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Department of Conservation and Land Management

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# **FITZGERALD RIVER NATIONAL PARK**

**VISITOR SURVEY**

**November 1987 - April 1988**

**Matt Cavana  
Sue Moore**

**September 1988**



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## **ACKNOWLEDGEMENTS**

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## **CONTENTS**

	Page
<b>SUMMARY</b>	1
<b>A. INTRODUCTION</b>	3
A.1 AIM	3
A.2 OBJECTIVES	3
A.3 METHODS	3
<b>B. RESULTS</b>	4
B.1 Visitor Survey	4
B.2 Traffic Counters	5
B.3 Recreation Site Survey	6
<b>C. DISCUSSION</b>	10
C.1 Visitor Numbers	10
C.2 Visitor Age and Origin	11
C.3 Method of Travel	12
C.4 Group Size	12
C.5 Length of Visit	13
C.6 Accommodation	13
C.7 Visitor Activities	14
C.8 Main Purpose of Trip	15
C.9 Preferred Times of Year	15
C.10 Future Management Options	15
C.11 Places Visited	17
C.12 Places Camped	19
C.13 Access Routes	20
C.14 Expenditure	21
C.15 Entrance Fees	22
C.16 Visitor Comments	23
C.17 Recreation Sites	23
<b>APPENDICES</b>	
Appendix 1. Summary of responses to the Visitor Survey	29
Appendix 2. Vehicle and tent capacities for recreation sites	33
Appendix 3. Accessories recorded	34

**FIGURES**

Figure 1.	Traffic Counter Records : Nov. 1987 - Apr. 1988	6
Figure 2.	Fitzgerald Inlet - Average and Peak No.s of Vehicle	8
Figure 3.	Four Mile Beach - Average and Peak No.s of Vehicles	8
Figure 4.	Hamersley Beach - Average and Peak No.s of Vehicles	8
Figure 5.	Hamersley Inlet - Average and Peak No.s of Vehicles	8
Figure 6.	Mylies Beach - Average and Peak No.s of Vehicles	8
Figure 7.	Point Ann - Average and Peak No.s of Vehicles	8
Figure 8.	Quoin Head - Average and Peak No.s of Vehicles	8
Figure 9.	Western End - Average Numbers of Vehicles	9
Figure 10.	Eastern End - Average Numbers of Vehicles	9
Figure 11.	Average Numbers of Tents : Nov. 1987 - Apr. 1988	9
Figure 12.	Number of Visitors Each Month	10
Figure 13.	Age and Origin of Visitors	11
Figure 14.	Activities Undertaken in the Park	14
Figure 15.	Traffic Flow Diagram Based on Observations Recorded 23-26 January 1988	20

**TABLES**

Table 1.	Number of Vehicles in Fitzgerald River National Park: Nov. 1987 - Apr. 1988	6
Table 2.	Seasonal Preferences Indicated by Visitors	15
Table 3.	Campsites Used and Average Number of Camp Nights	19
Table 4.	Average Expenditure per Visitor	21
Table 5.	Summary of Visitor "Likes"	25
Table 6.	Summary of Visitor "Dislikes"	26
Table 7.	Summary of "Suggested Improvements"	27
Table 8.	Summary of "Further Comments"	28

## SUMMARY

The scenery, views, wildflowers, wildlife and unspoilt natural beauty of Fitzgerald River National Park were appreciated by many visitors. The coast with its beaches, scenery, fishing and swimming was a popular destination.

The total number of visitor days spent in the Park November 1987 - April 1988 (6 months) was 16570. Of these, 4714 visited the western end and 11856 visited the east. Peak visitor numbers were recorded in January with 8030 visitor days.

The majority of Park visitors came from Perth (39 %) and surrounding country areas (29 %). Surprisingly few visitors came from the Shires of Jerramungup and Ravensthorpe (14 %). 18 % were from interstate and overseas.

Most people visited the Park with their families (51 %) or friends (27 %). Less than half of these camped in the Park. The majority of people camping in the Park stayed 2-3 nights and preferred basic bush camping remote from other groups. Caravan parks were the most popular form of accommodation outside the Park.

Equal numbers of visitors had 2WDs and 4WDs. 61 % thought that it was important to have some areas accessible only to 4WDs. The biggest concern expressed by Park visitors was the condition of the roads, particularly Hamersley and Pabelup Drives.

The most popular activities were sightseeing (68 %), bushwalking (46 %) and photography (43 %). Although these were not water-based activities, all three utilise the coastline and coastal sites. Other popular activities included camping (40 %), swimming (40 %), fishing (36 %) and nature study (32 %).

The most frequently visited site in the western end of the Park was Point Ann, and in the eastern end, all 2WD-accessible sites between Four Mile Beach and Hamersley Inlet. The site capacity of most of these, plus Dempster Beach, St Marys and Smokehouse Landing, was exceeded during peak use periods.

The most popular campsites were Fitzgerald Inlet and Point Ann in the west, and Four Mile and Mylies in the east. Site capacity was exceeded during peak periods at Fitzgerald Inlet, Point Ann and St Marys.

The majority of people noted that it was important - very important to learn more about nature, particularly from information boards and pamphlets (81 %).

Estimated expenditure over the 6 months (November 1987 - April 1988) by Park visitors was \$6000 in Ravensthorpe, \$7000 in Jerramungup, \$16000 in Hopetoun and \$8000 in Bremer Bay.

Two-thirds of visitors were willing to pay an entrance fee, generally of \$2 per vehicle. Local people supported an annual or seasonal pass.

## **A. INTRODUCTION**

The Fitzgerald River National Park (area 242 804 ha) lies on the south coast of Western Australia between the towns of Bremer Bay and Hopetoun. The Park is vested in the National Parks and Nature Conservation Authority, and is managed by the Department of Conservation and Land Management (CALM).

The Park is one of the most biologically important areas in the State and is one of only two international biosphere reserves in Western Australia.

Late in 1987, the Department convened a planning team to produce a management plan for the area. An Advisory Committee, with 11 representatives of the community, was appointed to provide advice on preparation of the management plan. In order to gather information about visitor use patterns and to stimulate public involvement in the planning process, a visitor survey was conducted in the Park from November 1987 to April 1988.

The results of the survey and their implications for park management are discussed in this report.

### **A.1 AIM**

The study sought to obtain information on visitor preferences and how they use the Park.

### **A.2 OBJECTIVES**

The objectives of the survey were to :

1. define a profile of Park visitors
2. identify patterns of visitor use
3. gather visitor attitudes and opinions about the Park
4. determine implications for park management from this study

### **A.3 METHODS**

#### **Data Collection**

A comprehensive questionnaire-based survey of visitors to the Park was conducted between November 1987 and April 1988. Two questionnaire formats were pilot tested in November 1987 and consequently amended to the final format (App. 1). Questionnaires were available from boxes at the Park entry



points and were distributed opportunistically by rangers. They were also distributed by site-based surveyors at various peak use periods. Completed questionnaires were collected in boxes placed at the Park exits. Questionnaires were available December 1987 - April 1988 inclusive.

In order to obtain data on vehicle movement within the Park, eight pneumatic traffic counters were installed on the major access tracks in November 1987. Minor problems with three of the counters have influenced the final results. A fourth counter was repeatedly crossed by road-grading vehicles during May and April which consequently augmented the true count.

Recreation site information was recorded by rangers, as part of their regular patrols, for seven of the most popular sites over the period December 1987 - April 1988 inclusive. Additionally, site details were recorded across the Park by departmental staff and volunteers on four weekends during the survey period. The survey weekends were:

- 13-15 November 1987 (low level of use)
- 9-10 January 1988 (high level of use - school holidays)
- 23-26 January 1988 (peak use - January long weekend)
- 2-3 April 1988 (peak use - Easter)

This method allowed a quantitative assessment of visitor numbers and vehicle numbers at each site, over a range of use levels.

### Data Processing

The information gathered from the survey questionnaires was encoded and entered onto a Perkin-Elmer computer. An SPSS-X package was used to analyse the data which has been graphically presented in this report via the Cricket-Graph software on a Macintosh SE computer. All visitor comments were sorted and analysed manually. Observation data gathered on the Australia Day long weekend, 23-26 January 1988, was analysed on an IBM personal computer using Dbase III+ software.

## **B. RESULTS**

### **B.1 VISITOR SURVEY**

A total of 723 questionnaires were collected over the survey period. This represents a return rate of 34 %. A much greater and more diverse sample could have been obtained had the survey period covered a full year. Inclusion of the spring months would have included many wildflower enthusiasts who visit the

Park at this time of year.

A summary of visitors' responses to the questionnaire is given in Appendix 1. The implications for management arising from each response are discussed in later sections of this report. Questions 1-7, 9 and 17 were straight forward multiple choice questions requiring one answer only. Some confusion arose when visitors completed the survey form on behalf of a group of people. Questions 8, 10, 11 and 13 allowed for more than one answer, each being depicted as a proportion (%) of the total number of responses. The map question 12 was completed by only 50 % of respondents. The results of this question are shown as a proportion of the completed forms only. Questions 14,15, 16 and 19 sought written comments from visitors. These were manually analysed and are shown in Tables 5 to 8.

## **B.2 TRAFFIC COUNTERS**

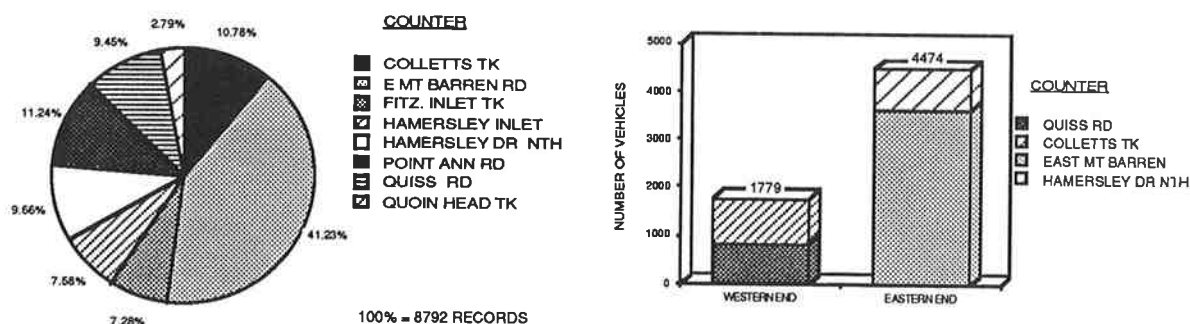
Weekly readings were compiled to give monthly records for the duration of the survey period (Table 1, Fig. 1). Each count was corrected for traverses made by Park rangers and other departmental staff. The traffic counters recorded one unit for every two axles crossing it, ie. one unit per vehicle for conventional vehicles. This figure was then divided by 2 for counters placed on spur roads to allow for both entry and exit of the same vehicle. The counters on these spur roads were removed at the end of April 1988.

During the weekend 23-26 January 1988, observers at the Colletts Track, Quiss Rd, Hamersley Dr North, and East Mt Barren counters recorded vehicle numbers, vehicle registrations, visitors per vehicle and whether they were entering or leaving the Park. The proportion of vehicles entering the Park at each location was estimated from this data - Colletts Track 47% entries, Quiss Road 54% entries, East Mt Barren 50% entries and Hamersley Drive North 50% entries. The recorded traffic counts from the counters at these locations were corrected accordingly.

**TABLE 1. NUMBER OF VEHICLES IN FITZGERALD RIVER NATIONAL PARK  
NOVEMBER 1987 - APRIL 1988**

<u>TRAFFIC COUNTER</u>	<u>MONTH</u>						TOTAL
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
<u>Entrance / Exit Roads</u>							
Colletts Track	56	84	349	170	118	171	948
Quiss Road	50	68	230	111	130	242	831
East Mt Barren	357	436	1879	360	162	431	3625
Hamersley Drive North	72	106	572?	31	47	21	849
TOTAL	535	694	3030	672	457	865	6253
<u>Spur Roads</u>							
Point Ann	49	66	401	179	125	164	984
Fitzgerald Inlet	9	27	251	45	212*	96*	640
Hamersley Inlet	100	122?	232?	63	99	50	666
Quoin Head	30	28	123	17	33	14	245

NOTE : ? malfunction problems with counter (  $\pm 10\%$  error )  
 \* contractors constantly moving over counter from 9 March to 15 April.



**FIGURE 1. TRAFFIC COUNTER RECORDS : NOV. 1987 - APR. 1988**

### B.3 RECREATION SITE SURVEY

Figures 2 to 8 detail the information gathered on vehicle numbers for the seven main sites surveyed by the rangers. The peak number of vehicles exceeded the capacity of the site at Four Mile Beach, Mylies Beach, Hamersley Inlet and Point Ann. Data gathered by other departmental staff for the 28 sites across the Park is depicted in Figures 9 and 10. For these sites, peak number of vehicles

exceeded the site capacity at Barrens Beach, Dempster Beach, Four Mile, Hamersley Inlet, Mylies Beach, Point Ann, St. Marys River, Smokehouse Landing and West Beach. Vehicle capacity was reached at Quoin Head (App. 2). At average levels of use no sites's capacity was exceeded.

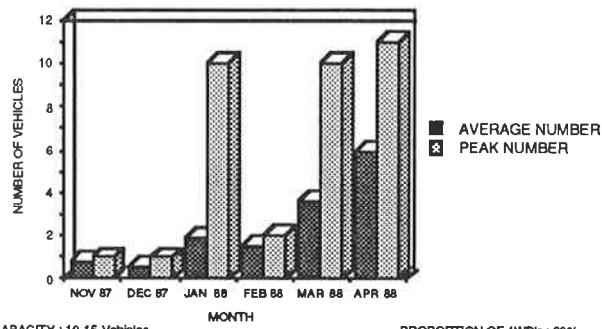
The same applied for numbers of tents - at average levels of use no site's capacity was exceeded. Figure 11 indicates average levels of use across all camping sites. During peak periods site capacity was exceeded at Point Ann, St Marys and Fitzgerald Inlet, and reached at Dempster Beach and Four Mile Beach. Fitzgerald Inlet and Dempster Beach are popular sites for four-wheel-drive clubs and enthusiasts while Point Ann, Mylies Beach and Four Mile Beach are popular sites for families with two-wheel-drive vehicles.

Aluminium or rubber dinghies were popular accessories (App. 3). This highlights the importance of water-based recreation to Park visitors. Only two visitors, however, suggested that a boat ramp should be installed.

Recreation sites are discussed in Section C.17.

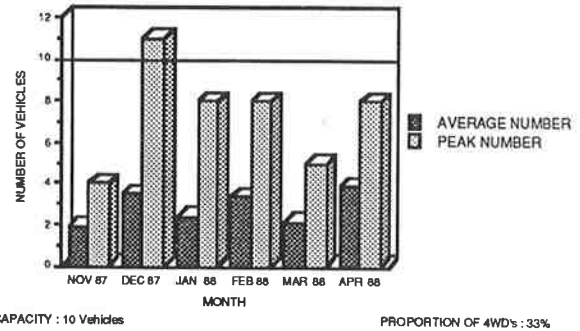
**FIGURE 2.**

**FITZGERALD INLET - AVERAGE AND PEAK NO.S OF VEHICLES**



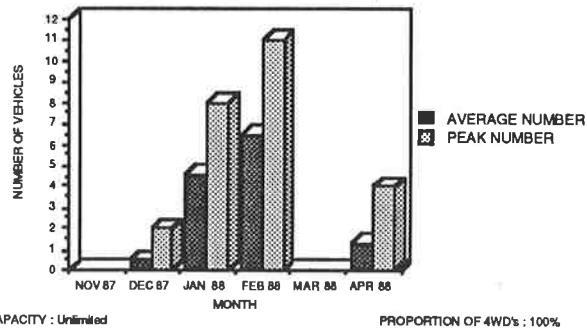
**FIGURE 3.**

**FOUR MILE BEACH - AVERAGE AND PEAK NO.S OF VEHICLES**



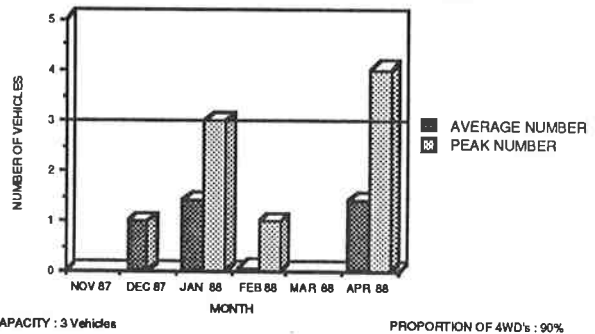
**FIGURE 4.**

**HAMERSLEY BEACH - AVERAGE AND PEAK NO.S OF VEHICLES**



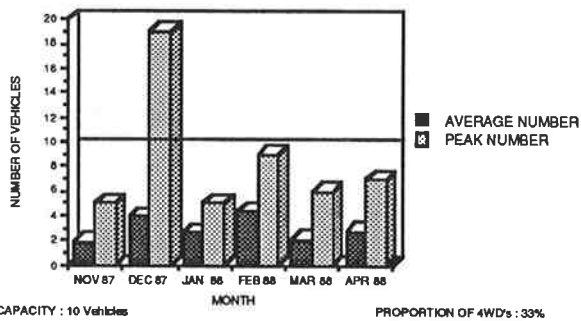
**FIGURE 5.**

**HAMERSLEY INLET - AVERAGE AND PEAK NO.S OF VEHICLES**



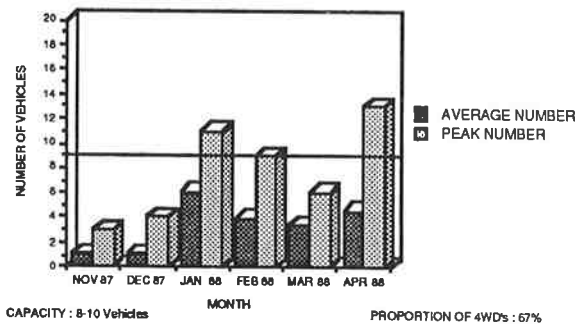
**FIGURE 6.**

**MYLIES BEACH - AVERAGE AND PEAK NO.S OF VEHICLES**



**FIGURE 7.**

**POINT ANN - AVERAGE AND PEAK NO.S OF VEHICLES**



**FIGURE 8.**

**QUON HEAD - AVERAGE AND PEAK NO.S OF VEHICLES**

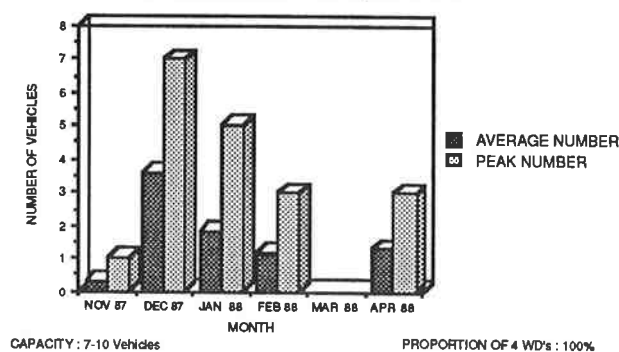


FIGURE 9.

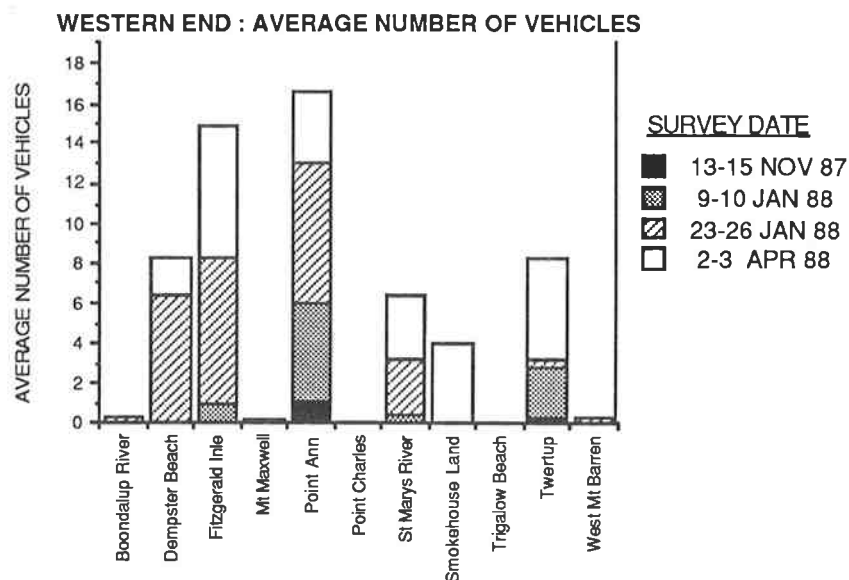


FIGURE 10.

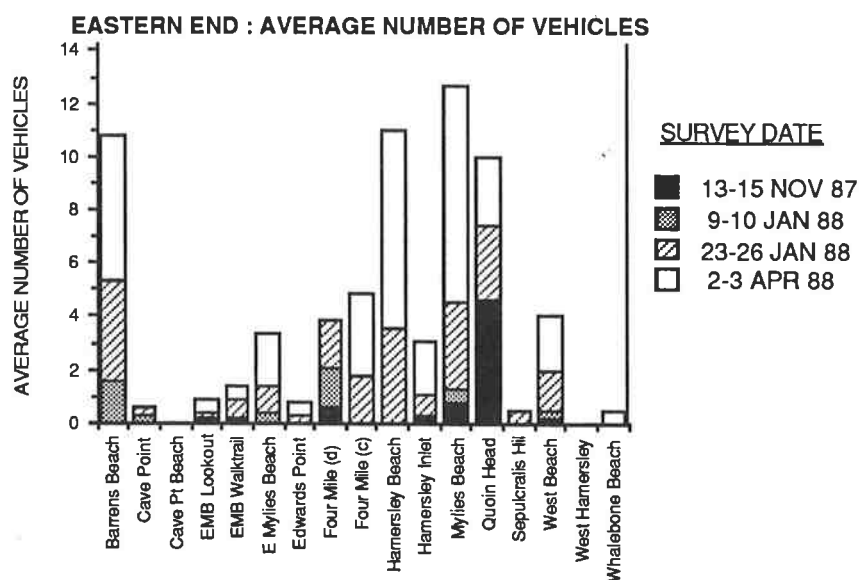
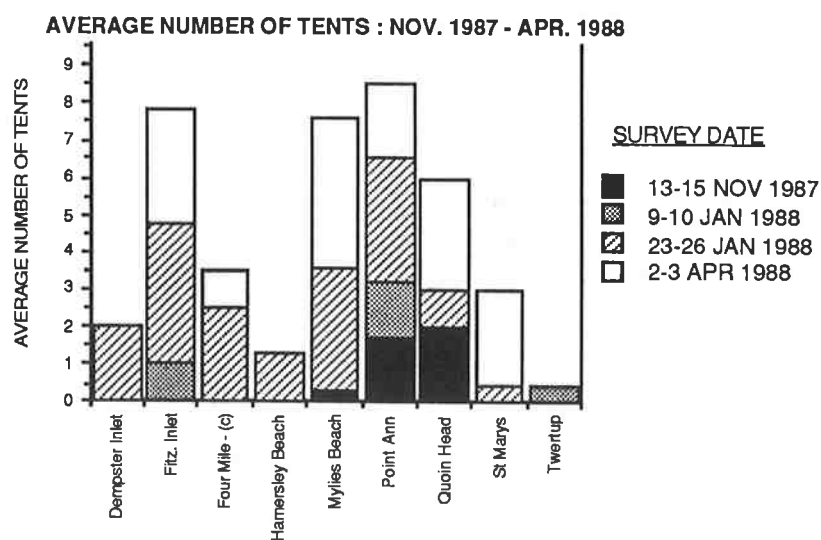


FIGURE 11.



## C. DISCUSSION

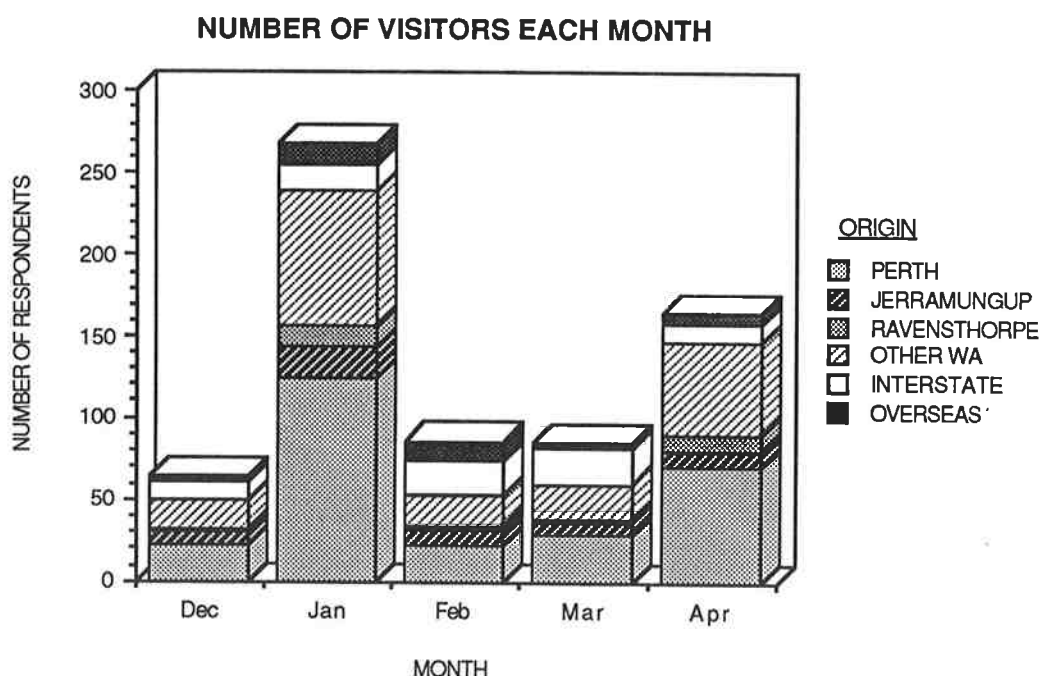
### C.1 Visitor Numbers

The traffic counter records shown in Table 1 give an estimate of 6253 vehicles in the Park during the survey period. It was also estimated from observation data taken over the Australia Day long weekend, 23-26 January, that the average number of people per vehicle was 2.65.

Using the average of 2.65 people per vehicle, it is estimated that the total number of visitor days in Fitzgerald River National Park during the November to April period was 16 570. Peak visitation occurred in January when approximately 8030 visitor days were recorded (Fig.12). Using the estimated proportions of visitors at each end of the Park (see Section C.11), this total may be divided into approximately 4714 visitor days for the western end and 11856 visitor days for the eastern end.

Note : A visitor day is defined as the aggregation of time spent by persons making a recreation visit to a recreation resource or facility into units of 12 visitor hours.

FIGURE 12.



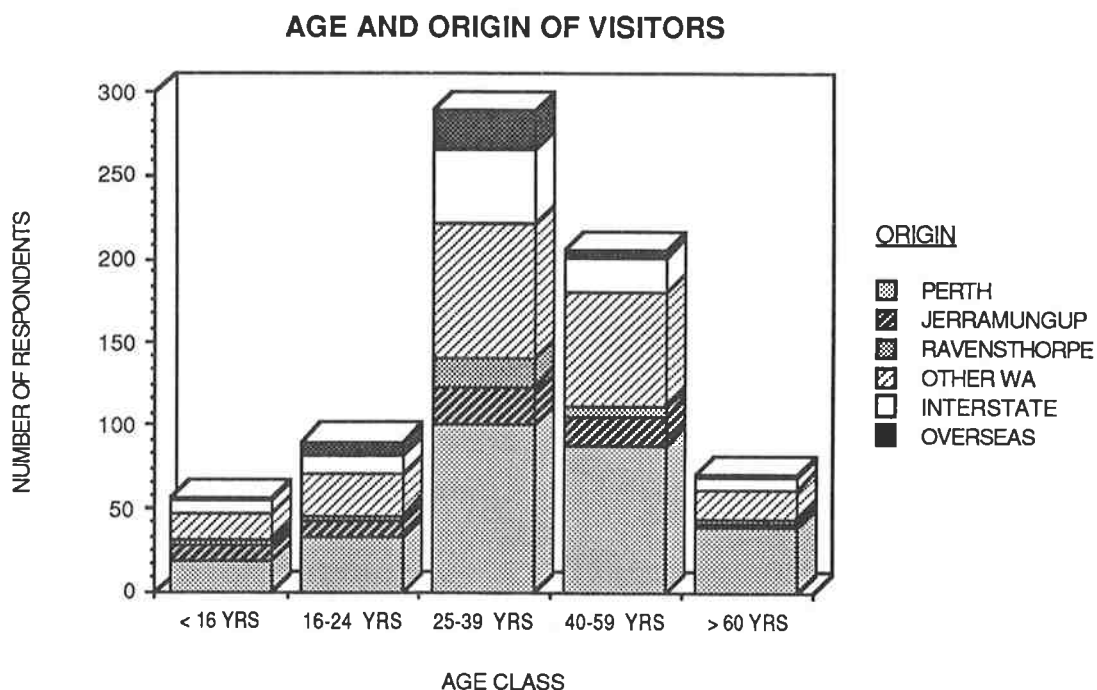
## C.2 Visitor Age and Origin

The majority of Park visitors came from Perth (39 %) and the surrounding country regions (29 %). Surprisingly few visitors came from the local Shires of Jerramungup and Ravensthorpe (14 %). This may be attributable to local people not regarding themselves as 'visitors' to the Park and therefore not filling in questionnaires.

Visitors from Perth included a significant proportion of elderly people (>60 yrs) (Fig. 13). Visitors from Jerramungup Shire included a high proportion of children (<16 yrs) and overseas visitors consisted mainly of young folk (16-39 yrs). Interstate visitors constituted 13 % of the Park visitors for the survey period and were mostly in the 25-39 yrs age bracket.

The visitor survey indicates that most people travel long distances to reach the Park (86 % from outside Ravensthorpe - Jerramungup area).

FIGURE 13.



### Management Implications

Given that the majority of visitors are from other areas, pre-visit information should be readily available from a number of well-known sources (eg. CALM regional office, State headquarters).



The majority of visitors (69 %) were between 25 and 59 years of age. Development of campsites, walktrails and facilities needs to cater for this age group, which is generally dominated by families with their children.

### **C.3 Method of Travel**

Conventional 2WD cars/vans and 4WD vehicles were used by 47 % and 49 % of visitors respectively, with a slightly higher number of people driving 4WD's. A small proportion of visitors, most of whom were elderly people (>60 yrs), travelled through the Park on coach tours (3 %). The numbers of people using other means of transport were negligible.

#### **Management Implications**

Nearly half of all visitors to the Park have 4WD vehicles. Both 2WD and 4WD users have access requirements.

### **C.4 Group Size**

The majority of Park visitors came with family (51 %) or friends (27 %). Children naturally tended to be with their families while young folk (16-24 yrs) tended to be with their friends. A significant proportion (10 %) of visitors indicated that they were alone. It appears that this figure was an over-estimate as several couples considered themselves 'alone' while in the company of their spouse. 10 % of respondents were members of a tour group or club/organisation. The 60+ yrs age group accounted for a significant proportion of these tour and club group members.

#### **Management Implications**

Campsites should be of sufficient size to accommodate family groups and groups of friends. Seclusion from other camping groups should also be considered.

## **C.5 Length of Visit**

49 % of people stayed in the Park for a day visit only. 42 % of people camped in the Park, the majority staying for 2-3 nights. Only 2 % of visitors stayed for more than 1 week.

Over the Australia Day long weekend, visitors entering the Park from Hamersley Drive North or East Mt Barren (eastern end of the Park) stayed on average less than 8 hours, ie. day trippers ; visitors entering the Park from Quiss Rd or Colletts Track (western end of the Park) stayed on average up to 2 days, ie. campers.

### **Management Implications**

Very few visitors stay for more than 2-3 days. Therefore, longer term services and facilities such as rubbish collection and water may not be required.

Most day visitors use the eastern end of the Park. This end of the Park also has higher total numbers of visitors. Given these current higher numbers, increased staff resources and interpretation programs maybe required at the eastern end. Good standards of roads are also particularly important in the eastern end where people are staying outside the Park and driving in to use the area, rather than camping in the Park.

## **C.6 Accommodation**

42 % of visitors camped in the Park. Caravan parks in the neighbouring towns service a significant proportion of Park visitors (20 %). A need for upgraded facilities in the Park was expressed by several people, in particular, extra toilets, improved water availability, and additional campsites.

### **Management Implications**

Camping within the Park is the major accommodation type used by Park visitors. Some concern was expressed at the need to upgrade present campsite facilities.

Caravan parks service a significant proportion of visitors, many of whom make repeated day trips into the Park. Use of caravan parks by Park visitors should continue to be encouraged, both to support the local community and to provide

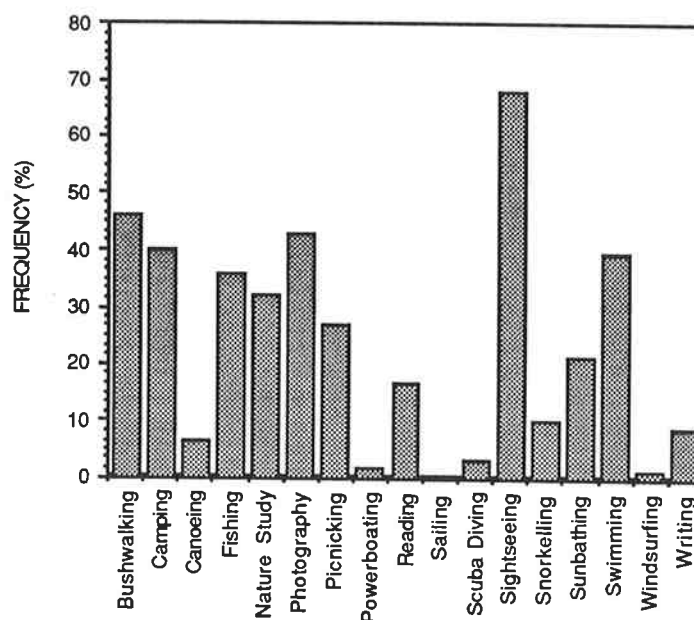
access to the level of facilities desired by a number of Park users.

### C.7 Visitor Activities

The most popular activity undertaken by Park users was sightseeing (68 %), followed by bushwalking (46 %) and photography (43 %) (Fig. 14). Activities enjoyed in the Park could be correlated to two main user groups : fishing was the main activity undertaken by campers in 4WD vehicles; and bushwalking and nature study were undertaken by day visitors in 2WD vehicles. Not all park users fell into these two categories, however the activities conducted in the Park tended to reflect the type of visitor.

12 % of people indicated their involvement in other activities than those listed in the questionnaire. These varied from birdwatching to fossicking and were consistently of a passive nature.

**FIGURE 14. ACTIVITIES UNDERTAKEN IN THE PARK**



### Management Implications

The predominant activities in the Park were 'passive', that is bushwalking, photography, sightseeing. The majority of activities focused on the scenic coastline unique to the Park. Such activities, if managed correctly, have little impact on the natural environment.

The two very different user groups will have different requirements. The fishing 4WD group is likely to prefer 4WD tracks and primitive camping facilities. The 2WD day visitors/bushwalkers are likely to require 2WD access either to trailheads or campsites, plus good interpretive information.

#### **C.8 Main Purpose of Trip**

55 % of respondents specifically came to visit the Fitzgerald River National Park and its attractions. 42 % of people had other reasons for visiting the Park, perhaps using it as a 'stop-over' as part of an extensive trip or merely as an area to be traversed to reach a coastal fishing spot. The question may have misled some people, particularly locals, who refer to specific sites eg. "We went to Point Ann for Easter", or "We came to camp at Quoin Head not Fitzgerald River National Park".

#### **C.9 Preferred Times of Year**

Table 2 details the times of year that people prefer to visit the Park.

**TABLE 2. SEASONAL PREFERENCES INDICATED BY VISITORS**

<u>SEASON</u>	<u>NUMBER</u>	<u>FREQUENCY</u>
Summer	361	50 %
Autumn	238	33 %
Winter	110	15 %
Spring	399	55 %

#### **Management Implications**

Wildflowers in spring and favourable weather conditions in summer means that the greatest visitation occurs over these seasons. This is indicative of when the greatest management resources are required.

#### **C.10 Future Management Options**

Visitor's responses to Question 11 are shown in the summary of responses in Appendix 1.

i) Access

The upgrading of all roads to 2WD standard was important - very important to 43 % of users and was not important to 50 %. A more conclusive response was obtained when visitors were asked about the importance of retaining some areas as 4WD access only. The majority of people thought it was important - very important to retain some areas accessible by 4WD only (61 %). It was also felt by nearly all respondents that coastal accessibility was almost obligatory (92 %).

Of those visitors to comment on their likes and dislikes, a number expressed concern at the condition of the present roads. The issue of 2WD versus 4WD accessibility was fairly evenly balanced amongst the remainder of the comments (see Tables 6 and 7). This could also have been a consequence of the fact that the ratio of 2WD to 4WD vehicles was approximately 1:1.

Management Implications

If visitor preferences are to be met, both 2WD and 4WD opportunities should be provided.

ii) Walktrails

83 % of respondents felt that walktrails were important - very important. Suggested improvements to Park management made by visitors indicated that the present walktrails network needs to be further developed.

Management Implications

The level of interest and support for walktrails indicates that resources should be directed to this area.

iii) Camping Pattern

The ability to camp away from other people was important - very important to 81 % of campers in the Park. This is also reflected in the visitor's comments in Tables 5 and 7. Camping is one of the more popular activities undertaken in the Park.

### Management Implications

Site planning for camping areas should take into account visitor's strong preference to camp away from other people.

#### iv) Toilets

59 % of visitors felt it was important - very important that toilets were available; 34 % felt that it was not important.

### Management Implications

The lack of strong demand for toilets indicates the general desire for low key facilities and primitive camping areas.

#### v) Interpretation

The majority of people agreed that learning more about nature was important - very important. Information boards and pamphlets were felt to be a better means of promoting environmental awareness and education than the rangers (81 % and 68 % respectively). Many visitors commented on the lack of park interpretation, or suggested improvements in park interpretation.

### Management Implications

The high level of interest in interpretation and information is a need that can be readily serviced. Management resources should be directed particularly towards information boards and pamphlets which were considered important by visitors and are also relatively cheap to provide.

## **C.11 Places Visited**

Approximately 50 % of the respondents completed the map question. All conclusions drawn in the next three sections are based on the completed forms only.

A full summary of the responses to the map question is given in Appendix 1.

The results of the map question indicated that 43 % of visitors used the eastern end, 33 % visited the western end and 13 % visited both ends. This contradicted the traffic counter findings of 72 % for the eastern end and 28 % for the western end. The January long weekend data (80 % eastern end, 20 % western end) also indicated similar proportions to those found from the traffic counters. The traffic counter percentages were considered to be the most reliable. Therefore, because of unreliable data, no conclusions can be made regarding the number of people visiting both ends of the Park.

The most frequently visited site in the western part of the Park was Point Ann. This was also indicated by the traffic counter results of Table 1. Point Ann is accessible with 2WD year round. Trigalow Beach was the least frequented site.

Consistent levels of visitation occurred at the coastal sites between Four Mile Beach and Hamersley Inlet in the eastern part of the Park, the exception being Edwards Point which is accessible by 4WD. This is largely a consequence of 2WD accessibility and the fact that the sites are located in close proximity to each other and to Hopetoun.

A small number of people visited the Mid Mt Barren area (1 %) and the Eyre Range area (1 %). Their mode of access was not indicated, but it was probably on foot.

62 % of respondents visited more than one site during their visit to the Park and only 6 % of visitors declined from stopping at any site, preferring to sightsee as they drove through.

### Management Implications

The most popular sites in the Park lie on the coast with highest levels of use being in the eastern end. The easier the access in terms of 2WD roads and closeness to towns, the higher the levels of use.

Some people make an effort to enter the rugged 'natural' areas such as Mid Mt Barren and the Eyre Range.

## C.12 Places Camped

The most popular campsites were Fitzgerald Inlet and Point Ann in the western section of the Park, and Four Mile Beach and Mylies in the eastern section (Table 3). On average, people stayed longest (4 nights) at the Twertup Field Studies Centre.

Campers tended to stay for an average of 3 nights at the more popular campsites in the western end of the Park, such as Dempster Beach and Fitzgerald Inlet. Mylies was the only site in the eastern end of the Park with a similar length of stay.

**TABLE 3. CAMPSITES USED AND AVERAGE NUMBER OF CAMP NIGHTS**

WESTERN END			EASTERN END		
SITE	% CAMPED	AVERAGE NO. NIGHTS	SITE	% CAMPED	AVERAGE NO. NIGHTS
Dempster Beach	4	3	Barrens Beach	2	1
Fitzgerald Inlet	23	3	East Mt Barren	2	2
Gordon Inlet	3	1	East Mylies	2	2
Mt Maxwell	-	-	Edwards Point	2	1
Point Ann	22	2	Four Mile Beach	10	3
Point Charles	2	1	Hamersley Inlet	7	1
Pt Charles Beach	3	1	Hamersley River	1	1
Quaalup	1	1	Mylies	10	3
Roes Rock	2	1	Quoin Head	8	2
St Marys	1	2	West Beach	5	1
Trigalow Beach	-	1	West Hamersley	-	2
Twertup	11	4	Whalebone Beach	1	1
West Mt Barren	2	1			

### Management Implications

The most frequently used campsites were Fitzgerald Inlet and Point Ann, and to a lesser extent Four Mile Beach and Mylies. On average, people tended to camp for up to 3 nights at these sites, and up to 4 nights at the Twertup Field Studies Centre. There is an obvious demand for medium length stay (2-3 days) camping opportunities.



### C.13 Access Routes

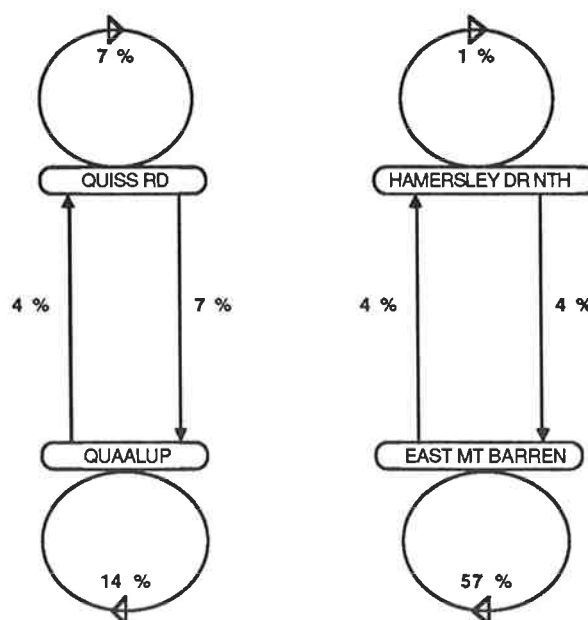
The questionnaire map indicated that the Quiss Rd entrance off the South Coast Highway was the most frequently used point of entry to the western end of the Park. This conflicted with data obtained from the traffic counters along Pabelup Dr and Colletts Track which indicated more vehicles entered via Colletts Track near Mt Maxwell (Table 1, Fig. 1). The same conclusion was drawn from observation data recorded over the Australia Day long weekend (Fig. 15). The traffic counter and observation data have been assumed to be more reliable than the questionnaire findings.

In the eastern end of the Park, the majority of users entered and left near East Mt Barren (43 %). Similar results are shown in Figure 15 for the January long weekend.

It is of interest to note that 1 % of people who completed the map question traversed the boundary firebreaks and the Fitzgerald Track (to Roes Rock) in the north-west of the Park. It is most likely that these people were on foot.

Many people were concerned with the condition of the roads and the sinuous nature of certain sections of road (Table 6). These comments were essentially aimed at Hamersley Drive and Pabelup Drive.

**FIGURE 15. TRAFFIC FLOW DIAGRAM BASED ON OBSERVATIONS  
RECORDED 23-26 JANUARY 1988**



## Management Implications

The most frequently used access routes in the Park are the Hamersley Drive and Pabelup Drive loop roads. A large proportion of comments received focused on the condition of the roads and the allegedly dangerous bends in certain sections of road. Greatest management effort should be put into these two roads to ensure safety and to maximise visitor enjoyment.

Entry is gained predominantly at East Mt Barren in the east and via Colletts Track in the west. These should be of the highest priority in terms of providing introductory material to the Park.

### **C.14 Expenditure**

Park visitors were asked to write the amount they spent on food, petrol, accommodation etc.. at any of the four major towns around the Park. Analysis of the data did not allow for multiple answers ie. more than one response on the expenses incurred by a group of people.

**TABLE 4. AVERAGE EXPENDITURE PER VISITOR**

TOWN CENTRE	% VISITED	AVERAGE AMOUNT SPENT PER VISITOR	ESTIMATED TOTAL EXPENDITURE
Ravensthorpe	22	\$ 40.00	\$ 6 290
Jerramungup	22	\$ 42.00	\$ 6 850
Hopetoun	35	\$ 62.00	\$15 890
Bremer Bay	16	\$ 64.00	\$ 7 590

From Table 4 above it can be seen that the greatest expenditure occurred in Bremer Bay and Hopetoun. This was to be expected as these are the closest towns to the Park. The fact that most visitors used Hopetoun as their supply centre relates to the discussion in Section C.13. The higher visitation rate in the eastern end of the Park indicates a larger influx of the tourist dollar.

### Management Implications

Visitors to the Fitzgerald are the source of many thousands of dollars each year for the neighbouring towns of Hopetoun, Bremer Bay, Jerramungup and Ravensthorpe. The Park plays an important role as a tourism resource in the south coast region.

#### **C.15 Entrance Fees**

66 % of visitors were prepared to pay a fee to use the Park on the premise that the money received would be used to manage the Park. 26 % of visitors would not pay such a fee. The question of entrance fees raised a number of comments pertaining to departmental policies, and the conditions under which fees should or should not apply.

It was felt by 39 % of those people who would pay a fee that \$2 was a reasonable amount per car per visit.

The comments received on the topic of entrance fees were made by those people disadvantaged by its introduction. Local people in particular felt that if camping or entrance fees were to be introduced then seasonal or annual passes would benefit those who make multiple visits into the Park. This would apply also to holiday makers camped outside the Park.

Several people expressed concern at the idea of paying to experience nature. Day visitors especially opposed the 'pay as you enter' proposal, and suggested that fees should be charged according to the length of the visit and facilities available (Table 8).

### Management Implications

Most people were in favour of paying a fee to use the Park on the premise that the money received would be used to manage the Park. It was felt that \$2 was a reasonable amount to pay.

People who made multiple visits into the Park eg. local residents, and holiday makers camped outside the Park, felt disadvantaged by the introduction of a 'pay as you enter' system. Several suggestions to overcome this problem were made.

## **C.16 Visitor Comments**

Visitors were asked to comment on the things they liked most and liked least about the Park and its present management. Furthermore, they were asked to suggest ways of improving their stay in the Park. Many comments were recorded and analysed. They have been summarised in Tables 5 to 8 and organised into broad topics for easier reference.

The majority of responses praised the beautiful scenery and open vistas of the Park. The scenic beauty and the diverse flora and fauna were the key attractions for most people. This was further emphasised by an enthusiasm for more interpretation and/or information boards detailing the diversity and fragility of the natural environment.

The biggest concern expressed by Park visitors was the condition of the roads. Corrugations on Hamersley Drive and allegedly dangerous bends on Pabelup Drive detracted from the visitor's enjoyment and were an alleged safety hazard. Most comments on the access/road system suggested upgrading.

## **C.17 Recreation Sites**

Peak numbers of vehicles exceeded the site capacity at Barrens Beach, Dempster, Four Mile, Hamersley Inlet, Mylies, Point Ann, St Marys, Smokehouse Landing and West Beach. At average levels of use, these capacities were not reached.

Capacity for number of tents was exceeded at Point Ann, St Marys and Fitzgerald Inlet.

### **Management Implications**

There is a need to assess the efficiency of vehicle use of sites where peak use exceeded capacity, particularly Point Ann and Mylies (Figs. 6 and 7), to ensure that these levels of use do not damage the environment. To cater for peak use, which may only occur for a total of 2 weeks per year, is an inefficient use of resources. Minimising damage and ensuring easy use of the site at all use levels should be the goal.

Similarly, site assessment and re-design should be considered for those places where peak use exceeded the site's capacity for campers (Point Ann, St Marys and Fitzgerald Inlet).

**TABLE 5. SUMMARY OF VISITOR "LIKES"**

<u>Natural Environment</u>	<u>Number</u>	<u>% Total</u>
Scenery, beauty, views	213	30
Flora, plants, vegetation	196	27
Fauna, wildlife, birds	116	16
Natural, unspoilt	113	16
Beaches	111	15
Peace, quiet, tranquility	103	14
Isolation, solitude	84	12
Coastline	58	8
Not many people	48	7
Wilderness	28	4
Remoteness	27	4
Everything, all of it	20	3
Mountains, ranges	20	3
Size of Park	20	3
Landscape	15	2
Ruggedness	11	2
Geology, rock formations	10	1
Weather	7	1
<u>Access/Road System</u>		
Good access (2WD)	21	3
4WD tracks	14	2
<u>Activities</u>		
Fishing	67	9
Camping	25	4
Bushwalking	14	2
Freedom of camping	10	1
Swimming	9	1
Relaxing	4	1
<u>Park Management</u>		
Cleanliness, no litter	24	3
Non-development	18	2
Walktrails	12	2
Campsites	12	2
Twertup Studies Centre	10	1
Available facilities	9	1
Signposting	8	1
Rangers	6	1
Current management	4	1

TABLE 6.

## SUMMARY OF VISITOR "DISLIKES"

<u>Natural Environment</u>	<u>Number</u>	<u>% Total</u>
Nothing to dislike	40	6
Flies	31	4
Lack of freshwater	18	2
Weather, wind	16	2
Mosquitoes	9	1
Dust	8	1
Ants, insects	8	1
No fish biting	6	1
Claypans	5	1
<u>Access/Road System</u>		
Condition of road(s)	154	21
Road closures, restrictions	34	5
Blind corners, windy roads	25	4
Lack of 2WD access	22	3
No east - west access	21	3
Long drives	11	2
2WD roads, 2WD access	8	1
Too many tracks	8	1
4WD tracks	7	1
Roads too narrow	5	1
Fitzgerald Inlet track	4	1
<u>Activities</u>		
Fast drivers	10	1
Too many people	9	1
Yobbos, yahoos	6	1
Bush-bashing 4WD'ers	5	1
Generators	5	1
Fishermen	4	1
<u>Facilities</u>		
Lack of toilets	12	2
No designated fireplaces	12	2
No showers	7	1
Lack of rubbish bins	5	1
Facilities at Pt Ann	5	1
<u>Park Management</u>		
Lack of information, interpretation	34	5
Litter	20	3
Lack of signposting	17	2
No pets rule	12	2
Lack of walktrails	10	1
Deterioration of campsites	10	1
Limited number of campsites	8	1

Campsites	5	1
Damage by tourists	4	1
Park security is at risk	4	1

**TABLE 7. SUMMARY OF "SUGGESTED IMPROVEMENTS"**

<u>Access/Road System</u>	<u>Number</u>	<u>% Total</u>
Upgrade present roads	76	11
More 2WD access needed	30	4
Re-open 4WD tracks	24	3
Greater access to coastline	18	2
Restrict 4WD access	12	2
More 4WD access needed	9	1
Closer parking to beach needed	6	1
Roads need re-aligning	6	1
Allow unrestricted access	5	1
Don't upgrade to 2WD	5	1
Upgrade Twertup track	5	1
Coastal road - Bremer to Hopetoun	5	1
<u>Facilities</u>		
More toilets needed	49	7
Water tank, freshwater needed	35	5
More secluded campsites needed	34	5
Install solar-heated showers	23	3
Fireplaces, firewood supply	20	3
Gas barbecues needed	20	3
Upgrade present facilities	19	3
Install shelters, shacks	9	1
More rubbish bins needed	6	1
More picnic areas needed	6	1
<u>Park Management</u>		
Improve brochure, info/interpretation	86	12
More/better walktrails needed	44	6
Keep natural, no development	42	6
Leave it as it is	36	5
Improved signposting needed	35	5
Dogs should be allowed on leash	12	2
Information boards at each entrance	11	2
Road signs needed	11	2
Gravel claypans on Fitz. Inlet track	11	2
Allow horseriding on designated trails	7	1
Guided tours through Park	5	1
Rehabilitate tracks and firebreaks	4	1
Promote public awareness	4	1
More frequent patrols by rangers	4	1
Booking system to limit no. of visitors	4	1
Another studies centre needed	4	1
Install car bays, pull overs	4	1



TABLE 8.

## SUMMARY OF "FURTHER COMMENTS"

<u>Comments</u>	<u>Number</u>	<u>% Total</u>
Enjoyed visit, loved it etc..	56	8
Should not charge fees, free to all	40	6
Leave as natural as possible	36	5
More/better info/interpretation	20	3
Compliments to rangers	14	2
Charge fee by length of stay	12	2
Compliments to CALM	11	2
Don't commercialise	10	1
Road improvements needed	9	1
Charge fees if facilities supplied	9	1
Seasonal passes for local people	8	1
Should impose speed limits	7	1
Use honesty system, donation box	6	1
Locals disadvantaged by fees	5	1
Campfires should be permitted	5	1
Keep all tracks 4WD	4	1

## APPENDIX 1. SUMMARY OF RESPONSES TO VISITOR SURVEY

W.A. DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT



### FITZGERALD RIVER NATIONAL PARK VISITOR SURVEY

To help us plan for the future of Fitzgerald River National Park we need to learn more about visitors to the Park and get your views on the Park and its management.

PLEASE FILL OUT THIS QUESTIONNAIRE AT THE END OF YOUR VISIT.

When you have finished would you please put this form in one of the boxes provided at the exits from the National Park (locations of boxes shown as a ▽ on the map inside) or give it to a National Park Ranger.

Thank you for your assistance.

FOR EACH QUESTION PLEASE TICK THE APPROPRIATE BOX OR BOXES OR WRITE YOUR ANSWER IN THE SPACE PROVIDED.

1. Your age (years)

less than 16	8%	25 — 39	40%	60 and over	10%
16 — 24	13%	40 — 59	28%		
  
2. Sex:    Male            40%                      Female    28%                      BOTH       26%
  
3. Where do you live?

Shire of Ravensthorpe	5%	other W.A. (please specify)	29%
Shire of Jerramungup	9%	interstate	13%
Perth	39%	overseas	5%
  
4. Method of travel:

4WD	49%	bus/coach tour	3%	foot	1%
car/van	47%	motor bike	—		
  
5. Are you visiting the Park . . .

with family	51%	organised tour	5%	by yourself	10%
with friends	27%	with a club or organisation	5%		

6. How long were you in the Park?

day visit(s)	49%	2 — 3 nights	24%	1 — 2 weeks	1%
1 night	19%	4 — 7 nights	5%	> 2 weeks	1%

7. Where have you stayed on this visit to the Park?

camping in the Park	42%	hotel/motel	4%	with friends/relatives	4%
caravan park	20%	holiday home	4%	camping elsewhere	10%
live in the area	6%	twertup	2%		

8. Please tick the main activities you have undertaken in this Park on this visit . . .

camping	40%	snorkelling	10%	sightseeing	68%
fishing	36%	scuba diving	3%	nature study	32%
bushwalking	46%	canoeing or rowing	7%	photography	43%
picnicking	27%	power boating	2%	reading	16%
swimming	40%	wind surfing	1%	writing	9%
sunbathing	21%	sailing	-		

Other (please specify) 12%

9. Is the main purpose of this trip to visit the Fitzgerald River National Park?

Yes	55%	No	42%
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10. What time(s) of the year do you prefer to visit the Park?

Spring	55%	Autumn	33%
Summer	50%	Winter	15%

11. How important are the following items to you in terms of future management of this Park?  
Tick one box per item.

	VERY IMPORTANT	IMPORTANT	NOT IMPORTANT
a. All roads accessible to 2WD	23%	20%	50%
b. Some areas accessible only to 4WD	36%	25%	31%
c. Access to the beach and coastal spots	63%	28%	4%
d. Walk trails are available	50%	33%	10%
e. Can camp away from other people	60%	21%	13%
f. Toilets are available	33%	27%	34%
g. Being able to learn more about nature from rangers	28%	40%	23%
h. Being able to learn more about nature from pamphlets and information boards	44%	37%	12%

- 12 i) Map information useful (all directions of travel shown - both entry and exit);

YES 50% NO 50%

- ii) General areas visited:

EAST 43% WEST 33% BOTH 13%

- iii) Sites visited:

WESTERN END		EASTERN END		CENTRAL
Mt Maxwell	5%	Four Mile	22%	Marshes Beach -
West Mt Barren	19%	Barrens	22%	Twin Bays -
Trigalow Beach	4%	East Mt Barren	26%	Mid Mt Barren 1%
Point Ann	36%	East Mylies	25%	Thumb Peak -
Point Charles	10%	West Mylies	31%	Mt Drummond -
Fitzgerald Inlet	15%	West Beach	27%	
Dempster Beach	7%	Edwards Pt	8%	
Twertup	14%	Hamersley Inlet	24%	
Gordon Inlet	-	Whalebone Beach	4%	
		Quoin Head	8%	
		Eyre Range	1%	

- iv) More than one site visited:

YES 62% NO 25%

- v) No sites visited (sightseeing on through roads)

YES 6% NO 81%

- vi) Direction of travel:

WESTERN END		EASTERN END	
Quiss to Quiss	18%	East Mt Barren to Hamersley Dr(Nth)	23%
Quiss to Quaalup	5%	East Mt Barren to East Mt Barren	18%
Quiss to Mt Maxwell	6%	Hamersley Dr(Nth) to East Mt Barren	18%
Mt Maxwell to Mt Maxwell	6%	Hamersley Dr(Nth) to Hamersley Dr(Nth)	7%
Mt Maxwell to Quiss	8%	Hamersley Dr(Nth) to Moir Tk	-
Mt Maxwell to Quaalup	1%	East Mt Barren to Moir Tk	1%
Quaalup to Quaalup	4%	Moir Tk to Hamersley Dr(Nth)	1%
Quaalup to Quiss	5%	Moir Tk to East Mt Barren	-
Quaalup to Mt Maxwell	2%	Moir Tk to Moir Tk	1%

- vii) Closed tracks:

Drummond Track	-
Boundary Firebreaks	1%
Telegraph Track	-
Roes Rock	1%

13. On this visit to the Park have you bought food, drinks, petrol, equipment or accommodation in:

If yes, approximate amount spent . . .

Ravensthorpe	Yes	No	\$ 39.80 average
Bremer Bay	Yes	No	\$ 64.32 average
Hopetoun	Yes	No	\$ 62.33 average
Jerramungup	Yes	No	\$ 42.30 average

14. What do you like most about the Park? 1. Scenery, beauty, views 30%

2. Flora, plants, vegetation 27%

3. Fauna, birds, wildlife 16%

15. What do you like least about the Park? 1. Condition of road(s) 21%

2. Nothing to dislike 6%

3. Lack of interpretation 5%

16. How do you think the National Park could be improved (facilities, allowable activities)?

1. Improve brochure information/park interpretation 12%

2. Upgrade present roads 11%

17. If you were sure that money received would be used to manage this Park, would you be prepared to pay to use the Park?

Yes 66%

No 26%

18. If yes, what would be a reasonable amount per car per visit (please circle)?

26% 7% 8% 17% 1% 5%  
\$2 \$3 \$4 \$5 \$6 \$10

Other (please specify) \$

19. Any further comments Enjoyed visit, loved it etc. 8%

20. Date you left the Park

**THANK YOU FOR YOUR HELP**

When you have completed this questionnaire please put it in the marked box at a Park exit or give it to a Ranger.

## APPENDIX 2. VEHICLE AND TENT CAPACITIES FOR RECREATION SITES

SITE	MAXIMUM CAPACITY	
	NO. OF VEHICLES	NO. OF TENTS
Barrens Beach	5 *	---
Boondalup River	2	1
Cave Point	4	---
Cave Point Beach	3	1
Dempster Beach	4 *	4 +
East Mt Barren Lookout	7	---
East Mt Barren Walktrail	8	---
East Mylies Beach	5	---
Edwards Point	4	1
Fitzgerald Inlet	12	8 *
Four Mile - camping	6	6 +
Four Mile - day use	4 *	---
Hamersley Beach	4	3
Hamersley Inlet	3 *	4
Mt Maxwell	6	---
Mylies Beach	10 *	6
Point Ann	9 *	6 *
Point Charles	4	2
Quoin Head	8 +	6
St Marys River	4 *	2 *
Sepulcralis Hill	4	---
Smokehouse Landing	2 *	1
Trigalow Beach	6	3
Twertup	10	2
West Beach	4 *	---
West Hamersley Inlet	8	6
West Mt Barren	6	---
Whalebone Beach	3	---

NOTE :       \* maximum capacity exceeded at peak levels of use  
               + maximum capacity reached at peak levels of use

**APPENDIX 3.****ACCESSORIES RECORDED**

SITE	CARAVAN	VAN/TRAILER	BUS	GENERATOR	FUN-BIKE	BOAT
Dempster Beach	---	X	---	---	---	---
East Mylies Beach	---	---	---	---	---	X *
Fitzgerald Inlet	---	X	---	X	---	X *
Four Mile : camping	X	X	---	---	---	---
Four Mile : day use	---	---	X	---	---	---
Hamersley Inlet	---	---	---	---	---	---
Mylies Beach	X	X	X	---	X	---
Point Ann	X	X	---	X	---	X
Quoin Head	---	X	---	X	X	X
Smokehouse Landing	---	---	---	---	---	X
Twertup	---	X	---	---	---	---
West Beach	---	---	X	---	---	X *

NOTE :      \* boat on vehicle roof.