

**Implementing the Western Ground Parrot Interim Recovery Plan**

**SEARCH FOR THE WESTERN GROUND PARROT  
IN CAPE ARID NATIONAL PARK  
AND NEARBY AREAS**

**JUNE 1999 TO JUNE 2000**



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**A project of Birds Australia Western Australia Inc.**



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Natural Heritage Trust and World Wide Fund for Nature Australia (WWF)



*Threatened Species Network Community Grants 1998 - 1999*

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This project was funded by the Natural Heritage Trust and World Wide Fund for Nature Australia (WWF) and administered by the Threatened Species Network (TSN)



*"The Threatened Species Network's mission is to involve the community in the recovery of threatened species and ecological communities."*



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# **Implementing the Western Ground Parrot Interim Recovery Plan**

## **Search for the Western Ground Parrot in Cape Arid National Park and nearby areas**

**June 1999 to June 2000**

### **Introduction**

Because the Western Ground Parrot is known from only three populations with an overall total of only a few hundred birds, it is listed under the Western Australian Wildlife Conservation Act as 'rare or likely to become extinct' and is ranked as Endangered in the current Bird Action Plan (Garnett and Crowley 2000). The Western Ground Parrot Interim Recovery Plan (Burbidge *et al.* 1997) lists several actions required for recovery, including the need to document known populations and monitor the trend of population sizes and boundaries. This study is part of the implementation of that action.

The Western Ground Parrot is a rare and unusual parrot. The Ground Parrot is unusual in that it lives in heath where it walks along the ground feeding during the day. At approximately 20 minutes after sunset the Western Ground Parrot begin to call and then fly to its roosting place for the night. About 60 to 90 minutes before sunrise the Western Ground Parrot will begin to call and fly to its feeding area. The secretive nature of the Western Ground Parrot during the day means that they are most easily located by listening for their calls after sunset and before sunrise.

There are three known populations of the Western Ground Parrot in Western Australia. These are at Waychinicup - Manypeaks, Fitzgerald River National Park and Cape Arid National Park. The population of Western Ground Parrot in Cape Arid National Park is the eastern most population. This population is in a relatively remote area, 120 km east of Esperance. Records have been reported from the Cape Arid area from the 1960s to 1983. A survey during 1984 confirmed the presence of a population of Western Ground Parrots in Cape Arid National Park (Watkins 1985). However, at this time the population was relatively small (an estimate of a minimum of 10 and a maximum of 21 birds was made) and restricted to a small area of unburnt heath. Up to 75% of Cape Arid National Park was burnt during a fire in February 1982 and a fire in December 1984 burnt approximately 50% of the unburnt vegetation where Western Ground Parrots had been located earlier in 1984. Watkins (1985) estimated that by the end of 1984, 15 sq km or 1,500 ha of unburnt vegetation remained for the Western Ground Parrots in Poison Creek Road area.

Western Ground Parrots were still present within the unburnt area in 1989 as determined from one sighting and listening to their calls several evenings (A.H. Burbidge unpublished). Allan Rose (Ranger at Cape Arid National Park) tried to relocate the Western Ground Parrots in this unburnt area by listening for their calls (after sunset and before sunrise), during 1996 to 1998, without success.

The aims of this project were to determine the presence (or absence) of the Western Ground Parrot in the unburnt heaths of Cape Arid National Park where it was last located in 1989, to survey heaths outside the unburnt area (now 16 to 17 years old) for the Western Ground Parrot, to invite people from the community to join in and assist the search, to increase the awareness of the Western Ground Parrot with its unusual habits and needs and to provide opportunities for people to learn and experience how to locate and identify Western Ground Parrots.

## Historical records of the Western Ground Parrot at Cape Arid National Park and surrounds

Although the Western Ground Parrot is a secretive parrot that is rarely seen, there are occasions when it can be flushed by a vehicle or person. However, the views are brief, as the parrot usually explodes out of the heath, a bit like a quail, then flies low over the vegetation for a short distance before going to ground. It is not easily flushed again as it tends to run along the ground after landing and therefore is no longer present where it was last seen going to ground (as observed by Garstone (1977)). The flight is distinctive with a flap and glide motion. It is preferable if sightings of Western Ground Parrots are followed up by listening for their calls, either after sunset or before sunrise. Apart from helping confirm that the bird seen was a Ground Parrot it will also help establish whether the Ground Parrot seen was a dispersing bird or from a sedentary (or temporarily sedentary) population.

Table 1 presents the known historical records for the area east of Esperance to Israelite Bay, including Cape Le Grand and Cape Arid National Parks as well as the eastern end of Nuytsland Nature Reserve (Figure 1). Two of the records included in Table 1 only came to light during the period of the project (a sighting near Rossiter Bay and a sighting in vacant crown land north of Cape Le Grand National Park). Both have still to be confirmed.

### Methods

A reconnaissance trip was made on 21 June 1999 to Cape Arid National Park. Allan Rose, the Ranger for Cape Arid National Park, showed me the Poison Creek Road Western Ground Parrot site (referred to in this report as the 1984 Ground Parrot site), and then the heaths of the centre of the park, which were along the Telegraph Track east of Poison Creek Road then up a track to Fisheries Road. We listened for Western Ground Parrots at a site 16.3 km east of the Park boundary on Fisheries Road. No Ground parrots were heard.

People from the public were invited to participate in the "In search of Western Ground Parrots in Cape Arid National Park" surveys. Two surveys were conducted and these were held on 15 to 22 September 1999 and 22 May to 5 June 2000.

Six Western Ground Parrot Listeners participated in each of the surveys (including myself), with a total of 11 people overall. This was sufficient to cover a reasonable area during each listening session. The listening sessions were held in the late afternoon from sunset (1741 hrs in September and 1650 hrs in May and June) till at least 60 minutes after sunset (eg, 1740 - 1840 hrs in September or 1645 - 1800 hrs in May and June) and before sunrise (0538 hrs in September and 0640 hrs in May and June) from approximately 90 to 10 minutes before sunrise (eg, 0440 - 0530 hrs in September and 0515 - 0630 hrs in May and June 2000). Ground Parrot Listeners were positioned at a specific location to listen and spaced 200, 300 or 400 m apart.

**Table 1** Historical records of Western Ground Parrots east of Esperance to Israelite Bay. It is unclear whether post-1990 records marked with an asterisk (\*) represent resident or dispersing birds.

Location and observation	Vegetation	Date, observer and reference/ source
Possibly Poison Creek Road~ 100 km east of Esperance One bird flushed several times <i>Cape Arid National Park</i>	From sand track, over heath and into mallee clump	February 1965 Ray Garstone (Garstone 1977)
11.3 km (seven miles) west of Mt Baring on a track to Israelite Bay Bird was flushed	In flat country and stunted heath 60 cm (two feet) high	27 March 1968 John Bannister and Alex Baynes (Ford 1969)
Possibly Poison Creek Road Most of park burnt by fire One bird flushed several times <i>Cape Arid National Park</i>	Dry sandy heathland that had escaped recent burning	6 November 1975 Ray Garstone (Garstone 1977)
<i>Cape Arid National Park</i>		November 1975 Ian Solomon (Ranger) (I. Solomon, pers. comm.)
Poison Creek Road; Watkins (1985) site 2e 10 km S of Merivale Rd <i>Cape Arid National Park</i>	<i>Gahnia</i> flats	13 October 1983 Ken and Brenda Newbey (Watkins 1985)
Alexander Bay	In low <i>Banksia</i> heath	April 1984 V and P Oma (G. Storr 1987 and pers. comm.)
Poison Creek Road, 10 - 11 km S of Merivale Rd. Birds heard calling after sunset or before sunrise One bird seen <i>Cape Arid National Park</i>	Heath on dunes	June, Aug., Sept. and Nov. 1984 D. Watkins, R. Garstone, W. Zadow, Jim Masters, Chris Hart (Watkins 1985)
5 km E of Poison Creek/Mt Arid Roads intersection One bird seen, possibly flushed out by a fire burning at the time to the west <i>Cape Arid National Park</i>	Vegetation two years old	late December 1984 Chris Hart (Watkins 1985)
~ 500 m W of Poison Creek Road on Thomas Fisheries Road One bird seen during a fire <i>Cape Arid National Park</i>		late December 1984 Chris Hart (Watkins 1985)

**Table 1 cont.** Historical records of Western Ground Parrots east of Esperance to Israelite Bay. It is unclear whether post-1990 records marked with an asterisk (\*) represent resident or dispersing birds.

Location and observation	Vegetation	Date, observer and reference/source
Poison Creek Road, near 1984 Ground Parrot site At least 6 birds heard in unburnt heath only <i>Cape Arid National Park</i>	Low heath	Oct 1985 Allan Burbidge, Julie Raines and Louise Boscacci (A.H. Burbidge unpub.)
Tumbut Track, 2.7 - 3.4 km east of Poison Creek Rd Two birds flushed on burnt side of track. <i>Cape Arid National Park</i>	Low heath to 0.5 m	Nov 1988 Jim Rolfe and Allan Burbidge (A.H. Burbidge unpub.)
Tumbut Track, c. 3.4 km east of Poison Creek Road One bird seen <i>Cape Arid National Park</i>	Low heath	March 1989 Trevor Stoneman (A.H. Burbidge unpub.)
*Thomas River Rd, near rubbish tip, W of Thomas River One bird seen <i>Cape Arid National Park</i>		20 March 1994 Mike Paxman (Ranger) (A.H. Burbidge unpub.)
*Thomas Fisheries Rd N of Mt Arid One bird seen <i>Cape Arid National Park</i>		March 1994 Mike Paxman (Ranger) (A.H. Burbidge unpub.)
*~2 km W Cape Le Grand Road in uncleared vegetation 3.5 km south of Merivale Road Bird flushed	In <i>Dryandra</i> and Myrtaceous heath	March 1994 or 1993 Barbara Archer and others (B. Archer pers. comm.)
*Poison Creek Road, between Seal Creek and Jorndee Camp sites Possible sighting of Ground Parrot Bird flew across road and went to ground S side of road <i>Cape Arid National Park</i>		13 June 1996 Allan Rose (Ranger) (A. Rose pers. comm.)
*East end of Rossiter Bay, 50 m N of turn off from beach One bird seen drinking <i>Cape Le Grand National Park</i>	Eroded scalded area with hummocks of low shrubs and rock platforms where rainwater had collected	24 November 1998 Dave Gibson (A.H. Burbidge unpub.)

Figure 1

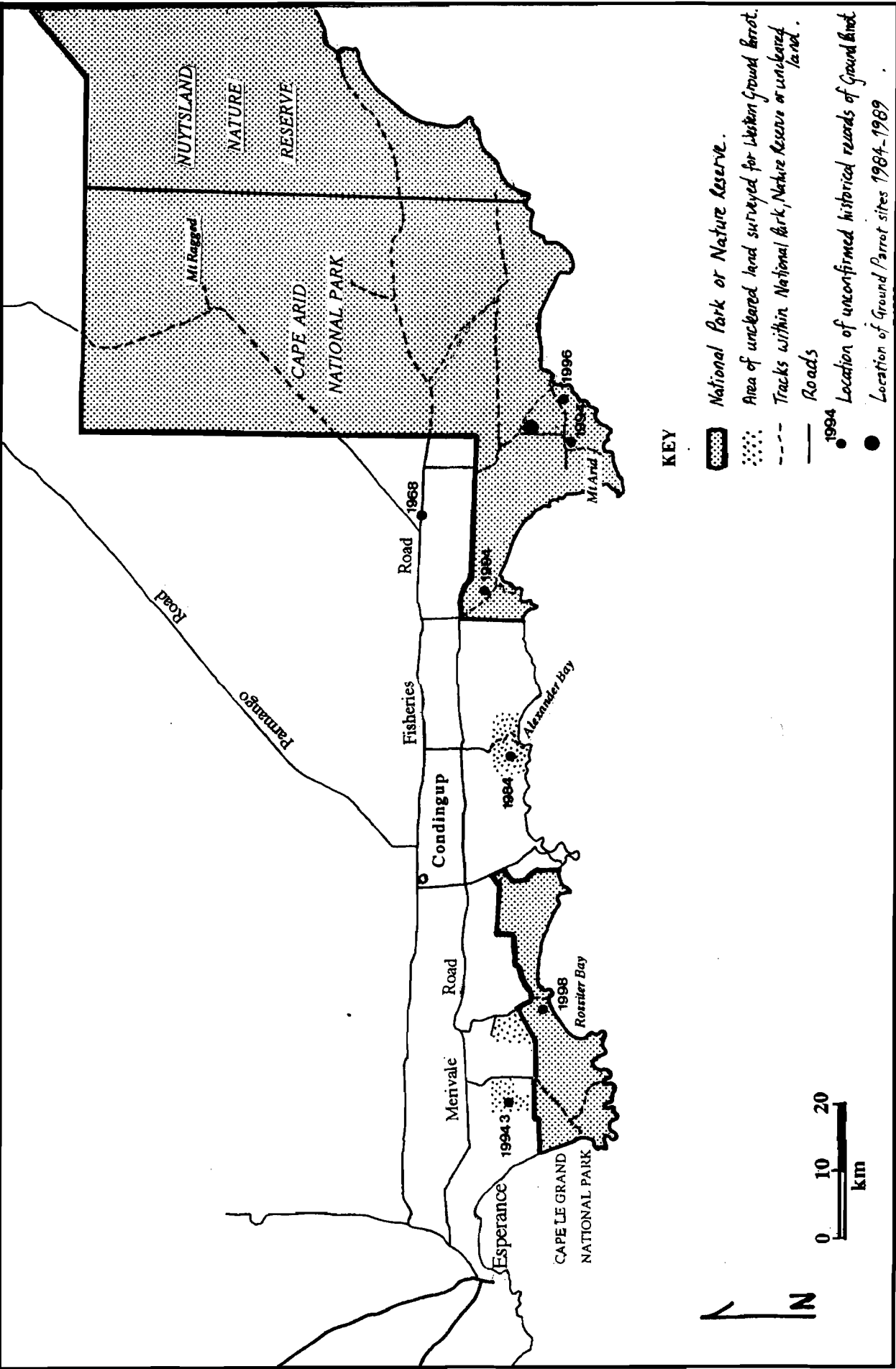


Figure 1 Historical locations of Western Ground Parrots (some yet to be confirmed) from 1968 to 1998 east of Esperance to Cape Arid National Park.

Weather conditions were generally good with only a few very windy mornings or evenings which make listening very difficult. Mosquitoes and frogs at times were very noisy. Where possible, listeners were placed on high points in the landscape on dry ground and some distance from loud frog choruses in swamps. In some cases Ground Parrot Listeners walked two to five kilometres to their listening point. The use of compasses and torches ensured that no one got lost and found their way safely back to the camp site for warm and hearty refreshments under the marquee.

Photographs were taken of some of the vegetation types surveyed. Descriptions of heath vegetation included a plant species list of the most prominent species and an estimate of canopy cover for different heights.

The surveys were promoted through fliers (see Appendix 1 for an example) and articles in *Western Australian Bird Notes* (WA Group, Birds Australia), the South Coast Threatened Bird Species Newsletter, the local Esperance newspaper, *Esperance Express* and at Two Peoples Bay Nature Reserve. Interviews or notices in regard to the project were given through the ABC regional radio and a reference to the Ground Parrot Project on the ABC regional television weather forecast.

## Results

A total of 111 listening points were used to listen for Western Ground Parrots within Cape Arid National Park. A small number of these were listened at on more than one occasion, particularly within the 1984 Ground Parrot site on Poison Creek Road. A further 25 listening points were used outside the park to survey areas where there had been unconfirmed sightings of the Western Ground Parrot since 1984. This involved 11 participants in the survey and 91 person days. Despite these efforts, no Western Ground Parrots were located.

It is estimated that approximately 1940 ha within Cape Arid National Park were surveyed during this project. This included areas along most of Poison Creek Road, Tumbut Track, the west end of Fisheries Road and a few kilometres of Telegraph Track and Mt Pasley Track (Figures 2 and 3). Access to Telegraph and Mt Pasley Tracks was limited due to wet conditions and dieback control measures requiring the tracks be closed to vehicles. This area is well worth searching (as determined from a reconnaissance trip in June 1999) and includes an additional area of approximately 1600 ha if searches are limited to along these two tracks.

Cape Arid National Park is 2800 sq km (280 000 ha). Of this area, somewhere between 50 000 and 100 000 ha may have the potential to contain heaths that are suitable for Western Ground Parrots (particularly if greater than 15 years old). However, access to many of these areas is difficult due to long distances from tracks or the closure of tracks during wet conditions. The most accessible areas have been surveyed first.



Figure 2

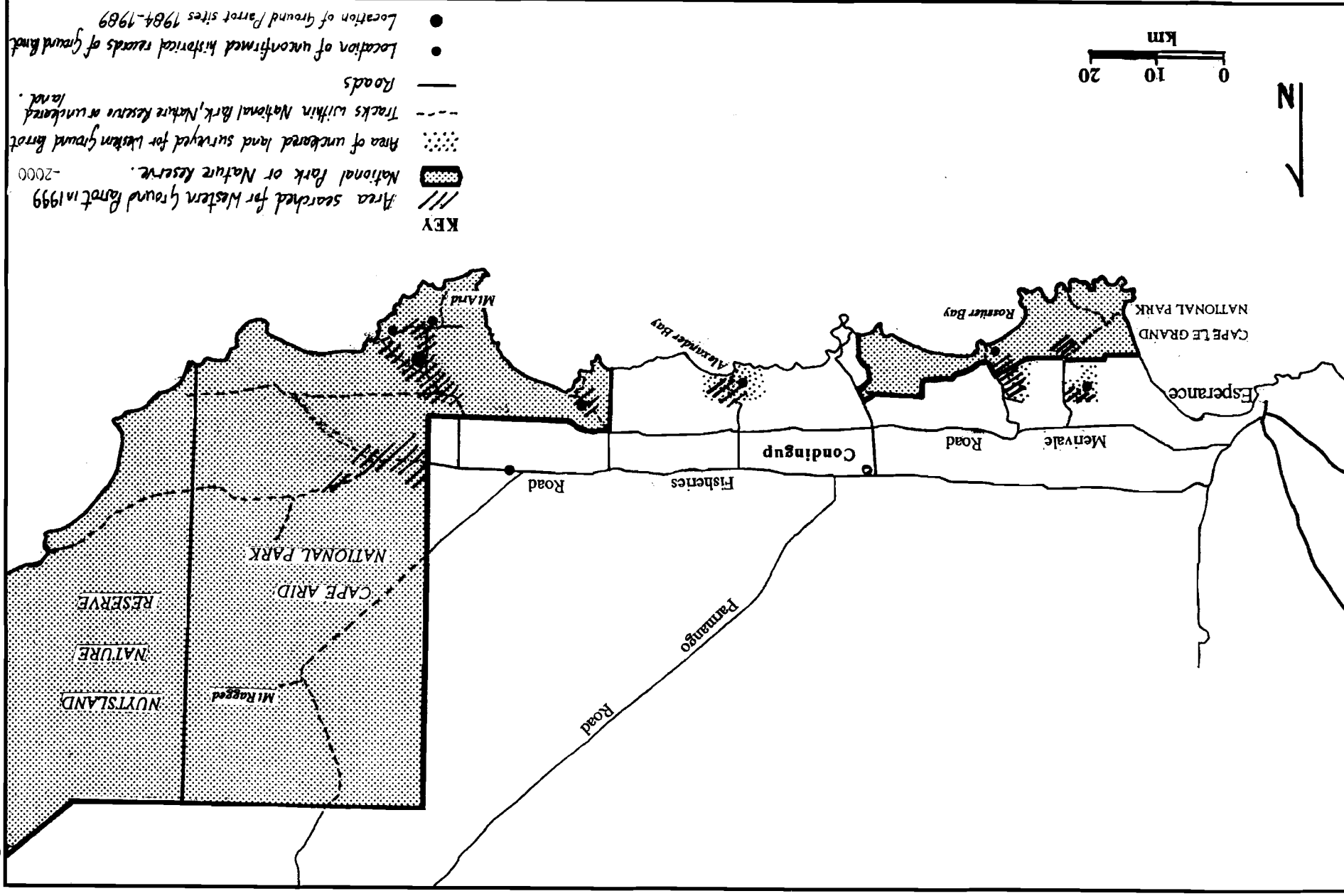
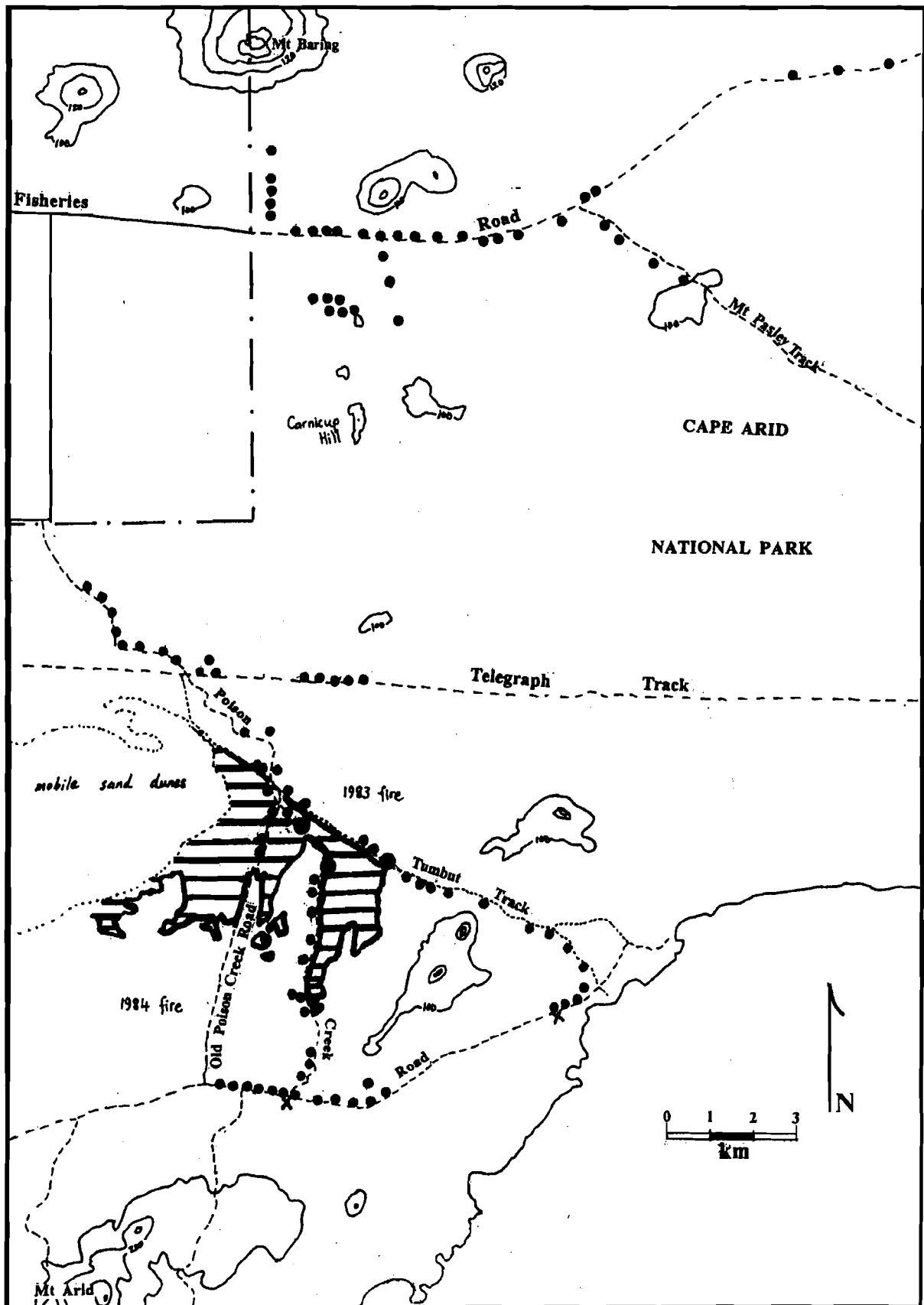


Figure 2 Areas searched for the Western Ground Parrot during the survey of Cape Arid National Park and nearby areas in September 1999 and May - June 2000.

Figure 3



**Figure 3** Locations of listening points for the Western Ground Parrot survey in Cape Arid National Park during September 1999 and May - June 2000. Listening points (●), Western Ground Parrot sites in 1984 or 1989 (●), unconfirmed or possible Ground Parrot sightings in 1994 or 1996 (x) and the area of unburnt heaths, where Ground Parrots occurred, after the fires in 1982 and 1984 (▨).

## Areas searched for Western Ground Parrots

Below is a list of areas searched for Western Ground Parrots. Information presented includes; whether there have been any historical records for this location, the number of sites listened at, the fire age (if known), vegetation type and general comments.

### Within Cape Arid National Park

The search for the Western Ground Parrot within Cape Arid National Park was concentrated along Poison Creek Road, Tumbut Track and Fisheries Road (Figures 2 and 3). Although Telegraph Track was traversed in June 1999 and found to have potentially suitable Ground Parrot habitat it could not be surveyed (apart from a few sites near Poison Creek Road) as it had surface water in September 1999 and May and June 2000 (due to winter and summer rains) and was closed for dieback control measures.

#### 1. Poison Creek Road, 1984 Ground Parrot Sites

##### Historical records

two specific sites (2e and 2f) located by Watkins (1985) (Figure 3)  
unburnt since at least 1978, large fires nearby in 1982 and 1984  
some small control burns in strips in 1991

##### Comments

Gahnia flats, flooding in September (15 - 30 cm deep) and May to June (approximately 10 - 15 cm deep) surveys. Includes flooding of shrub species as well as Gahnia.

#### 2. Poison Creek Road and Old Poison Creek Road

##### Historical records

one bird seen in 1994 on Thomas Fisheries Road west of Poison Creek Road.  
one bird flushed during a fire in December 1984, 5 km east of where  
Thomas Fisheries and Poison Creek Roads meet.  
one possible sighting ~ 2.2 km west of Seal Creek site in 1996 (see Table 1).  
19 listening sites to the north and 14 listening sites to the south of 1984 Ground  
Parrot sites and 11 listening sites east of Thomas Fisheries Road  
fire age of vegetation was 16 years or younger

##### Comments

Included large areas of flooded Gahnia and heaths (Figure ). There were stands of *Banksia speciosa* on sand ridges.



**Figure 4** Gahnia and heath within the 1984 Ground Parrot site.



**Figure 5** Brenda walking along the flooded Tumbut Track in May 2000.



**Figure 6** Ian and Francis walking through the 1984 Ground Parrot area to listening sites.

### 3. Tumbut Track

#### Historical records

one bird seen and calling heard in 1989 and one seen in >1985<1990.

15 listening points (Figure 3)

fire age variable, northern side more recently burnt

flooding present in areas throughout the length of the track

#### Comments

A mixture of swamps, *Banksia speciosa* stands and low heaths in the low lying areas

### 4. Telegraph Track

#### Historical records

no known historical records of Western Ground Parrot

eight listening points

fire age was 17 years old

#### Comments

A mixture of heath and swamps. There were patches where a *Hakea* species was emergent, or heaths were lower. Sedge cover was about 20-30%. There were occasional mallees (*Eucalyptus angulosa*) and *Nuytsia floribunda*. At one site there was an *Acacia cyclops* (>17 years old).

### 5. Thomas Fisheries Road

#### Historical records

one bird flushed in late December 1984 during a fire and one bird seen in 1994.

seven listening points

fire age was 16 years old

### 6. Fisheries Road

#### Historical records

no known historical records within Cape Arid National Park. One record of bird seen 11.3 km west of Mt Baring on Fisheries Road in 1968, area now cleared.

33 listening points

fire age unknown

#### Comments

Vegetation consists of a mixture of *Banksia speciosa* stands and low heaths dominated by *Dryandra* species, *Hakea* species or Myrtaceous species. This area was generally drier than the Poison Creek Road sites. There were discrete swamps of varying sizes; the larger ones had surface water.

## 7. Merivale Road

### Historical records

no known historical records of the Western Ground Parrot

fire age unknown

four listening sites

### Comments

These sites were situated high in the landscape. Soils consisted of deep sand or a mixture of sand and gravel.

## 8. Thomas River Road

### Historical records

one bird seen near rubbish tip in 1994 (Table 1)

fire age unknown

four listening sites

### Comments

At one listening site heath was predominantly 0.5 m high with some 0.5 - 1m high (10-30% cover). Total vegetation cover ~ 50 - 60%. *Dryandra* species prominent. *Eucalyptus tetragona* (green form) present.

## Between Esperance and Cape Arid National Park

Reasonably recent possible sightings (in 1984, 1994 and 1998) of Western Ground Parrot have been reported between Esperance and Cape Arid National Park. It was considered worthwhile to visit these areas and spend some time surveying the areas to determine if Western Ground Parrots could be found calling. Four different areas were visited and these are listed below (also see Figure 1 and 2 for locations).

## 1. Alexander Bay (North of Shire Reserve)

### Historical records

one bird seen in 1984 (Table 1)

19 listening points

recent fire during 1999 in some areas. Remaining vegetation age unknown.

*Banksia speciosa* with 9 to 12 flowering nodes in some areas

### Comments

There had been a recent fire (1999) near the coast.

## 2. Rossiter Bay, Dunns Rock Road (Cape Le Grand National Park)

### Historical records

one bird seen in 1998 (Table 1, Figure )  
one morning listening and search of an area four to eight km north of record.  
fire age unknown  
vegetation to the south of park boundary more recently burnt than to the north.  
*Banksia speciosa* with two flower nodes where most recently burnt and  
seven to 14 flowering nodes in older vegetation.

### Comments

Vegetation consisted of swamps in low lying areas which were covered in sedges and *Verticordia* species on edges with surface water in between sand dunes or sand ridges with low heath, *Banksia speciosa* and *Nuytsia floribunda*.

## 3. Cape Le Grand Road, Cape Le Grand National Park

### Historical records

no known records of Western Ground Parrot  
one evening listening  
most recent fire was during the mid 1990s?  
*Banksia speciosa* with 10 to 15 flowering nodes in some areas

### Comments

A large low lying area with swamps and heath combined with patches of *Banksia speciosa* and *Lambertia inermis* on higher areas of land.

## 4. Cape Le Grand Road, north of Cape Le Grand National Park

### Historical records

one unconfirmed record of a bird seen in 1993 or 1994 (Table 1)  
one evening and one morning listening  
most recently burnt on eastern side of south track  
*Banksia speciosa* with 10 to 12 flowering nodes

### Comments

Area consists of dune with deep sand with *Banksia speciosa* and small round swamps covered by fine sedges. Listening sites were not quite far enough south to be at the location of the possible Western Ground Parrot sighting. This area is worthy of a more intense search. Where the parrot was flushed, the vegetation was described as predominantly *Dryandra* and *Myrtaceous* heath (B. Archer personal communication.)

## Discussion

The surveys in 1999 and 2000 indicate that the Western Ground Parrot no longer occurs at the 1984 Ground Parrot site on Poison Creek Road. The first indication that they were no longer using this area was in 1996 when Allan Rose began to re-survey the area for Western Ground Parrots. The last record of Ground Parrots in this area was in 1989. A possible scenario as to why Ground Parrots no longer use this area could be that the long unburnt habitat became unsuitable, due to its small size and exposure to prolonged periods of flooding and/or predation, combined with (we hope) the increasing availability of more suitable habitat elsewhere in the park, as the vegetation increased in age since the 1982 and 1984 fires.

### Possible effects of long periods of flooding

Large areas of the 1984 Ground Parrot site were flooded during late winter to early spring in 1999 and autumn to spring in 2000. The flooding in May and June 2000 was unusual and was the result of unseasonal summer rains. Flooding of vegetation can significantly reduce the area suitable for Ground Parrots. During 1984, Watkins (1985) recorded significantly reduced calling by Ground Parrots at the 1984 site when much of it was flooded during September 1984. For example, at one site, 10 Ground Parrot calls were heard in June compared to no calls heard when it was flooded with 15 cm of water in September of 1984. Prior to the 1982/1984 fires Ground Parrots were probably able to move to higher ground nearby when the heaths became flooded. In the Waychinicup - Manypeaks area (45 km east of Albany) there is evidence of a seasonal movement of Ground Parrots to higher ground in response to the flooding of low lying sites during the winter and spring months (McNee 1999).

It would be interesting to know whether the 1984 Ground Parrot site, in Cape Arid National Park, has been subjected to longer periods of flooding during the 1990s than in the past (eg. from higher than average annual rainfalls). The realignment and upgrading (with gravel) of Poison Creek Road in the early 1980s may also have had the potential to contribute to such an effect.

It would be easy to conclude that the absence of Ground Parrots from this site was due to flooding. However, there is evidence that does not support this, such as the work of Allan Rose at this site during 1996 and 1997, when presumably flooding was not extensive, when Ground Parrots were not located.

### Potential vulnerability to predation

The 1984 Ground Parrot site may provide insufficient protection from predation by foxes, cats and/or rats due to a high ratio of fire edge to area unburnt (see Figure 3). The existence of such small numbers of Ground Parrots in such a small area may have influenced the predator-prey relationship to a point where the impact of predators became critical. Careful monitoring and predator control would be advisable at any other sites where future fires cause similar population reductions.

A programme of aerial fox baiting in Cape Arid National Park was initiated in 1997 and this may assist the Western Ground Parrot. By contrast, Chuditch were released in the western area of the park in 1998. Their relationship with Ground Parrots is unknown.



## Habitat availability elsewhere in Cape Arid National Park

The disappearance of the Western Ground Parrot from the 1984 site may indicate that this site was not their preferred habitat or was not the area individuals were raised in or bred within, prior to the 1982/1984 fires.

It is not clear whether the 1984 site had been used by Western Ground Parrots prior to 1982. The sightings of Western Ground Parrots by Garstone (1977) were considered to be within the vicinity of the 1984 sites (D. Watkins personal communication). A precise location is still unknown, because maps available in the 1970s did not contain sufficient detail and, in any case, track alignments have changed since that time.

Western Ground Parrots were probably not restricted to the 1984 sites prior to the large fires of the early 1980s as indicated by the record of a Western Ground Parrot on Fisheries Road, west of Mt Baring and the Ground Parrots flushed near Thomas Fisheries Road during the December 1984 fires (Table 1).

From an optimistic point of view, the 1984 site may have been sufficient to support Western Ground Parrots with minimal predation and at least some success in breeding until the country they originally came from (as individuals) had adequately regenerated after fire for them to return to it. Certainly there is evidence in the Fitzgerald River National Park that Western Ground Parrot populations will eventually return to sites which they have abandoned as a result of fires (although it is not known whether it was the same individuals or not) (A.H. Burbidge *et al.* unpublished).

Although considerable effort was put in during this project it was not sufficient to determine whether the Western Ground Parrot still occurs within Cape Arid National Park or not. There are still large areas of heaths that Western Ground Parrots could be using (16 to 17 years old) which have yet to be surveyed. It is hoped that future surveys can be conducted under drier conditions than experienced during 1999 and 2000, when access to tracks such as Telegraph and Pasley will be possible.

## High priority areas that still need to be searched for Western Ground Parrots

From this survey the areas that are considered to be of a high priority to search for Western Ground Parrots would be:

### A. Within Cape Arid National Park

1. Telegraph Track (east of Poison Creek Road).
2. Mt Pasley Track.
3. Fisheries Road, particularly east of Price Hill.
4. The area south of Poison Creek Road (1.7 km east of Thomas Fisheries Road) towards the Cone of Rocks.
5. Jenamullup Track.

### B. Between Esperance and Cape Arid National Park

1. Uncleared land north of Cape Le Grand National Park west of Cape Le Grand Road.
2. Dunns Rock Road and north of Rossiter Bay including the vacant crown land north of the Cape Le Grand National Park boundary which appears not to have been burned as recently burnt as areas within the park.

## Fires in Cape Arid National Park

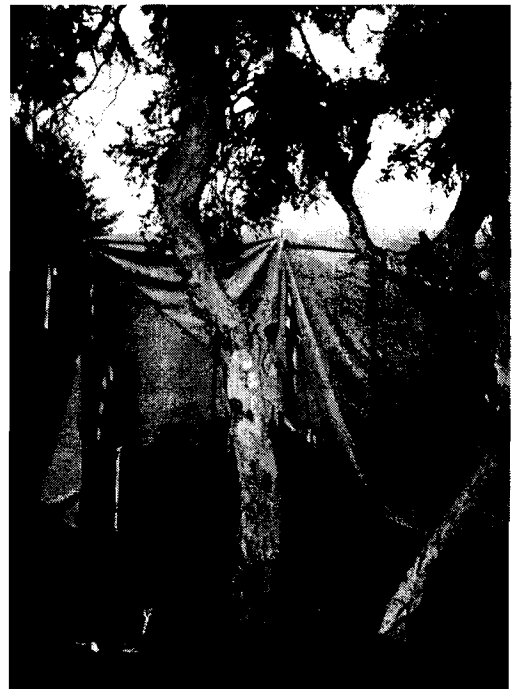
Aerial photography indicates the occurrence of extensive fires during the 1960s, 1970s and 1980s. Significant areas remained unburnt where Telegraph Track, Poison Creek Road, old Poison Creek Road and Tumbut Track meet. This also includes the area in which the Western Ground Parrot was located during 1983 to 1989 (Watkins 1984; A.H. Burbidge, unpublished) and referred to in this report as the 1984 Ground Parrot site. However, the heaths left unburnt within this area were not always the same each decade.

Figures 7, 8 and 9 show the areas of unburnt vegetation in 1962, 1978 and 1989 respectively as indicated from aerial photography. It was estimated that the fire scars evident in the 1962 photography were at least two years old (A. Rose, personal communication) (Figure 7). Garstone (1977) made no mention of fires in regard to a visit to the park in February 1965 (when the burnt vegetation would have been at least five years old). The fire scars evident in the 1978 photography may be about three years old as Garstone (1977) mentions that most of the park was burnt when he visited in 1975. The main area of vegetation that was unburnt in both the 1960s and 1970s was towards the south end of Old Poison Creek Road (Figure 8). In the 1989 photography the 1982 and 1984 fires were still clearly evident (as they were in the 1994 photography, although not shown here). The main area of vegetation that was unburnt during both the 1970s and 1980s was at the junction of Tumbut Track, Poison Creek Road and Old Poison Creek Road (Figure 9). This is a part of the 1984 Ground Parrot site.

The aerial photography indicates that in 1984, the Ground Parrot site would have included vegetation nine years old (burnt ~ 1975) and 24 years old (burnt ~ 1960). In 1999, this vegetation would have been 24 and 39 years old respectively, compared to surrounding vegetation, which was either 15 or 16 years old.

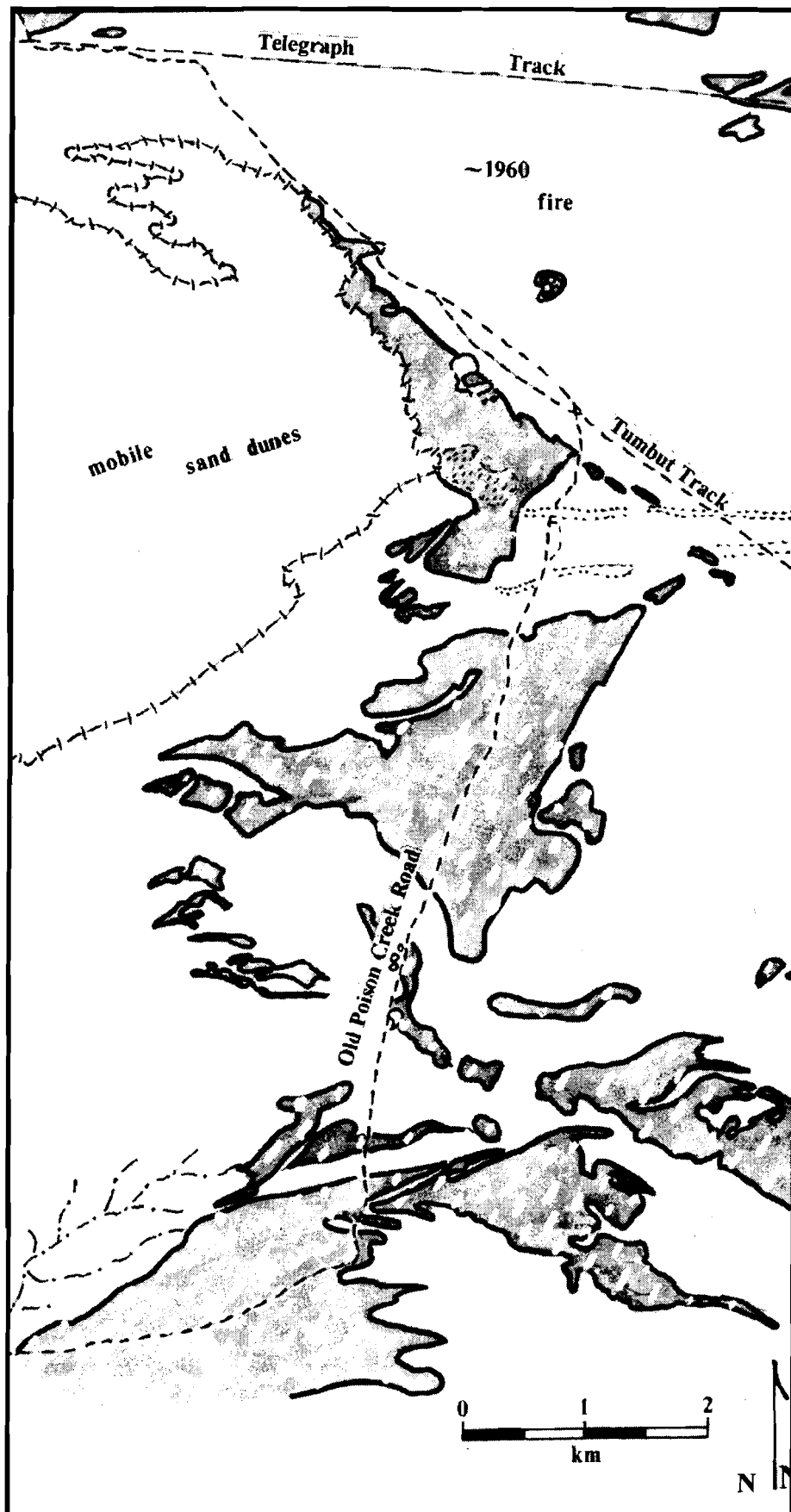


Campsite south of Mt Baring. The marquee was loaned to us from the Applecross Girl Guides and gave us a welcome refuge from often inclement weather.



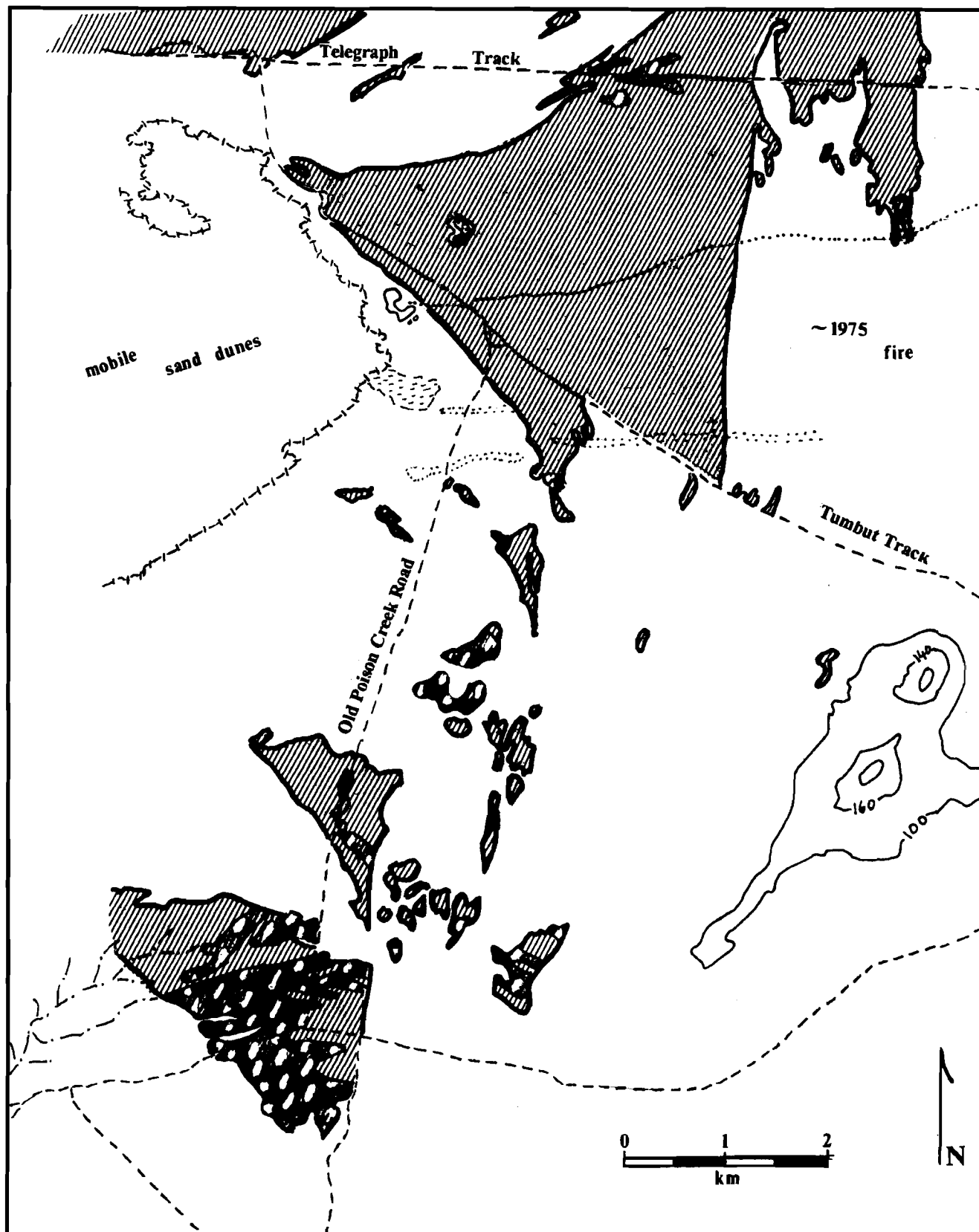
Campsite at Alexander Bay  
"Home sweet home!"

Figure 7



**Figure 7** Unburnt vegetation after fire(s), estimated to have occurred in 1960, in the area known to be used by Western Ground Parrots during the 1980s at Cape Arid National Park. Fire boundaries were determined from December 1962 aerial photography. Area burnt in ~1960 fire (□), vegetation not burnt in ~1960 fire (■) >10 years old in 1960).

Figure 8



**Figure 8** Unburnt vegetation after fire(s), estimated to have occurred in 1975, in the area known to be used by Western Ground Parrots during the 1980s at Cape Arid National Park. Fire boundaries were determined from November 1978 aerial photography. Area burnt in ~1975 fire (□), vegetation not burnt in ~1975 fire but burnt in ~1960 fire, (▨) ~15 years old in 1975), vegetation not burnt in ~1960 and ~1975 fires (▩ at least 25 years old in 1975).

Figure 9

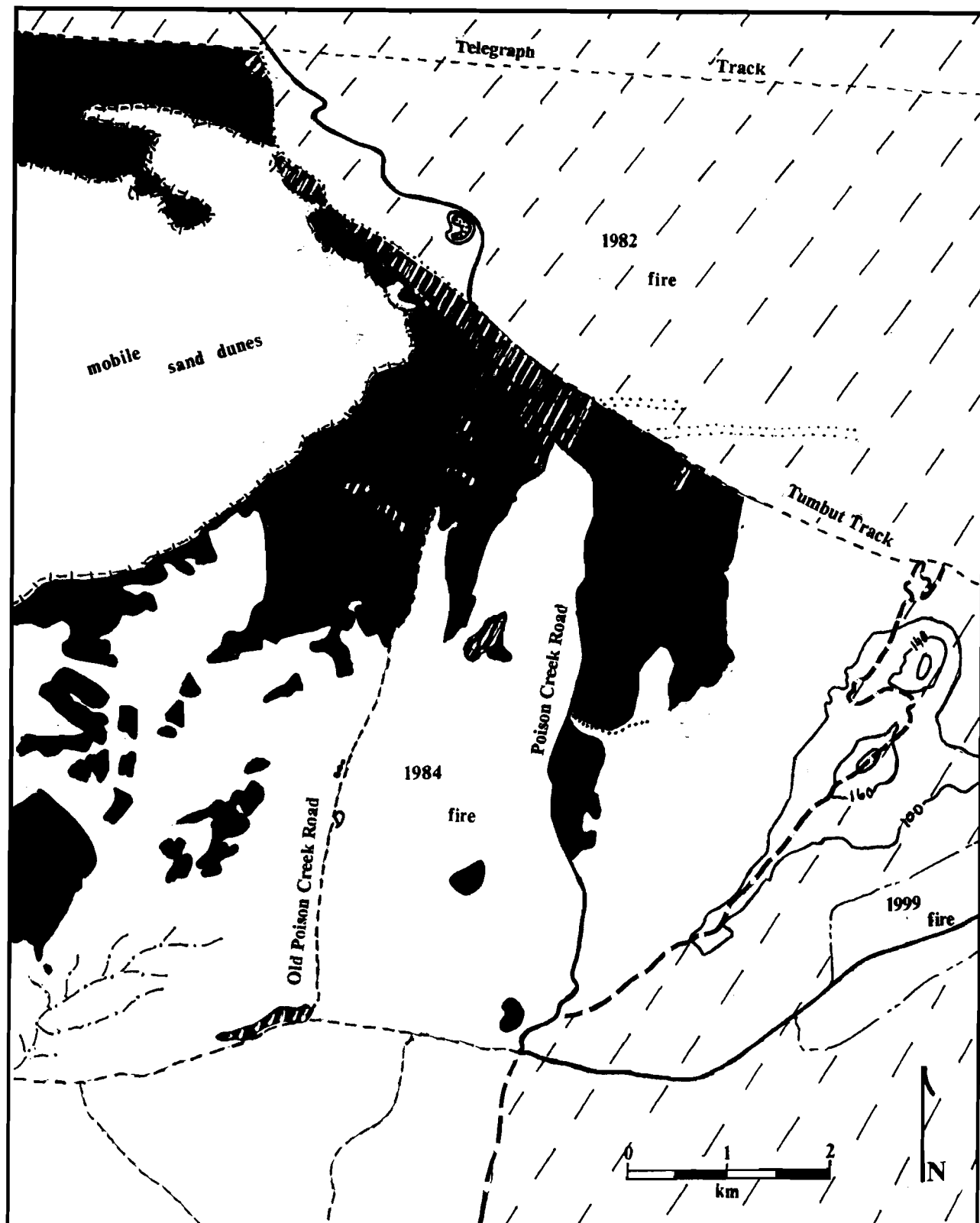


Figure 9 Unburnt vegetation since the 1982 and 1984 fires to the present day (2000) in the area known to be used by Western Ground Parrots during the 1980s at Cape Arid National Park. The 1983 and 1984 fire boundaries were determined from January 1989 aerial photography. Boundaries of fires during the 1990s were estimated from the ground. Area burnt in February 1982 fire (//), area burnt in December 1984 fire (■), vegetation not burnt in 1982 and 1984 fires but burnt in ~1975 fire (■) ~9 years old in 1984), vegetation not burnt in ~1975, 1983 or 1984 fires but burnt in ~1960 fire (▨) ~24 years old in 1984).

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## Summary of findings

1. No Western Ground Parrots were located during this survey of Cape Arid National Park in September 1999 and May - June 2000. Neither were Western Ground Parrots located at four potential sites west of the park.
2. Eleven people participated in this survey and listened for Western Ground Parrots at a total of 111 sites. This involved 91 person days work (for 41 listening sessions). It is estimated that an area of approximately 1940 ha was surveyed within the Cape Arid National Park.
3. It is estimated that an additional area of 1600 ha would be worthwhile surveying in the future, along Mt Pasley and Telegraph Tracks, which were unable to be surveyed due to tracks being closed to vehicles as a result of unusually wet conditions.
4. Four areas outside the Park, which had unconfirmed reports of sightings of Western Ground Parrot, were also surveyed. However, these were only surveyed for one morning or evening with the exception of Alexander Bay where 19 listening points were surveyed.

## Recommendations

1. The findings of this survey should be reported to the local Bird Group in Esperance.
2. The Esperance Bird Group and other local people should be inspired and encouraged to continue the search for Western Ground Parrots. In particular, the vacant crown land north of Cape Le Grand National Park deserves further survey.
3. Extra effort should be put in to searching for the Western Ground Parrot within Cape Arid National Park and lands west of Cape Arid to Esperance. Priority areas need to be identified and agreed upon. Sources of funding will need to be identified and pursued.
4. Detailed fire history maps should be prepared for Cape Arid National Park and the uncleared lands between Cape Arid and Esperance. This will help identify high priority areas for searching.
5. The information brochure on the Western Ground Parrot being prepared by the WA Group of Birds Australia should be distributed as widely as possible in the Esperance region.
6. If no Western Ground Parrots are found following further searching in Cape Arid National Park, a translocation proposal should be prepared for re-establishment of the species in the park.



Potential Western Ground Parrot heath, east of Mt Arid and south of Poison Creek Road, yet to be surveyed. The small hill in the background is referred to as 'a cone of rocks'.

Low lying swamp-heath amongst a system of small dunes, north of an area where a Western Ground Parrot may have been flushed in March 1994 in vacant crown land north of Cape Le Grand National Park.



**AUTUMN 2000**



## **Western Ground Parrot Survey at Cape Arid National Park**

**22 May to 5 June 2000**

We are still in search of the Western Ground Parrot at Cape Arid National Park.

Extensive fires during 1983 and 1984 restricted the area of heath used by Western Ground Parrots to a few hectares of unburnt heath. A survey in September 1999 confirmed that the Western Ground Parrots no longer appear to be using this area of heath (last record was in 1989).

There are vast areas of heathlands at Cape Arid, most of which are now at least 15 years old since the last fires. These heathlands are expected to be sufficiently old to be used by Ground Parrots. We would like to find where the Western Ground Parrots are today, in Cape Arid National Park.

The Western Ground Parrot calls particularly well during the autumn months. It has a beautiful call, heard from 20 to 50 minutes after the sun has set, long after other birds have finished calling. Many pairs of ears are needed to help find these parrots. Your help, as a Ground Parrot Listener, would be invaluable and gratefully appreciated.

For further enquiries and information contact:

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or (08) 9765 3073

or Allan Rose at Cape Arid Ph: (08) 9075 0055

*(Some field experience in listening for Western Ground Parrots, prior to the survey, may be able to be arranged)*

**A WA Group, Birds Australia Project  
Project Funded by National Heritage Trust and Threatened Species Network (WWF)**

