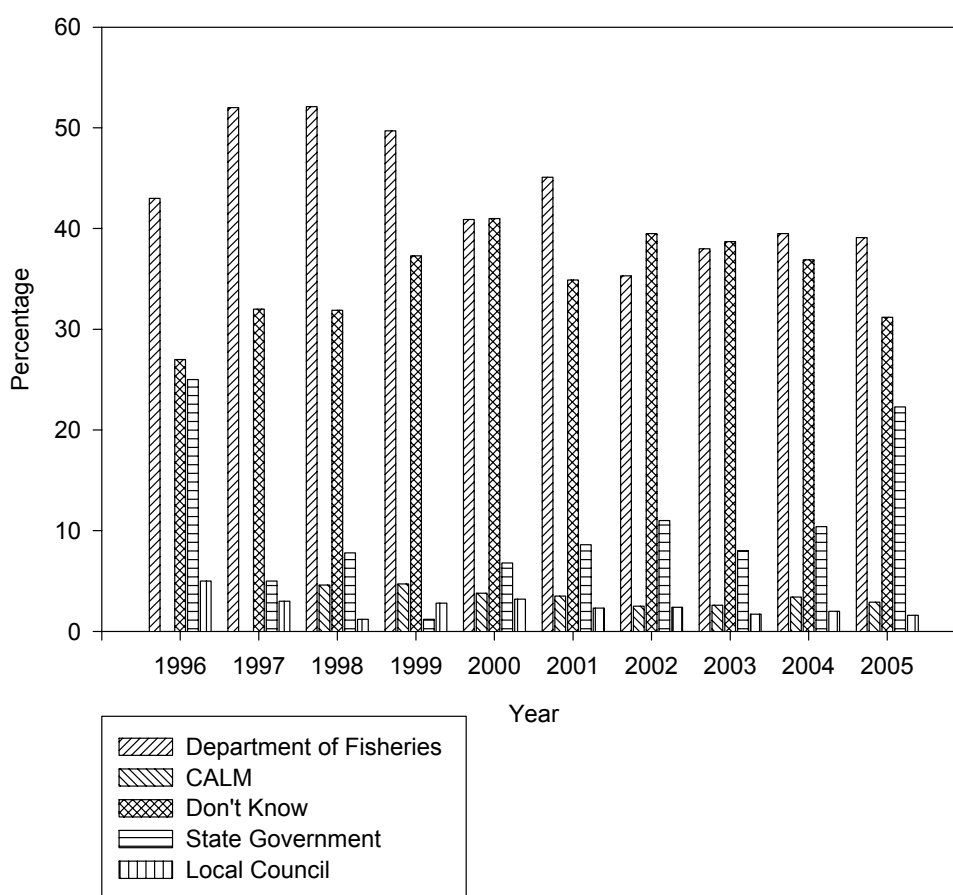


Figure 6: Organisations responsible for recreational fishing

Question 5b

In question 5b, respondents were asked: “How would you rate the Department of Fisheries in their management of recreational fisheries?”

Of the respondents that knew that the Department of Fisheries was responsible for recreational fishing, 56.2 per cent gave a good or very good rating (Table 11). A small

number of respondents (12.6 per cent) had a poor or very poor opinion of the Department of Fisheries performance.

Table 11: Management of recreational fishing

| | Count | % |
|--------------|------------|------------|
| Very Good | 17 | 6.4 |
| Good | 131 | 49.8 |
| Poor | 26 | 9.9 |
| Very Poor | 7 | 2.7 |
| Neither | 7 | 2.7 |
| Can't Say | 75 | 28.5 |
| Total | 263 | 100 |

Over the last year there has been a significant decrease ($p < 0.05$) in the percentage of respondents that gave the Department of Fisheries a very good rating, with a corresponding increase in the percentage that gave a good rating (Figure 7).

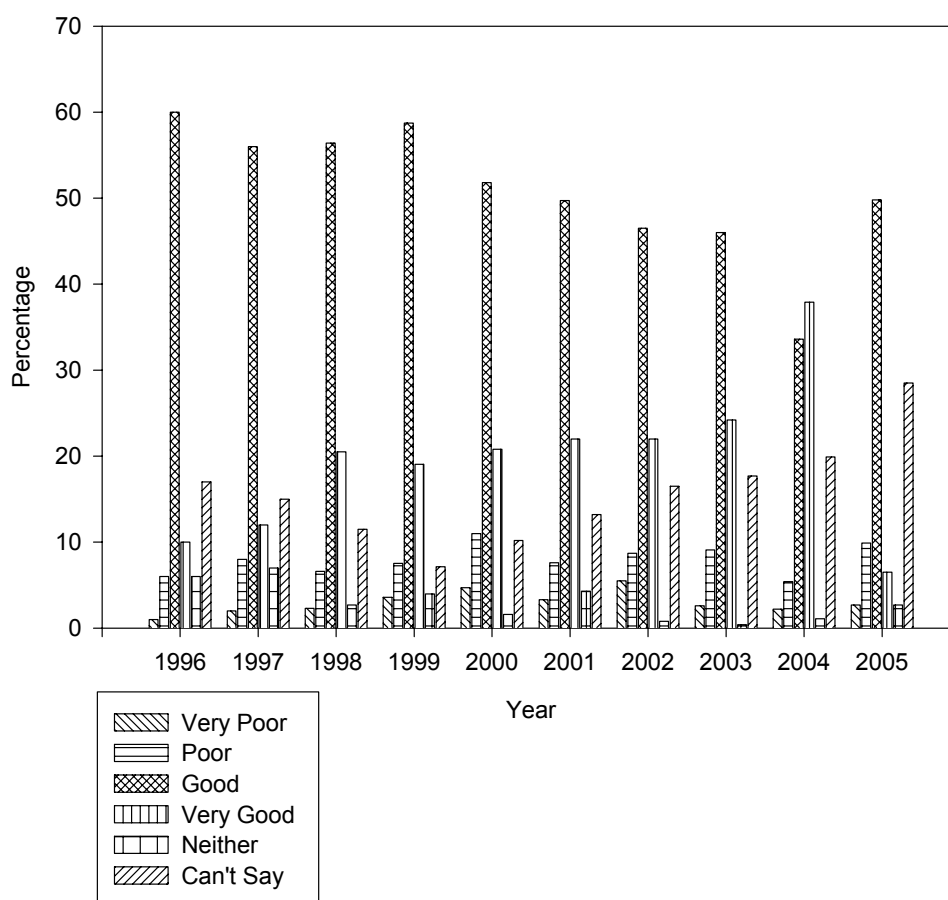


Figure 7: Management of recreational fishing

Question 6a

In question 6a, respondents were asked: “When you think about the fish habitat in oceans and waterways in Western Australia, that is, where fish live and breed, who do you think, if anyone, is responsible for protecting the fish habitat?”

The Department of Fisheries was recognised by 27.6 per cent of respondents as responsible for protecting the fish habitat (Table 12). A large number of respondents (21.3 per cent) did not know who was responsible.

Multiple responses were accepted.

Table 12: Organisations responsible for fish habitat protection

| | Count | % |
|----------------------------|-------|------|
| Department of Fisheries | 193 | 27.6 |
| State Government | 170 | 24.3 |
| Don't Know | 149 | 21.3 |
| General Public | 93 | 13.3 |
| Other | 74 | 10.6 |
| CALM | 70 | 10.0 |
| Local council/shire | 14 | 2.0 |
| Waters & Rivers Commission | 10 | 1.4 |
| Marine & Harbours | 7 | 1.0 |
| Department of Agriculture | 5 | 0.7 |

Over the last year there has been a significant change ($p < 0.05$) in the responses about who is responsible for protecting fish habitat protection. The percentage of 'don't know' responses decreased and the percentage of State Government responses increased (Figure 8).

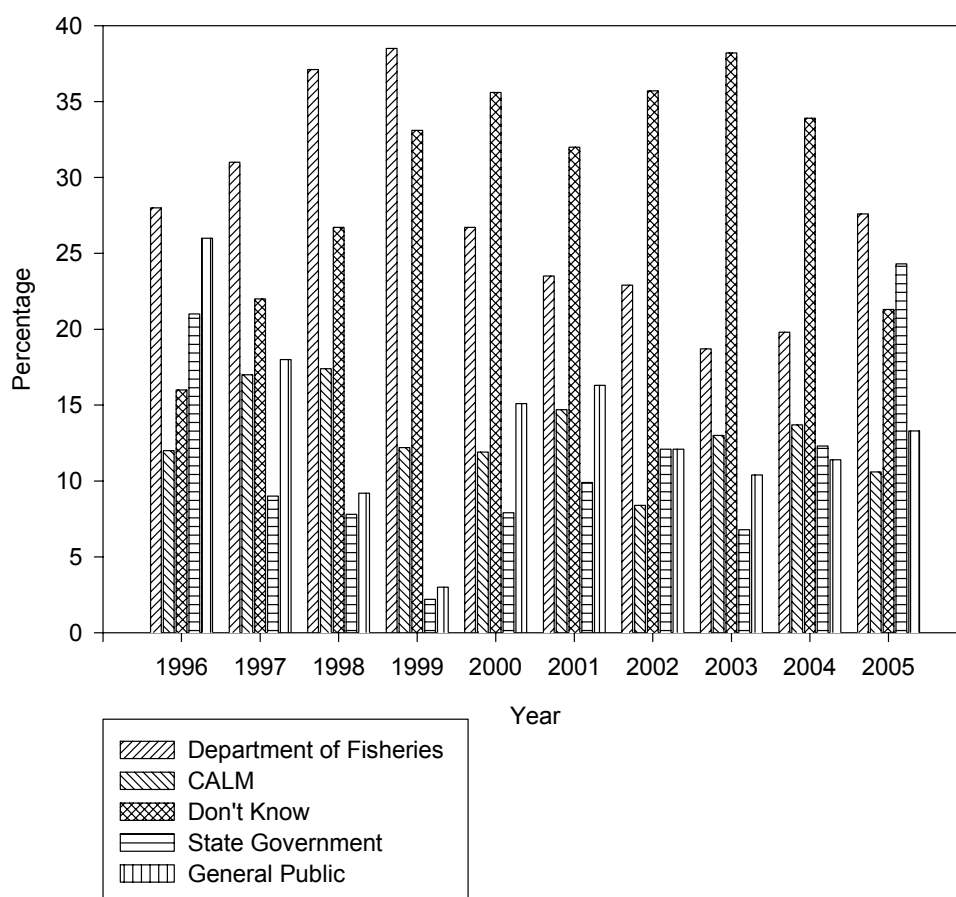


Figure 8: Organisations responsible for fish habitat protection

Question 6b

In question 6b, respondents were asked: “How would you rate the Department of Fisheries in their conservation and protection of the fish habitat?”

Of the respondents that knew that the Department of Fisheries was responsible for conservation and protection of fish habitat, 59.4 per cent gave a good or very good rating (Table 13). A smaller number of respondents (15.0 per cent) had a poor or very poor opinion of the Department of Fisheries’ performance.

Table 13: Conservation and protection of fish habitat

| | Count | % |
|--------------|------------|------------|
| Very Good | 14 | 7.5 |
| Good | 97 | 51.9 |
| Poor | 22 | 11.8 |
| Very Poor | 6 | 3.2 |
| Neither | 6 | 3.2 |
| Can't Say | 42 | 22.4 |
| Total | 187 | 100 |

There has been no significant change in the rating of the conservation and protection of fish habitat by Department of Fisheries over the past two years (Figure 9).

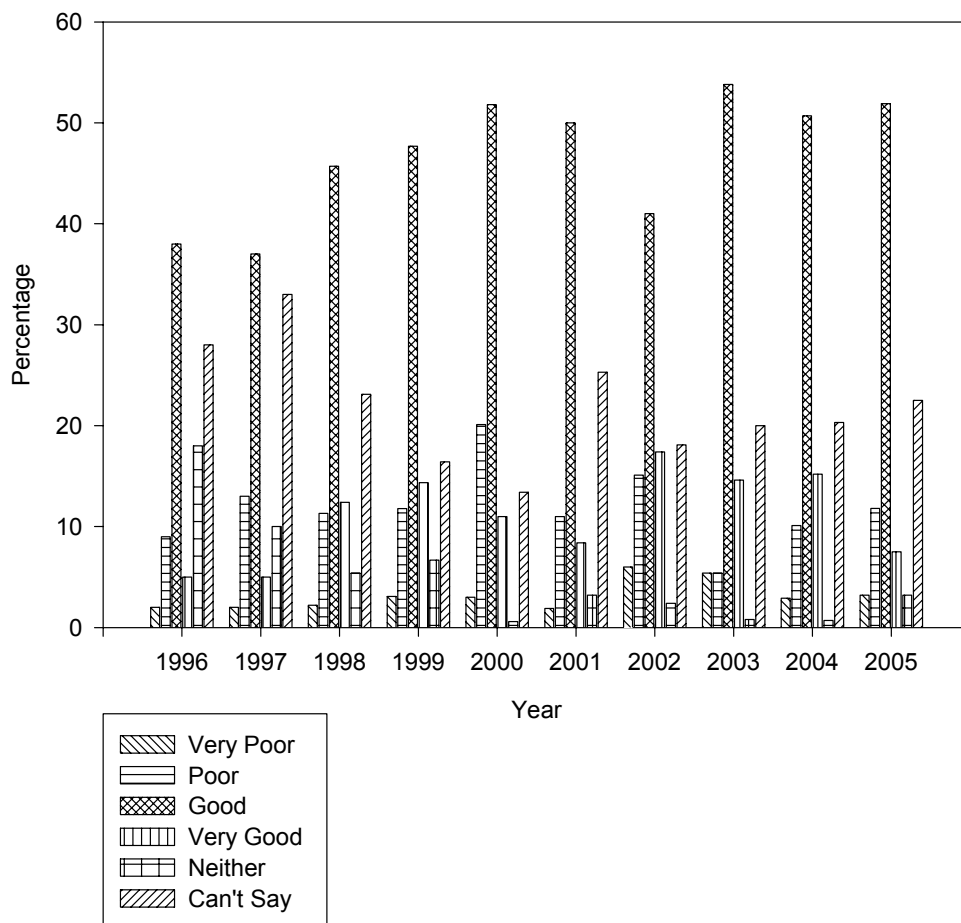


Figure 9: Conservation and protection of fish habitat

Question 7a

In question 7a, respondents were asked: “When you think about aquaculture, pearling, or fish farming in Western Australia, who do you think, if anyone, is responsible for managing aquaculture?”

A high proportion of respondents (35.0 per cent) did not know who was responsible for the management of aquaculture (Table 14). However, the Department of Fisheries was recognised by 194 people - 27.6 per cent of the respondents - as responsible for the management of aquaculture in Western Australia.

Multiple responses were accepted.

Table 14: Organisations responsible for managing aquaculture

| | Count | % |
|----------------------------|-------|------|
| Other | 294 | 41.9 |
| Don't Know | 246 | 35.0 |
| Department of Fisheries | 194 | 27.6 |
| State Government | 148 | 21.1 |
| Private Industry | 57 | 8.1 |
| Department of Agriculture | 25 | 3.6 |
| CALM | 20 | 2.8 |
| Local council/shire | 4 | 0.6 |
| Marine & Harbours | 4 | 0.6 |
| Waters & Rivers Commission | 3 | 0.4 |

Over the last year there has been a significant change ($p < 0.05$) in the responses about who is responsible for managing aquaculture and pearling. The percentage of ‘don’t know’ responses decreased and the percentage of State Government responses increased (Figure 10).

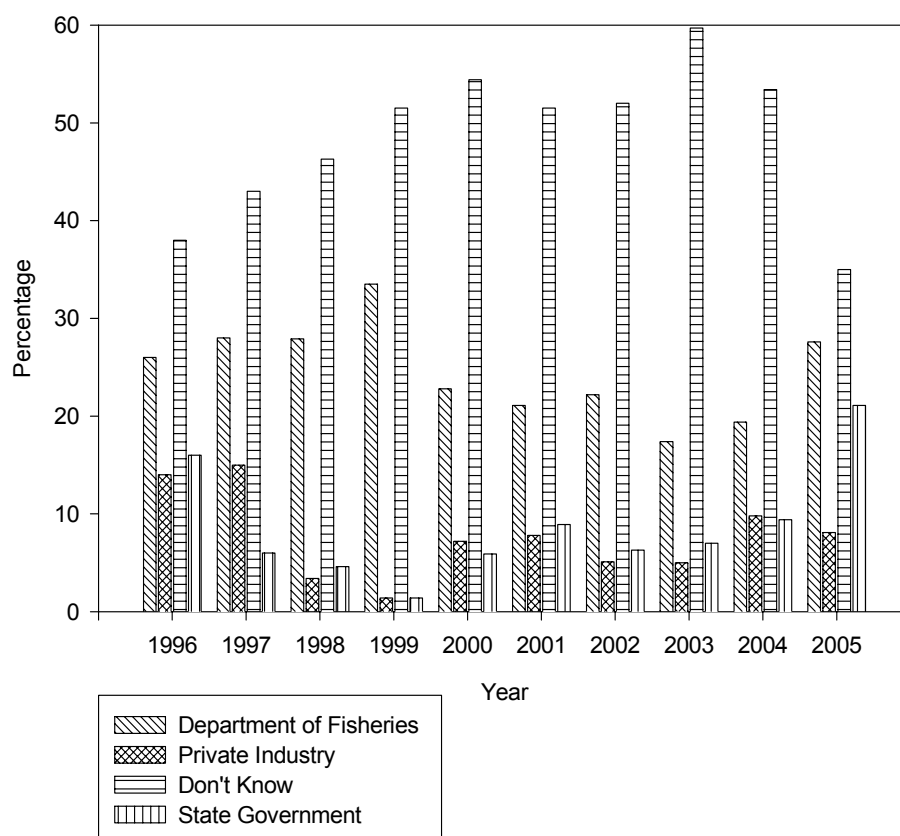


Figure 10: Organisations responsible for managing aquaculture

Question 7b

“The Department of Fisheries provides information such as advising on technology, identifying suitable sites and conducting and supporting research.”

In question 7b, respondents were asked: “How would you rate the Department of Fisheries in their management and development of aquaculture and pearling?”

Of the respondents that knew that the Department of Fisheries was responsible for the management of aquaculture, 47.5 per cent felt that the Department of Fisheries was doing a good or very good job (Table 15). A very small percentage (4.5 per cent) had a poor or very poor opinion of the Department of Fisheries’ performance.

Table 15: Management and development of aquaculture

| | Count | % |
|--------------|------------|------------|
| Very Good | 12 | 6.6 |
| Good | 74 | 40.9 |
| Poor | 7 | 3.9 |
| Very Poor | 1 | 0.6 |
| Neither | 2 | 1.1 |
| Don't Know | 85 | 46.9 |
| Total | 181 | 100 |

There has been little change in the rating of the management and development of aquaculture and pearling over the past three years (Figure 11).

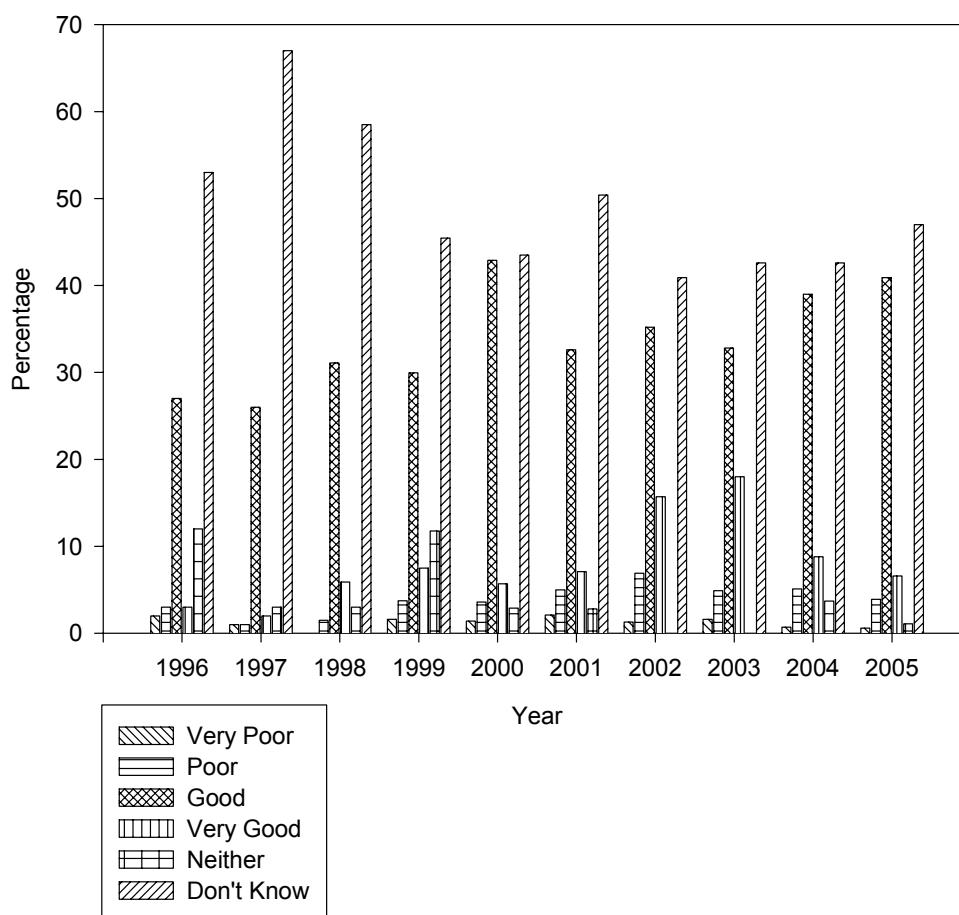


Figure 11: Management and development of aquaculture

3.8 Allocation of fish resources among the fishing sectors

Question 8

“The Department of Fisheries is responsible for recreational fishing, commercial fishing, aquaculture and protecting the fish habitat.”

In question 8, respondents were asked: “In your opinion, do you think the Department of Fisheries manages the share of fish resources fairly between these sectors?”

Most respondents (56.3 per cent) thought that the Department of Fisheries allocates resources fairly between its sectors (Table 16). A large number of respondents (28.7 per cent) could not give an opinion.

Table 16: Opinion on allocation of resources

| | Count | % |
|--------------|------------|------------|
| Yes | 157 | 56.3 |
| No | 42 | 15.0 |
| Can't Say | 80 | 28.7 |
| Total | 279 | 100 |

Over the last year there has been a significant decrease ($p < 0.05$) in the proportion of respondents who can't say whether the Department of Fisheries allocates resources fairly between sectors and a significant increase in the proportion of respondents who said that the Department of Fisheries does allocate the share of fish resources fairly between the sectors (Figure 12).

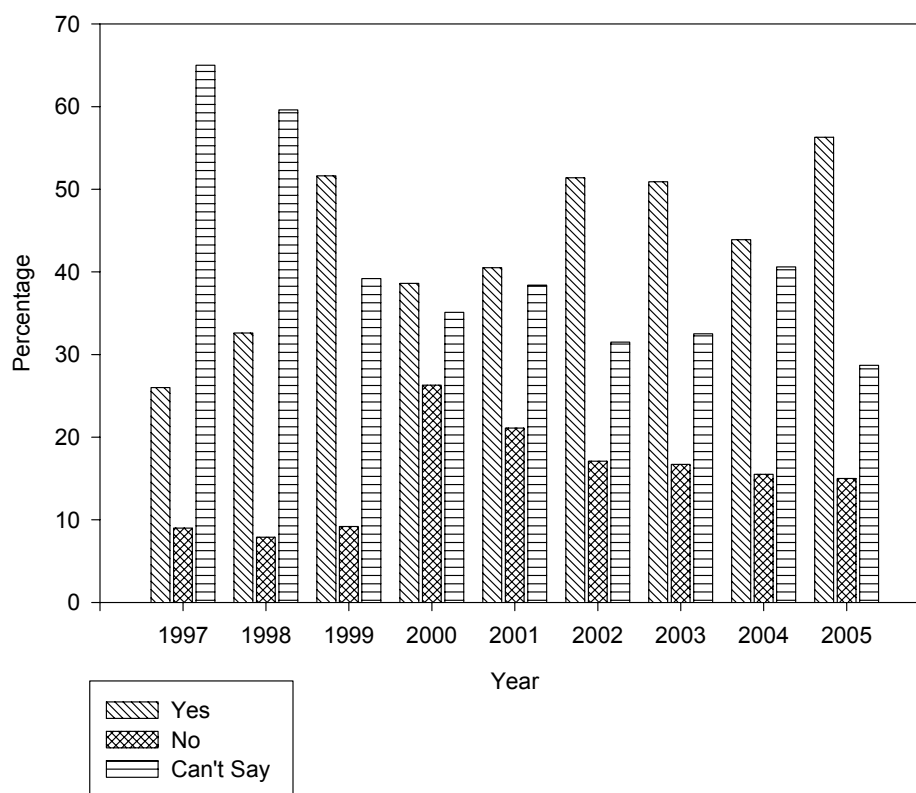


Figure 12: Opinion on allocation of resources

3.9 Awareness and opinion of fishing regulations

Question 9

In question 9, respondents were asked: “Before today, were you aware that there are recreational fishing rules that apply when fishing in Western Australian waters?”

The majority of respondents (91.8 per cent) were aware that there are recreational fishing rules that apply when fishing in Western Australia (Table 17).

Table 17: Knowledge of recreational fishing rules

| | Count | % |
|--------------|------------|------------|
| Yes | 638 | 91.8 |
| No | 57 | 8.2 |
| Total | 695 | 100 |

There has been a significant increase ($p < 0.05$) in the proportion of respondents that were not aware that recreational fishing rules apply in Western Australia (Figure 13).

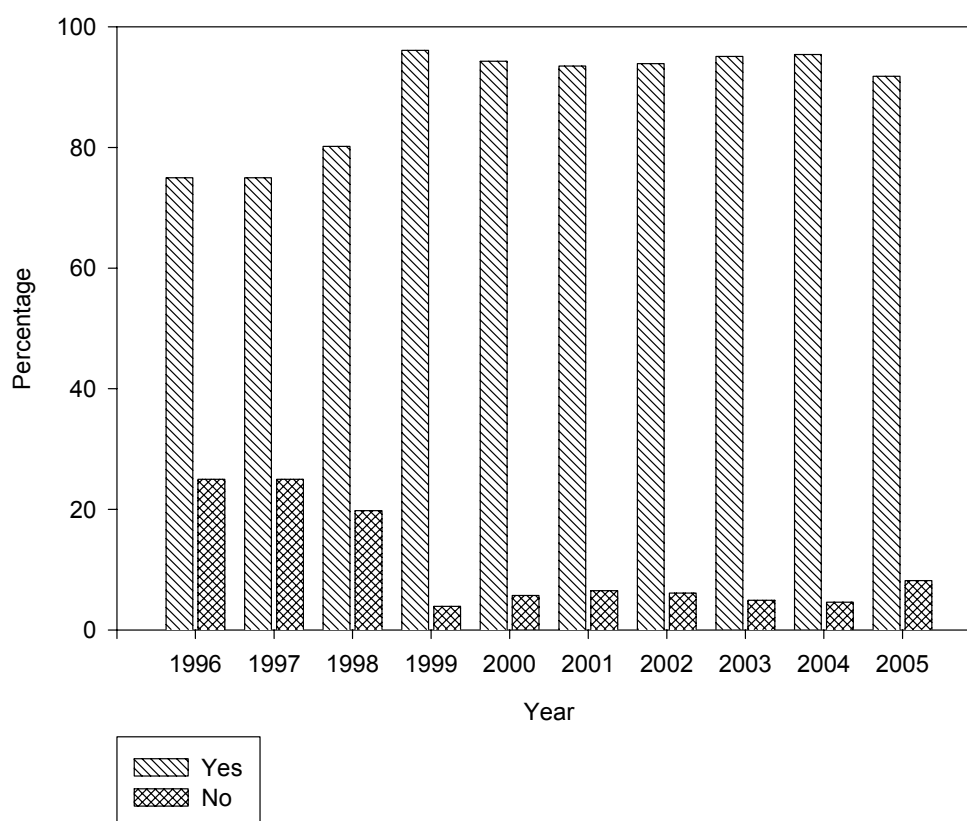


Figure 13: Knowledge of recreational fishing rules

3.10 Knowledge of recreational fishing regulations

Question 10a

In question 10a, respondents were asked: “Thinking back to the last time you went fishing, how knowledgeable were you of the bag and size limits of fish you were planning to catch?”

Most fishers responded that they were fairly knowledgeable or very knowledgeable (78.6 per cent) about the bag and size limits of the fish they were planning to catch (Table 18).

Table 18: Knowledge of bag and size limits

| | Count | % |
|------------------------|------------|------------|
| Very Knowledgeable | 85 | 38.0 |
| Fairly Knowledgeable | 91 | 40.6 |
| Not Very Knowledgeable | 48 | 21.4 |
| Total | 224 | 100 |

Over the past year, there was no significant change in the knowledge of fishers regarding the bag and size limits of the fish they were planning to catch (Figure 14).

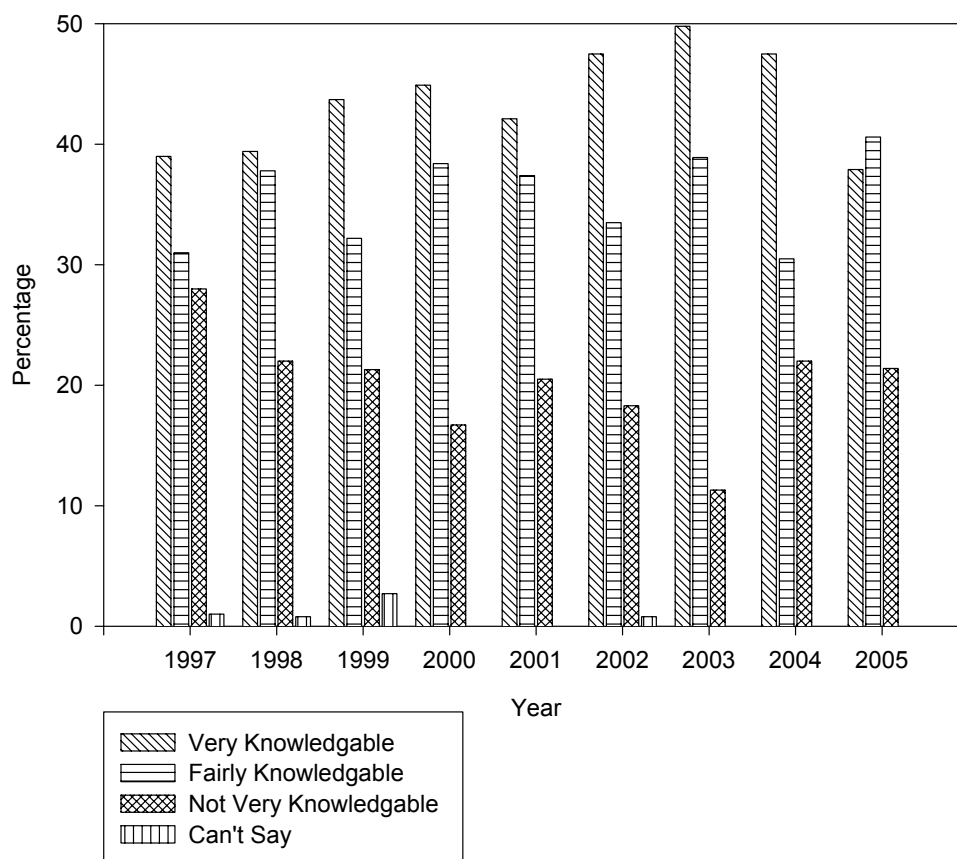


Figure 14: Knowledge of bag and size limits

Question 10b

In question 10b, respondents were asked: “How knowledgeable were you on the best ways to catch the fish you were after (e.g. method, bait, hooks)?”

Most fishers responded that they were very knowledgeable (32.1 per cent) or fairly knowledgeable (43.3 per cent) about the best ways to catch the fish they were after (Table 19).

Table 19: Knowledge of best ways to catch fish

| | Count | % |
|------------------------|------------|------------|
| Very Knowledgeable | 72 | 32.1 |
| Fairly Knowledgeable | 97 | 43.3 |
| Not Very Knowledgeable | 55 | 24.6 |
| Total | 224 | 100 |

Over the past year there was a significant ($p < 0.05$) decrease in the proportion of fishers that were very knowledgeable and an increase in the proportion of fishers that were fairly knowledgeable about the best ways to catch fish (Figure 15).

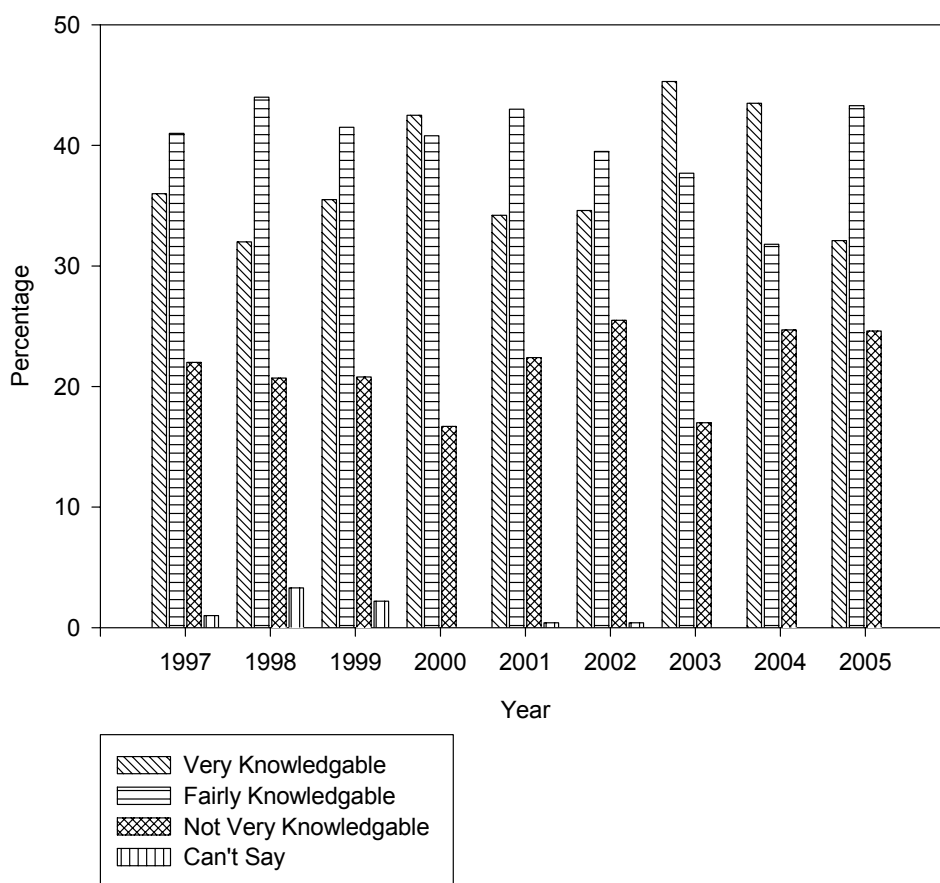


Figure 15: Knowledge of best ways to catch fish

Question 10c

In question 10c, respondents were asked: “How knowledgeable were you on the habits of the fish you were after (e.g. where found, when feeding)?”

A high proportion of fishers responded that they were fairly knowledgeable (42.2 per cent) about the habits of the fish they were after (Table 20).

Table 20: Knowledge of habits and behaviour of fish

| | Count | % |
|------------------------|------------|------------|
| Very Knowledgeable | 53 | 23.8 |
| Fairly Knowledgeable | 94 | 42.2 |
| Not Very Knowledgeable | 72 | 32.2 |
| Can't Say | 4 | 1.8 |
| Total | 223 | 100 |

Over the past year there was a significant decrease ($p < 0.05$) in the proportion of fishers that were very knowledgeable and an increase in the proportion of fishers that were fairly knowledgeable about the habits and behaviour of the fish they were after (Figure 16).

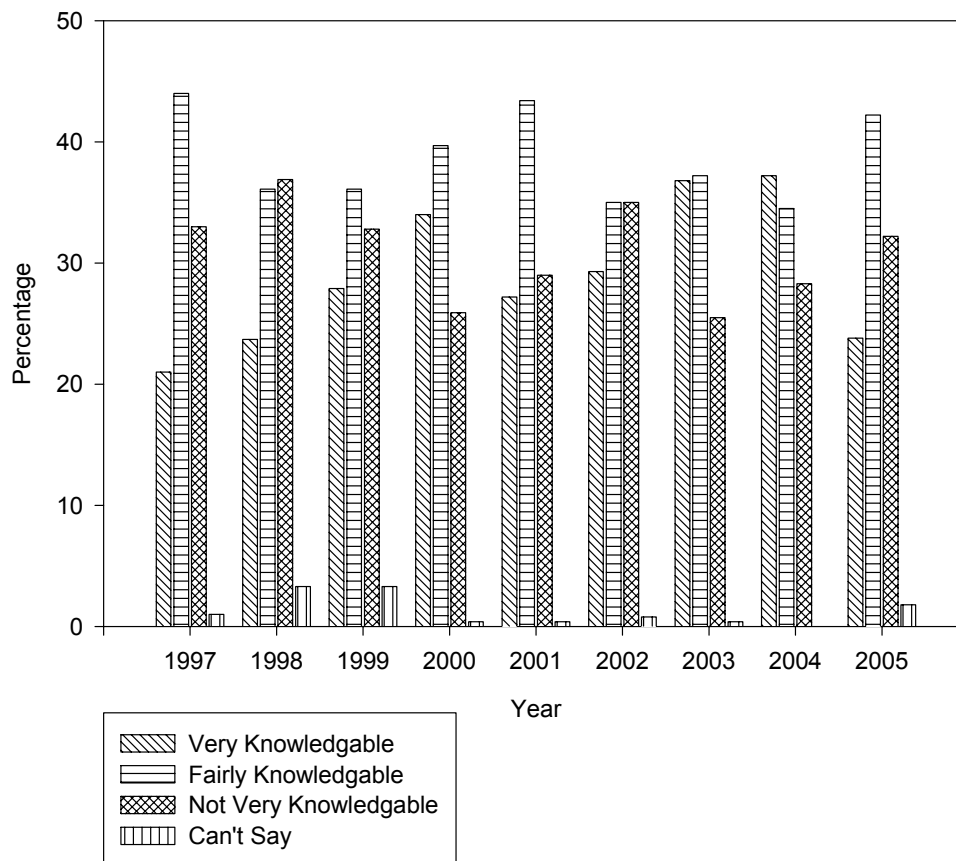


Figure 16: Knowledge of habits and behaviour of fish

3.11 Satisfaction with most recent fishing trip

Question 11a

In question 11a, respondents were asked: “Thinking back to the last time you went fishing, how satisfied were you with the number of fish you caught?”

A high proportion of respondents (60.7 per cent) were satisfied or very satisfied with the number of fish caught in their last fishing trip (Table 21).

Table 21: Satisfaction with the number of fish caught

| | Count | % |
|-------------------|------------|------------|
| Very Satisfied | 31 | 13.8 |
| Satisfied | 105 | 46.9 |
| Dissatisfied | 51 | 22.8 |
| Very Dissatisfied | 34 | 15.2 |
| Neither | 2 | 0.9 |
| Can't Say | 1 | 0.4 |
| Total | 224 | 100 |

Over the past year there has been a significant decrease ($p < 0.01$) in the proportion of respondents that were very satisfied with the number of the fish caught (Figure 17).

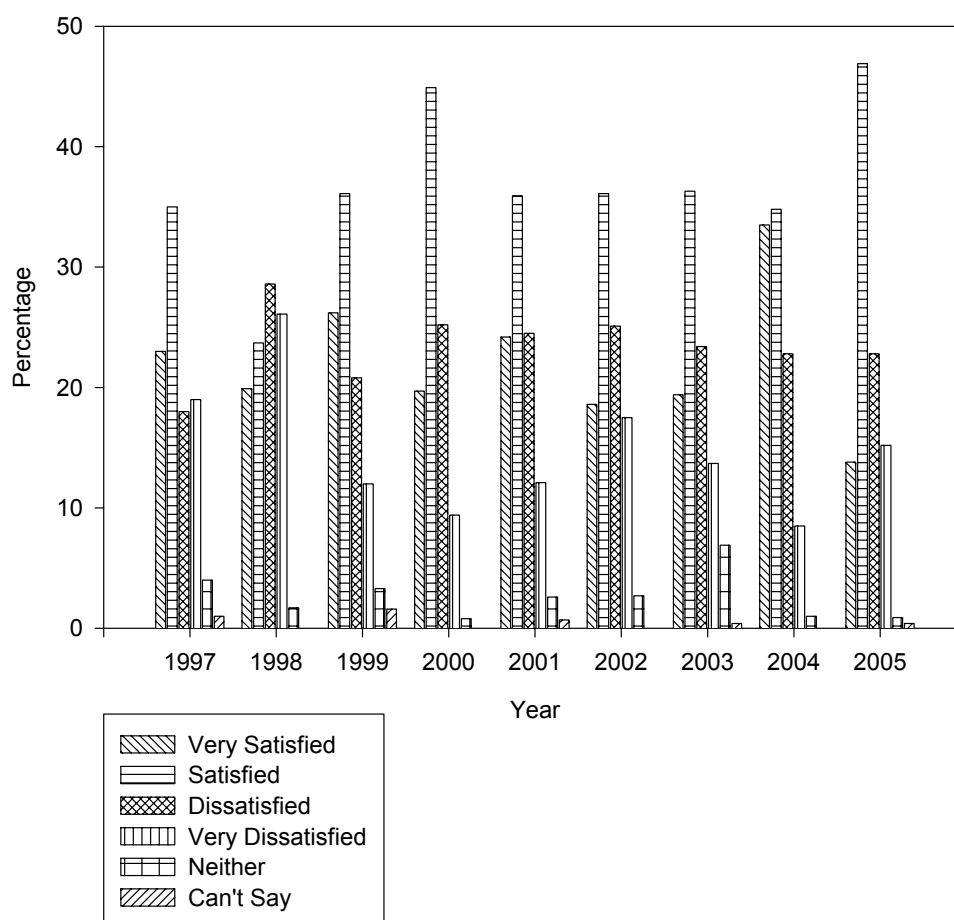


Figure 17: Satisfaction with the number of fish caught

Question 11b

In question 11b, respondents were asked: “How satisfied were you with the variety of fish caught?”

Most fishers (58.8 per cent) were satisfied or very satisfied with the variety of fish caught (Table 22).

Table 22: Satisfaction with the variety of fish caught

| | Count | % |
|-------------------|------------|------------|
| Very Satisfied | 26 | 11.7 |
| Satisfied | 105 | 47.1 |
| Dissatisfied | 54 | 24.2 |
| Very Dissatisfied | 29 | 13.0 |
| Neither | 6 | 2.7 |
| Can't Say | 3 | 1.3 |
| Total | 223 | 100 |

Over the past year there has been a significant decrease ($p < 0.01$) in the proportion of respondents that were very satisfied with the variety of the fish caught (Figure 18).

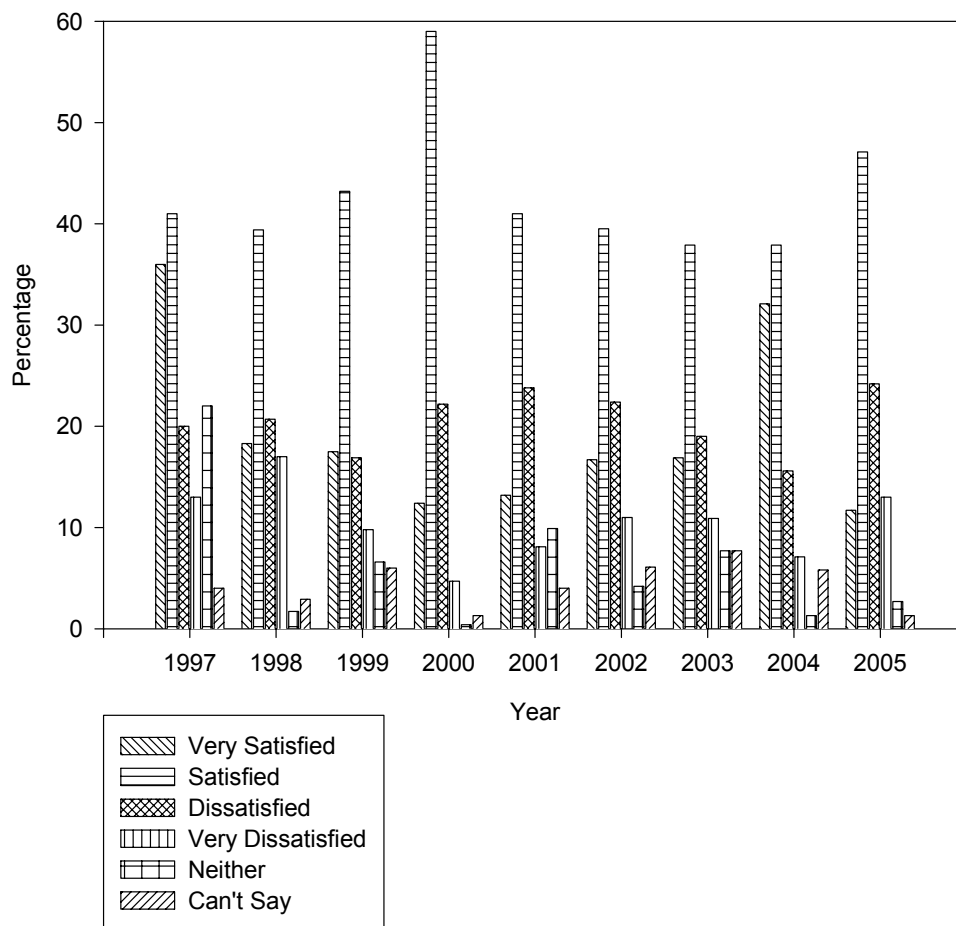


Figure 18: Satisfaction with the variety of fish caught

Question 11c

In question 11c, respondents were asked: “How satisfied were you with the size of the fish caught?”

Most fishers (58.3 per cent) were satisfied or very satisfied with the size of fish caught (Table 23).

Table 23: Satisfaction with the size of fish caught

| | Count | % |
|-------------------|------------|------------|
| Very Satisfied | 27 | 12.1 |
| Satisfied | 103 | 46.2 |
| Dissatisfied | 57 | 25.6 |
| Very Dissatisfied | 30 | 13.4 |
| Neither | 4 | 1.8 |
| Can't Say | 2 | 0.9 |
| Total | 223 | 100 |

Over the past year there has been a significant decrease ($p < 0.01$) in the proportion of respondents that were very satisfied with the size of fish caught (Figure 19).

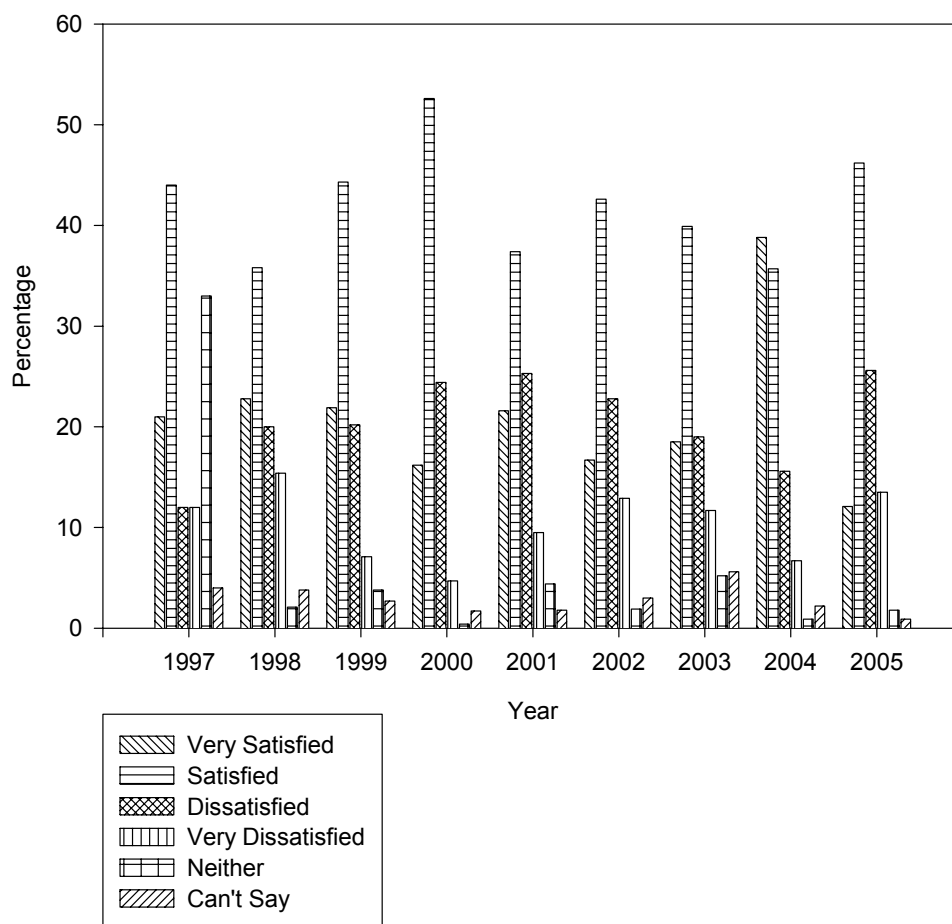


Figure 19: Satisfaction with the size of fish caught

Question 11d

In question 11d, respondents were asked: “How satisfied were you with the environment where you were fishing?”

Most fishers (91.5 per cent) were very satisfied with the environment where they were fishing (Table 24).

Table 24: Satisfaction with the environment where fishing

| | Count | % |
|-------------------|------------|------------|
| Very Satisfied | 106 | 47.5 |
| Satisfied | 98 | 44.0 |
| Dissatisfied | 14 | 6.3 |
| Very Dissatisfied | 4 | 1.8 |
| Neither | 1 | 0.4 |
| Total | 223 | 100 |

Over the past year there has been a significant increase ($p < 0.05$) in the proportion of respondents that were satisfied with the size of fish caught and a decrease in the proportion that were very satisfied with the size of fish caught (Figure 20).

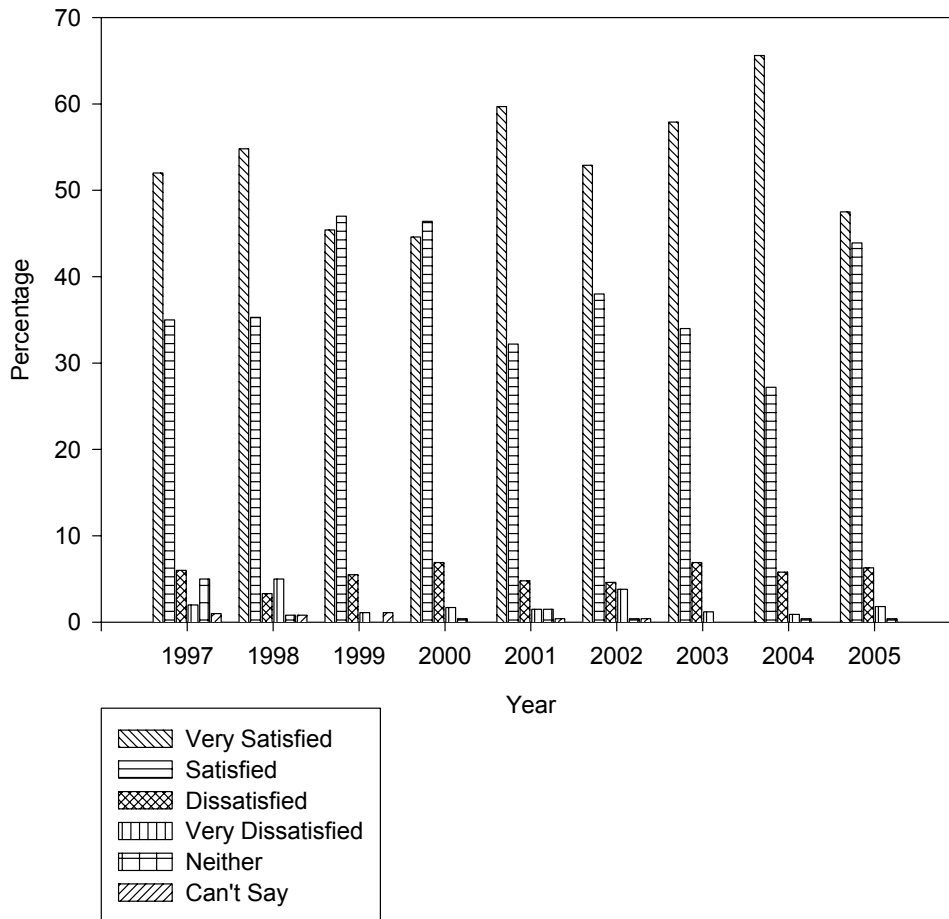


Figure 20: Satisfaction with the environment where fishing

Question 11e

In question 11e, respondents were asked: “Thinking of the trip overall, how satisfied were you with that fishing trip?”

Most fishers (52.7 per cent) were satisfied with the overall fishing trip (Table 25).

Table 25: Satisfaction with the overall trip

| | Count | % |
|-------------------|------------|------------|
| Very Satisfied | 69 | 31.1 |
| Satisfied | 117 | 52.7 |
| Dissatisfied | 25 | 11.3 |
| Very Dissatisfied | 10 | 4.5 |
| Neither | 1 | 0.4 |
| Total | 222 | 100 |

Over the last year there has been a significant decrease ($p < 0.05$) in the proportion of fishers that were very satisfied with their overall fishing trip (Figure 21), together with a corresponding increase in the proportion that were satisfied.

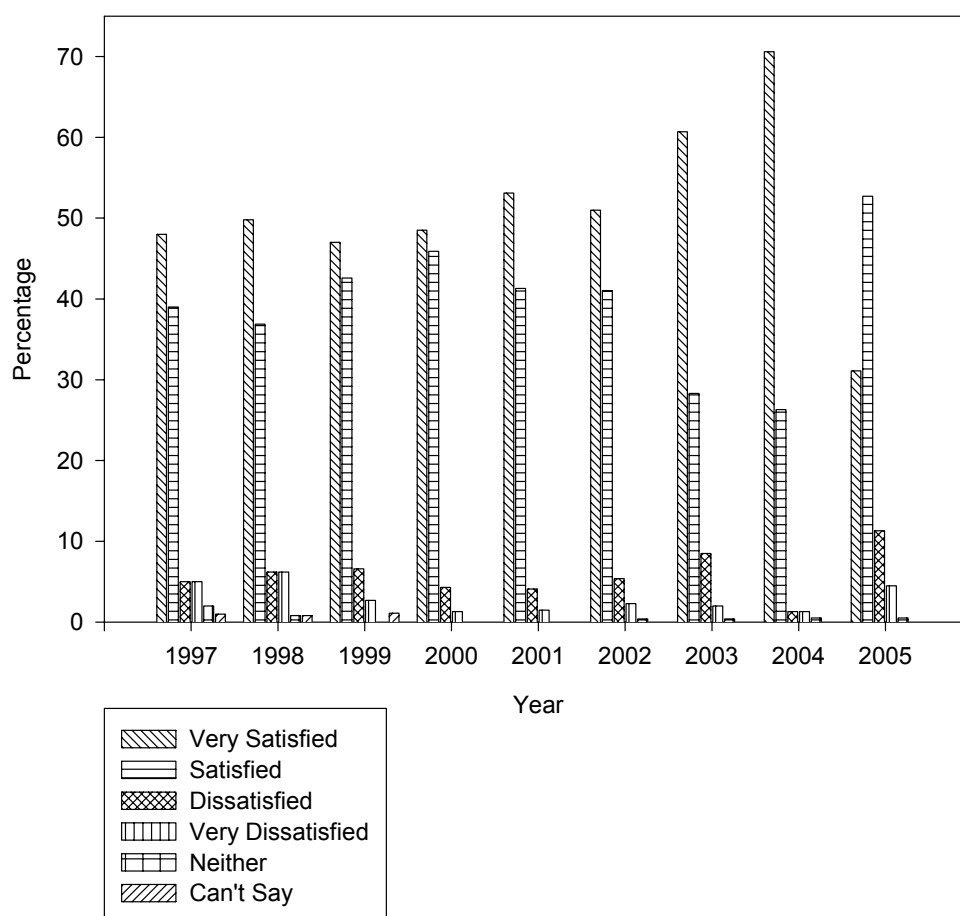


Figure 21: Satisfaction with the overall trip

3.12 Information about recreational fishing

Question 12a

In question 12a, respondents were asked: “Thinking about fishing regulations and other information to do with recreational fishing in W.A.... where do you find out about things to do with fishing?”

Half the fishers asked other fishers (52.2 per cent) about fishing regulations and other information to do with recreational fishing in Western Australia (Table 26).

Multiple responses were accepted.

Table 26: Information about fishing

| | Count | % |
|--|-------|------|
| Other fishers | 117 | 52.2 |
| Department of Fisheries brochures / publications | 87 | 38.8 |
| Newspapers | 52 | 23.2 |
| Tackle shops | 48 | 21.4 |
| Other | 23 | 10.3 |
| Fishing magazines | 14 | 6.3 |
| Department of Fisheries internet web site | 13 | 5.8 |
| Other fishing web sites | 12 | 5.4 |
| Department of Fisheries shows / displays | 10 | 4.5 |
| Television | 10 | 4.5 |
| Clubs / associations | 7 | 3.1 |
| Radio | 6 | 2.7 |
| None | 4 | 1.8 |
| Volunteer Fisheries Liaison Officers | 2 | 0.9 |

Some detail was collected about the ways fishers gain their information. Unfortunately, this information was very sparse.

Some fishers used the *Western Angler* magazine, the *West Australian* newspaper, the *Sunday Times* newspaper, local newspapers and the ABC to gain information about recreational fishing.

Question 12b

In question 12b, respondents were asked: “Which of these is the main way you find out about these things?”

Asking other fishers was the main way that a large number of respondents (41.2 per cent) found out about fishing regulations and other information to do with recreational fishing (Table 27).

Table 27: Main way information about fishing is found

| | Count | % |
|--|--------------|------------|
| Other fishers | 80 | 41.2 |
| Department of Fisheries brochures / publications | 39 | 20.1 |
| Newspapers | 25 | 12.9 |
| Tackle shops | 23 | 11.9 |
| Other | 7 | 3.6 |
| Department of Fisheries shows / displays | 5 | 2.6 |
| Fishing magazines | 4 | 2.1 |
| Other fishing web sites | 4 | 2.1 |
| Clubs / associations | 3 | 1.5 |
| Department of Fisheries web site | 2 | 1.0 |
| Television | 2 | 1.0 |
| Total | 194 | 100 |

3.13 Contact with the Department of Fisheries

Question 13a

In question 13a, respondents were asked: “During the past twelve months have you contacted the Department of Fisheries for any reason?”

Only 7.7 per cent of respondents had contacted the Department of Fisheries in the past twelve months (Table 28).

Table 28: Contacted the Department of Fisheries

| | Count | % |
|--------------|--------------|------------|
| Yes | 54 | 7.7 |
| No | 636 | 91.0 |
| Don't Know | 9 | 1.3 |
| Total | 699 | 100 |

Over the past ten years, there has been little change in the percentage of respondents that had contacted the Department of Fisheries (Figure 22).

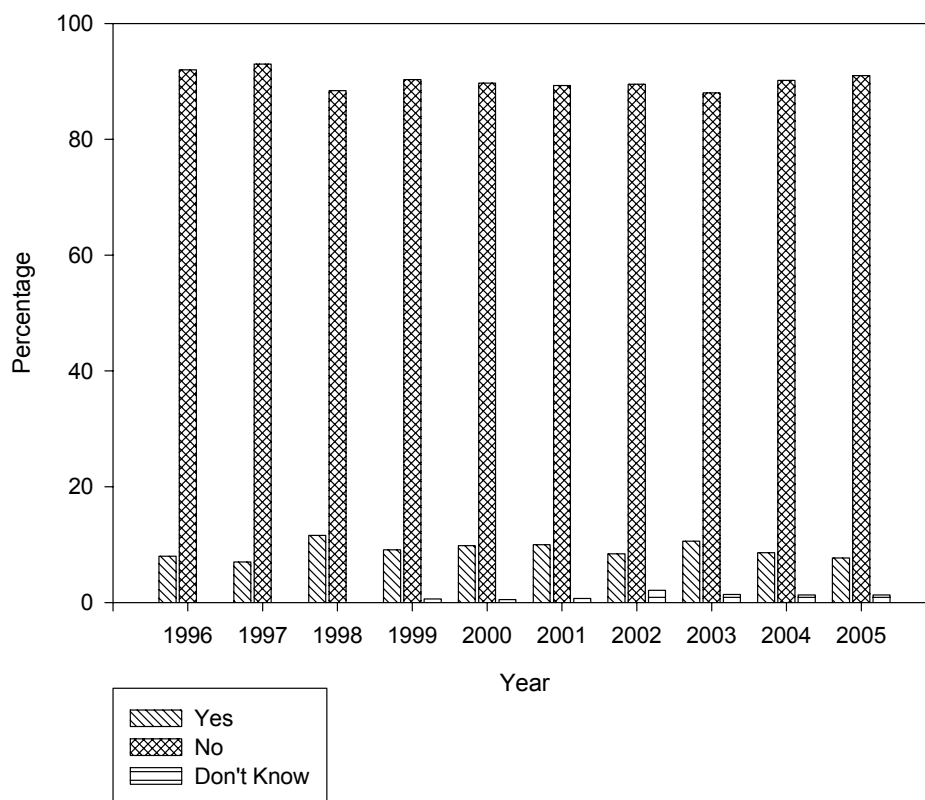


Figure 22: Contacted the Department of Fisheries

Question 13b

In question 13b, respondents were asked: “How did you make contact with the Department of Fisheries?”

Of the 54 people that contacted the Department of Fisheries in the past twelve months, 38.9 per cent contacted them in person and 38.9 per cent contacted them by telephone (Table 29).

Multiple responses were accepted.

Table 29: Ways contacted the Department of Fisheries

| | Count | % |
|-----------|-------|------|
| In person | 21 | 38.9 |
| Telephone | 21 | 38.9 |
| Internet | 7 | 13.0 |
| Mail | 3 | 5.6 |
| Email | 3 | 5.6 |

There has been little change in the way respondents have contacted the Department of Fisheries over the past two years (Figure 23).

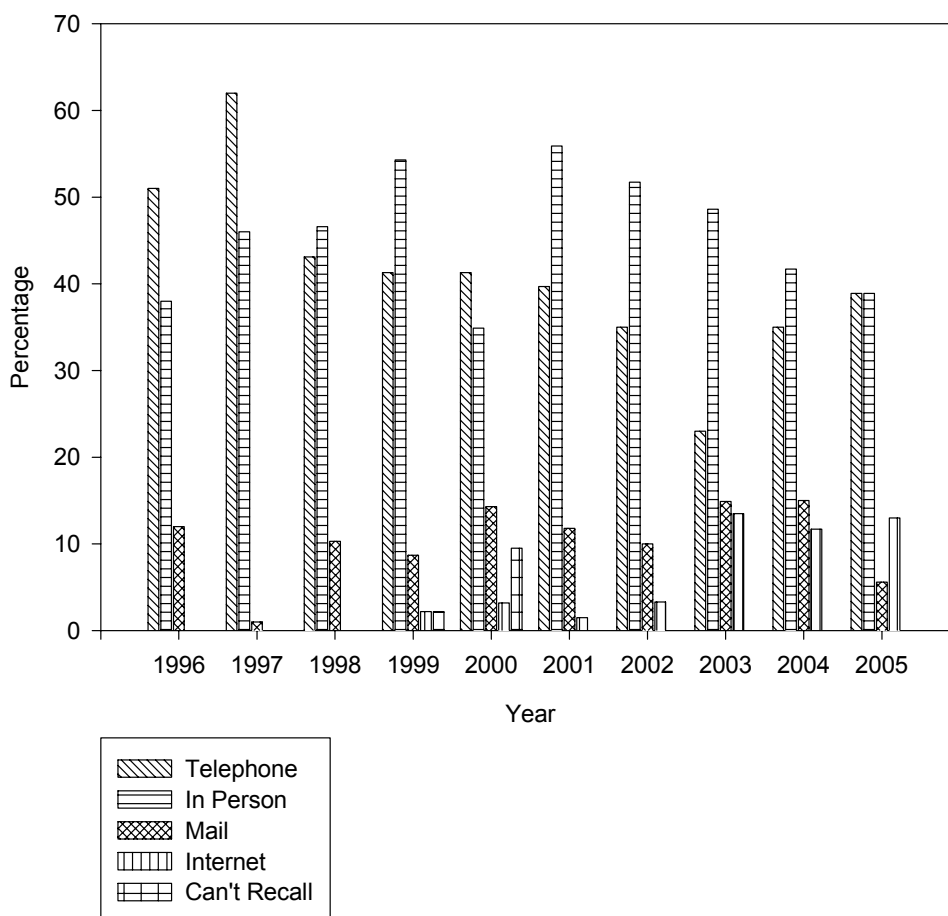


Figure 23: Ways contacted the Department of Fisheries

Question 13c

In question 13c, respondents were asked: “Considering all aspects of your contact with the Department of Fisheries, overall, how satisfied were you with the level of service you received?”

The majority of respondents that had contacted the Department of Fisheries were satisfied (43.1 per cent) or very satisfied (35.3 per cent) with the level of service they received (Table 30).

Table 30: Satisfaction with level of service

| | Count | % |
|-------------------|-----------|------------|
| Very Satisfied | 18 | 35.3 |
| Satisfied | 22 | 43.1 |
| Dissatisfied | 6 | 11.8 |
| Very Dissatisfied | 4 | 7.8 |
| Can't Say | 1 | 2.0 |
| Total | 51 | 100 |

Over the past year, there has been a slight increase in the proportion that was dissatisfied with the level of service they received (Figure 24).

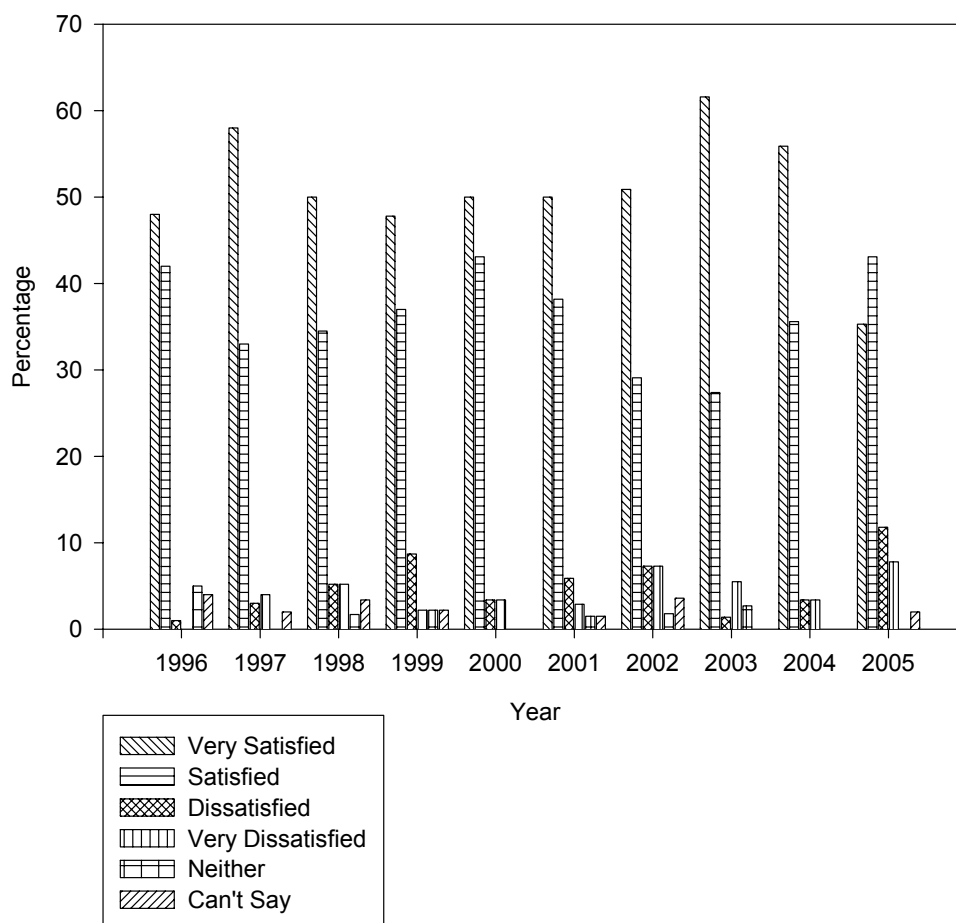


Figure 24: Satisfaction with level of service

3.14 Awareness of representatives of the Department of Fisheries

Question 14

In question 14, respondents were asked: “In the last 12 months, have you been approached or contacted by someone from the Department of Fisheries, or representatives of the Department of Fisheries such as Volunteer Fisheries Liaison Officers (VFLOs)?”

The majority of respondents (94.0 per cent) had not been approached or contacted by anyone from the Department of Fisheries (Table 31).

Multiple responses were accepted.

Table 31: Contacts from the Department of Fisheries

| | Count | % |
|---------------------------|-------|------|
| No / Can't Say | 657 | 94.0 |
| Yes - Department officers | 27 | 3.9 |
| Yes - Researchers | 7 | 1.0 |
| Yes - Other | 4 | 0.6 |
| Yes - VFLOs | 2 | 0.3 |

Over the past year, there has been a significant ($p < 0.05$) decrease in the proportion of respondents who have been contacted by Volunteer Fisheries Liaison Officers (Figure 25).

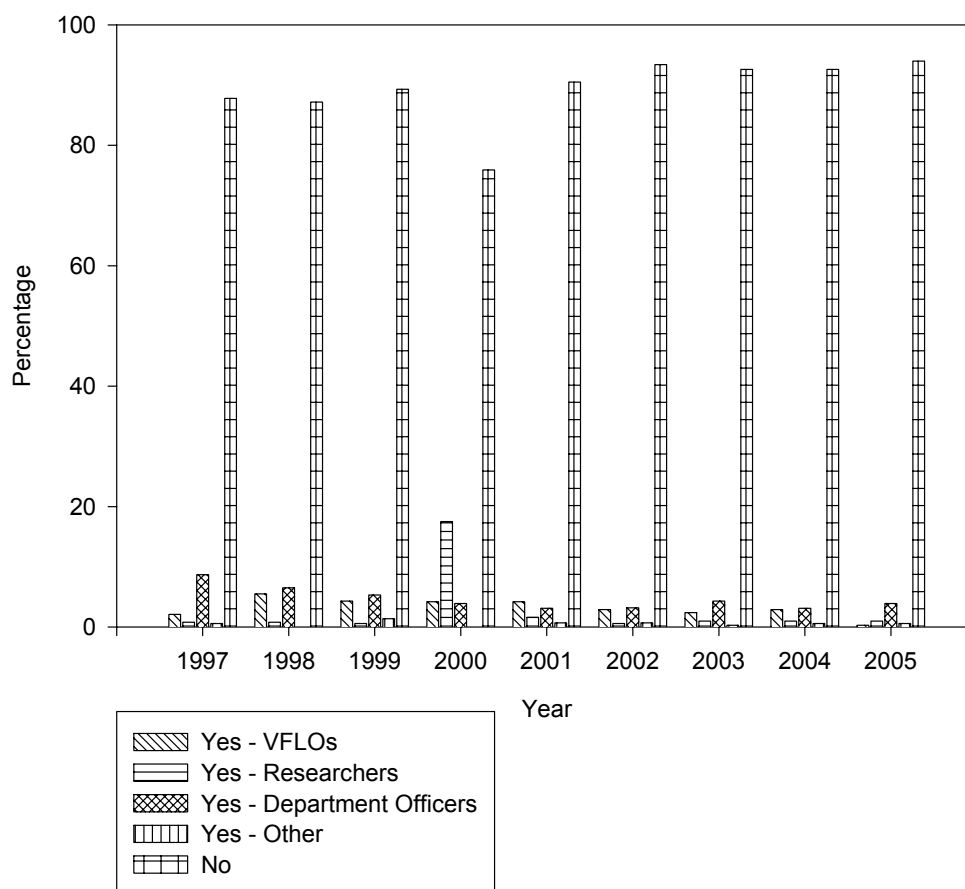


Figure 25: Contacts from the Department of Fisheries

3.15 Recollection of the Department of Fisheries

Question 15

In question 15, respondents were asked: “Do you recall, over the last twelve months, seeing or hearing anything about the Department of Fisheries in the media?”

Most respondents had recalled hearing or seeing of the Department of Fisheries in the media over the past twelve months, mostly from the television (51.2 per cent) and newspapers and magazines (34.6 per cent) (Table 32).

Multiple responses were accepted.

Table 32: Recollection of the Department of Fisheries in the media

| | Count | % |
|----------------------------|-------|------|
| Yes – Television | 379 | 51.2 |
| Yes – Newspapers/Magazines | 242 | 34.6 |
| No | 183 | 26.2 |
| Yes – Radio | 64 | 9.2 |
| Yes – Unsure | 27 | 3.9 |
| Yes – Internet | 3 | 0.4 |

Over the past year, there has been a slight decrease in the proportion that heard on the radio and a slight increase in the proportion of respondents who were unsure where they heard about the Department of Fisheries in the media (Figure 26).

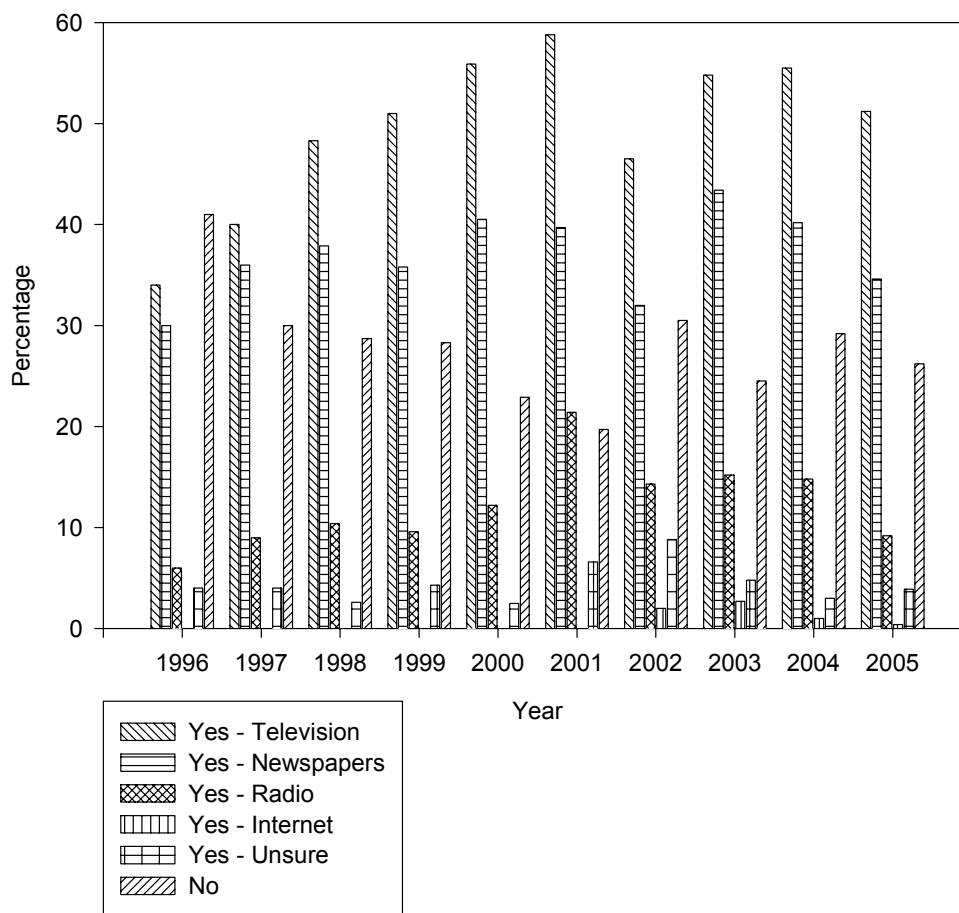


Figure 26: Recollection of the Department of Fisheries or the fishing industry in the media

3.16 Opinion on Aquaculture

Question 16a

In question 16a, respondents were asked: “Aquaculture is the farming of aquatic plants and animals. Do you feel that aquaculture is beneficial to the state?”

The majority of respondents felt that aquaculture was beneficial to the state (87.3 per cent) (Table 33).

Table 33: Benefit of aquaculture to the state

| | Count | % |
|--------------|------------|------------|
| Yes | 611 | 87.3 |
| No | 19 | 2.7 |
| Can't Say | 70 | 10.0 |
| Total | 700 | 100 |

Over the past year, there has been a significant increase ($p < 0.05$) in the proportion of respondents who did not consider aquaculture beneficial to the state and a decrease in the proportion that can't say (Figure 27).

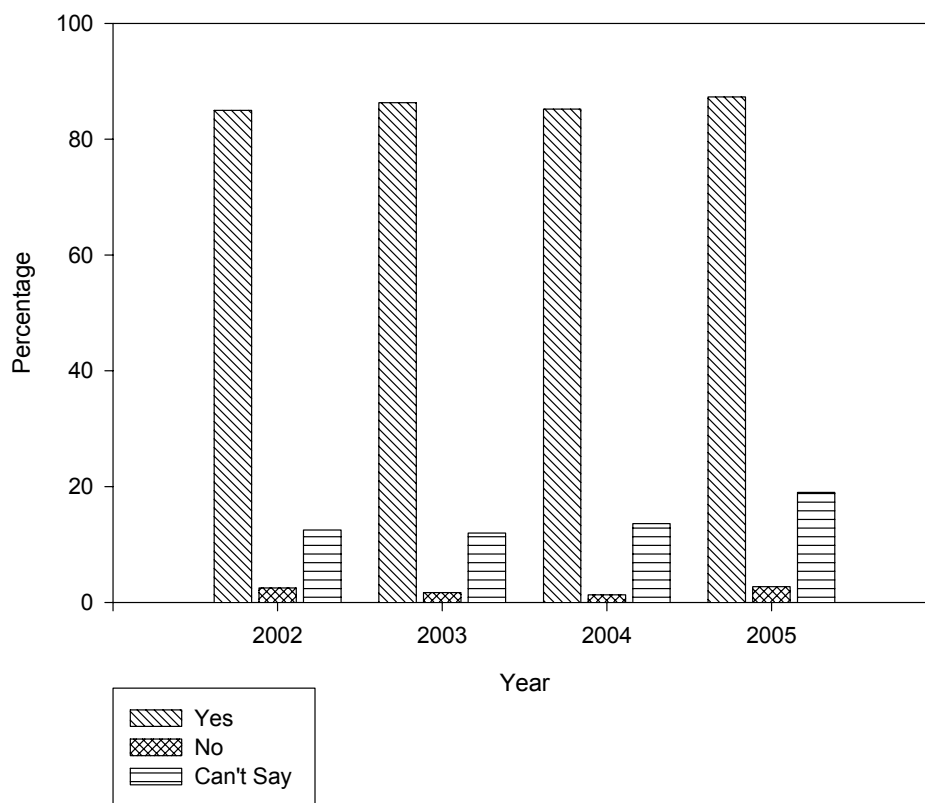


Figure 27: Benefit of aquaculture to the state

Question 16b

In question 16b, respondents were asked: “What do you think is the main benefit?”

Due to a data collection problem, multiple responses were collected for this question. The results are not valid and cannot be reported.

Question 16c

In question 16c, respondents were asked: “Do you think that aquaculture has any negative impacts?”

The majority of respondents felt that aquaculture had no negative impacts (56.1 per cent) Table 34).

Table 34: Negative impact of aquaculture

| | Count | % |
|--------------|------------|------------|
| Yes | 138 | 19.9 |
| No | 389 | 56.1 |
| Can't Say | 166 | 24.0 |
| Total | 693 | 100 |

Over the past three years, there has been little change in the proportion of respondents who thought that aquaculture had any negative impacts (Figure 28).

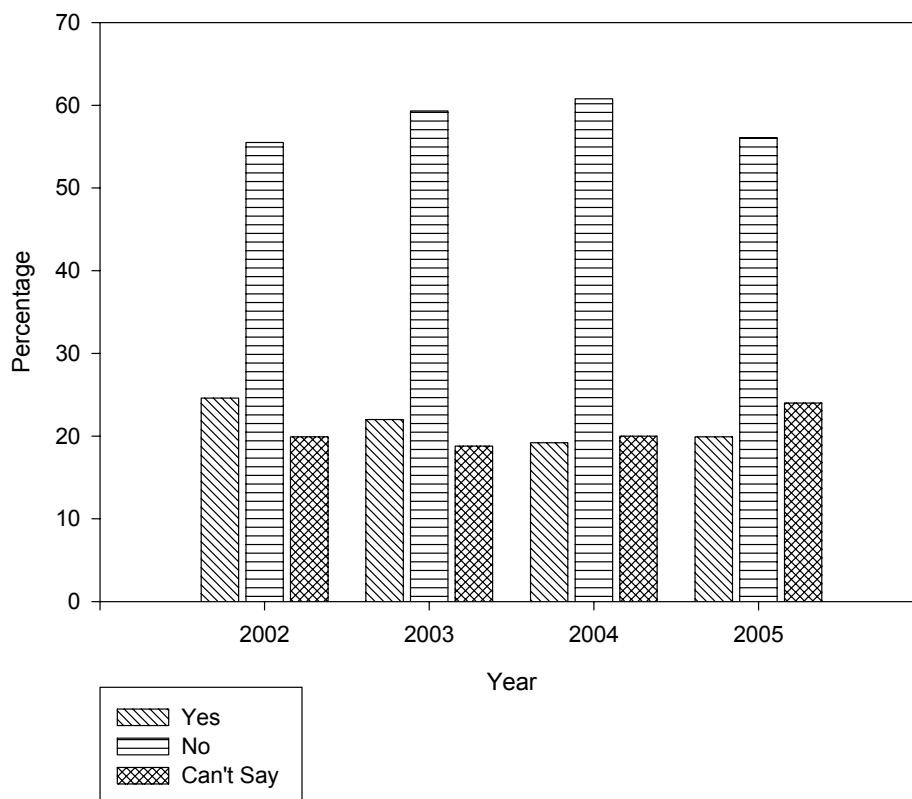


Figure 28: Negative impact of aquaculture

Question 16d

In question 16d, respondents were asked: “What do you think is the main negative impact?”

Of the respondents that felt that aquaculture had negative impacts, a large proportion considered that pollution (25.8 per cent) and the risk of disease (22.7 per cent) were the main negative impacts of aquaculture (Table 35).

Table 35: Negative impacts of aquaculture

| | Count | % |
|-----------------------|--------------|------------|
| Risk of disease | 30 | 22.7 |
| Pollution | 34 | 25.8 |
| Competition for space | 25 | 18.9 |
| Other | 22 | 16.7 |
| Can't Say | 15 | 11.4 |
| Economic viability | 6 | 4.5 |
| Total | 132 | 100 |

3.17 Demographics

Question 17

In question 17 respondents were asked: "Firstly, into which of these age groups do you fall?"

The age structure of respondents was significantly different ($p < 0.05$) to the population age structure of Western Australia (Table 36), mostly due to a lower proportion of respondents aged between 25 and 34 and a higher proportion of respondents aged between 55 and 64.

Table 36: Age categories

| | Count | % |
|-----------------|--------------|------------|
| 18 to 19 years | 26 | 3.7 |
| 20 to 24 years | 43 | 6.1 |
| 25 to 34 years | 84 | 12.0 |
| 35 to 44 years | 158 | 22.6 |
| 45 to 54 years | 137 | 19.6 |
| 55 to 64 years | 117 | 16.7 |
| 65 years & over | 122 | 17.4 |
| Unknown | 13 | 1.9 |
| Total | 700 | 100 |

Question 18

In question 18 respondents were asked: "Which of the following categories best describes what you currently do?"

A large number of respondents (44.7 per cent) were employed in full-time work (Table 37). Some were retired or aged pensioners (21.4 per cent) and others involved in part-time work (16.9 per cent). The activity structure of respondents was significantly different ($p < 0.05$) to the population activity structure of Western Australia, possibly due to the low number of people doing home duties and the high number of retired and aged pensioner respondents.

Table 37: Activity structure

| | Count | % |
|---|--------------|------------|
| Full - time work in a job or business | 313 | 44.7 |
| Part - time or casual work in a job or business | 118 | 16.9 |
| Full - time student | 28 | 4.0 |
| Looking for work | 18 | 2.6 |
| Retired or aged pensioner | 150 | 21.4 |
| Other pensioner | 13 | 1.8 |
| Home duties | 53 | 7.6 |
| Unknown | 7 | 1.0 |
| Total | 700 | 100 |

Question 19

In question 19 respondents were asked: “What kind of work do you do?”

There were 313 respondents employed in a full or part-time capacity. Of these, 21.7 per cent were professionals, 15.5 per cent were tradespersons and 11.1 per cent were technicians and associated professionals (Table 38). There was no significant difference between the employment structure of respondents and the population employment structure of Western Australia.

Table 38: Type of work

| | Count | % |
|--|--------------|------------|
| Managers | 20 | 5.4 |
| Professionals | 80 | 21.6 |
| Technicians and associated professionals | 41 | 11.0 |
| Tradespersons | 57 | 15.4 |
| Production, plant and transport operators | 38 | 10.2 |
| Clerical, sales and service - advanced, intermediate | 60 | 16.2 |
| Clerical, sales and service – elementary | 41 | 11.1 |
| Labourers, process workers, cleaners etc | 29 | 7.8 |
| Refused | 5 | 1.3 |
| Total | 371 | 100 |

Question 20

In question 20 respondents were asked: “What is the postcode of the suburb/town in which you live?”

Question 21

In question 21, the sex of the respondent was recorded.

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5.0 APPENDICES

5.1 Appendix A: Survey Questionnaire Form

Department of Fisheries Community Survey

Good (.....) my name is (.....) from Asset Research. We are currently conducting research into coastal and marine areas in Western Australia.

May I please speak to the person in the household who is older than 17 years of age and whose birthday is closest to today's date.

Q1 Thinking back over the last twelve months, have you done any recreational fishing, including angling, crabbing, prawning, spearfishing, collecting abalone or aquarium fish? [Other Recreational Fishing may include Marron, Netting, Oysters, Rock Lobsters]

YES 1
 NO 2 → Q3
 DON'T KNOW 9 → Q3

Q2 In the last 12 months, in what areas have you been fishing? How many days did you go fishing?

| | | Days |
|---|------------------------------|----------------------|
| South Coast – Marine (east of Augusta to the South Australian border) | <input type="checkbox"/> 1 ▶ | <input type="text"/> |
| Southern Inland – Freshwater | <input type="checkbox"/> 2 ▶ | <input type="text"/> |
| Perth Metropolitan (Yanchep to Mandurah) | <input type="checkbox"/> 3 ▶ | <input type="text"/> |
| West Coast – Augusta to Kalbarri (other than Perth Metropolitan) | <input type="checkbox"/> 4 ▶ | <input type="text"/> |
| Gascoyne (north of Kalbarri to south of Onslow) | <input type="checkbox"/> 5 ▶ | <input type="text"/> |
| Pilbara / Kimberley – Marine (Onslow to Broome) | <input type="checkbox"/> 6 ▶ | <input type="text"/> |
| Pilbara / Kimberley Inland – Freshwater | <input type="checkbox"/> 7 ▶ | <input type="text"/> |
| CAN'T SAY | <input type="checkbox"/> 9 | |

Q3 Also, thinking back over the last twelve months, have you gone snorkelling or diving just to look at fish and the marine environment rather than to capture fish or other animals?

YES 1
 NO 2
 DON'T KNOW 9

Q4a Who, if anyone, do you think is responsible for managing commercial fishing in WA?

| | | |
|----------------------------|----------------------------|-------|
| DEPARTMENT OF FISHERIES | <input type="checkbox"/> 1 | } Q5a |
| LOCAL COUNCIL/SHIRE | <input type="checkbox"/> 2 | |
| STATE GOVERNMENT | <input type="checkbox"/> 3 | |
| DEPARTMENT OF AGRICULTURE | <input type="checkbox"/> 4 | |
| CALM | <input type="checkbox"/> 5 | |
| MARINE & HARBOUR | <input type="checkbox"/> 6 | |
| WATERS & RIVERS COMMISSION | <input type="checkbox"/> 7 | |
| DON'T KNOW | <input type="checkbox"/> 9 | |
| OTHER _____ | | |

Q4b There are a number of rules and regulations in place, which limits catch size, allowable fishing days and designated areas to fish. How would you rate Department of Fisheries in their management of **commercial fisheries**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q5a Who, if anyone, is responsible for managing recreational fishing in WA?

- DEPARTMENT OF FISHERIES 1
 - LOCAL COUNCIL/SHIRE 2
 - STATE GOVERNMENT 3
 - DEPARTMENT OF AGRICULTURE 4
 - CALM 5
 - MARINE & HARBOUR 6
 - WATERS & RIVERS COMMISSION 7
 - DON'T KNOW 9
 - OTHER _____
- } Q6a

Q5b Limits have been set on size, type of species that can be caught, as well as season limits etc. How would you rate Department of Fisheries in their management of **recreational fisheries**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q6a When you think about the fish habitat in oceans and waterways in WA, that is, where fish live and breed, who, if anyone, do you think is responsible for protecting the fish habitat?

- DEPARTMENT OF FISHERIES 1
 - LOCAL COUNCIL/SHIRE 2
 - STATE GOVERNMENT 3
 - DEPARTMENT OF AGRICULTURE 4
 - CALM 5
 - MARINE & HARBOUR 6
 - WATERS & RIVERS COMMISSION 7
 - DON'T KNOW 9
 - OTHER _____
- } Q7a

Q6b How would you rate the Department of Fisheries in their conservation and protection of the **fish habitat**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q7a When you think about aquaculture, pearling, or fish farming in WA, who do you think, if anyone, is responsible for managing aquaculture?

- | | | |
|----------------------------|---------------------------------------|------|
| DEPARTMENT OF FISHERIES | <input checked="" type="checkbox"/> 1 | } Q8 |
| LOCAL COUNCIL/SHIRE | <input type="checkbox"/> 2 | |
| STATE GOVERNMENT | <input type="checkbox"/> 3 | |
| DEPARTMENT OF AGRICULTURE | <input type="checkbox"/> 4 | |
| CALM | <input type="checkbox"/> 5 | |
| MARINE & HARBOUR | <input type="checkbox"/> 6 | |
| WATERS & RIVERS COMMISSION | <input type="checkbox"/> 7 | |
| DON'T KNOW | <input type="checkbox"/> 9 | |
| OTHER _____ | | |

Q7b The Department of Fisheries provides information such as advising on technology, identifying suitable sites and conducting and supporting research. How would you rate the Department of Fisheries in their management and development of **aquaculture** and **pearling**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q8 The Department of Fisheries is responsible for recreational fishing, commercial fishing, aquaculture and protecting the fish habitat. In your opinion, do you think the Department of Fisheries manages the **share of fish resources** fairly between these sectors?

- YES 1
- NO 2
- CAN'T SAY 9

Q9 Before today, were you aware that there are recreational fishing rules that apply when fishing in Western Australian waters?

- YES 1
- NO 2

Sequence Guide

If has been recreational fishing ('1' in Q1a)

→ Q10a

Otherwise

→ Q13a [PAGE 5]

Thinking back to the last time you went fishing, can you tell me how knowledgeable you were on the following:

- Q10a Firstly, the bag and size limits for the fish you were planning to catch?
 Q10b The best ways to catch the fish you were after (eg: method, bait, hooks)?
 Q10c The habits of the fish you were after (eg: where found, when feeding)?

- | | |
|------------------------|---|
| Very knowledgeable | 1 |
| Fairly knowledgeable | 2 |
| Not very knowledgeable | 3 |
| CAN'T SAY | 9 |

Still thinking about the last time you went fishing. How satisfied were you with the following:

- Q11a The number of fish you caught?
 Q11b The variety of fish you caught?
 Q11c The size of the fish you caught?
 Q11d The environment where you were fishing?
 Q11e And thinking of the trip overall, how satisfied were you with that fishing trip?

- | | |
|-------------------|---|
| Very Satisfied | 1 |
| Satisfied | 2 |
| Dissatisfied | 3 |
| Very Dissatisfied | 4 |
| NEITHER | 5 |
| CAN'T SAY | 9 |

Q12a Thinking about fishing regulations and other information to do with recreational fishing in WA ... where do you find out about things to do with fishing? PROBE: Which ones?

- | | |
|--|----|
| DEPARTMENT OF FISHERIES BROCHURES /STICKERS / PUBLICATIONS | 1 |
| DEPARTMENT OF FISHERIES SHOWS / DISPLAYS | 2 |
| DEPARTMENT OF FISHERIES INTERNET WEB SITE | 3 |
| OTHER FISHING WEB SITES _____ | 4 |
| FISHING MAGAZINES _____ | 5 |
| NEWSPAPERS _____ | 6 |
| TELEVISION _____ | 7 |
| RADIO _____ | 8 |
| TACKLE SHOP | 9 |
| CLUBS / ASSOCIATIONS | 10 |
| DEPARTMENT OF FISHERIES OFFICERS / RESEARCHERS / VOLUNTEER FISHERIES LIAISON OFFICERS | 11 |
| OTHER FISHERS | 12 |
| NONE | 13 |
| OTHER _____ | |

Q12b Which of these is the main way you find out about these things?

Q13a During the past 12 months have you contacted the Department of Fisheries for any reason?

- YES 1
 NO 2 → Q14
 DON'T KNOW 9 → Q14

Q13b How did you make contact with the Department of Fisheries?

- Telephone 1
 In person 2
 Mail 3
 Fax 4
 Email 5
 Internet 6
 DON'T KNOW / CAN'T RECALL 9
 OTHER _____

Q13c Considering all aspects of your contact with the Department of Fisheries, overall, how satisfied were you with the level of service you received?

- Very Satisfied 1
 Satisfied 2
 Dissatisfied 3
 Very Dissatisfied 4
 NEITHER 5
 DON'T KNOW 9
 NOT RELEVANT 10

Q14 In the last 12 months, have you been approached or contacted by someone from Department of Fisheries, or representatives of Department of Fisheries such as Volunteer Fisheries Liaison Officers?

- YES - VFLO's (Yellow Shirts) 1
 YES - Researchers (Red Shirts) 2
 YES - Department officers (Uniforms) 3
 YES - OTHER _____
 NO / CAN'T SAY 9

Q15 Do you recall over the last twelve months seeing or hearing anything about the Department of Fisheries in the media?

- YES - TV 1
 YES - Newspapers/Magazines 2
 YES - Radio 3
 YES - Internet 4
 YES - UNSURE WHERE 5
 NO / UNSURE 9

Q16a Aquaculture is the farming of aquatic plants and animals. Do you feel that aquaculture is beneficial to the state?

- YES 1
- NO 2 → Q16c
- DON'T KNOW 9 → Q16c

Q16b What do you think is the main benefit of aquaculture?

- Relieves pressure on wild fish stocks 1
- Provides fresh seafood 2
- Provides consumers with greater range and availability of seafood 3
- Provides regional employment and economic development 4
- DON'T KNOW 9
- OTHER _____

Q16c Do you feel that aquaculture has any negative impacts to the state?

- YES 1
- NO 2 → Q17
- DON'T KNOW 9 → Q17

Q16d What do you think is the main negative impact?

- Risk of disease 1
- Pollution 2
- Competition for space 3
- Economic viability 4
- DON'T KNOW 9
- OTHER _____

Finally to make sure we've spoken to a cross section of people I would like to ask you some questions about yourself.

Q17 Firstly, into which of these age groups do you fall?

- 18 to 19 years 1
- 20 to 24 years 2
- 25 to 34 years 3
- 35 to 44 years 4
- 45 to 54 years 5
- 55 to 64 years 6
- 65 years & over 7
- REFUSED 8

Q18 Which of the following categories best describes what you currently do?

- Full - time work in a job or business 1
 - Part - time work in a job or business 2
 - Full - time student 3
 - Looking for work 4
 - Retired or aged pensioner 5
 - Other pensioner 6
 - Home duties 7
 - OTHER _____
- } Q20

Q19 What kind of work do you do?

- Managers 1
- Professionals 2
- Technicians and associated professionals 3
- Tradespersons 4
- Production, plant and transport operators 5
- Clerical, sales and service - advanced, intermediate 6
- Clerical, sales and service - elementary 7
- Labourers, process workers, cleaners etc. 8
- OTHER _____

Would you mind telling me your first name?

(Just in case my supervisor wants to check that the work was done properly.)

RECORD NAME ON FORM

Q20 POSTCODE

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Q21 SEX

- MALE 1
- FEMALE 2 ◀ END

Thank you for your time!

STAMP YOUR NAME ON THE TOP LEFT HAND CORNER. ENTER SAMPLE NUMBER IN THE RIGHT HAND CORNER.

5.2 Appendix B: Survey Answer Form

Department of Fisheries

Community Survey 2005

Respondent Name: _____

| Response Report | |
|-----------------|---|
| Fully Responded | 1 |
| Part Refusal | 3 |

Interviewer Name

Sample No

Postcode

Sex M F

Q1 1 2 9

Q2 1

2

3

4

5

6

7 9

Q3 1 2 9

Q4a 1 2 3 4 5 6 7 9

OTHER _____

Q4b 1 2 3 4 5 9

Q5a 1 2 3 4 5 6 7 9

OTHER _____

Q5b 1 2 3 4 5 9

Q6a 1 2 3 4 5 6 7 9

OTHER _____

Q6b 1 2 3 4 5 9

Q7a 1 2 3 4 5 6 7 9

OTHER _____

Q7b 1 2 3 4 5 9

Q8 1 2 9

Q9 1 2

Q10a 1 2 3 9

Q10b 1 2 3 9

Q10c 1 2 3 9

Q11a 1 2 3 4 5 9

Q11b 1 2 3 4 5 9

Q11c 1 2 3 4 5 9

Q11d 1 2 3 4 5 9

Q11e 1 2 3 4 5 9

Q12a 1 2 3

4 _____

5 _____

6 _____

7 _____

8 _____

9 10 11 12 13

OTHER _____

Q12b

Q13a 1 2 9

Q13b 1 2 3 4 5 6 9

OTHER _____

Q13c 1 2 3 4 5 9 10

Q14 1 2 3 9

OTHER _____

Q15 1 2 3 4 5 9

Q16a 1 2 9

Q16b 1 2 3 4 9

Q16c 1 2 9

Q16d 1 2 3 4 9

OTHER _____

Q17 1 2 3 4 5 6 7 8

Q18 1 2 3 4 5 6 7

OTHER _____

Q19 1 2 3 4 5 6 7 8

OTHER _____

Respondent Name: _____