

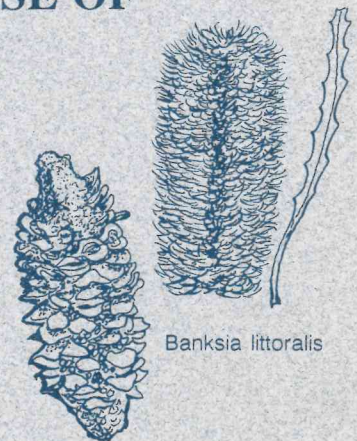
WALPOLE-NORNALUP
NATIONAL PARK

management plan



Noisy Scrub-bird

RECREATION AND TOURIST USE OF
WALPOLE-NORNALUP
NATIONAL PARK



Banksia littoralis



Red-Flowering Gum
(*Eucalyptus ficifolia*)

Splendid Fairy-wren

January 1990



Department of Conservation and Land Management

**RECREATION AND TOURIST USE OF
WALPOLE-NORNALUP
NATIONAL PARK**

**A SUMMARY OF INFORMATION GATHERED
FOR THE WALPOLE-NORNALUP NATIONAL PARK
MANAGEMENT PLAN**

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January 1990

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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SUMMARY

AUSTRALIAN AND REGIONAL TRENDS

The number of people participating in outdoor recreation has increased in recent years (Mercer, 1977). This is reflected in the increase in the number of people visiting national parks in Australia generally.

Visitor numbers to the Walpole region (Shires of Manjimup and Denmark) has also steadily increased during the past decade. The annual average daily traffic (AADT) travelling along the South Western Highway near Walpole has increased from 165 in 1970/71 to 273 in 1987/88 (MRD, 1989). This represents an increase of 65%, with an average annual increment of 3.6%.

A total of 84 900 visitors stayed in the Manjimup Shire during 1987/1988 (Australian Bureau of Statistics, 1988). The number of people staying in hotels, motels, guesthouses or caravan parks during their visit to the region has increased by 25% since 1983/1984 .

Schmidt (1980) estimated that 125 000 people visited the Southern Forest Region in 1978. More recent figures are unavailable for the Region.

WALPOLE-NORNALUP NATIONAL PARK

Estimates from this study show that approximately 78 000 people visited Walpole-Nornalup National Park during 1988/1989. Schmidt (1980) estimated that 25 000 people visited Walpole during 1978, and predicted a growth of 7% p.a. with a doubling every ten years. This current survey shows that Schmidt may have underestimated the growth in visitors to the Park.

Visitor surveys held during four days of July 1988, October 1988 and January 1989 showed that:

- * 71% of visitors came from W.A., with a particularly high percentage from the Perth metropolitan area.
- * Most Park users originated from outside the Shires of Denmark and Manjimup.
- * 58% of visitors stayed less than half a day in the Park
- * 82% of respondents felt that some areas should be accessible by foot only.
- * 75% felt that more information on the Park should be available to visitors.
- * 67% agreed there should be more walktrails in the Park.
- * 57% felt that dogs should not be allowed on some beaches in the Park.
- * 67% of Park users travelled by 2WD.
- * During spring, 18% more visitors travelled by coach tour than during summer.

- * Sightseeing, pleasure driving, looking at plants and animals and photography were the most common activities by Park users.
- * Big Tree (Valley of the Giants), Tingle Tree, and Hilltop Lookout were the most visited sites.
- * Most liked aspects of the Park were the naturalness, scenery, and peacefulness of the area.
- * The most disliked aspects of the Park were poor roads and lack of signposting.
- * An increase or improvement to the facilities of the Park, such as barbecues, showers and toilets (at Coalmine), were seen as the greatest improvements the Park requires. Better maintenance of roads was also a common suggestion.

1.0 INTRODUCTION

Walpole-Nornalup National Park is a popular coastal area of 18 419 ha situated in the southwest of Western Australia. The Park contains outstanding karri (*Eucalyptus diversicolor*) and red tingle (*E. jacksonii*) forests, coastal heaths, beautiful beaches and wild rivers.

The Park is managed by the Department of Conservation and Land Management (CALM) and is vested in the National Parks and Nature Conservation Authority (NPNCA). An adjacent area of highly visited State forest, "Valley of the Giants", is currently vested in the Lands and Forests Commission (LFC), but will be included in the Park in the near future.

Approximately 25 000 people visited the Park in 1978 (Schmidt, 1980). The number of visitors to the Park at present is believed to be much greater. The current survey is the first comprehensive survey of visitor usage since Schmidt (1980).

CALM began the preparation of a draft management plan for the Park in June 1988, with a high degree of public involvement in the planning process. This participation included conducting public workshops (Smith, 1988 and Smith & Albone, 1989), obtaining public submissions (Smith, 1989) and conducting user surveys (this report). Gathering current information on users of the Park is considered an important part of the planning process.

The aims of this study were to determine:

- * The number of visitors to the Park
- * Level of use of recreation sites
- * A profile of Park users
- * Patterns of usage
- * User attitudes and expectations about the Park and specific issues
- * Implications for Park recreation management.

This document is a summary of currently available visitor information, including the results obtained from three user surveys conducted to complement the available data.

2.0 METHODS

User surveys utilizing detailed questionnaires were conducted in June and October 1988 and January 1989. Additional user information statistics have been obtained from the Australian Bureau of Statistics (ABS), Main Roads Department (MRD), CALM Walpole Rangers, Coalmine Beach Caravan Park, Nuyts Wilderness logbook, Walpole Tourist Bureau

visitation figures, and coach tour operators.

2.1 USER SURVEYS

A user survey was conducted by Early (unpublished, 1988) over five days between Monday June 27 and Sunday July 3, in the winter school holidays of June 1988 as a student project. Questionnaires were distributed at two sample locations within the Park:

- Crystal Springs/Mandalay Beach
- Hilltop Lookout

An additional seven locations were sampled in the subsequent spring and summer surveys, run by CALM, to ensure as broad a spectrum of Park users was sampled as possible. These sites were located at:

- Crystal Springs
- Tinglewood Drive
- Isle Road
- Rest Point Road
- Knoll Drive
- Hilltop Lookout
- Valley of the Giants (Big Tree)
- Conspicuous Beach
- Peaceful Bay (January survey only)

Appendix 1 gives a description of each survey site.

A pilot survey was conducted in September 1988, in which a draft questionnaire and survey techniques were trialed. As a result, the questionnaire was slightly modified. The questionnaire and survey techniques were designed with advice from the Australian Bureau of Statistics.

The spring survey was conducted over a four day period at the end of the school holidays, between Thursday October 6 and Sunday October 9 1988. It attempted to sample both holiday and local users.

The summer survey was conducted over the Australia Day long weekend (also a four day period) between Thursday January 26 and Sunday January 29, 1989 to gather a sample of Park users during a peak period of use.

The survey techniques were identical in the spring and summer surveys. Each location had one entry point where a sign was placed informing Park users of the survey. A survey person was at each location between the hours of 9.00 am and 4.00 pm to distribute

questionnaire forms, provide information and collect completed forms. Completed forms were also returned to collection boxes located at clearly visible sites en route in the Park and at the local service station, CALM Office and Coalmine Beach Caravan Park.

Questionnaires were handed to each Park user 15 years of age and over at each sample location. A brief explanation of the survey and the necessity of user information in park management was given to each user. The number of forms handed out, the number of people already with a form and the number of people refusing a form were recorded.

The survey form included questions on the origin of the user, age of the user, locations visited, and activities undertaken during their visit. Questions on the spring and summer questionnaires were similar to but refined from the winter survey. An example of the questionnaire and a summary of results from the surveys are given in Appendix 2.

The questionnaire information was entered onto a Perkin-Elmer computer and analysed using an SPSS-X package. Graphs and tables were prepared using Cricket-Graph software on an Apple Macintosh IICx computer.

The results section is broken down into the relevant headings from the questionnaire. Under each heading, the results of the winter, spring and summer surveys are discussed collectively. This is followed by implications for Park management drawn from the three surveys.

2.2 COALMINE BEACH CARAVAN PARK

Attendance figures at Coalmine Beach Caravan Park, which is within Walpole-Nornalup National Park, have been recorded since 1957. Annual and monthly figures for the Caravan Park were used to determine seasonal trends and predict future usage.

2.3 NUYTS WILDERNESS AREA LOGBOOK

At the trailhead to the Nuyts Wilderness Area, visitors are asked to enter their names and details of their proposed journey into a logbook. This book is primarily used to keep a record of who is in the area at any one time to ensure their safety, but is also a useful record of visitor usage patterns. Records from 1980 onwards were examined to determine the annual and monthly usage of the area.

2.4 TRAFFIC COUNTERS

A traffic counter operated by the Main Roads Department (MRD) has been located on the South West Highway near Crystal Springs since 1970. This induction loop counter gives the annual average daily traffic (AADT). Traffic composition is estimated from two to six day manual counts held occasionally throughout the year.

CALM has operated a pneumatic vehicle counter at Crystal Springs, along the Mandalay/Banksia Camp no-through-road since January 1986. In addition, CALM also placed counters along one-way roads at Hilltop Lookout, Knoll Drive and Valley of the Giants (Big Tree) picnic site in March 1989.

2.5 TOUR OPERATORS

All known tour operators originating from within Western Australia were contacted to determine if they had visited the Park in the last 12 months and, if so, what their tour frequency was, the activities conducted in the Park, the locations visited within the Park, and likely future projections of their Park use.

2.6 REGIONAL PERSPECTIVE

Occupancy of rooms at hotels, motels, guesthouses, and sites on caravan parks in the Shire of Manjimup was supplied by the Australian Bureau of Statistics. Visitation figures to the Pioneer Cottage Visitors Centre, Walpole, was determined by entries into the visitor book supplied by the Walpole Tourist Bureau. Tourist motoring data was supplied by the Western Australian Tourism Commission.

3.0 RESULTS

3.1 USER SURVEYS

The sample size and response rate from all three surveys satisfied the recommended levels advised by the Tourism and Recreation Research Unit (1983) for self administered questionnaires, and so the results are statistically valid.

WINTER

Cold and wet conditions were experienced during most of the survey period. The forest locations, Hilltop and Valley of the Giants (Big Tree), were the only locations sampled.

SPRING

Cool and wet conditions were experienced on the first survey day, while the remaining three days were mild, with isolated patches of rain. However, the weather did not appear to deter many Park users, as the coolest and wettest day attracted the most users to the Park. This probably corresponded to the presence of school holiday visitors, many of whom appeared to leave on the Thursday and Friday. The last survey day (Sunday, October 9) attracted the least number of users. Peaceful Bay was not surveyed due to inundation making tracks impassable.

Valley of the Giants (Big Tree picnic site) was the most visited site during the survey period with an average of 198 visitors per day. Figure 1 shows the average number of visitors per day during the four survey days at the eight sample locations. Valley of the Giants had the largest number of users on a single day with 245 on Thursday 6 October. It is estimated that 1134 people over the age of fourteen used the Park during the four days. This represents an average of 284 park users per day.

The forest locations (Hilltop, Giants and Tinglewood) attracted 70% of the respondents (visitor/days) during the survey, while beach locations (Mandalay and Conspicuous) attracted only 7%.

Of the total of 1034 questionnaires distributed during the four survey days, 716 were returned, representing a return rate of 69%. Questions on the front page of the questionnaire had a greater response rate than those on the back.

SUMMER

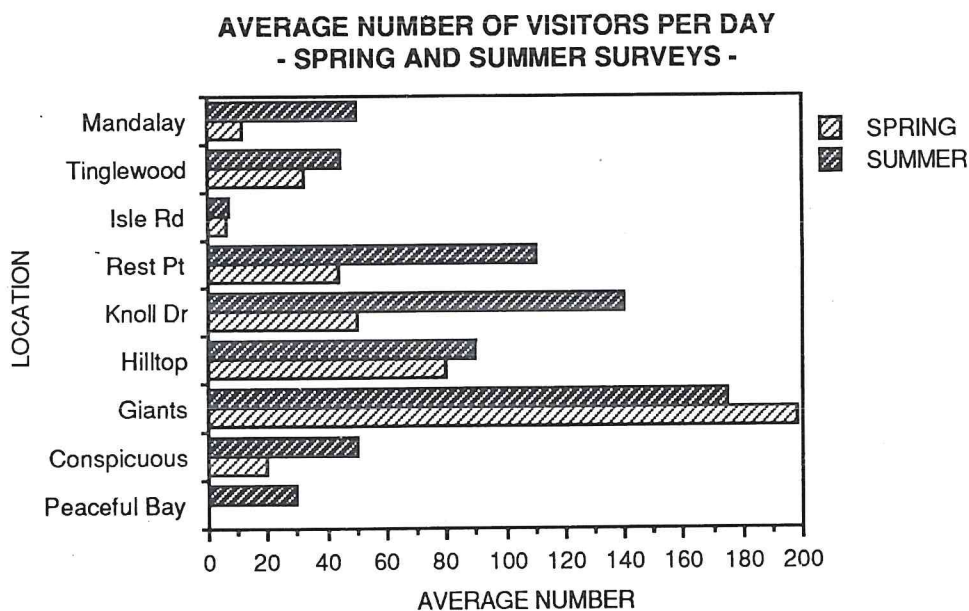
Cool and drizzly conditions were experienced on the first survey day, however, the weather was fine and warm for the remaining three days. The weather immediately preceding the survey had also been cool and drizzly, and a number of holiday-makers had headed home early. Hence the overall figures for summer were probably lower than if more constant fine weather had occurred.

Approximately 1 538 people visited the Park during the four survey days with an average of 385 people per day. The Park was most visited on Sunday January 29, with a total 570 people. A number of sites experienced at least a doubling of visitor numbers compared to spring. These included Mandalay and Conspicuous Beaches, Rest Point, and Knoll Drive.

The forest locations (Hilltop, Giants and Tinglewood) attracted only 44% of visitors (visitor/days) during the summer survey, but the beach locations (Peaceful Bay, Conspicuous and Mandalay) attracted 19%. The number of visitors to Knoll Drive doubled from 11% in the spring to 20% in the summer.

Valley of the Giants (Big Tree) was the most visited site during the survey, with an average of 175 visitors per day. Figure 1 shows the average number of visitors to each survey location in the Park during the summer survey. A total of 1508 questionnaires were distributed during the four survey days, 861 of which were returned, representing a response rate of 57%.

FIGURE 1.



IMPLICATIONS FOR MANAGEMENT

1. The greater level of use of recreation sites in summer requires increased ranger presence (patrol, rubbish removal, fire control etc).
2. The highest use in the Park (in summer) corresponds with the greatest fire risk period. Visitors need to be informed of appropriate behaviour to reduce fire risk, and safety procedures in case of a fire including evacuation procedures if necessary.
3. Roads providing access to medium - high use areas need to be maintained throughout the year to a standard sufficient to cope with the demand.
4. The extent and adequacy of medium to high use sites and their facilities need to be examined, particularly the forest areas which receive fairly constant year-round use.
5. Valley of the Giants receives consistent high levels of use throughout the year. Its effectiveness as the major tourist destination in the area needs to be examined.
6. Most sites experience periods over winter with low use. This allows time for areas to regenerate, and so reduces impacts of users.

7. Since much of the use of the Park is seasonal, and over the year numbers can vary greatly, a balance needs to be found between sufficient provision of facilities to cope with peak demand while not over-providing throughout the remainder of the year.

3.1.1 User Origin and Age Group

It was found that the majority of Park users over the three survey periods came from within Western Australia, most of which originated from the Perth metropolitan area (48% in winter, 56% in spring, 48% in summer). The highest number of interstate visitors was recorded during the spring survey (34%), and the highest number of overseas visitors was recorded during the summer survey (12%).

People from the Shires of Manjimup and Denmark constituted 8% of visitors during the summer survey and 5% during the spring survey. Figure 2 shows the origin of Park users during the spring and summer surveys.

During the winter and spring surveys, it was found that the majority of Park users were in the 41-60 years age group (35%). The 61+ age group accounted for a significant 24% of Park users during these periods.

The summer survey showed the most common age group of Park users to be 26-40 years (41%). The 61+ age group accounted for only 9% of Park users.

On the average, there were 1-2 children under 15 years accompanied by 3-4 adults per vehicle during the spring survey, and similarly, 1-2 children accompanied by 2-3 adults per vehicle during the summer survey. Figure 3 shows the age groups of Park users over the spring and summer surveys.

FIGURE 2.

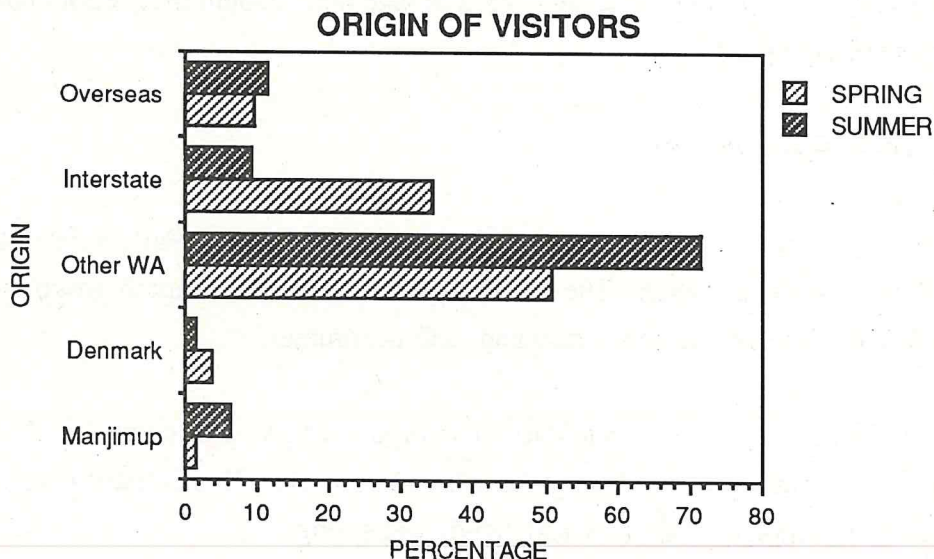
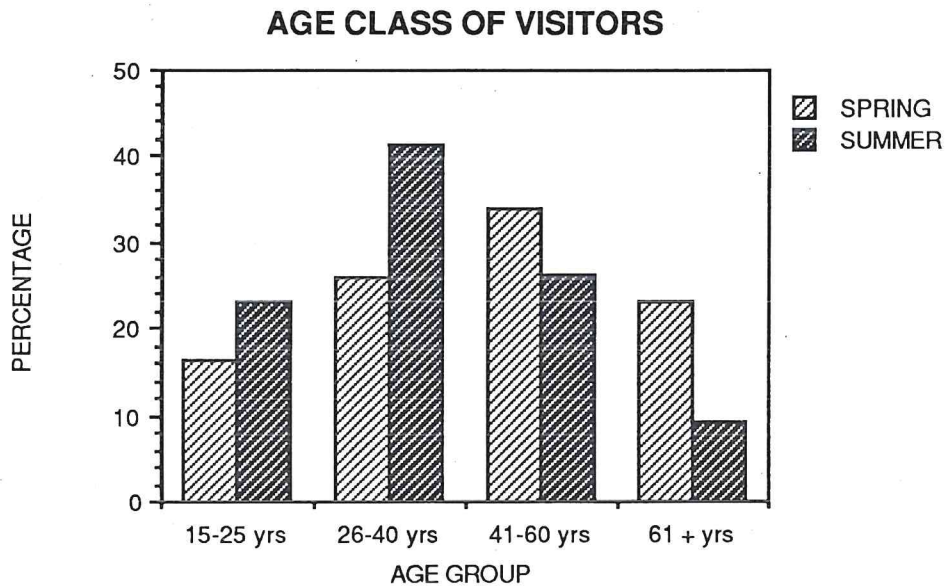


FIGURE 3.



IMPLICATIONS FOR MANAGEMENT

1. As most Park users came from outside the region, information about the Park should be readily available from sources such as all CALM offices and tourist information centres in Western Australia (particularly in the metropolitan area) and all capital cities throughout Australia.
2. The significant proportion of interstate and overseas visitors in spring (44%) needs to be taken into account in the information services provided.
3. The Park attracts visitors within a wide age range. Winter and spring are dominated by the 41-60 years age group, and summer by the 26-40 years age group. Facilities, particularly walktrails, need to be able to cater for this wide range where appropriate. Interpretive activities in summer need to take into account the predominance of the 26-40 years age group.

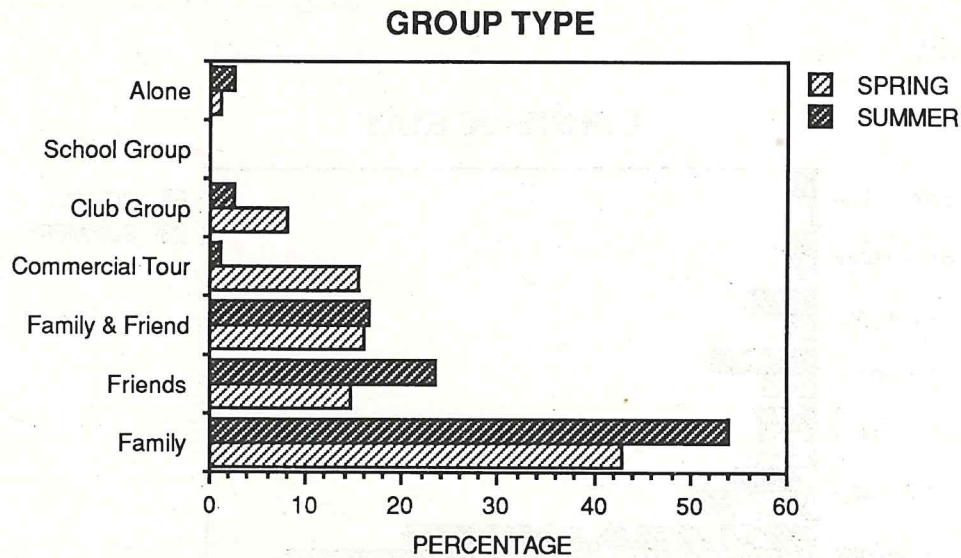
3.1.2 Group Type and Size

In all survey periods, the majority of Park users visited the Park with either family or friends, or family and friends. The family unit was the most common group to use the Park, accounting for 43% of users in spring and 52% in summer.

A total of 24% of users visited the Park in an organised group or commercial tour during the spring survey, but only 4% during the summer survey. This is indicative of the greater proportion of commercial tours conducted during spring.

The largest groups consisted, on average, of 14 people and 2 vehicles during spring, and of 7 people and 2 vehicles in summer. Groups of 2-3 people and 4-5 people were common during winter. Figure 4 shows with whom users visited the Park.

FIGURE 4.



IMPLICATIONS FOR MANAGEMENT

1. The family unit is the most common group to use the Park, with nearly all visitors being accompanied by family and/or friends throughout the year. Picnic areas and facilities, campsites and walktrails need to cater for these groups which vary in size from 2-3 people in single vehicles, to 7 people in 2 vehicles.
2. The Park attracts the highest proportion of commercial tours in spring (obviously coinciding with the wildflower season). These tours mainly pass through the Park only, though group sizes are larger, with 14 people on average. Provision of information and facilities needs to take this into account.

3.1.3 Length of Stay and Accommodation

Most Park users stayed less than half a day in the Park (53% in winter and summer, and 62% in spring). Unpleasant weather conditions are likely to be mainly responsible for only 20% of visitors staying one night or longer in winter, and only 19% in spring (although other factors are also involved - see Implications for Management). The finer weather in summer permitted 36% of visitors to stay one night or longer. Figure 5 shows the length of stay of Park users during their visit.

The majority of Park users found accommodation outside the Park during the survey periods (82% in spring and 62% in summer), preferring to stay in either a hotel, motel or lodge. The numbers of people camping either at Coalmine Beach Caravan Park, or elsewhere in the Park, increased as the weather became finer. Figure 6 shows the accommodation that visitors used.

FIGURE 5.

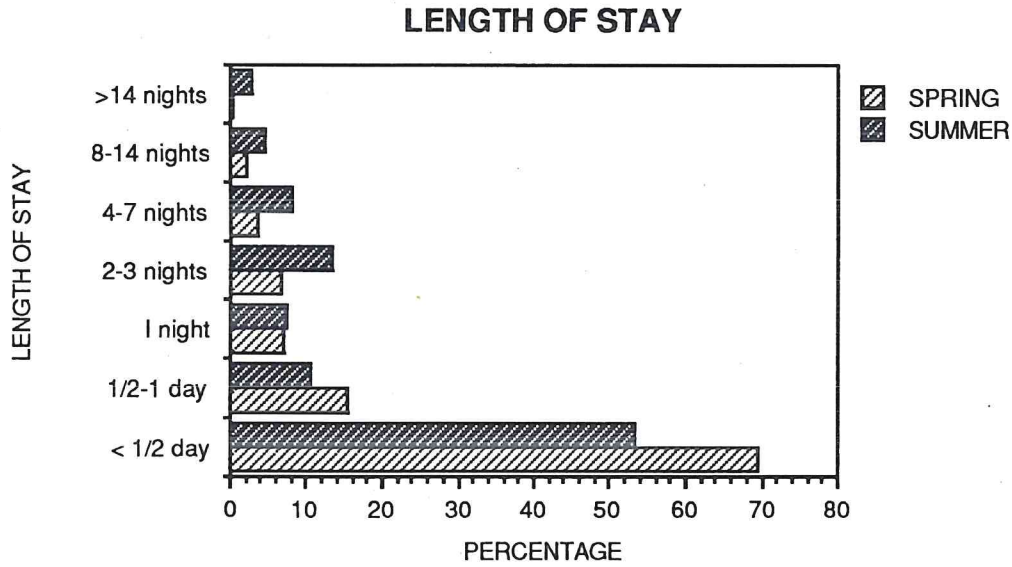
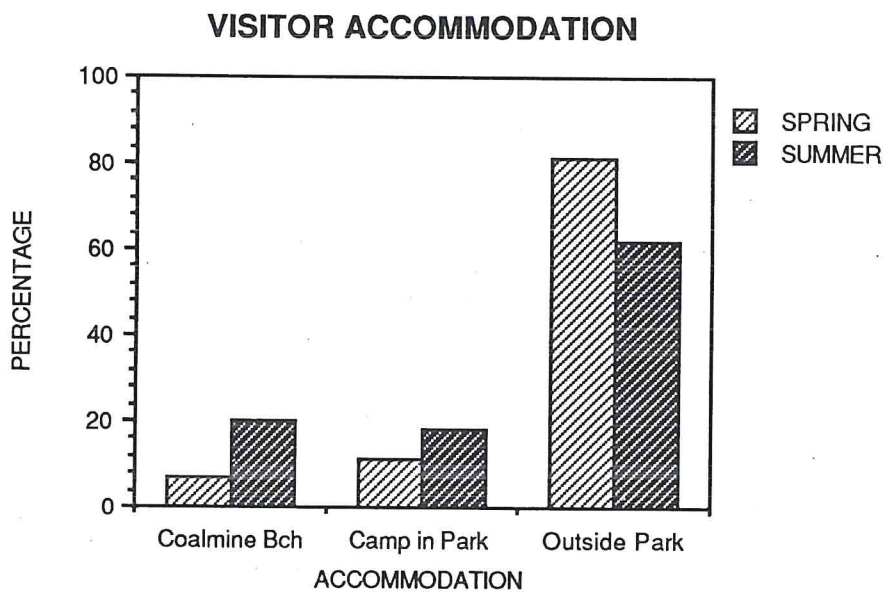


FIGURE 6.



IMPLICATIONS FOR MANAGEMENT

1. The majority of visitors to the Park stay less than half a day and this has a number of implications for management:
 - * areas which attract most use by short term visitors need to provide facilities to cater for a short stay eg. length of walktrails, easy accessibility to main features;
 - * visitors should be able to see and experience areas which are representative of Park values, during their stay in the Park. High use areas in particular should be examined to see if this is achieved;
 - * effective dissemination of information to ensure the most beneficial use of limited time in the Park is essential;
 - * consideration needs to be given to the desirability of encouraging visitors to stay longer in the area, to experience more of the Park (eg. by more pre-visit and on-site information). The possible impacts of this deliberate change in visitor use patterns on Park values need to be examined.

2. The lower proportion of people who stayed one night or longer in the Park is probably a reflection of the lack of camping facilities available in the Park, the lack of promotion of the Coalmine Beach Caravan Park, the availability of accommodation outside the Park, an overall trend of only passing through the Walpole area (as in Implication No. 1), and the unsuitability for camping for much of the year (frequent inclement weather). However, if more information was provided and more camping facilities were available, more visitors may choose to stay in the Park and experience it on a different basis. More visitors may also choose to stay in Coalmine Beach Caravan Park if it was promoted. (Refer also to Section 3.1.5(d)).

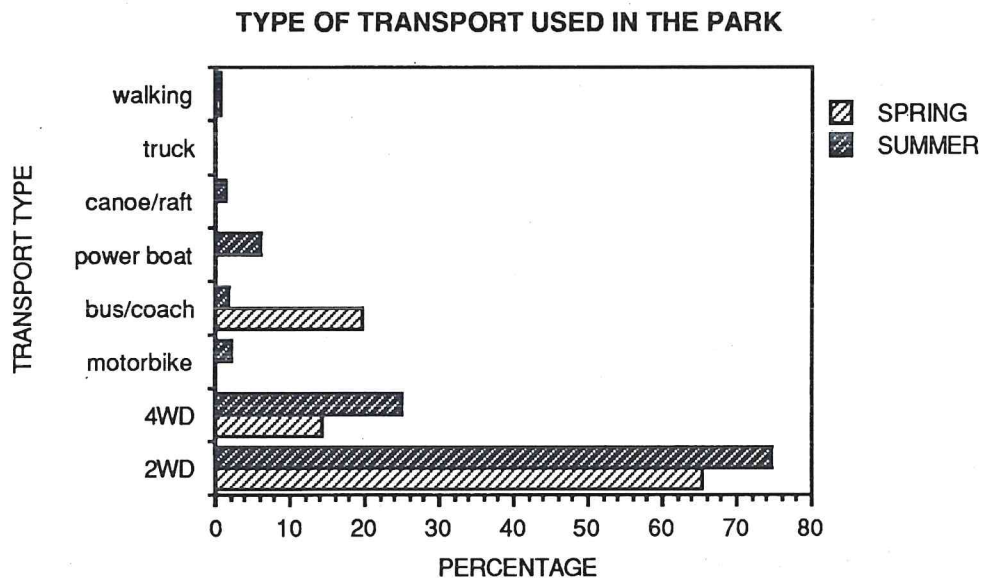
3.1.4 Transport Type

The majority of visitors to the Park used two wheel drive vehicles (2WD) as their main form of transport (61% in winter, 65% in spring, and 75% in summer). 4WD vehicles were the next most popular form of transport (30% in winter, 14% in spring, and 25% in summer).

20% of respondents travelled on a bus or coach during the spring survey, but only 2% used this mode of transport in the summer survey.

Powerboats were used by 3% of Park users in spring and by 6% of users in summer. The summer survey also revealed that 10% of people used two modes of transport, and 2% used three modes of transport. Figure 7 shows the types of transport used.

FIGURE 7.



IMPLICATIONS FOR MANAGEMENT

1. As most visitors used 2WD vehicles (up to 75% in summer), provision and maintenance of 2WD access and end facilities needs to be of sufficient standard and capacity to meet present and future demands.
2. A significant proportion of respondents used 4WD vehicles (up to 25% in summer), which is probably a reflection of the availability of 4WD tracks in the Park. 4WD tracks need to be of sufficient quality to ensure users stay on the tracks. Information to all Park users should include the necessary guidelines for 4WD use.
3. Management needs to strike a balance between providing for the demands for different types of access and its capability to adequately maintain this access, at the same time ensuring that the Park and management resources are capable of sustaining an equity of use in the Park and an increased demand in the future.

3.1.5 Future Management Options

The results from the three surveys examining visitor attitudes to various questions are summarised under the following relevant headings.

Figures 8, 9 and 10 outline the Park users' responses to these management questions during the spring and summer surveys.

3.1.5(a) Access

Users tended to support provision of foot access and oppose provision of more vehicle access (Figure 8):

- * Balanced response to providing "some areas accessible to 4WD vehicles only" (45% oppose, 49% support)
- * Some opposition to making more roads accessible to 2WD (45% opposed, 35% support)
- * Strong support for more walktrails (67%)
- * Very strong support for some areas accessible by foot only (82%).

3.1.5(b) Information

There was strong support for the provision of more information on the plants and animals in the Park. The use of information boards was particularly well supported (83%), with pamphlets (78%) and Park Rangers (65%) also seen as useful in providing opportunities to learn more about the natural features of the Park. (Figure 9).

3.1.5(c) Dogs

There was opposition regarding allowing dogs on some beaches in the Park, with 57% opposed, 35% in favour and 9 % unsure.

FIGURE 8.

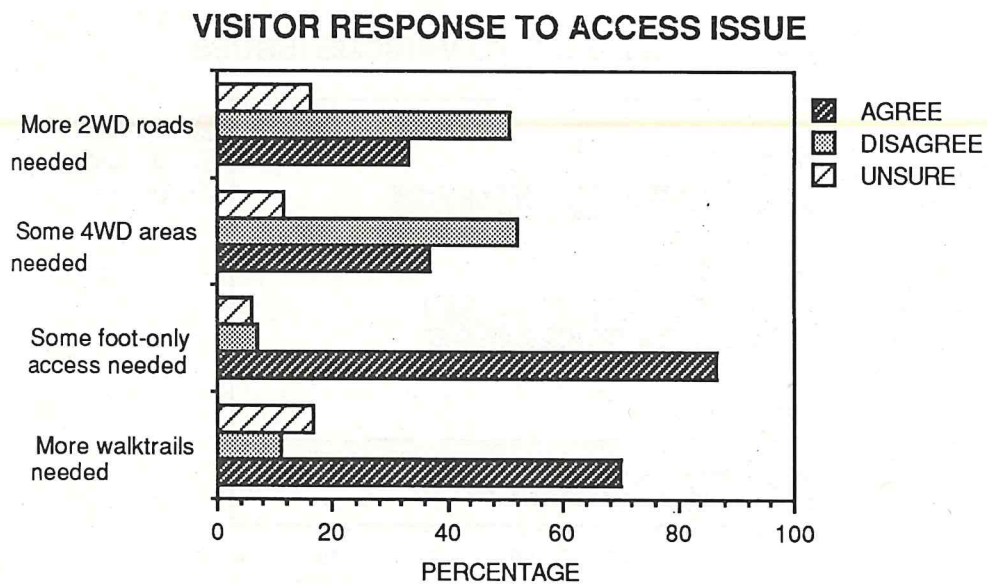
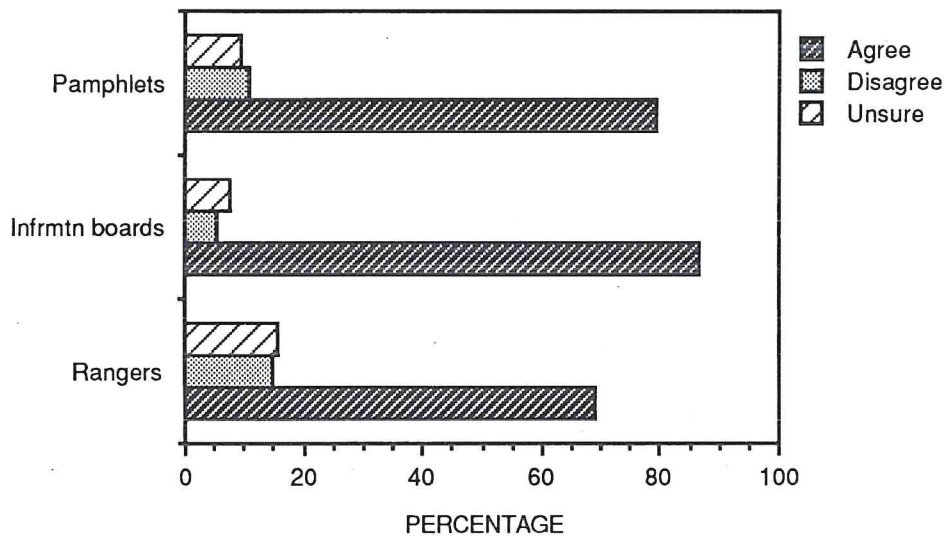


FIGURE 9.

VISITOR RESPONSE TO INFORMATION ISSUE

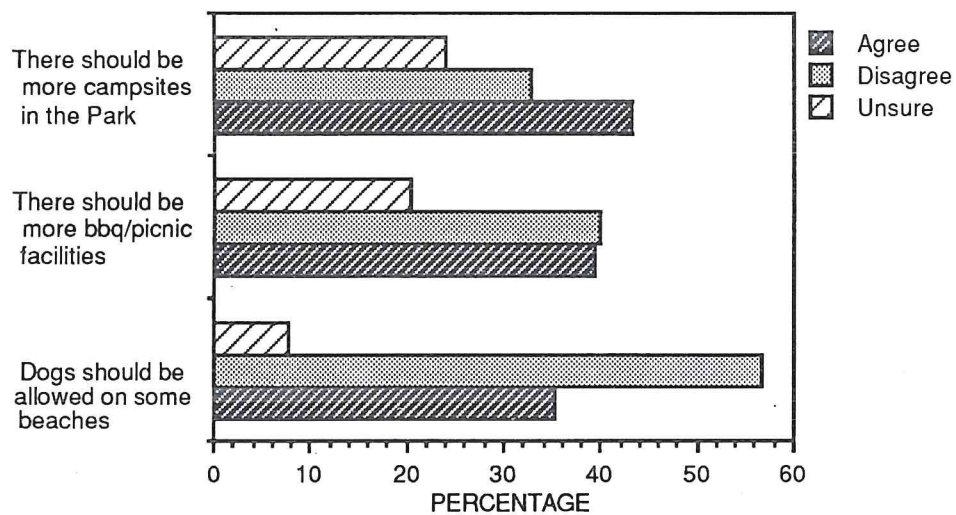


3.1.5(d) Facilities

The provision of more facilities in the Park did not receive unanimous support. Installation of more barbecue/picnic facilities received 41% in favour, 31% opposed and 21% unsure. Construction of more campsites within the National Park received 43% in favour, 33% opposed and 24% unsure. (Figure 10.)

FIGURE 10.

VISITOR RESPONSE TO VARIOUS ISSUES



IMPLICATIONS FOR MANAGEMENT

ACCESS

1. The issue of 4WD and 2WD access did not produce a clear response, obviously there are mixed views in the community. Although there was only marginal support to some areas being accessible to 4WD vehicles only, there was slightly stronger opposition to the provision of more 2WD access. Provision of access needs to take these mixed views into account.
2. The provision of more walktrails in the Park should be considered.
3. The continued provision of areas which are only accessible by foot should be considered.

INFORMATION

4. The greater provision of information throughout the Park by pamphlets and information boards should be a high priority.
5. A greater presence of rangers in the Park to provide information, particularly at key areas, perhaps at peak times, should be considered.

DOGS

6. The majority opposition to dogs on beaches in the Park needs to be taken into account when considering this issue.

FACILITIES

7. There was some support for the provision of more barbecue/picnic facilities, although there was a comparatively high level of unsureness (probably a reflection of an overall lack of knowledge of the Park by most visitors who only pass through the Park). One conclusion of these results is that the current provision of facilities may be considered as adequate. The provision of some more barbecue/picnic facilities should be considered but not as a high priority.
8. There was neither strong support nor opposition to more campsites in the Park (this may be a reflection of the desire by many visitors to stay only a short time in the Park). The provision of more camping facilities may attract more people to camp in the Park. This should be taken into account when considering the future provision of camping facilities.

3.1.6 Activities

The most popular activities undertaken by Park users over the three survey periods were sightseeing (73% in summer, 65% in spring, 46% in winter), pleasure driving (67% in summer, 63% in spring, 29% in winter), and looking at plants and animals (55% in summer, 58% in spring). Bushwalking was also very popular (47% in summer, 41% in spring) as was photography (41% in summer, 43% in spring).

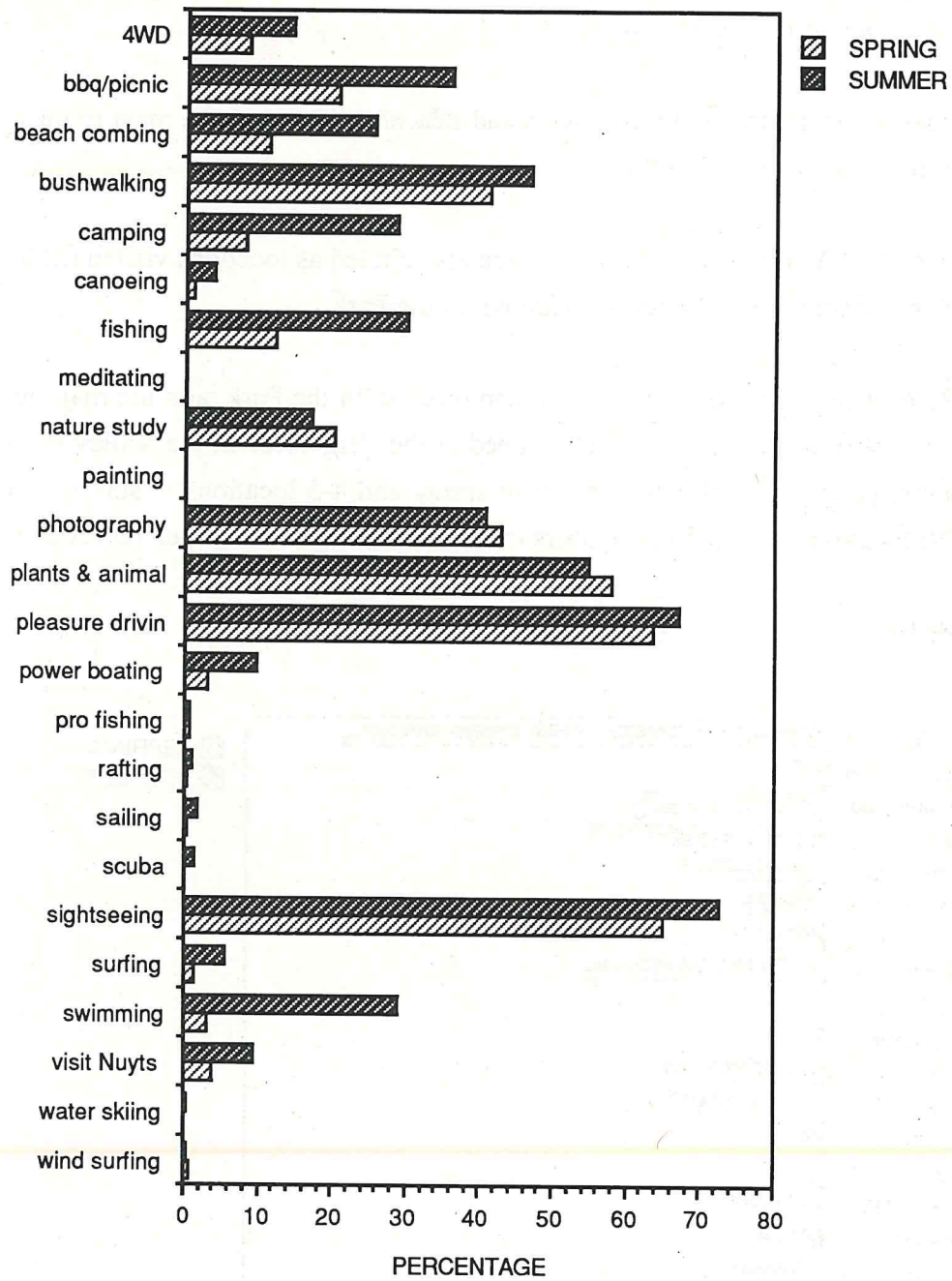
In general, passive recreation pursuits were favoured over active ones, with four wheel driving (14%) being the most participated active recreation. Of the 25% of respondents who indicated that they used 4WD vehicles in Section 3.1.4, only 14% indicated they participated in 4WD'ing as an activity.

Each person participated in an average of 4 activities during the spring survey, and 5 activities during the summer survey. Figure 11 shows the activities participated in by Park users.

IMPLICATIONS FOR MANAGEMENT

1. The range of recreation sites in the Park with their varying levels of use provide a variety of experiences. The provision of access and facilities should continue to provide for this variety.
2. A high proportion of visitors participated in bushwalking in the Park. This is despite a fairly limited provision of trails in the Park, therefore provision of more trails should prove popular.
3. Beach-based activities (fishing, beach-combing, swimming) are quite popular, particularly in summer. Adequate access and relevant safety information needs to be provided.
4. Information on suitable locations at which recreation activities can be undertaken needs to be provided .
5. A greater range of activities, and higher participation rates, occur in the summer (reflecting good weather conditions and longer stays in the area).
6. A greater range of activities can be encouraged by the provision of appropriate information.

FIGURE 11. ACTIVITIES UNDERTAKEN IN THE PARK



3.1.7 Locations Visited

The results of this question are not highly accurate as a number of people filled out the survey before the end of their stay in the Park, and so some locations visited were not indicated. However, these results do give a useful indication of the level of use of various sites.

Overall, the forested recreation sites were the most visited during the three survey periods. In particular, the 'Big Tree' in the Valley of the Giants was the most popular site visited

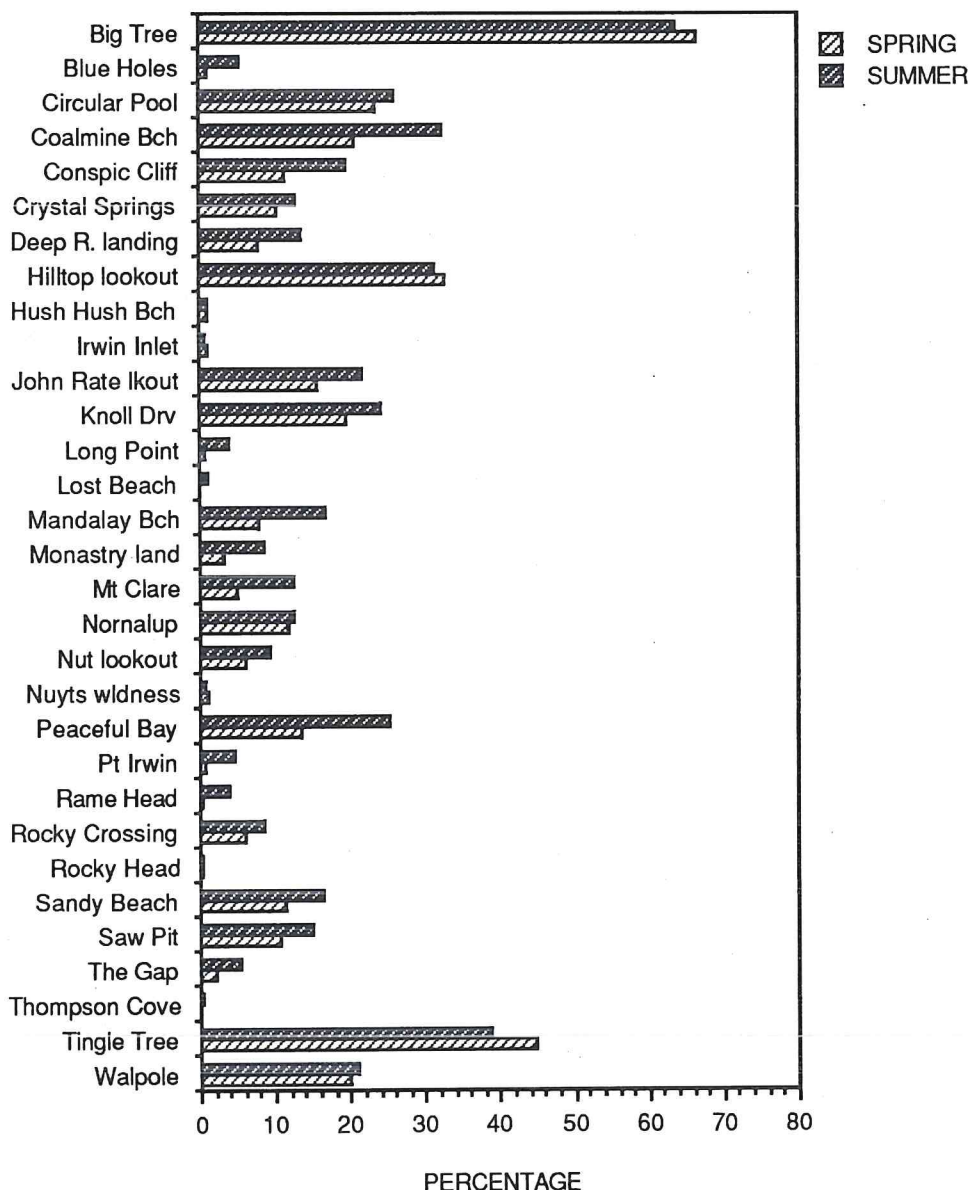
(66% in spring, and 64% in summer). The 'Tingle Tree' site was the next most frequented location (45% in spring, and 39% in summer). Other popular forest recreation sites include Hilltop Lookout and Circular Pool.

Of the coastal locations, Coalmine Beach and Peaceful Bay were the most frequented (32% and 25% in summer respectively).

The townsites of Walpole and Nornalup were also circled as locations visited (21% and 13% in summer respectively) although they are not in the Park.

About 83% of respondents visited more than one site in the Park, and the majority of those people who only visited one location stopped at the 'Big Tree' in the Valley of the Giants. On average, people visited 3-4 locations in spring and 4-5 locations in summer. Figure 12 shows the locations visited by Park users during the spring and summer surveys.

FIGURE 12. LOCATIONS VISITED



IMPLICATIONS FOR MANAGEMENT

1. The most visited locations in the Park have 2WD access, therefore areas which are upgraded to 2WD standard (from 4WD) can expect an increase in use.
2. Areas which have a low level of use provide opportunities to experience the Park in quiet solitude with little contact with other people. These areas require a minimum of facilities and contribute to the range of recreation opportunities in the Park.
3. Lookouts, providing scenic vistas of the Park, attract significant numbers of people and provide appropriate opportunities for the majority of visitors who are sightseeing and pleasure driving (refer Section 3.1.6).
4. More areas experience greater use during summer, particularly beach and 4WD areas. An increased ranger presence is necessary during this period.
5. The Park provides a range of opportunities within a variety of settings, from very low use to high use areas. The continued maintenance of this range of opportunities should be considered.
6. The results of this question show the main popular attractions in the Park are the most accessible forest areas. The emphasis of Park management (in terms of level of facilities and promotion) should reflect this. Provision of more opportunities to experience the forest in a variety of ways (eg. varying lengths of walktrails, picnic areas of varying capacity and experience) should be considered.

3.1.8 Amount Spent in the Area

These results are under-estimates of the true expenditure in the area. Many visitors were on their way to half of the towns listed, and so had not spent any money at these towns.

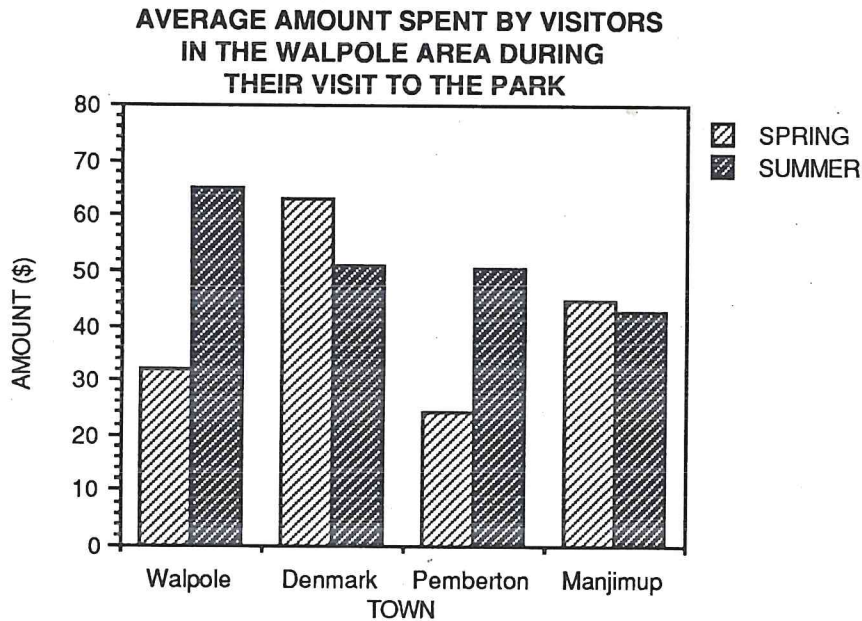
The average amount spent per person on food, drinks, souvenirs, petrol, equipment and accommodation ranged between \$41 and \$52 in the towns of Denmark, Pemberton, Manjimup and Walpole (which included Nornalup, Bow Bridge and Peaceful Bay). More money was spent during the summer survey period than either the winter or spring periods.

Denmark had the highest average amount spent in it during spring with \$63 per person. In summer, Walpole had the highest average amount spent in it with \$65 per person.

It is estimated that the total amount spent by Park users during the spring survey was

\$18,000 and during the summer survey was \$27,500. Figure 13(a) shows the average amount spent in the four main towns during the spring and summer surveys, and Figure 13(b) shows the amount spent in each category averaged for all four towns during both spring and summer surveys. Appendix 3 shows the categories of money spent in each town.

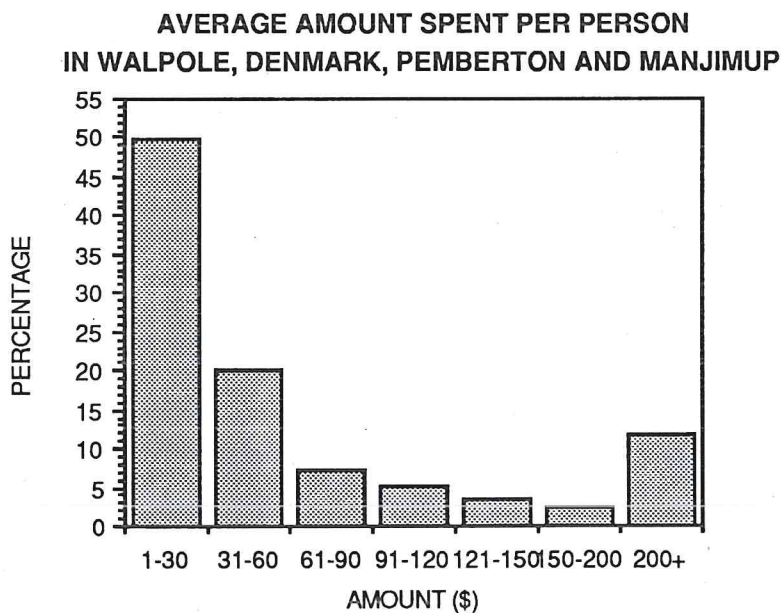
FIGURE 13(a).



IMPLICATION FOR MANAGEMENT

It is estimated that many thousands of dollars are spent by visitors annually in nearby towns during their visit to the Park. Therefore, the presence of the Park contributes to the economy of these towns.

FIGURE 13(b).



3.1.9 User Comments

Park users commented on their likes and dislikes about the Park and also suggested improvements that could be made. Several of the comments had no implications for management as they either related to areas outside the Park (eg. shops) or were beyond the control of management (eg. the weather). Visitor likes received 1899 comments, improvements received 451 comments and dislikes received 430 comments during the spring and summer surveys. This suggests that the Park is generally well liked and meets the demands and expectations of most visitors.

3.1.9(a) Likes

The most popular feature of the Park mentioned by Park users is its naturalness and natural environment. More specifically, people like the large trees, the peace and tranquility of the forest, the natural beauty of the bush, the wildflowers and scenery. 812 comments were received during spring, and 1087 comments were received during the summer survey. The most frequent comment made by winter visitors was that the Park should be left as natural as possible:

Figure 14 shows the general likes of Park users, and Figure 15 shows their more specific likes.

FIGURE 14.

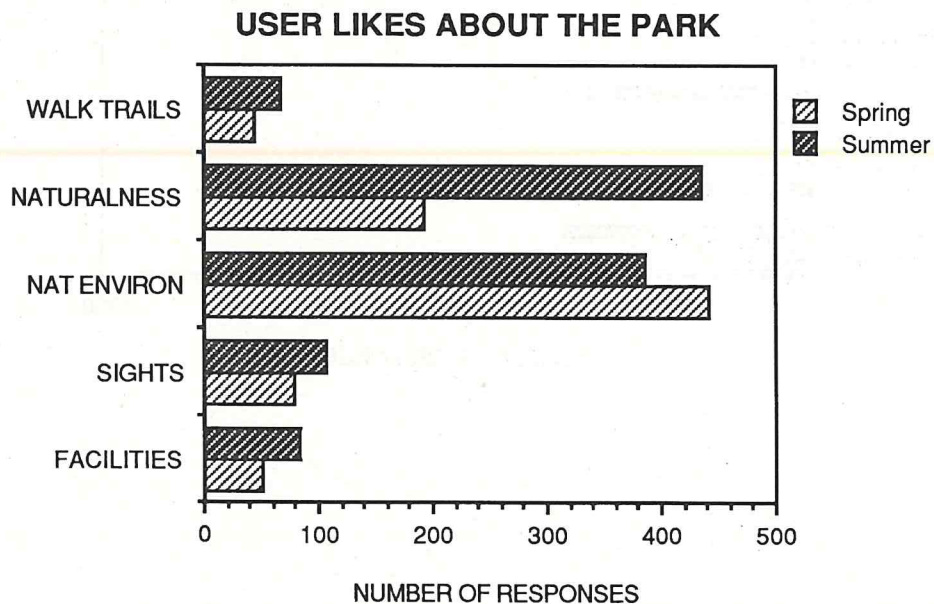
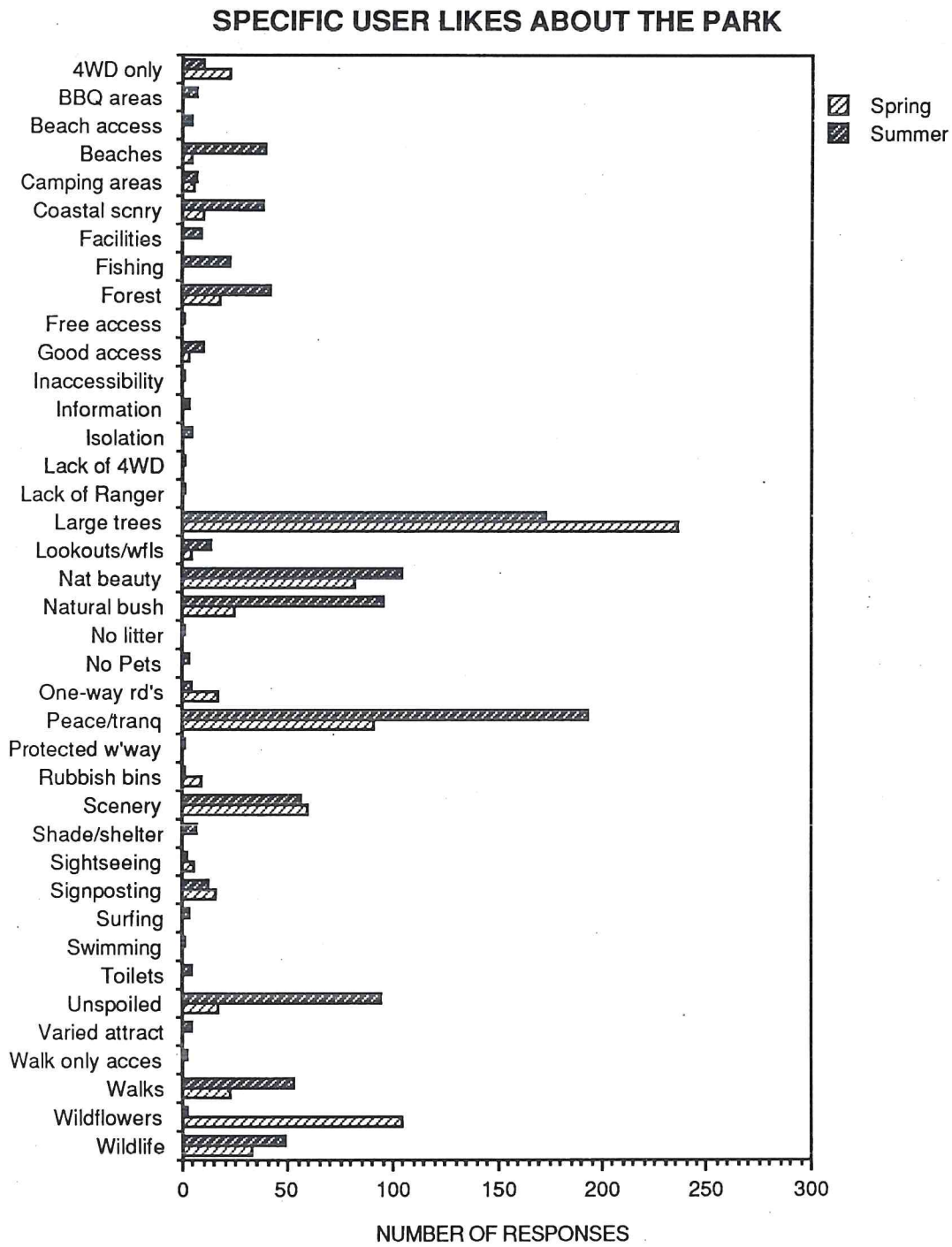


FIGURE 15.



3.1.9(b) Dislikes

In general, Park users were disconcerted by the lack of and/or quality of facilities in the Park, in particular, signposting and toilets.

The quality of the roads was the least liked feature of the Park, particularly the corrugations on formed gravel roads. Many comments regarding the overcrowding and noise associated with Coalmine Beach Caravan Park were also received, particularly during the summer when visitor numbers are high.

Other aspects of the Park such as the lack of information and/or interpretation, and management restrictions (on dogs, access tracks, and bush camping) were also disliked by Park users.

147 comments on dislikes were received during spring, and 283 comments were received during the summer survey.

Figure 16 shows the generally disliked features of Park users and Figure 17 shows their more specific dislikes.

FIGURE 16.

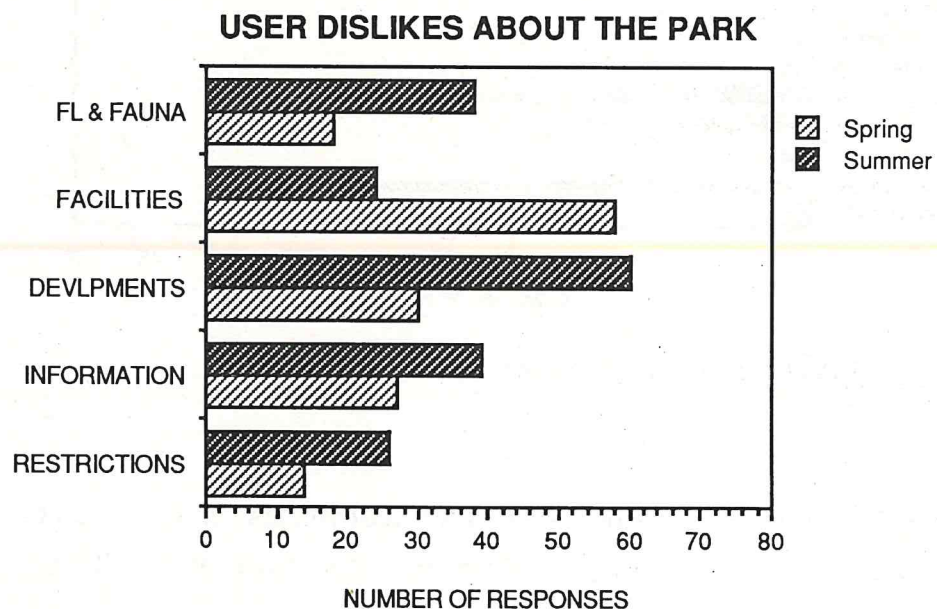
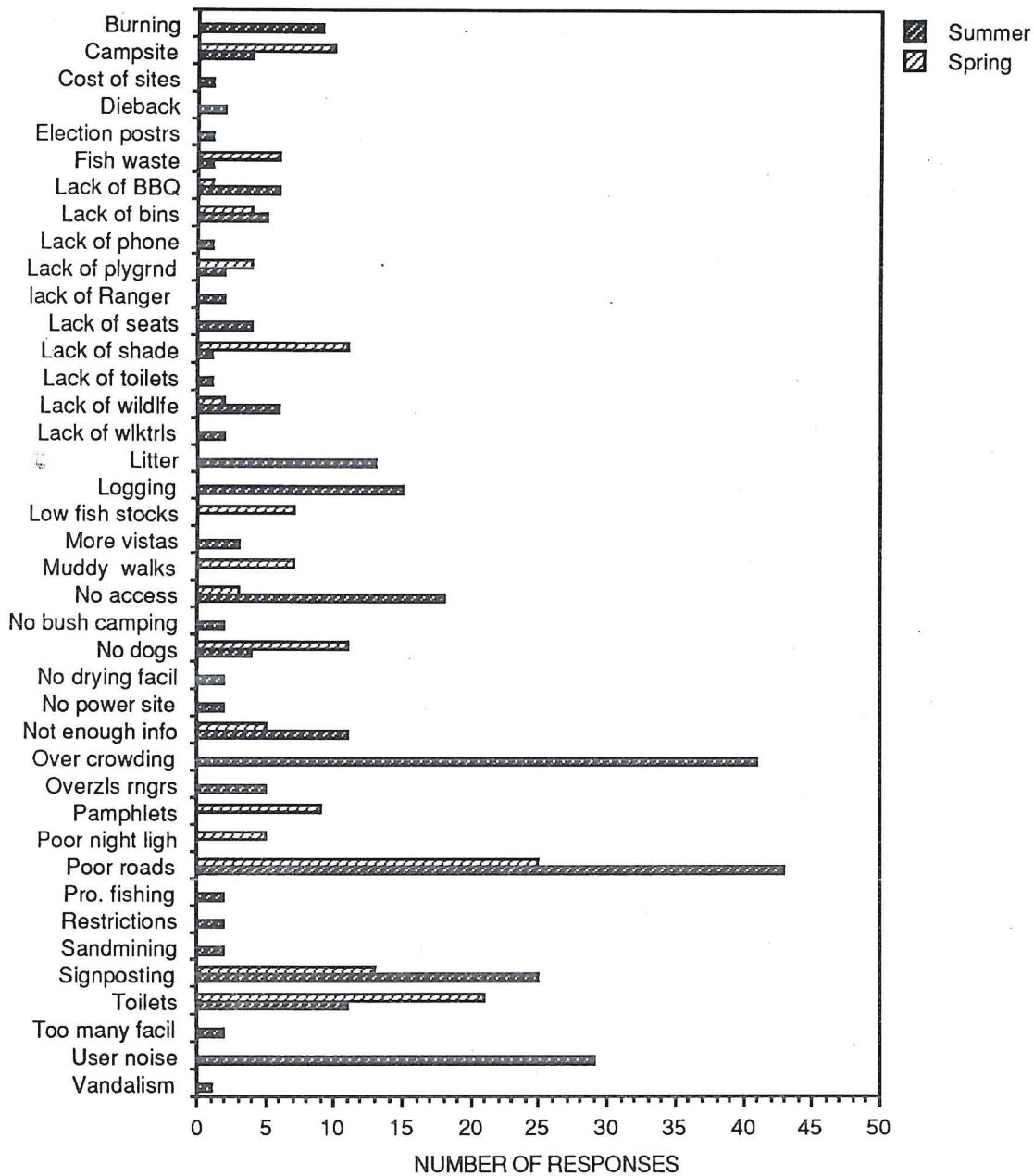


FIGURE 17. SPECIFIC USER DISLIKES ABOUT THE PARK



IMPLICATIONS FOR MANAGEMENT

LIKES

1. The large trees are a major attraction for most visitors. It is important that visitors are given the opportunity to enjoy good representative areas of the tall forests.
2. The peace and unspoiled nature of the Park rated very highly with visitors. The maintenance of these qualities is therefore important.
3. Wild flowers in spring are a major attraction. Information provided needs to cater for this interest.

4. The landscape of the Park, consisting of a range of views from close-up (forests) to long range (coastal scenery), and the overall unspoiled nature of that landscape, is the most prominent attraction of the Park. It is important that the landscape is maintained and visual resource management considered in all management practices.

DISLIKES

1. The major dislike was the condition of some roads, particularly those leading to the most visited sites. It is important that all roads providing medium to high level access should be well maintained.
2. The provision of more effective signposting in the Park, and more toilets should be considered.
3. The provision of some shelter in high use areas should be considered.
4. Areas of medium to high use require sensitive management to minimise visual impairment.
5. Greater provision of information is needed.
6. The restriction of dogs in the Park is obviously not popular with some users, although overall more users support the restriction (see Section 3.1.9(a)).
7. The upgrading of Coalmine Beach Caravan Park needs to be considered. Ways to reduce noise and overcrowding in summer should be investigated.

3.1.9(c) Improvements

A total of 91 suggestions for improvements were received from the spring survey, and 360 suggestions were received from the summer survey.

Suggested improvements to the Park included installation of more facilities such as barbecues, shelters and available drinking water (despite the response to the question of whether there should be more facilities, which was not strong; see Section 3.1.5(d)). The availability of more shower/toilet facilities and more barbecues were popular suggestions. The repair of roads and the increased availability of Park information and signposting were also common suggestions.

Details of suggested improvements are given in Table 1.

TABLE 1. SUGGESTED IMPROVEMENTS TO THE PARK

<u>DESCRIPTION</u>	<u>TOTAL</u>	<u>NO. OF COMMENTS</u>
FACILITIES:		129
New BBQ's	28	
More BBQ's	11	
Gas BBQ's only	1	
More drinking water available	14	
More shelter	14	
More showers/toilets	36	
Install canoe hire	1	
CALM should operate caravan/camping grounds	1	
Better boat ramp	5	
Kiosk souvenir shop	10	
Install a Flying fox at in Beach	1	
Improve Rest Point shop	1	
More rubbish bins	1	
More picnic areas	5	
FLORA AND FAUNA:		14
Stop net fishing	7	
Set aside a dog beach	5	
Save timber	2	
INFORMATION:		105
Name prominent trees	1	
More flora & fauna pamphlets	2	
More information boards	21	
Better quality stickers	1	
Name trails	4	
Increase number of Rangers	13	
Include estimated time on walks	14	
More signs (before Hilltop Lookout), scenic attraction and l-way roads	5	
Install vandal-proof Information Boards	2	
Rangers to act as Fisheries Officers	2	
Good maps, especially of l-way roads	8	
More Education exhibits (like Yulara)	4	
Make information available from out of the Region	2	
DEVELOPMENT:		42
Create and upgrade picnics areas	16	
Provide shade at Coalmine Bch	2	
Fewer campsites-bookings only	1	
Limit development (general)	23	
Upgrade steps at Knoll Drv	1	
More parking areas	5	
Advertise the area more	2	
Reduce litter	7	
Allow campfires at Long Point	1	
More open space	1	
Cement walk trails	1	
Provide better views	2	

<u>DESCRIPTION</u>	<u>TOTAL</u>	<u>NO. OF COMMENTS</u>
ACCESS & ROADS:		103
Need maintenance	36	
Allow for coaches	1	
Restrict the number of vehicles	1	
Widen roads	1	
Reduce speed limit to 20KPH	2	
More 2WD access	7	
More 2WD access to coast	1	
More 4WD access	5	
Decrease 4WD access	7	
Upgrade SW highway	1	
Allow 4WD clubs only	1	
Make 4WD access more difficult (to deter vandals)	1	
More access to surf beaches	2	
SLOW sign at Consp. to be more prominent	1	
One-way sign at Valley of Giants	1	
Vehicle access to Pt Nuyts	2	
Upgrade roads for coach use	6	
More walk trails	15	
More tourist drives	1	
More access to water	2	
Develop cycle trails	4	
Reduce all vehicle access	2	
All beaches should be accessible	2	
Seal road to boat harbour	1	
COALMINE BCH CARAVAN PARK:		37
Upgrade bbq plates	1	
More activities at Coalmine Bch	3	
More short-term camp sites	16	
More free camping	1	
Encourage camping on private land	1	
Provide a campers kitchen	1	
Greater water pressure in ablution blocks	4	
Grass the tent sites	1	
Better night lighting	3	
Less dense camp sites	1	
Install tumble dryers in ablution blocks	4	
Dont develop Coalmine Bch Crvn Pk	1	
Regularly clean ablution block	2	
BOATS:		8
Improve ramp	2	
Better moorings for small boats	1	
Vehicles should be removed from beach after boat launch	1	
Introduce boat hire	4	
OTHER:		13
Campers should not have to pay for facilities used by others	1	
Make signs unobtrusive	1	
Provide lifebuoys at popular coastal spots	1	
Rangers to keep low profile	1	

<u>DESCRIPTION</u>	<u>TOTAL</u>	<u>NO. OF COMMENTS</u>
Increase Park size	5	
Supply seeds of Park plants	1	
Reduce impact of presc. burns	1	
Reduce size of wilderness area	1	
Allow limited pro-fishing & amateur net fishing	1	

IMPLICATIONS FOR MANAGEMENT

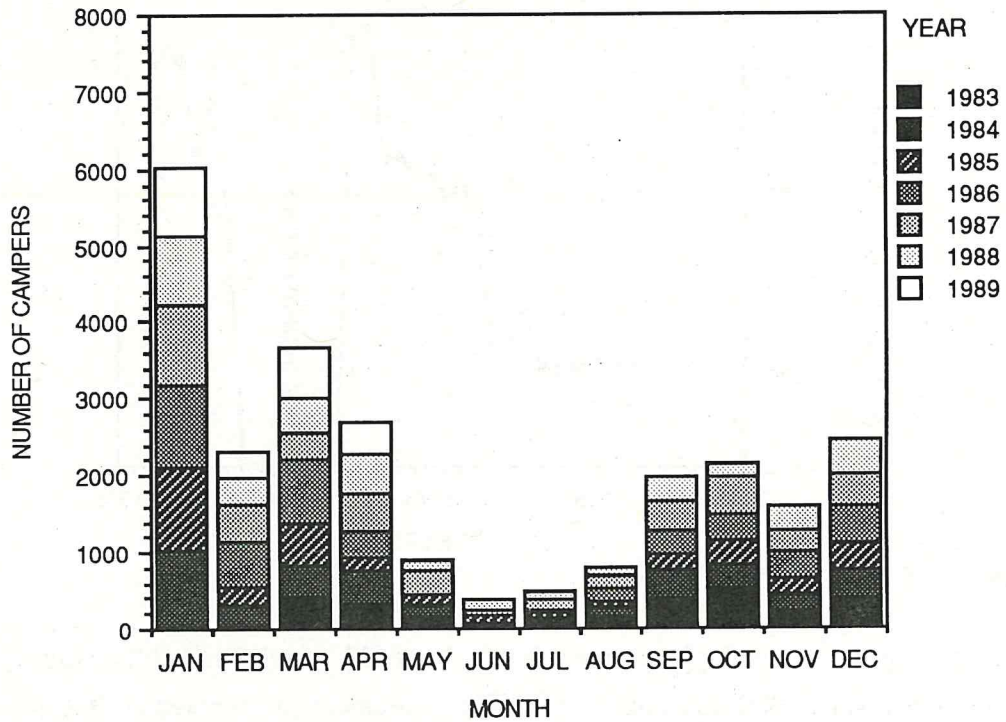
1. There are a number of aspects of the provision of information which require improvement in the Park including pamphlets, information boards, greater ranger presence, good maps and effective signs.
2. A number of visitors want development limited in the Park.
3. The provision of more picnic areas and upgrading of existing ones should be considered.
4. There are a variety of views regarding access in the Park, with no clear support for any particular approach (as with Section 3.1.5(a)). Decisions on access in the Park need to take the wide range of views into account.
5. The development of more walktrails and cycle trails should be considered.
6. A number of improvements for Coalmine Beach Caravan Park should be considered including provision of more short-term campsites, lighting, and provision of tumble dryers in the laundry.

3.2 COALMINE BEACH CARAVAN PARK

Attendance figures for Coalmine Beach Caravan Park show that January experiences the most and June the least number of campers in the Caravan Park. Figure 18 shows the monthly attendance of campers (camper/nights) in the Park since 1983.

FIGURE 18.

**NUMBER OF CAMPERS (CAMPER/NIGHTS)
AT COALMINE BEACH CARAVAN PARK**

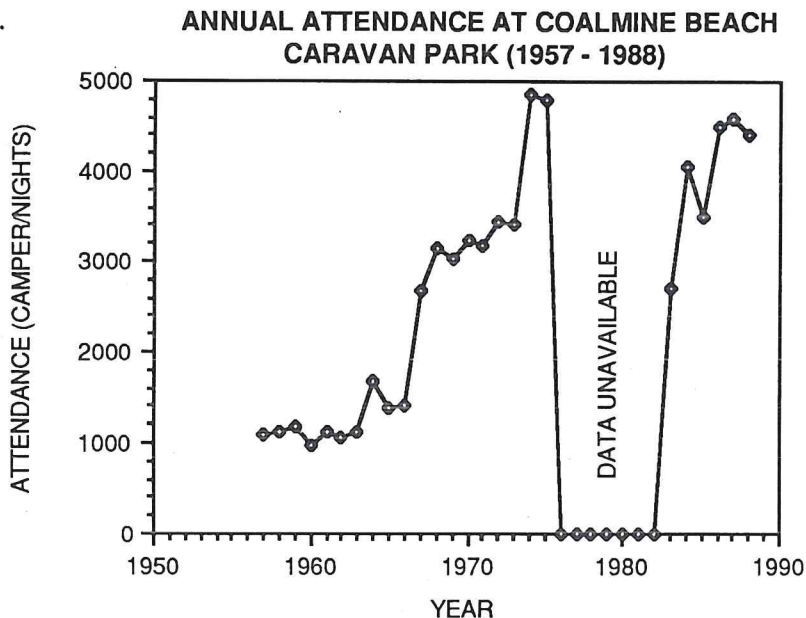


A large increase in the number of campers occurred in the late 1960s, however, there has been a small increase since 1983 as shown by Figure 19. The largest attendance in recent years was in 1987, the year of the 'Americas Cup', with over 4600 people (camper/ nights) staying at the Caravan Park. The largest attendance at the park in any one month was January 1975, with 1400 campers (camper/nights). The lowest attendance was in July 1985, with only 25 campers.

IMPLICATIONS FOR MANAGEMENT

1. Attendance at Coalmine Beach Caravan Park is very seasonal, the peak occurring during January each year. Facilities provided need to strike a balance between adequate provision during peak times and over-provision during the remainder of the year.
2. Attendance during the winter is generally very low. However, trends show that there has been an increase in attendance for most months of the year since 1983.
3. Greater promotion of the Caravan Park would very likely see an increase in attendance.

FIGURE 19.



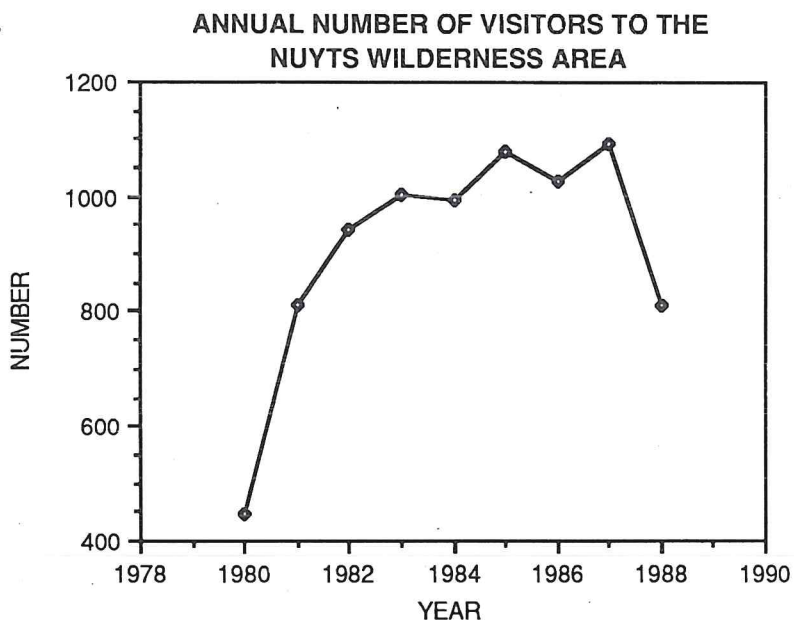
3.3 NUYTS WILDERNESS AREA

The entries in the visitor logbook have shown that 8611 people visited the Nuyts Wilderness area between May 1980 and April 1989. This represents an average of 956 per year. The total number of visitors has been steadily increasing since 1980 (Figure 20).

A lowering of visitor numbers to the Wilderness Area occurred in 1988, due to closure of a footbridge along the main access into the area caused by flooding. The largest number of visitors to the area occurred in 1987, with 1097 people.

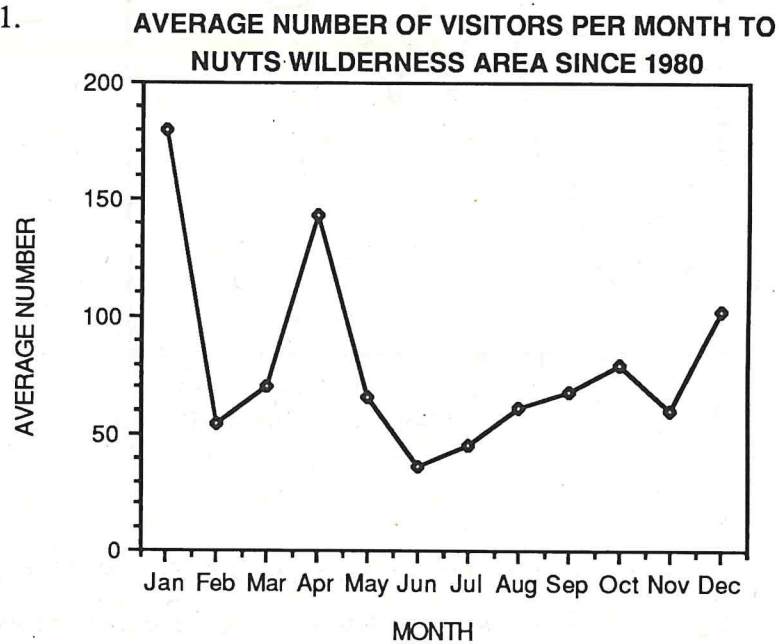
The logbook may not, however, give a true indication of the actual number of visitors to the area. Many people do not enter the names of all the walkers in their party and some do not register at all. The annual number of visitors may be as high as 2000 (B. Bond, Pers. comm., 1989).

FIGURE 20.



January is the most heavily used time in the Wilderness Area. However, April is also quite popular. January coincides with the greatest fire risk in the Park and April often coincides with the Easter school holidays. Figure 21 shows the average number of users per month in the Wilderness area since 1980.

FIGURE 21.



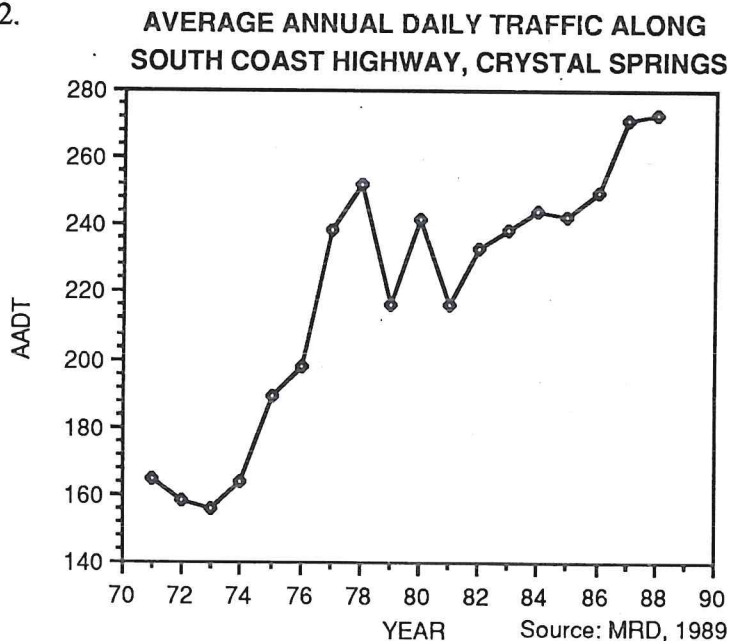
IMPLICATIONS FOR MANAGEMENT

1. An average of 956 people per year visit Nuyts Wilderness Area, a large proportion of which visit during January. As January is the greatest fire risk month and management access into the area is difficult, visitor safety may require review.
2. The visitor logbook may not give a true reflection of the actual number of visitors to the Wilderness Area, hence, an improved system may be required. An upgraded notice may encourage visitors to fill in the required details.
3. The high levels of use, particularly in January and April, need to be assessed in terms of impact on the environment, effects on other users and the overall wilderness experience.

3.4 TRAFFIC COUNTERS

The annual average daily traffic (AADT) travelling along the South Western Highway near Crystal Springs has increased from 165 in 1970/71 to 273 in 1987/88 (MRD, 1989). This represents an increase of 65%, with an average annual increment of 3.6%. Figure 22 shows the AADT from 1971 to 1988.

FIGURE 22.



The total number of vehicles travelling along the Highway during 1987/88 was 99,645. The most monthly traffic during 1987/88 was registered during December through to February, with a peak of 800 people on one day during the new year period. However, April was also quite busy with 1070 vehicles on one particular day over the Easter break.

MRD manual traffic counts show the estimated vehicle composition to be:

- | | |
|---|-----|
| 1. Cars and wagons | 55% |
| 2. Utilities, light trucks and buses (without dual axles) | 37% |
| 3. Heavy trucks and buses (with dual axles) | 6% |
| 4. Semi-trailers | 1% |
| 5. Heavy multi-unit vehicles | 1% |
| 6. Others (eg. farm machinery) | 0% |

The number of vehicles travelling along the Mandalay/Banksia camp road has increased from 3 095 in 1986 to 5 270 in 1988. This is an increase of 70%, with an annual increment of 23%. The average number of vehicles per day travelling along this road during the three year period was 12.

The average number of vehicles per month at Mandalay between January 1986 and April 1989 is shown in Figure 23. As along the South Western Highway, the peak number of vehicles was during January and April (Easter).

Traffic counters have only been operating from February to April 1989 at Hilltop Lookout, Knoll Drive and Valley of the Giants, therefore, results are insufficient to form a basis of

comparison. However, the counters have shown, as during the user surveys, Valley of the Giants is the most visited site. 702 vehicles were recorded at that site during one day of March. Figure 24 shows the vehicle counts for the three locations between February and April 1989.

FIGURE 23.

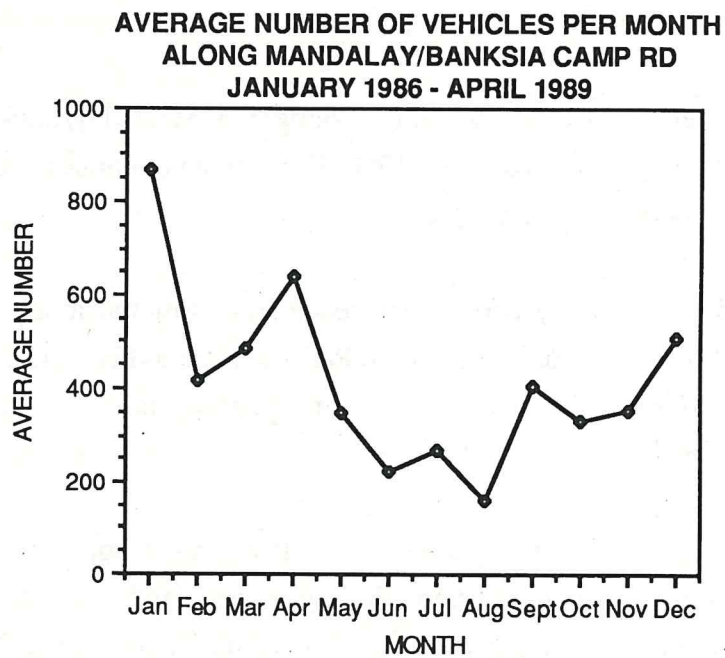
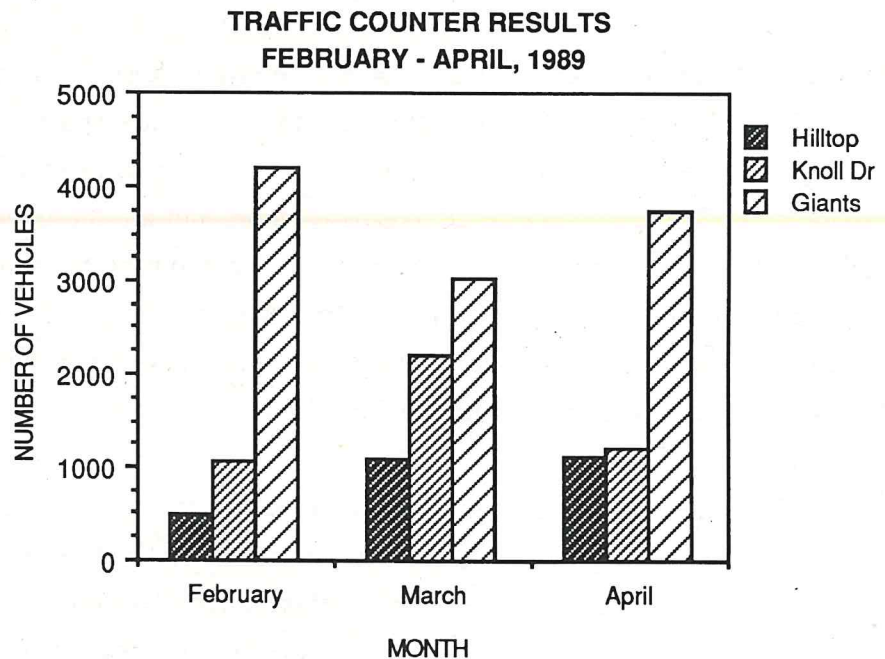


FIGURE 24.



IMPLICATIONS FOR MANAGEMENT

1. The annual traffic travelling along the South Western Highway during 1987/88 was approximately 100 000 with an increase of 3.6% since 1970/71. This indicates the general growth of traffic in the region, a proportion of which are tourists. Hence, an increase in visitors to the Park is probable.
2. The number of vehicles travelling along the Mandalay/Banksia Camp Road has increased by 23% per year since 1986. If this trend continues, a doubling of visitors to the Park may occur within 4 years.
3. The Christmas holiday period experiences the most traffic along the South Western Highway and along roads within the Park. This period coincides with the greatest fire risk in the Park, therefore, fire safety information should be incorporated in all Park information.
4. Traffic counters located at three of the Parks most popular sites in the Park have shown, as in the user surveys, that Valley of the Giants is heavily used, with up to 700 vehicles travelling through per day. The adequacy of the Big Tree recreation site to accommodate these numbers needs to be examined.

3.5 TOUR OPERATORS

Several tour operators originating from within Western Australia visited the Park during 1988/89. Table 2 outlines the (known) tours visiting the Park and includes information on frequency of visit, activities, locations visited, and future projections of their Park use. Denmark Tour Operators have adventure-based tours and are the most frequent organised tours in the Park. They have up to four visits per week during the summer holiday period, with camping up to three days at a time. Most of their activities centre on the Deep and Frankland Rivers of adjacent State forest. Most other tours do not, however, visit the Park regularly or spend a great deal of time in the Park.

In addition to the tour operators listed in Table 2, there are probably many Western Australian charter bus operations and coach tours originating from interstate which infrequently visit the Park. Westrail and Deluxe have daily coach services which travel along the South Western Highway, past Walpole, and occasionally call into the Park for lunch.

TABLE 2. TOUR OPERATORS VISITING WALPOLE-NORNALUP NATIONAL PARK.

OPERATOR	FREQ. OF VISITS	LENGTH OF STAY	ACTIVITIES UNDERTAKEN	LOCATIONS IN PARK	FUTURE PROJECTIONS
1. Adventure West	2/year	5 days	Outdoor training	Nuyts Wildness	No change
2. Allstates Charters	3/year	1 day	Touring, short walks	Giants, picnic sites	No change
3. Coastal Karri 4WD Tours	4/year	1 day	4WD convoy (2WD tracks)	Hilltop and nearby areas	No change
4. Cross Country Safaris	2/year	1 day	Touring, picnics	Various, camp at Coalmine Bch	No change
5. Denmark Tour Operators	70/year, summer	1-3 days	Canoeing, rafting walks, 4WD, bus	Giants, Deep & Frankland Rvrs	No change
6. Great Western Tours	2/year	>1 day	Picnic/lunch	Picnic sites esp. Giants	50%/year increase
7. Miles Away Safari Tours	5/year	2 days	Bushwalks	Giants, Mandalay	40%/year increase
8. Moore Bus	2/year	>1 day	Picnic/lunch	Picnic sites	No change
9. SouthWest Coach Lines	6/year	> 1 day	Picnic/lunch	Giants	No change

IMPLICATIONS FOR MANAGEMENT

1. Most tour operators do not visit the Park regularly or spend a significant amount of time in the Park. Their impact on the Park could be described as minimal, although if increased use occurs, impacts will need to be monitored.
2. The most frequent tour operators to visit the Park spend most of their time on each trip in adjacent State forest.

3.7 REGIONAL PERSPECTIVE

The Lower South West is very popular and current trends show that the number of visitors to the region is likely to increase in future years.

For all motoring trips taken in W.A. during 1987, the most popular regions were the Upper South West and Lower South West (containing Walpole-Nornalup National Park) (W.A.T.C., 1987). For holidays of 8 nights or longer, the Lower South West was the most popular destination.

The total guest arrivals at hotels, motels, guesthouses and caravan parks in the Shire of Manjimup increased by 23% at an annual increment of 4.6% from 1983 to 1988 (Australian Bureau of Statistics, 1988). In 1983/84 there were 68 300 arrivals and in 1987/88 there were 84 900.

The number of guest arrivals in the Shire during 1987/88 shows seasonal patterns. School holidays were the most popular months, particularly during January, with 14 000 arrivals during the month.

The pioneer cottage Visitors Centre in Walpole has been open since February 1988. Between February 1988 and April 1989, 4 134 people visited the centre, of which 38% were from the Perth metropolitan area, 22% from other W.A., 25% from interstate and 15% from overseas. The peak number of visitors to the Centre occurred in January 1989, with 602. The largest number of interstate visitors occurred in September and October 1988.

IMPLICATION FOR MANAGEMENT

The Walpole area is popular and current trends show that the number of visitors in the area is likely to increase. The number of visitors to the Walpole-Nornalup National Park is likely to increase as a result. All management planning needs to take this likely increase into account.

4.0 DISCUSSION

The available visitor information and user surveys conducted in Walpole-Nornalup National Park have shown that recreation demands appear to be increasing. This trend is common in other Australian national parks. The number of visitors to national parks in Victoria increased at an annual compound rate of 12% between 1958 and 1972 (Mercer, 1977). Parks in other Australian States experienced an annual increase in visitors of between 7% and 18%.

It is difficult to obtain the absolute number of annual visitors to the Walpole-Nomalup National Park. Schmidt (1980) estimated that 25 000 people annually visited the Park. He also predicted an annual growth rate of 7% and a doubling of visitors within ten years. Schmidts' estimations were based on data obtained from monthly surveys over an entire year on weekends and/or public holidays to coincide with peak visitor activity.

Estimation of the current number of visitors to the Park was calculated from the three user surveys and vehicle counters. The formula used in this calculation is shown in Appendix 4.

This estimated number of visitors is a three-fold increase over the last 10 years. If an increase of 3.6% occurs, as represented by the MRD traffic counter located at Crystal Springs, then it may take some time before the number of annual visitors increases dramatically. If, however, the number of visitors increases at a similar rate to the counter located at Mandalay, then a doubling of visitors will occur within four years.

CONSTRAINTS OF THE USER SURVEY

Some factors involved in the practical reality of conducting a survey under such complex conditions means that while figures obtained from the user survey are very useful as an indication of the levels of use and the attitudes of a representative sample of users they cannot be used as absolute statistics. Factors included an under-representaion of: 4WD users (due to the difficulty in surveying the many 4WD areas and inundation of tracks in spring); fisherpeople (any who were in and out of the Park before 9am and after 4pm); Nuyts Wilderness area users, of which numbers were probably down because of the absence of the bridge; summer visitors (due to poor weather prior to the survey).

PROFILE OF PARK USERS

There were some differences in the profile of Park users at different seasons. The majority of Park users came from outside the Shires of Denmark and Manjimup, with many being in the 41-60 years age group. In spring, however, there was a higher percentage of visitors from the eastern States and a higher percentage in the 41-60 and 61+ years age groups than in summer.

More users visited the Park on a tour bus during spring, which may explain the number of interstate and older age visitors. The fact that more users visited as part of a tour bus during spring may also help explain why people stayed for a shorter period than during summer.

The majority of users visited the Park with the family and /or friends. This was common for

all three surveys and was also the case during Schmidt's (1980) survey.

During all three surveys, most people visited the Park by 2WD vehicle. In summer, there was a higher percentage of 4WD users than during the other two periods.

There was not a significant difference between the opinions of users from the three surveys regarding future management options. All agreed that there was a need the provision of more information on the Park. There was also support for foot-only access and less vehicle access. The majority of users were opposed to allowing dogs on some beaches in the Park, and were in favour of provision of more facilities.

Passive activities such as sightseeing, looking at plants and animals, and pleasure driving were the most popular activities. These activities are often the major reason of visit to a national park (Mercer, 1977). Fourwheel driving was popular during summer but not in winter or spring.

The Big Tree, and other forest recreation sites were the most popular locations in the Park. These sites have traditionally been popular (B. Bond, pers. comm., 1989) and this is evidenced by the vehicle counters and visitor surveys.

There was generally a larger response to the user likes and dislikes section of the survey during summer than winter and spring. This may reflect the fact that people stay longer during summer, get to know the Park better, and acquire a sounder basis for opinion. Many people just pass through the Park during winter and spring, generally staying for less than a few hours, so do not see a significant part of the Park.

The natural environment with its tall trees, scenery, wildflowers and peacefulness was clearly the most popular aspect of the Park, while the lack and/or quality of facilities was the least popular. Visitor likes attracted more response than visitor dislikes.

CONCLUSIONS

The Walpole-Nornalup National Park is very popular with an annual number of visitors of approximately 78,000. If the current trends continue, there may be over 100,000 people visiting the Park by the early 1990s. Management should be prepared for this increase. Management also needs to consider the findings in this document if the Park is to cater for its users while ensuring the environment is protected.

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APPENDIX 1.

DESCRIPTION OF SURVEY SITES

Crystal Springs

Situated at the Western boundary of WNNP, Crystal Springs is the junction from which access is gained to Mandalay Beach (2WD access), Banksia Camp (4WD), and Long Point (4WD) (all beach locations). While the access bridge to Nuyts Wilderness Area (near Tinglewood) was washed out, Crystal Springs was the main access point to the Wilderness Area throughout the survey period. There is a ranger's residence, information board and a small camping area at Crystal Springs.

Tinglewood Drive

The survey point was situated at the junction of Tinglewood and Shedley Drives. These gravel roads provide 2WD access through tingle and karri forest, to Tinglewood Lodge, Mt Clare Lookout, Delta Road and the Nuyts Wilderness trailhead. During the Spring survey Shedley Drive and Delta Road were impassable, and as already noted the Wilderness area was not accessible from the usual trailhead during the survey.

Isle Road

The survey point was situated at the junction of Delta and Isle Roads. Isle Road provides 2WD access to a recreation site near the mouth of the Deep River which has a picnic area and a boat launching area. Delta Road connects with Tinglewood Drive and was impassable during the Spring survey.

Rest Point Road

The survey point was situated at the junction of Rest Point and Sandy Beach Roads. The sealed Rest Point Road provides access to Rest Point Tourist Centre and the mouth of the Walpole Inlet (with an associated boat launching facility), and an historic site, (a saw pit), to which a trail has been developed. The gravel Sandy Beach Road provides access to Sandy Beach, on the shores of the Nornalup Inlet. Along with Coalmine Beach, it is the only safe swimming area close to Walpole. There is a walk trail linking Sandy Beach to Rest Point, and a picnic area at Sandy Beach.

Knoll Drive

Knoll Drive (a sealed road) provides access to Coalmine Beach Caravan Park, Coalmine Beach (on the edge of Nornalup Inlet), Walpole Yacht Club and the scenic Knoll Drive (which provides views across the two inlets). The scenic drive contains three picnic sites, walk trails, paths and parking for fishing spots and lookout points. The Coalmine Beach Heritage Trail finishes close to the caravan park. The road is in close proximity to the town

of Walpole and is accessible to cars, caravans and tourist buses.

Hilltop Lookout

With well-signposted access off South West Highway, Hilltop Road is a narrow, one-way gravel road which winds its way through tingle and karri forest. Hilltop lookout (at which the survey point was located) provides spectacular views of the Park and islands off the coast. Running off Hilltop Road are a number of roads (of varying quality) which provide access to the Frankland River and the northern part of the Park. There is also the Tingle tree recreation site (with a walk trail) and Circular Pool (with picnic facilities), on the Frankland River. Hilltop Road is only accessible to cars and mini-buses.

Valley of the Giants

The famous Valley of the Giants Road provides easy sealed access (particularly for tourist buses and caravans) through the tingle forest. The Big Tree recreation site (and the location of the survey point) contains a walktrail, picnic sites, information board and toilets.

Conspicuous Beach

Conspicuous Beach is one of three beaches in the area (the others are Peaceful Bay and Mandalay) with 2WD access. Access is along a gravel road. A picnic area, toilets and a pathway to the beach are provided.

Peaceful Bay

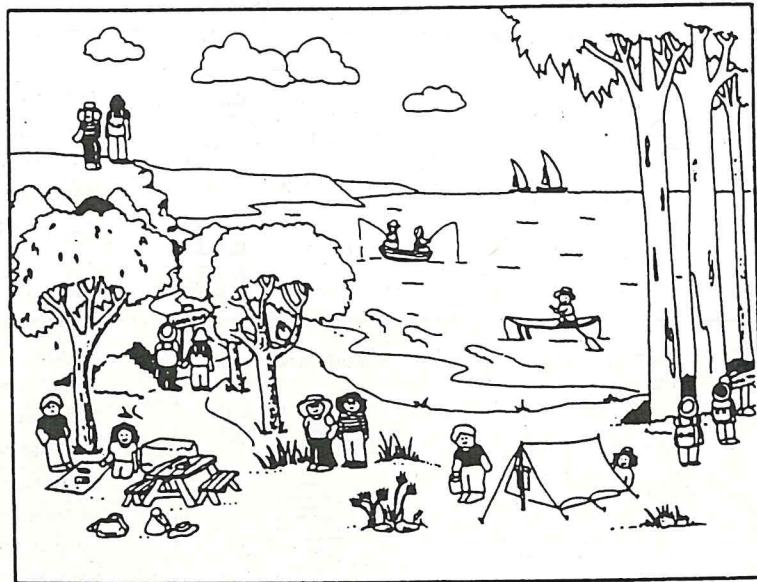
The survey point was situated at the beginning of the Rame Head track, which provides 4WD access to fishing spots on the coast. The track was impassable during the spring survey and so was only surveyed in summer.



Department of Conservation and Land Management, W.A.

WALPOLE-NORNALUP NATIONAL PARK USER SURVEY

OCTOBER 1988



To help us plan for the future of the Walpole-Nornalup National Park, it is important that we know what visitors think of the Park, its facilities and its future.

- PLEASE FILL OUT THIS QUESTIONNAIRE AT THE END OF YOUR VISIT.
- This Questionnaire is for people 15 YEARS OF AGE AND OVER.

Thanks

UNLESS OTHERWISE INDICATED, PLEASE TICK ONE BOX ONLY.

1. Where do you usually live?	POSTCODE	2. What is your age?
Shire of Manjimup 1.6% <input type="checkbox"/>	-----	15-25 16.5% <input type="checkbox"/>
Shire of Denmark 3.7% <input type="checkbox"/>	-----	26-40 26.0% <input type="checkbox"/>
Other W.A. 50.8% <input type="checkbox"/>	-----	41-60 34.0% <input type="checkbox"/>
Interstate 34.2% <input type="checkbox"/>	-----	61 and over 23.3% <input type="checkbox"/>
Overseas 9.7% <input type="checkbox"/>	-----	

APPENDIX 2. SPRING SURVEY

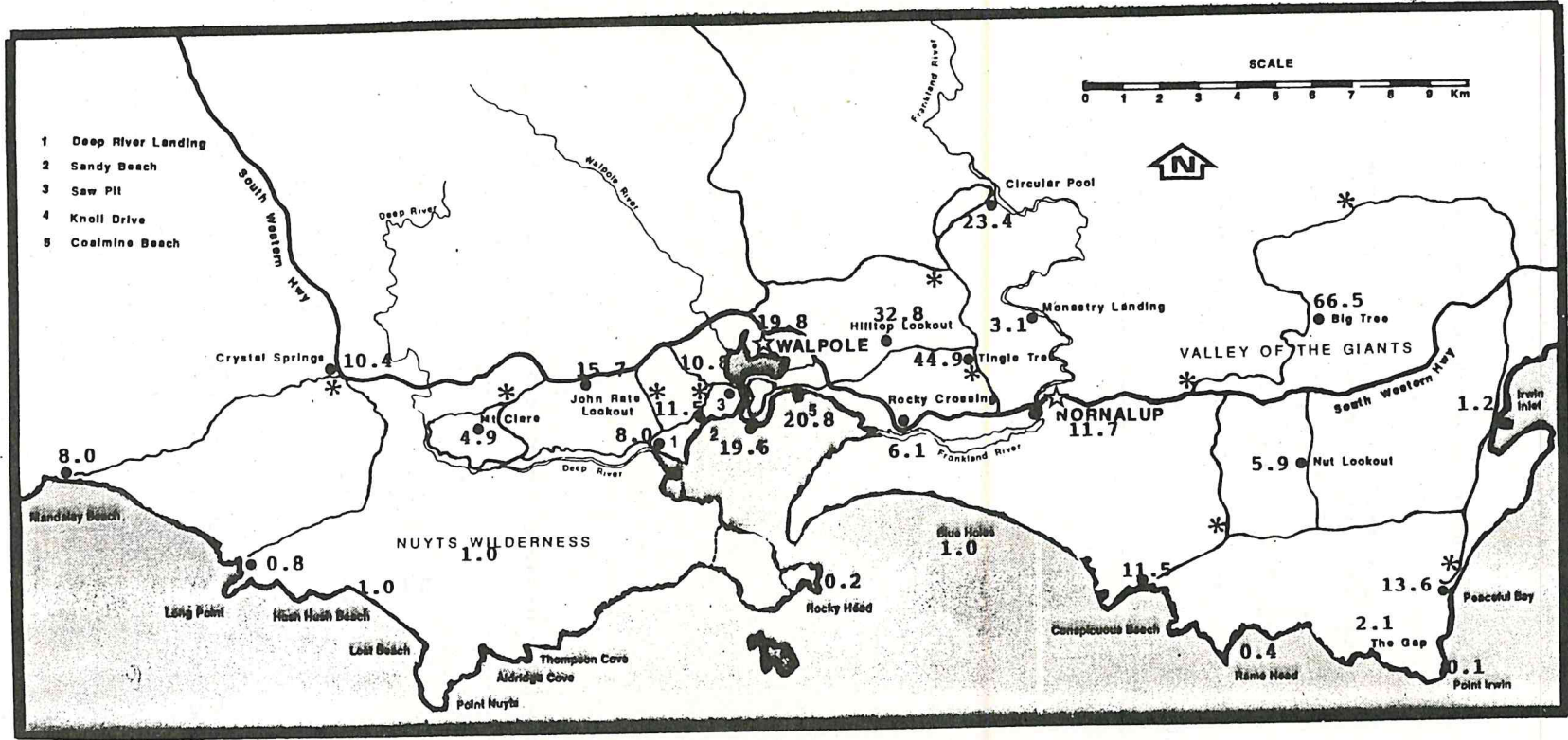
<p>3. Including people in other vehicles (if any) are you visiting the Park</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">with family e.g. partner, parents and/or children</td> <td style="width: 10%; text-align: right;">42.9%</td> <td style="width: 10%; text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>with friends</td> <td style="text-align: right;">14.6%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>with family and friends</td> <td style="text-align: right;">16.0%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>on a commercial tour</td> <td style="text-align: right;">15.6%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>with a club or organisation</td> <td style="text-align: right;">7.9%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>a school group</td> <td style="text-align: right;">0</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>other (please specify)</td> <td style="text-align: right;">1.1%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> </table>	with family e.g. partner, parents and/or children	42.9%	<input type="checkbox"/>	with friends	14.6%	<input type="checkbox"/>	with family and friends	16.0%	<input type="checkbox"/>	on a commercial tour	15.6%	<input type="checkbox"/>	with a club or organisation	7.9%	<input type="checkbox"/>	a school group	0	<input type="checkbox"/>	other (please specify)	1.1%	<input type="checkbox"/>	<p>8. What transport did you use during your visit to the National Park? (tick all types used)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">2 wheel drive car/van</td> <td style="width: 10%; text-align: right;">65.2%</td> <td style="width: 10%; text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>4 wheel drive</td> <td style="text-align: right;">14.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>motorbike</td> <td style="text-align: right;">0</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>bus/coach tour</td> <td style="text-align: right;">19.8%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>power boat</td> <td style="text-align: right;">0</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>canoe/raft</td> <td style="text-align: right;">0</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>other (please specify)</td> <td style="text-align: right;">0.75%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> </table>	2 wheel drive car/van	65.2%	<input type="checkbox"/>	4 wheel drive	14.2%	<input type="checkbox"/>	motorbike	0	<input type="checkbox"/>	bus/coach tour	19.8%	<input type="checkbox"/>	power boat	0	<input type="checkbox"/>	canoe/raft	0	<input type="checkbox"/>	other (please specify)	0.75%	<input type="checkbox"/>																								
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<p>4. The driver of the vehicle ONLY should answer this question (otherwise go to Question 5).</p> <p>(a) How many people are in your vehicle?</p> <p>(i) Children (under 15) <input type="checkbox"/> 1.2</p> <p>(ii) Adults (15 & over including yourself) <input type="checkbox"/> 3.3</p> <p>(b) Are you visiting the Park with a group?</p> <p style="padding-left: 20px;">YES <input type="checkbox"/> 27.6% NO <input type="checkbox"/> — go to Q.5</p> <p>If yes, 72.4%</p> <p>(i) How many people are in your group? <input type="checkbox"/> 13.7</p> <p>(ii) How many vehicles are in the group? <input type="checkbox"/> 2.1</p>	<p>9. Please tick the main activities you have undertaken in the National Park on this visit.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">camping</td> <td style="width: 10%; text-align: right;">7.9%</td> <td style="width: 10%; text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>powerboating</td> <td style="text-align: right;">3.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>canoeing</td> <td style="text-align: right;">1.1%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>pleasure driving</td> <td style="text-align: right;">63.5%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>rafting</td> <td style="text-align: right;">0.1%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>sailing</td> <td style="text-align: right;">0.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>windsurfing</td> <td style="text-align: right;">0.5%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>sightseeing</td> <td style="text-align: right;">65.0%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>beach combing</td> <td style="text-align: right;">11.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>professional fishing</td> <td style="text-align: right;">0.5%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>visiting Nuyts wilderness</td> <td style="text-align: right;">3.8%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>bushwalking</td> <td style="text-align: right;">41.3%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>4 wheel driving</td> <td style="text-align: right;">8.5%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>swimming</td> <td style="text-align: right;">3.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>picnicking/ BBQ's</td> <td style="text-align: right;">20.6%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>scuba diving</td> <td style="text-align: right;">0.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>fishing</td> <td style="text-align: right;">12.3%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>surfing</td> <td style="text-align: right;">1.4%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>nature study</td> <td style="text-align: right;">20.2%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>photography</td> <td style="text-align: right;">43.1%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>looking at plants and animals</td> <td style="text-align: right;">57.9%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>other (please specify)</td> <td></td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> </table>	camping	7.9%	<input type="checkbox"/>	powerboating	3.2%	<input type="checkbox"/>	canoeing	1.1%	<input type="checkbox"/>	pleasure driving	63.5%	<input type="checkbox"/>	rafting	0.1%	<input type="checkbox"/>	sailing	0.2%	<input type="checkbox"/>	windsurfing	0.5%	<input type="checkbox"/>	sightseeing	65.0%	<input type="checkbox"/>	beach combing	11.2%	<input type="checkbox"/>	professional fishing	0.5%	<input type="checkbox"/>	visiting Nuyts wilderness	3.8%	<input type="checkbox"/>	bushwalking	41.3%	<input type="checkbox"/>	4 wheel driving	8.5%	<input type="checkbox"/>	swimming	3.2%	<input type="checkbox"/>	picnicking/ BBQ's	20.6%	<input type="checkbox"/>	scuba diving	0.2%	<input type="checkbox"/>	fishing	12.3%	<input type="checkbox"/>	surfing	1.4%	<input type="checkbox"/>	nature study	20.2%	<input type="checkbox"/>	photography	43.1%	<input type="checkbox"/>	looking at plants and animals	57.9%	<input type="checkbox"/>	other (please specify)		<input type="checkbox"/>
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<p>5. How long did you stay in the National Park on this visit?</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">less than half a day</td> <td style="width: 10%; text-align: right;">69.4%</td> <td style="width: 10%; text-align: right;"><input type="checkbox"/></td> <td rowspan="2" style="font-size: 2em; vertical-align: middle;">}</td> <td rowspan="2" style="vertical-align: middle;">go to Q.7</td> </tr> <tr> <td>half a day to a day</td> <td style="text-align: right;">15.6%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>1 night</td> <td style="text-align: right;">7.1%</td> <td style="text-align: right;"><input type="checkbox"/></td> <td rowspan="4" style="font-size: 2em; vertical-align: middle;">}</td> <td rowspan="4" style="vertical-align: middle;">go to Q.6</td> </tr> <tr> <td>2-3 nights</td> <td style="text-align: right;">6.5%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>4-7 nights</td> <td style="text-align: right;">3.4%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>8-14 nights</td> <td style="text-align: right;">2.0%</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>more than 14 nights</td> <td style="text-align: right;">0.3%</td> <td style="text-align: right;"><input type="checkbox"/></td> <td></td> <td></td> </tr> </table>	less than half a day	69.4%	<input type="checkbox"/>	}	go to Q.7	half a day to a day	15.6%	<input type="checkbox"/>	1 night	7.1%	<input type="checkbox"/>	}	go to Q.6	2-3 nights	6.5%	<input type="checkbox"/>	4-7 nights	3.4%	<input type="checkbox"/>	8-14 nights	2.0%	<input type="checkbox"/>	more than 14 nights	0.3%	<input type="checkbox"/>			<p>6. Did you</p> <p>(Tick as many categories as you need to)</p> <p>Stay at Coalmine Beach Caravan Park <input type="checkbox"/> 6.9%</p> <p>Camp in the Park <input type="checkbox"/> 11.5%</p> <p>(Please mark locations on map with *)</p> <p>Stay somewhere else outside the Park (e.g. hotel, lodge, holiday house) <input type="checkbox"/> 81.5%</p>																																							
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APPENDIX 2. SPRING SURVEY

10. On this map please . . .

- (a) Circle the places you visited on this trip to the National Park, e.g. Tingle Tree, Blue Holes, Coalmine Beach
- (b) Mark with (*) where you camped in the Park (if applicable).

1 Deep River Landing
 2 Sandy Beach
 3 Saw Pit
 4 Knoll Drive
 5 Coalmine Beach



* Questionnaire return box.
 Water

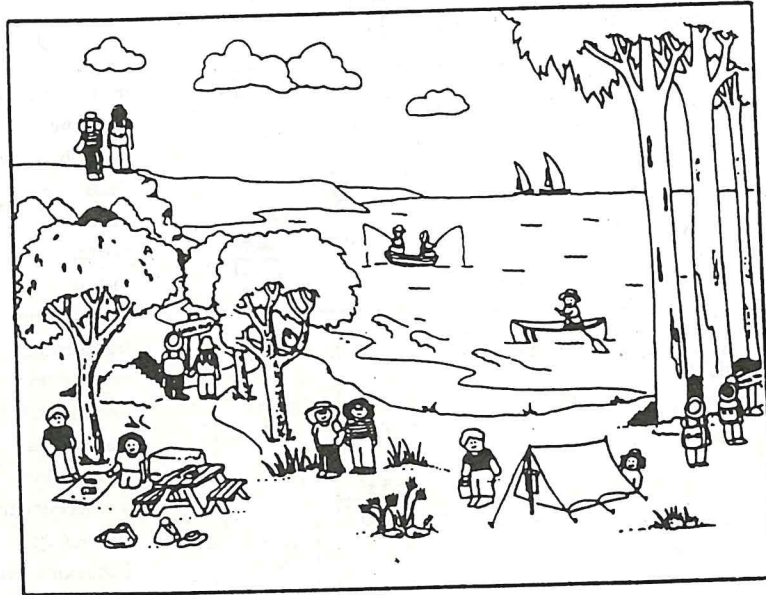
WALPOLE-NORNALUP
 NATIONAL PARK



Department of Conservation and Land Management, W.A.

SUMMER

WALPOLE-NORNALUP NATIONAL PARK USER SURVEY



To help us plan for the future of the Walpole-Nornalup National Park, it is important that we know what visitors think of the Park, its facilities and its future.

- PLEASE FILL OUT THIS QUESTIONNAIRE AT THE END OF YOUR VISIT.
- This Questionnaire is for people 15 YEARS OF AGE AND OVER.

Thanks

UNLESS OTHERWISE INDICATED, PLEASE TICK ONE BOX ONLY.

<p>1. Where do you usually live?</p> <p style="text-align: right;">POSTCODE</p> <p>Shire of Manjimup 6.2% <input type="checkbox"/></p> <p>Shire of Denmark 1.5% <input type="checkbox"/></p> <p>Other W.A. 71.4% <input type="checkbox"/></p> <p>Interstate 9.2% <input type="checkbox"/></p> <p>Overseas 11.6% <input type="checkbox"/></p>	<p>2. What is your age?</p> <p>15-25 23.3% <input type="checkbox"/></p> <p>26-40 41.3% <input type="checkbox"/></p> <p>41-60 26.2% <input type="checkbox"/></p> <p>61 and over 9.2% <input type="checkbox"/></p>
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APPENDIX 2. SUMMER SURVEY

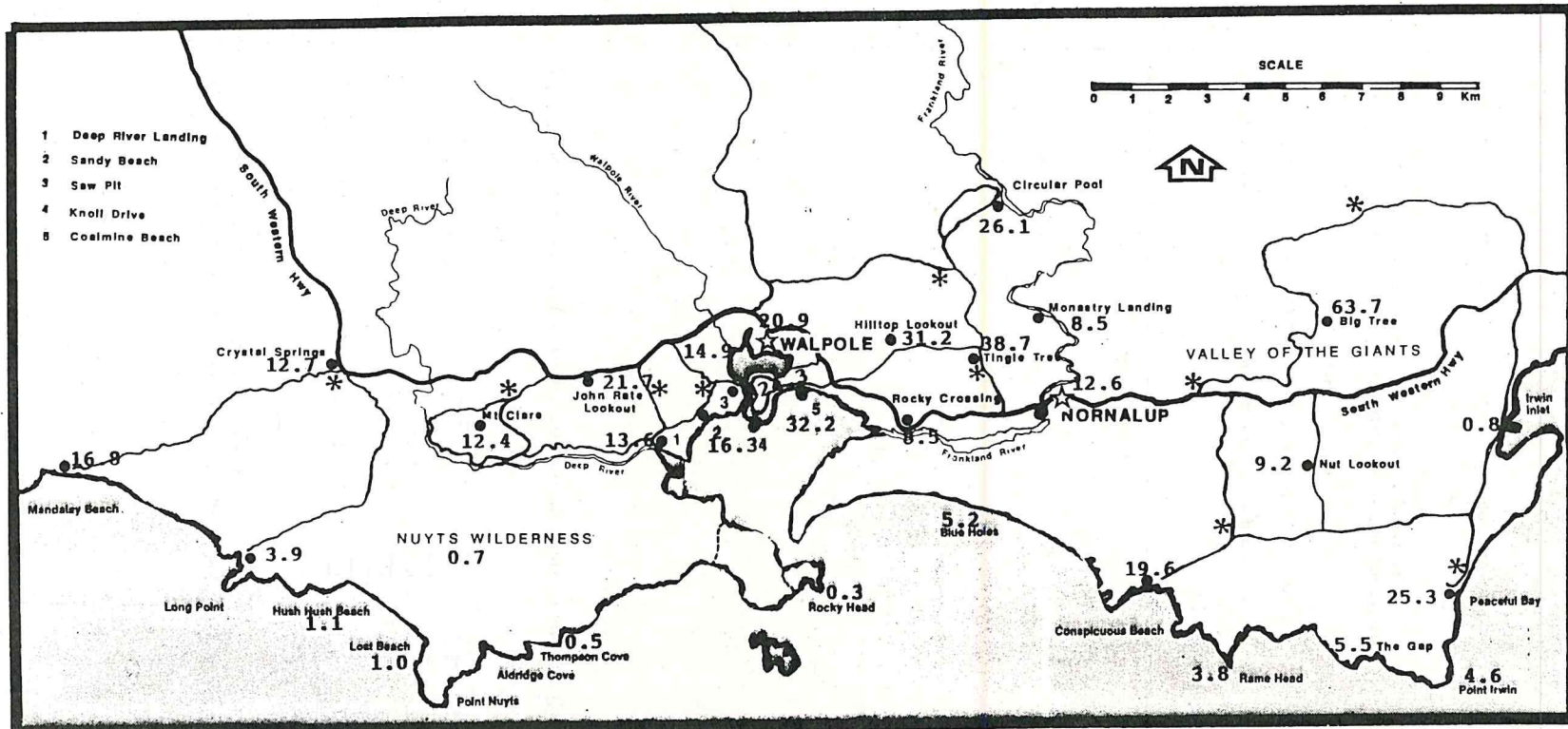
<p>3. Including people in other vehicles (if any) are you visiting the Park</p> <p>with family e.g. partner, parents and/or children <input type="checkbox"/> 53.8%</p> <p>with friends <input type="checkbox"/> 23.5%</p> <p>with family and friends <input type="checkbox"/> 16.5%</p> <p>on a commercial tour <input type="checkbox"/> 1.0%</p> <p>with a club or organisation <input type="checkbox"/> 2.6%</p> <p>a school group <input type="checkbox"/> 0%</p> <p>other (please specify) <u>Alone</u> <input type="checkbox"/> 2.6%</p>	<p>8. What transport did you use during your visit to the National Park? (tick all types used)</p> <p>2 wheel drive car/van <input type="checkbox"/> 74.8%</p> <p>4 wheel drive <input type="checkbox"/> 25.0%</p> <p>motorbike <input type="checkbox"/> 2.2%</p> <p>bus/coach tour <input type="checkbox"/> 1.8%</p> <p>power boat <input type="checkbox"/> 6.1%</p> <p>canoe/raft <input type="checkbox"/> 1.5%</p> <p>other (please specify) <u>Walk</u> <input type="checkbox"/> 0.7%</p> <p style="padding-left: 100px;"><u>Truck</u> <input type="checkbox"/> 0.1%</p>
<p>4. The driver of the vehicle ONLY should answer this question (otherwise go to Question 5).</p> <p>(a) How many people are in your vehicle?</p> <p>(i) Children (under 15) <input type="checkbox"/> 1.8%</p> <p>(ii) Adults (15 & over including yourself) <input type="checkbox"/> 2.4%</p> <p>(b) Are you visiting the Park with a group?</p> <p>YES <input type="checkbox"/> 24% NO <input type="checkbox"/> 76% go to Q.5</p> <p>If yes,</p> <p>(i) How many people are in your group? <input type="checkbox"/> 7.3%</p> <p>(ii) How many vehicles are in the group? <input type="checkbox"/> 1.7%</p>	<p>9. Please tick the main activities you have undertaken in the National Park on this visit.</p> <p>4.2 camping <input type="checkbox"/> 28.8%</p> <p>powerboating <input type="checkbox"/> 9.9%</p> <p>canoeing <input type="checkbox"/> 3.9%</p> <p>pleasure driving <input type="checkbox"/> 66.9%</p> <p>rafting <input type="checkbox"/> 0.9%</p> <p>sailing <input type="checkbox"/> 1.7%</p> <p>windsurfing <input type="checkbox"/> 0.4%</p> <p>sightseeing <input type="checkbox"/> 72.5%</p> <p>beach combing <input type="checkbox"/> 25.6%</p> <p>professional fishing <input type="checkbox"/> 0.6%</p> <p>visiting Nuyts wilderness <input type="checkbox"/> 9.3%</p> <p>bushwalking <input type="checkbox"/> 46.9%</p> <p>4 wheel driving <input type="checkbox"/> 14.2%</p> <p>swimming <input type="checkbox"/> 28.9%</p> <p>picnicking/BBQ's <input type="checkbox"/> 36.0%</p> <p>scuba diving <input type="checkbox"/> 1.3%</p> <p>fishing <input type="checkbox"/> 30.2%</p> <p>surfing <input type="checkbox"/> 5.7%</p> <p>nature study <input type="checkbox"/> 17.0%</p> <p>photography <input type="checkbox"/> 40.8%</p> <p>looking at plants and animals <input type="checkbox"/> 54.7%</p> <p>other (please specify) <u>Painting</u> <input type="checkbox"/> 0.1%</p> <p style="padding-left: 100px;"><u>Meditating</u> <input type="checkbox"/> 0.1%</p> <p style="padding-left: 100px;"><u>Waterskiing</u> <input type="checkbox"/> 0.3%</p>
<p>5. How long did you stay in the National Park on this visit?</p> <p>less than half a day <input type="checkbox"/> 53.4% } go to Q.7</p> <p>half a day to a day <input type="checkbox"/> 10.6%</p> <p>1 night <input type="checkbox"/> 7.5% } go to Q.6</p> <p>2-3 nights <input type="checkbox"/> 13.2%</p> <p>4-7 nights <input type="checkbox"/> 8.1%</p> <p>8-14 nights <input type="checkbox"/> 4.5%</p> <p>more than 14 nights <input type="checkbox"/> 2.7%</p>	
<p>6. Did you</p> <p>(Tick as many categories as you need to)</p> <p>Stay at Coalmine Beach Caravan Park <input type="checkbox"/> 20.0%</p> <p>Camp in the Park <input type="checkbox"/> 18.1%</p> <p>(Please mark locations on map with *)</p> <p>Stay somewhere else outside the Park (e.g. hotel, lodge, holiday house) <input type="checkbox"/> 61.9%</p>	
<p>7. Do you agree or disagree with each of the following statements on the future management of the National Park.</p> <p style="text-align: right; margin-right: 50px;">AGREE DISAGREE NOT SURE</p> <p>(a) More roads than at present, should be accessible to 2 wheel drive vehicles <input type="checkbox"/> 31.9 <input type="checkbox"/> 52.9 <input type="checkbox"/> 15.2</p> <p>(b) Some areas should be accessible to 4 wheel drive vehicles only <input type="checkbox"/> 41.2 <input type="checkbox"/> 49.3 <input type="checkbox"/> 9.5</p> <p>(c) Some areas should be accessible by foot only (i.e. Nuyts wilderness) <input type="checkbox"/> 85.9 <input type="checkbox"/> 8.3 <input type="checkbox"/> 5.8</p> <p>(d) There should be more BBQ picnic facilities available <input type="checkbox"/> 42.7 <input type="checkbox"/> 37.1 <input type="checkbox"/> 20.2</p> <p>(e) Opportunities to learn more about the plants and animals in the Park should be made available from:</p> <p style="padding-left: 20px;">(i) pamphlets <input type="checkbox"/> 79.0 <input type="checkbox"/> 10.3 <input type="checkbox"/> 10.7</p> <p style="padding-left: 20px;">(ii) information boards <input type="checkbox"/> 85.3 <input type="checkbox"/> 6.8 <input type="checkbox"/> 7.9</p> <p style="padding-left: 20px;">(iii) rangers <input type="checkbox"/> 68.7 <input type="checkbox"/> 15.9 <input type="checkbox"/> 15.4</p> <p>(f) There should be more campsites within the National Park <input type="checkbox"/> 41.8 <input type="checkbox"/> 40.5 <input type="checkbox"/> 17.7</p> <p>(g) Dogs should be allowed on some beaches in the Park <input type="checkbox"/> 40.4 <input type="checkbox"/> 52.5 <input type="checkbox"/> 7.1</p> <p>(h) There should be more walktrails <input type="checkbox"/> 70.9 <input type="checkbox"/> 13.6 <input type="checkbox"/> 15.5</p>	

APPENDIX 2. SUMMER SURVEY

10. On this map please . . .

- (a) Circle the places you visited on this trip to the National Park, e.g. Tingle Tree, Coalmine Beach
- (b) Mark with (*) where you camped in the Park (if applicable).

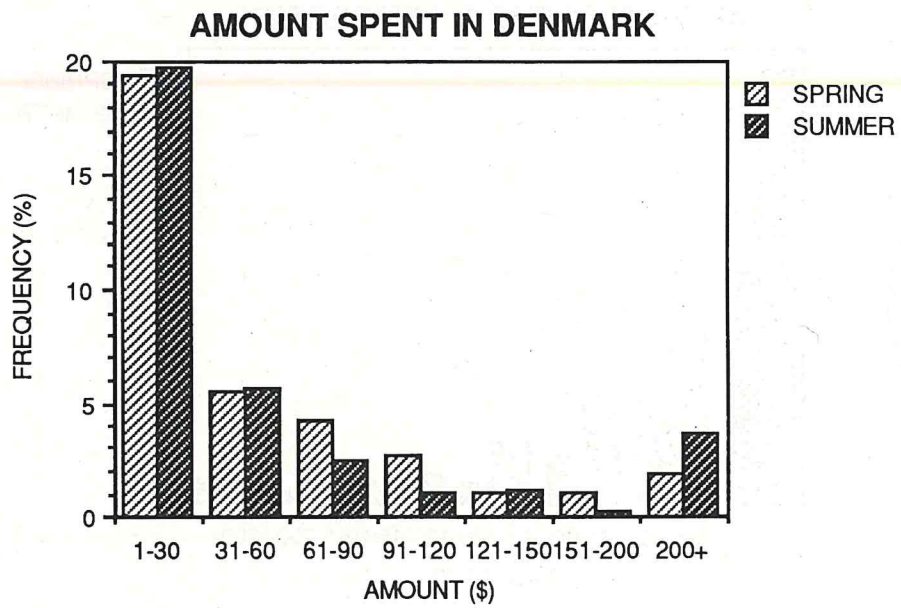
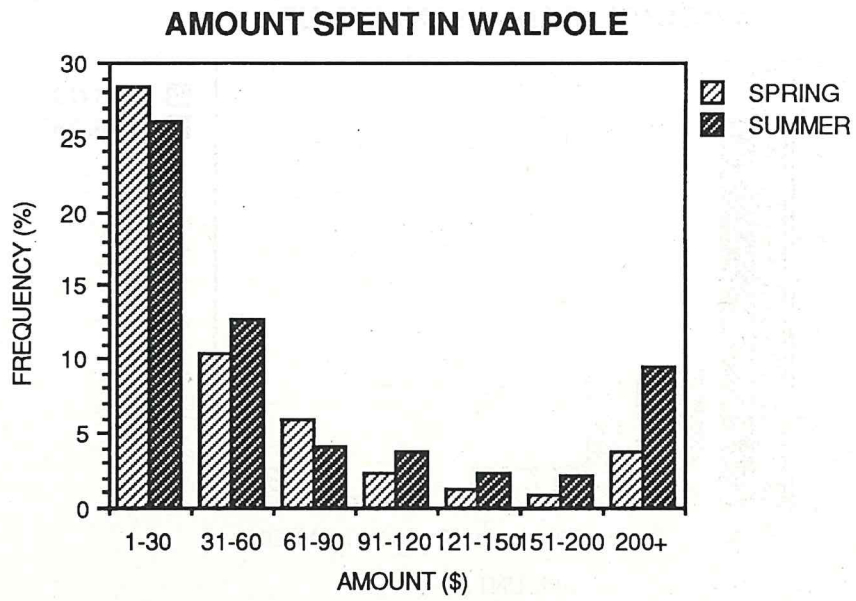
1 Coalmine Beach
2 Blue Holes
3 Tingle Tree



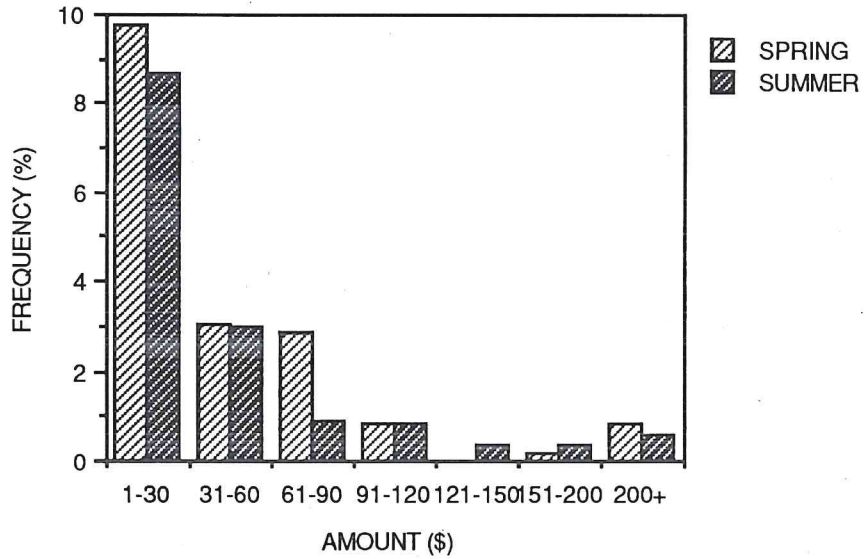
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Water

WALPOLE-NORNALUP
NATIONAL PARK

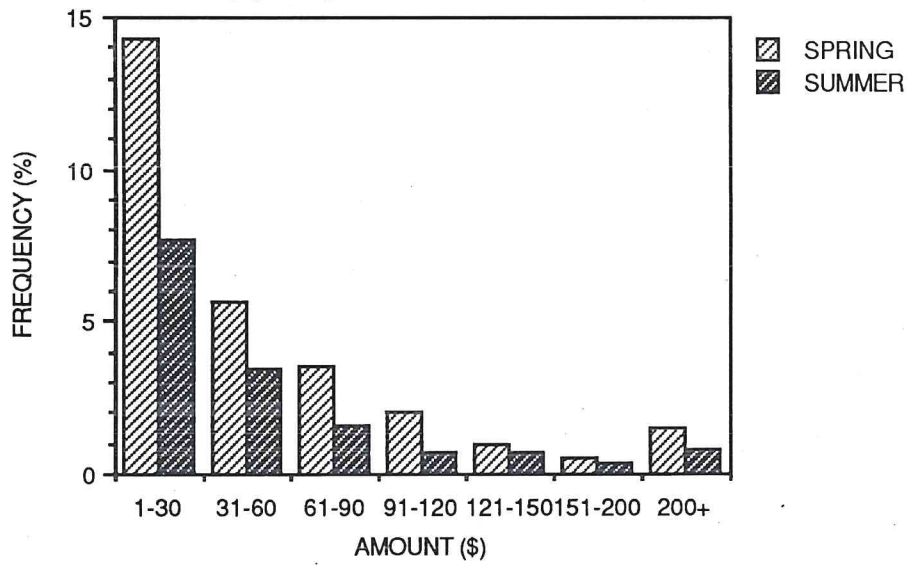
APPENDIX 3. AMOUNT SPENT IN NEARBY TOWNS BY PARK VISITORS DURING THE SPRING AND SUMMER SURVEYS



AMOUNT SPENT IN MANJIMUP



AMOUNT SPENT IN PEMBERTON



APPENDIX 4.

The following formula was derived to estimate the number of visitors:

$$T = (nm_1 + nM_1) + (nm_2 + nM_2) + (nm_3 + nM_3) + (nm_4 + nM_4)$$

where:

T = estimated total number of annual visitors to the Park

n = number of days

m = mean number of weekday visitors

M = mean number of weekend/public holiday visitors

1 = winter

2 = spring

3 = summer

4 = autumn

Therefore using the formula:

$$T = (62 \times 40 + 29 \times 80) + (64 \times 150 + 27 \times 310) + (65 \times 300 + 27 \times 435) \\ + (62 \times 210 + 28 \times 400)$$

$$T = 78\,235 \text{ (visitor/days) per year}$$

This total, however, may be an over estimate as visitors during autumn were not sampled, and estimates were based upon observations by ranger staff and traffic counters.