



LANDSCOPE EXPEDITIONS

Western Australian Department of Conservation and Land Management,
Locked Bag 29, Bentley Delivery Centre, WA 6983

in association with

UWA Extension, The University of Western Australia, Nedlands, WA 6907

Beyond the Dreaming – Project Eden 2000. LANDSCOPE Expeditions. Report No. 39

FROM THE EXPEDITION LEADERS

On behalf of CALM and UWA Extension we would like to thank all participants in the Project Eden expedition for their support. The success of a trip such as this can be attributed to the willingness and enthusiasm of team members who work together for a worthwhile cause. Special thanks to Joanne Varley and Lesley Morris for their sterling assistance. Participants for this expedition came from Victoria and Western Australia, with Ross Bedford from Bunbury enjoying his second trip to Shark Bay as a *LANDSCOPE* Expeditions participant. Ross had also previously been to the Gibson Desert with our fearless team leaders Graeme (Tub) Liddelow and Bruce Ward. Lawrie Bartlett was also a repeat – he went to 80 mile beach in 1999 with leader Grant Pearson. The other participants were “first timers” but we hope to see them back on other *LANDSCOPE* Expeditions.

Keith Morris, Graeme (Tub) Liddelow and Bruce Ward



Members of the Beyond the Dreaming – Project Eden *LANDSCOPE* Expedition 2000 at Heirisson Prong

EXPEDITION ACHIEVEMENTS

As on previous expeditions to Francois Peron National Park, the volunteers assisted CALM staff in the monitoring of mammals and reptiles on the trapping grids and transects. The trip also coincided with the release of bilbies into a 3 ha enclosure near the Peron homestead. We witnessed five bilbies with tail transmitters being released into human-made burrows and assisted in the monitoring of their survival over the week. These and other bilbies were to be released into the wild a few weeks later. For the first time, expeditioners travelled to Salutation Island, via Heirisson Prong to monitor the reintroduced greater stick-nest rat population and this will become a regular event for participants on future Project Eden expeditions. On Heirisson Prong we were able to see the work of the Useless Loop Community in conserving threatened boodies, western barred bandicoots and greater stick-nest rats.

All members stayed at the Peron homestead located at the Francois Peron National Park with the added luxury of a warm artesian bore to take away the aches of each day's activities.

- Trapping and measuring five native mammal species and 15 reptiles on Peron Peninsula
- Monitoring of reintroduced woylies
- Aerial checking of woylie radio-collars
- Additions to the opportunistic bird list for the peninsula
- Sighting of the threatened woma python
- Inspection of the threatened fauna breeding facility on Peron Peninsula.
- Inspection of threatened fauna program on Heirisson Prong
- Trapping greater stick-nest rats on Salutation Island
- Vegetation surveys
- Looking for signs of mallee-fowl.

PARTICIPANTS DIARY

All members were asked to contribute to the landscape journal for a particular day. Below is a summary of this diary of events plus additions by team leaders.

Friday September 22 Ross was given the responsibility of the diary on the first day since he was old hat at this procedure. Ross described the wildflowers on the way up as a little disappointing as the countryside was beginning to dry off. It was interesting to note a road kill euro *Macropus robustus* on the outer southern suburb of Geraldton. The expeditioners arrived at Peron around 6.00 pm and they were welcomed by Tub Liddelow and Joanne Varley who had arrived a day earlier to prepare the homestead. All members were in good spirits and looking forward to the next seven days.

At dusk we were fortunate enough to witness the release of the first bilbies *Macrotis lagotis* onto Peron Peninsula. Two females, one with a small pouch young, were released into burrows constructed within a fenced 3 ha enclosure on Woylie track. These were provided with

food and water for the next week or so and their survival monitored through radio-tracking (tail transmitters fitted to each animal) and diggings. Returning back to the homestead, team leader Keith Morris discussed the activities for the days to follow. Hot tub for some and then bed.

Saturday September 23 Most of the group made an early start to head across to Monkey Mia to view the dolphins and pelicans. This was to be the only free morning as the rest of the expedition involved early morning trapping of grids and roads. Six grids each with 16 pit traps and 16 Elliott traps needed to be set up. Tub, Bruce and Ross made an equally early start to set the pit traps on Grid 3. Most of the pit traps on all the grids needed maintenance and fences replaced. In the afternoon members were split into 3 groups and the 77 sheffield cages for trapping woylies were placed along the Cape Rose and Woylie tracks at 200 m intervals. Thirty-six woylies *Bettongia penicillata* had been released along the Cape Rose track the week before and trapping was being undertaken to monitor these and other woylies released at Peron since 1996. The bait used for trapping woylies is a universal bait consisting of oats, sardines and peanut paste mixture. Some participants were lucky enough to help mix this bait placing their hands into the "smelly" bucket with the above ingredients. On the way to the grids people witnessed several goannas *Varanus gouldii* crossing the tracks and one thorny devil *Moloch horridus*. The bilbies were still alive and had eaten some of the food left for them. One had dug its own burrow and the other was still in the same burrow it was released into.

In the afternoon, Bruce Ward went flying to look for some missing woylies by radio-tracking. Previously woylies had been fitted with radio-collars that emit a radio signal on a distinct frequency. One of the woylies was located and attempts will be made to trap this animal and remove the radio-collar.

Some of our intrepid fishermen clambered down a steep cliff face to catch twelve good-sized tailor. These provided a great meal for the next night as three budding cooks had their own ideas about the only way to cook fish.

Sunday September 24 It was now obvious competition had emerged between team leader Tub and "Victoria" Geoff as to who would get to the hot tub first thing in the morning. Geoff thought he had Tub beaten this particular morning but on arriving at the hot tub at 5.00 am he was greeted by the smiling Tub.

This was the first time to check what animals had been caught in the Elliott and pit traps. The results of this and subsequent days' trapping is shown in a Table below.

After completing grids 5 and 6 at Herald Bight, the grid trappers proceeded along the beach to inspect the spectacular Herald Bluff. On arriving back at the homestead we found that Team 3 had caught 4 woylies (5.2% trap success) and 1 hopping mouse in the cage traps.

In the afternoon, a survey of plant species was conducted in enclosures set up on the burnt buffer and

adjacent unburnt vegetation. Another 12 cage traps were set along Cemetery / Warren tracks – total number of cages set now is 89.

Monday September 25 Trapping proceeded and was now routine for participants. Five species of small mammals were trapped (including the introduced house mouse) plus six species of reptile including a nob-tailed gecko, a small goanna, and the bearded dragon. Nine woylies were trapped including 1 unmarked animal (10 % trap success). The pressure was on tomorrow's team to increase the number of woylies trapped. The afternoon session included a visit to the captive breeding pens near the Peron homestead (thanks Nicole Noakes). The tour of the pens was the first sighting for most of the volunteers of threatened native animals such as the mala *Lagorchestes hirsutus*, banded hare-wallaby *Lagostrophus fasciatus* and western-barred bandicoots *Perameles bougainville*. These colonies have been set up to provide animals for release onto Peron Peninsula once feral cats have been brought under control. An interesting bird observation was that of a white-bellied sea-eagle soaring over Peron Homestead. A western blue tongue skink *Tiliqua occipitalis* was seen crossing the Cape Peron track. With the warm weather, several 'bobtails' *Tiliqua rugosa* and goannas *Varanus gouldii* are seen regularly around the homestead: they have a liking for bread and milk! Very few goannas were seen on the peninsula prior to fox control commencing in 1994/95.

Tuesday September 26 This was the last day of grid and cage trapping so the pit nets were rolled up and put into the pit bucket and then sealed. The hope was that this would minimise repairs for next year. The cage and Elliott traps were collected and the Elliotts cleaned and re-baited ready for trapping of stick-nest rats *Leporillus conditor* tomorrow on Salutation Island. Some members went fishing, others went to the soft release pen to see the release of another two bilbies fitted with tail mounted radio-transmitters so their movements can be tracked. The two released on 22 September were still doing well and had dug several of their own burrows in the enclosure. On the way to the pen at dusk, a woma python *Aspidites ramsayi* crossed the road and settled into one of the nearby bushes. These are a threatened species and not often seen. Keith took photos of the python to show David Pearson back at Woodvale, who is doing research on this and other pythons. Brett Fitzgerald commented that there had been an increase in the number of these seen lately, particularly on the Monkey Mia road. Perhaps this is another positive response to fox control.

Wednesday September 27 The group woke at 5.30 am to the usual noise of the generator starting up. This was Tub's job in the morning on the way back from the hot tub. The group needed to be at Denham for a 7.30 am start on the charter boat *Ocean Invader* for Salutation Island. The first stop by the charter vessel was at the community of Useless Loop where we were met by Jeff Millgate, Leigh, Noelene and Grant from Clough

Environmental Services. The volunteers were shown around the peninsula and given a tour of the captive breeding enclosure on the island. The community and CSIRO have been breeding and releasing boodies *Bettongia lesueur*, western barred bandicoots and greater stick-nest rats into a fox- and cat-free area of the peninsula. The group arrived at Salutation Island at 2.30 pm. Members were ferried to the island in a rubber dinghy to set 100 Elliott traps in a 10 x 10 grid hopefully to catch greater stick-nest rats. Some people elected to sleep on the island, others slept on the comfortable vessel. As it turned out people on the island got a little wet but it was a good experience.

Thursday September 28 We were all up early in the morning to check the trapping grid on Salutation Island. Five stick-nest rats were trapped (5% trap success) and there was ample evidence of active stick-nests about. Keith saw this as a positive sign. The stick-nest rats were introduced to the island in 1990 as part of the recovery plan for this threatened rodent and this LANDSCOPE trip was used to monitor the population. It is estimated that about 500 rats now inhabit the island. The traps also caught some skinks (*Ctenotus saxatilis* and *Lerista* sp.), and a Burton's legless lizard *Lialis burtonis*. We departed from Salutation Island at 10.00 am and made our way back to Denham, via the other islands in the Freycinet Harbour and some fishing spots. Unfortunately these did not prove to be very productive. We arrived back at Denham at 4.30 pm and returned to Peron Homestead to prepare for the expedition dinner that evening. Our thanks to the skipper Les Fewster for making our trip to Salutation Island an enjoyable one.

The blooper of the trip had to be Ross (the fisherman) having the biggest tangle in his fishing line but according to Ross, Tub bumped him. We won't mention Keith's flat tyre effort but as Ross says 'always read the instruction manual'. Very early into this trip Geoff had the nickname Victoria and many a good debate was held over drinks and nibbles of an evening. The expedition was now coming to an end and it was evident at the Old Pearler restaurant in Denham on Thursday night that the group had bonded well. Brett Fitzgerald from CALM Denham met the group at the restaurant to reflect on the week's work and discuss the merits, progress and pitfalls of Project Eden. Brett had met the team at the grids for the morning trappings. He was able to give an update on the bilby release. Finally it was discovered that three of the six volunteers had the same birthday – a remarkable coincidence.

Friday September 29 The group packed for an early morning start back to Perth and for Tub and Bruce to Manjimup. Victoria (Geoff Slee) was to say good-bye to the group as he headed in his 4-wheel drive to meet up with friends in the north of the State. Some of the group stopped to view the stromatolites at Hamelin pool. The trip included a final stop at Dongarra for lunch, before arriving back at UWA at 6.00 pm to greet Jean Paton and tell the many funny stories of the trip.

TRAPPING AT PERON PENINSULA – SEPTEMBER 2000

Three teams of volunteers checked traps for three mornings starting on grids 1 and 2 near the homestead and finishing on grids 5 and 6 at Herald Bight on the coast. The three trapping sites represented different vegetation on the peninsula: *Acacia* heath close to the homestead; spinifex scrub and coastal heath at Herald Bight. Each grid consists of 16 trap points on a 4 x 4 pattern with 20 m between trap

points. Each point of the grid has an Elliott and pit-fall trap with a 5 m collecting fence set at each point. Pit trapping appears to be the most effective way of trapping small vertebrates and reptiles. Teams were rotated daily between grid trapping and woylie road trapping to give variation to trapping techniques and the type of animals caught. The trapping data collected on this trip will be added to the database held at the Wildlife Research Centre at Woodvale.

SUMMARY OF THE MAMMALS AND REPTILES CAPTURED

SPECIES	ACACIA HEATH (GRIDS 1,2)	SPINIFEX SCRUB (GRIDS 3,4)	COASTAL HEATH (GRIDS 5,6)
MAMMALS			
Spinifex hopping mouse (<i>Notomys alexis</i>)	X	X	X
Sandy inland mouse (<i>Pseudomys hermannsburgensis</i>)		X	X
Hairy footed dunnart (<i>Sminthopsis hirtipes</i>)		X	
House mouse (<i>Mus musculus</i>)			X
Little long-tailed dunnart (<i>Sminthopsis dolichura</i>)	X	X	X
REPTILES			
<i>Diplodactylus alboguttatus</i>			X
<i>Diplodactylus strophurus</i>	X	X	X
<i>Nephurus levis occidentalis</i>	X		
<i>Ctenophorus maculatus</i>			
<i>Aprasia</i> sp.			
<i>Lerista planiventralis</i>	X		X
<i>Morethia lineocellata</i>			
<i>Morethia obscura</i>		X	
<i>Ctenotus schomburgkii</i>	X		
<i>Diplodactylus ornatus</i>	X		
<i>Lerista lineopunctulata</i>			X
<i>Tiliqua rugosa</i>	X		
<i>Varanus gouldii</i>	X		
<i>Varanus eremius</i>			X
<i>Ctenotus fallens</i>		X	
<i>Pogona minor</i>			X
<i>Lerista praepedita</i>		X	X
<i>Moloch horridus</i>	X		

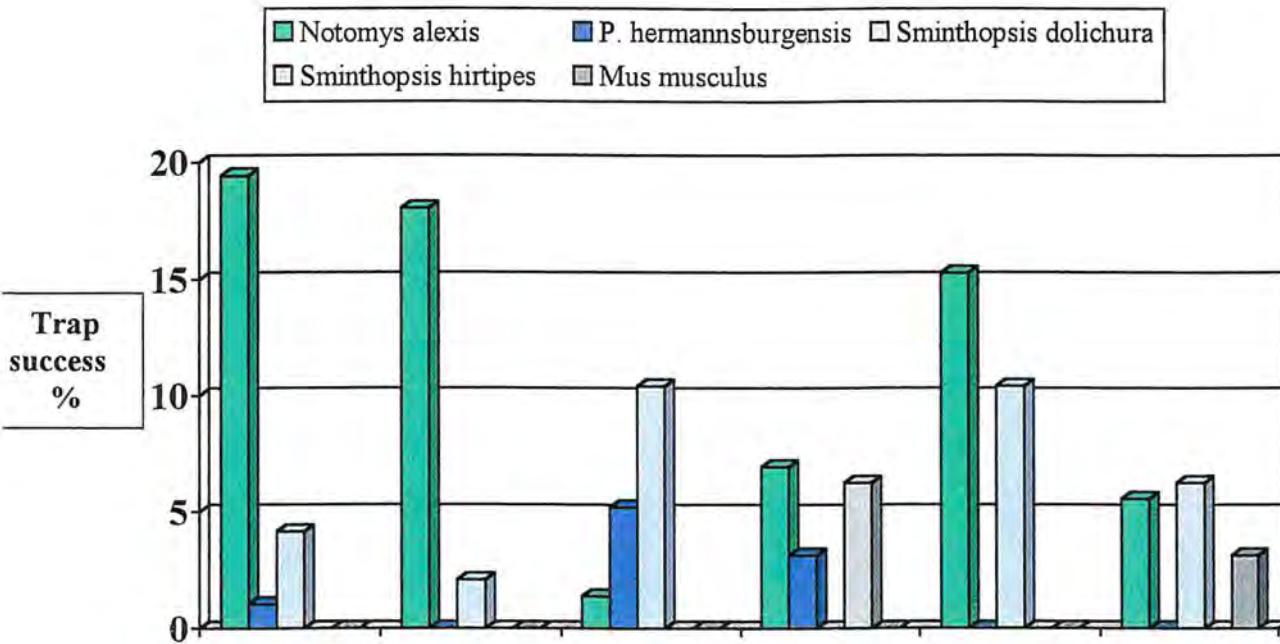


Figure 1. Mammal trap success rate for Francois Peron National Park, September 2000.

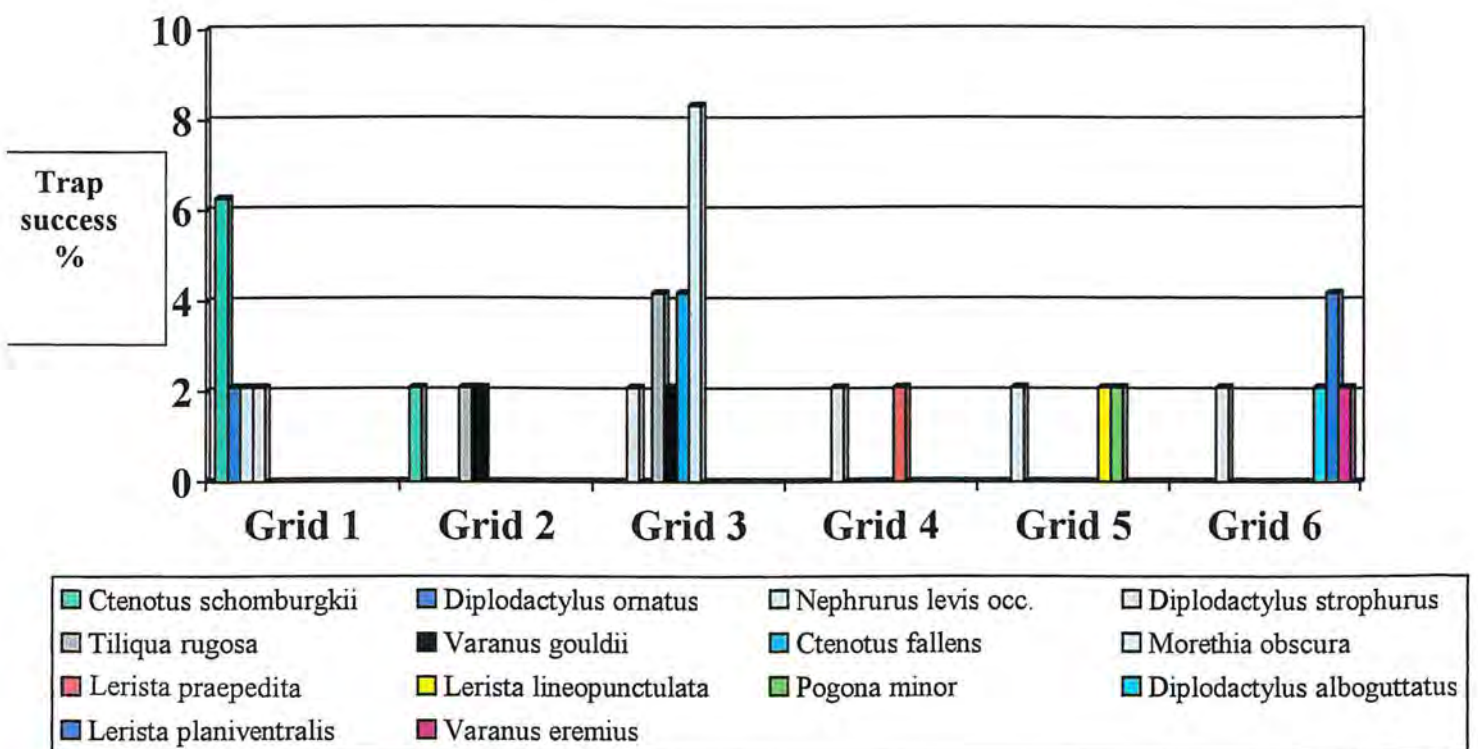


Figure 2. Reptile trap success rate for Francois Peron National Park, September 2000.



At Billabong Roadhouse en route to Peron Peninsula. Photo – Keith Morris



A bilby is released into an artificial burrow. Photo – Keith Morris



At the breeding pens, Heirisson Prong. Photo – Keith Morris



Michael Gibson, Ross Bedford, Chris and Keith Morris monitoring traplines, Peron Peninsula.
Photo – Joanne Varley



Herald Bluff with the weed Ruby Dock (*Acetosa vesicaria*) in foreground. Photo – Keith Morris



A woma python near the Cape Rose Track. Photo – Keith Morris

BIRDS

Specific time was not spent on bird observations but participant Lawrie Bartlett who describes himself in his journal as a 'keen amateur' compiled a list of species he recognized and later sent this to Keith Morris at the Research Centre at Woodvale. Forty-three birds were recorded on Peron Peninsula and another 15 species

recorded on Salutation Island. A total of 69 bird species had been recorded on Peron Peninsula previously. Lawrie noted that the yellow-plumed honeyeater is not usually seen so far north. All Project Eden participants were asked to keep an eye out for active mallee-fowl nests and tracks. Resident CALM vet Colleen Sims later found an active mallee fowl nest when radio-tracking the bilbies.

BIRDS

COMMON NAME	RAOU #	OBSERVED SEPTEMBER 2000	
		PERON PENINSULA	SALUTATION ISLAND
Emu	1	X	
Australian Grebe	61		
Australian Pelican	106	X	
Pied Cormorant	99	X	
Striated/Mangrove Heron	193	X	
Australian Shelduck	207		
Osprey	241	X	
White-bellied Sea-eagle	226	X	
Wedge-tailed Eagle	224	X	
Brown Falcon	239	X	
Australian Kestrel	240	X	
Australian Bustard	176		
Sand Plover	141		
Common Sandpiper			X
Pied Oystercatcher	130	X	
Sooty Oystercatcher			
Red-capped Plover	143	X	
Ruddy Turnstone	129	X	
Greenshank	158	X	
Grey-tailed Tattler	155	X	
Bar-tailed Godwit	153	X	
Red-necked Stint	162		
Pied Cormorant			X
Pacific Gull			X
Caspian Tern	112	X	X
Crested Tern	115	X	X
Fairy Tern			X
Bridled Tern			X
Silver Gull	125	X	X
Wedge-tailed Shearwater			X
Eastern Reef Egret			X
Laughing Turtle-dove (introduced)	998	X	
Common Bronzewing	34	X	
Crested Pigeon	43		
Galah	273	X	
Rock Parrot			X
Sacred Kingfisher	326		
Welcome Swallow	357	X	X
New Holland Honeyeater		X	
Yellow-plumed Honeyeater		X	
Spiny-cheeked Honeyeater		X	
Singing Honeyeater	608	X	X

COMMON NAME	RAOU #	OBSERVED SEPTEMBER 2000	
		PERON PENINSULA	SALUTATION ISLAND
Brown Honeyeater		X	
Dusky Gerygone		X	
Australian Raven		X	
Australian Crow		X	
Little Crow	691	X	
Tree Martin	359		
Richard's Pipit	647	X	
Black-faced Cuckoo-shrike	426	X	
Chestnut-rumped Thornbill	481	X	
Mistletoebird	564		
Yellow White-eye	576	X	
Zebra Finch	653	X	
Black-faced Woodswallow	546		
Mallee Fowl		X	
Brown Quail			X
Barn Owl			X
Southern Scrub-robin	441		
Red-capped Robin	384		
Hooded Robin	385		
Rufous Whistler	401		
Grey Shrike-thrush	408		
Crested Bellbird	419	X	
Grey Fantail	361		
Willie Wagtail	364	X	
Chiming Wedgebill	865	X	
White-browed Babbler	445		
Brown Songlark	508		
Spendid Fairy-wren	532	X	
Variegated Fairy-wren	536	X	
White-winged Fairy-wren	535		
Thick-billed Grasswren	512	X	
White-browed Scrubwren	488	X	
Inland Thornbill	476		

TRANSLOCATIONS

In 1997 CALM commenced translocating woylies to Francois Peron National Park. Prior to this expedition 108 had been released.

In mid-September another 36 woylies originally from Dryandra Nature Reserve south of Perth, were released along the Cape Rose track approximately 2 km from the homestead. The woylies were located near and around the soft release pens that were soon to be occupied by bilbies.

The first release of two female bilbies (1 with pouch young) coincided with the arrival of the Landscape party at the Peron homestead. Brett Fitzgerald and Nicole Noakes from CALM Denham took the bilbies to the soft release enclosure located along Woylie track about 6 km east of the homestead. Nicole released the animals, checking the tail transmitters one last time before they entered the artificial burrow. On checking the bilbies the

following morning it was noted that 1 bilby remained in the artificial burrow and the other bilby had made her own burrow in the enclosure. A further 3 bilbies were to be released a few nights later.

At the conclusion of the expedition, 5 bilbies had been released into the enclosure. Of the 2 originally released on the night of the group's arrival, 1 was still in the artificial burrow, the other had made burrows along the pen perimeter close to the fence. Three of the 5 bilbies were in the same burrow. Brett Fitzgerald outlined the future of the bilbies at Peron – within the week a group of bilbies would be released into a hard release situation, the open bush. Via radio transmitters, their subsequent progress will be compared to that of the bilbies in the soft release enclosure.

Mallee fowl have also been released in Francois Peron National Park

VOLUNTEER PROFILES

Lawrie Bartlett chose this particular *LANDSCOPE* Expedition as he has a practical interest in things coastal. His hobbies include small boat handling inshore and he has also acquired knowledge of seabirds and waders plus dune and coastal heath habitats through his interest in this area.



Michael Gibson loves the area and two previous holidays in Shark Bay and a four-wheel drive trip to the tip of Point Peron have impressed him with the value of this project.



Ross Bedford has been a member of Apex and a Rotarian for 35 years and is a life member of Rotary. Ross has enjoyed being on two previous *LANDSCOPE* Expeditions as he loves

outback travel, camping and meeting new people. He is basically a team player and *LANDSCOPE* Expeditions suit him very well.



Francis Parrotte (Frank) is interested in environmental issues, wildlife and conservation. A retired accountant, he has completed a Diploma of Art and Design (pottery) since he retired. Pottery is now a hobby as is growing and planting native trees for farmers.

Margaret Gibson visited this area of Shark Bay on previous occasions for fishing trips. Margaret was impressed with the eradication of feral animals on the Peron Peninsula and the subsequent re-introduction of native animals and she joined us after she had seen the advertisement amongst the UWA Extension programs. Margaret is a retired medical practitioner.



Geoffrey Slee came over from Bacchus Marsh in Victoria. He has a strong interest (as far back as he can remember) in wildlife and wild places. He describes himself as relatively self-contained and solitary but also as one who enjoys company. He also says that he is 'physically active but mentally lazy', a former employee of the Victoria Ministry of Conservation (late 1970s and early 1980s) he resigned after completing field work (Western Port Bay Study) and further funding for Gippsland Lakes became uncertain.



Stick-nest rat's nest on Salutation Island. Photo – Keith Morris



Above: On board the charter vessel *Ocean Invader*. Photo – Keith Morris



Left: Returning to the charter vessel. Photo – Joanne Varley

Below: Expeditioners on Salutation Nature Reserve. Photo – Chris Morris



This report is to be cited as Morris, K., Varley, J., Liddelow, G. & Ward, B. (2000). "Beyond the Dreaming – Project Eden 2000". *LANDSCOPE* Expeditions. Report No. 39, CALM, Perth, Western Australia. Copyright 2000 *LANDSCOPE* Expeditions, Science Publications Unit, Department of Conservation & Land Management (CALM), Locked Bag 29, Bentley Delivery Centre, Western Australia 6983. Extracts may be reproduced with the permission of *LANDSCOPE* Expeditions.

ISSN 1444-8742