Desert Discovery Inc.

Plumridge Lakes Project Report

Sept - Oct 2002

Cover Photo: Santalum spicalum

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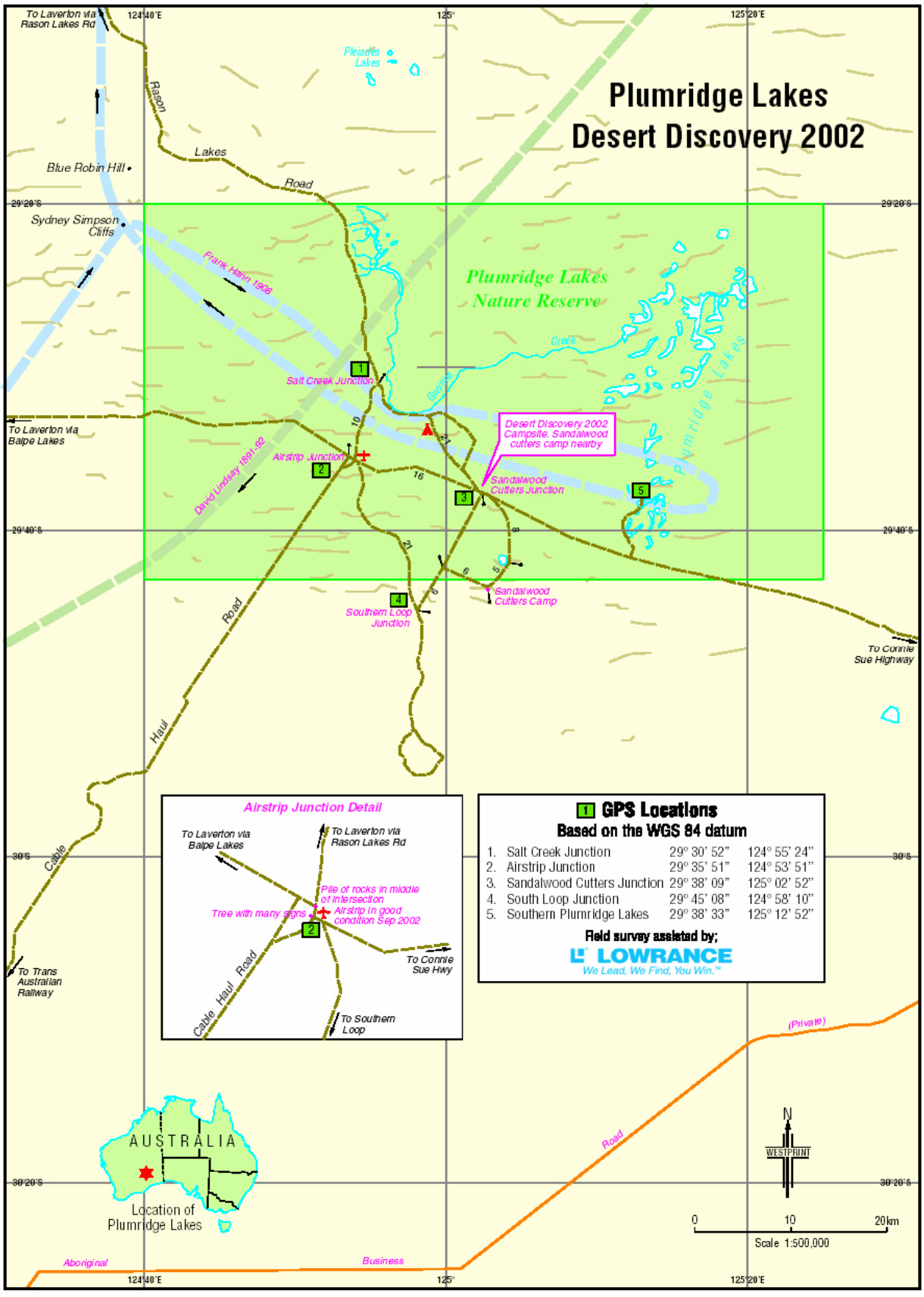
General Location Map



Desert Discovery Inc.

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Aims

Desert Discovery is a non profit organisation whose aims are –

1. to organise and document for the public record, safe expeditions into remote areas of Australia to study the environment, Aboriginal heritage and European exploration
2. to encourage responsible recreational use of remote and environmentally sensitive areas
3. to offer membership to people who enjoy and respect the outback regions and deserts of Australia
4. to provide members' families, invited guests and students with the opportunity for fellowship and to develop both individual strengths and team spirit through participation and co-operation in expeditions
5. to acquire knowledge, skills, equipment and funding to support the aims

Committee Members

President	Mr David Hewitt
Secretary/Treasurer	Mr Bob Hancock
Committee	Mr Stuart Kostera Mr Ken Harris Mr Rene Wysman

Background to Desert Discovery

David Hewitt

Desert Discovery had its beginning in 1994 when a small expedition visited Kurritji Yajula and Pikarungu in the Great Sandy Desert of Western Australia, 450km south east of Broome. These locations - the only semi-permanent waters in the Great Sandy were named Dragon Tree Soak and Joanna Spring by early European visitors to the region.

The 1994 expedition received sponsorship from Australian Geographic and one of the members was Dr Mike Bamford from Perth who had been in the area as the Australian representative with a Durham University Exploring Society party in 1981. The 2002 *Desert Discovery* project had a connection with the Durham University group through one of the members, Simon Wilkinson who was a participant at Plumridge Lakes.

In the 13 years between 1981 and 1994 there had been considerable changes to the environment in the Great Sandy Desert, particularly around Kurriji Yatula, caused mainly by feral camels. Many decisions can be made around a campfire on a still desert night and the 1994 trip was no exception. Travelling with Mike Bamford on this trip were Leanne and Jon Gregory and Margaret and David Hewitt. It was felt that there were opportunities for major privately sponsored scientific surveys to study some of these remote desert areas and it was decided to organise such a project in the Great Sandy Desert for 1996.

Preparations started immediately and the following year Leanne and Jon Gregory went back to the desert on a search for a suitable site for a base camp. Two of the main criteria were water and close by, an area that could be made into an airstrip. With advice from former oil exploration personnel in Broome and Derby, they drove 280km due east of Anna Plains Station on the Eighty Mile Beach and located an ideal site between sand dunes with a good water bore which had been used for an oil drilling program 10 years earlier. An old airstrip 2km away could be cleared for emergency use.

For 3 weeks in July 1996 the first Discovery Project worked out of the base camp called Pegasus, 35km from Pikarungu. Features within a 150km radius of the camp, as far a field as Kurriji Yatula and the McLarty Hills were visited. 39 members attended the camp, staying from two days to three weeks. The camp included Aboriginal people who knew the area, an archaeologist, a linguist, biologists, botany students, teachers and senior students from two schools, an environmental engineer, pilots of two aircraft, a professional photographer, a writer for 4 wheel drive magazines, an experienced backup crew and other people who were interested in observing the work. One of the teachers was an expert in desert navigation. Sponsors included Land Rover Australia, West Kimberley Fuels, Midland Sheet Metal, The Ricegrowers Co-operative, Bob Hancock, Stuart Kostera and Engel Fridges. Most members of the project contributed to a report edited by Carolyn Graham Taylor and Mike Bamford and published the following year. The report provided valuable information on the botany, biology, archaeology, water resources and history of an area which had rarely seen this kind of study.

The Discovery Project created a lot of interest around Australia. The title came initially from Discovery Well, a native soak 20km south of the base campsite. It was named by the leader of the 1896-97 Calvert Exploring Expedition, Lawrence Wells, following the discovery of the bodies of two young members of his party near the well. Charles Wells and George Jones had died tragically after failing to find what was thought to be a reliable supply of water at Joanna Spring. It had been given an incorrect position by Colonel Peter Egerton Warburton, 18 years earlier. The explorers always had difficulty determining accurate longitude and Warburton was no exception.

Following the success of the first project, *Desert Discovery* was established and Incorporated in NSW in January 1998 as a non profit Association. Five aims of the organization were defined. One of the principle objectives throughout has been to involve family groups, younger people and anyone with an interest in the Outback, with experts in the ecology of the desert.

Meanwhile planning was under way for another desert expedition. Because of the amount of preparation needed, it was decided to run the projects every two years. In August 1997 a reconnaissance party once again led by Jon Gregory selected a site in the Gibson Desert for the 1998 base camp. In June-July of that year, 114 people joined in the Warri Project, named after one of the last of the desert people who came in to Wiluna from this region 20 years earlier. It was a very wet year for the desert and rain before and during the camp provided an additional challenge.

The 1998 project base camp was at another abandoned oil exploration site, 160km north of the Gunbarrel Highway with features such as the Woolnough Hills, Ngarinyari Claypan, Veevers Crater and Constance Headland providing day or extended trips from the camp. Some members of the project stayed for a few days, others for the whole 3 ½ weeks, assisting with setting up and dismantling the camp. Bird surveys carried out by the Brooker family and Ken Harris were a feature of the camp and they gave talks on birds and involved other members in their work. Once again a report, edited by Bob and Kathy Hancock was published with many interesting contributions including some from the younger members. Another airstrip was prepared by a team led by Anthony McDonald, Greg Rankin and John Hewitt. Phil Crocker, a pilot from Tumut, NSW flew in and during his two days at the camp offered flights over the area. Bob and Elsie Lasseter attended and around the campfire Bob gave a fascinating account of his father's search for a gold reef in Central Australia. Ian Isbister returned again with students from his school in Bathurst NSW. A group from North-West Safaris, a Melbourne-based environmental tour company led by Peter Kelly, spent three days in the camp.

Planning began early in 1999 for another desert project. A reconnaissance party comprising long-time *Desert Discovery* members, Neil and Helen Cocks, Stuart Kostera, Ian Isbister and Margaret and David Hewitt covered possible sites in the Great Victoria and Gibson Deserts, finally recommending an area on the Connie Sue Highway near Cooper Hills.

The Cooper Hills Project was held over 3 weeks in June/July 2000. 98 people attended and once again the range of experts in fauna and flora, astronomy, geology, birds, desert navigation, camels and local history was a highlight. On a north-south axis through the Great Victoria Desert are a series of breakaways and spectacular rocky outcrops. Many of these were visited, perhaps the highlights being Waterfall Gorge and Sydney Yeo Chasm which both had pools of water. The report from Cooper Hills was edited by Garth and Jan Strong from Narrandera in NSW and was the most comprehensive yet in recording the many activities of the 3 week project.

The original committee of *Desert Discovery* Inc comprised David Hewitt, President; Bob Hancock, secretary/treasurer and Jon Gregory and Stuart Kostera as members. In 1999 Ken Harris joined and became secretary/treasurer. Jon Gregory subsequently retired from the committee after providing much practical assistance in the initial years of the organization. Rene Wysman is now part of the committee.

Immediately following the 2000 Project, *Desert Discovery* assisted with three bird expeditions covering remote one degree squares (approximately 100km by 100km) in the Great Victoria Desert for the new Bird Atlas of Australia. *Desert Discovery* committee member Ken Harris was one of the Bird Atlas Project leaders, and he coordinated our participation. Members assisted in planning the routes, and arranging permits for entering Aboriginal Lands, then four vehicles joined the surveys providing radio contact and backup for the bird observers. Aboriginal people from Tjuntjuntjara and Oak Valley supplied advice on bird species and two Pitjantjatjara men from Amata and Umuwa took part in another survey. A valuable financial contribution was made by Australian Geographic.

Again in 2001 *Desert Discovery* supported Birds Australia teams that were covering the last remote one degree squares for the new bird atlas. Five expeditions crossed the Tanami, Great Sandy, Gibson and Simpson Deserts in July and August, some of the travel being across-country through the most remote regions of Australia. Fortunately for the bird observers, the northern deserts were experiencing the wettest season for many years and water birds were recorded where they had never been seen before. However the wet conditions caused many problems for the vehicle parties. Bogging in wet sand was a constant occurrence and on several occasions routes had to be changed to avoid vast lakes between the sand dunes. Another consideration as a result of the rains was the very heavy vegetation on tracks which caused staking of tyres and blocked radiators. Despite the

problems encountered, the *Desert Discovery* members who participated found the surveys a very rewarding experience.

Birds Australia is considering further expeditions into remote areas, possibly starting with a Night Parrot search in 2003. *Desert Discovery* will assist in planning these expeditions and will take part, depending on timing.

The Plumridge Lakes Project

David Hewitt

Two sites were initially considered for the 2002 *Desert Discovery* Project. They were Wau Wau Well on the Gary Highway at the turnoff to Veevers Crater in the Gibson Desert and Gwenneth Lakes 130km east of the Kidson Track in the Great Sandy Desert. It was planned that *Desert Discovery* members who were accompanying the Birds Australia bird atlas surveys in July 2001 would check out both sites and recommend one for the next project.

Near record summer rains in 2001 through the Great Sandy and northern part of the Gibson had all but isolated the entire region. With the greatest difficulty the Birds Australia party had reached Wau Wau Well travelling across-country. But the Gary Highway from the south was impassable at Lake Cohen and the main access from the east, via Sandy Blight Junction and Kiwirrkurra was under water for many kilometres. In fact this road did not open to traffic again till August 2002. The next leg of the Bird Atlas survey was to call at Gwenneth Lakes where there was a bore and an old airstrip from oil exploration activity in the early 1980s. The access road from the Kidson Track was so overgrown and washed out that the Bird Atlas party took one and a half days to travel 100km then was stopped by water which appeared to extend at least another 30km to Gwenneth Lakes. As there was no indication that conditions would improve in the following 12 months both these sites unfortunately had to be discounted for the 2002 project.

In November 2001 Ian Kealley, Regional Manager for the Goldfields Region of the WA Department of Conservation and Land Management, was contacted. Ian had encouraged *Desert Discovery* since its Warri Project which was held in his Region. We were considering an abandoned mining camp called Officer Basin, 70km north of Queen Victoria Spring which had a bore but the water was unsuitable for drinking.

Ian Kealley suggested the Plumridge Lakes Nature Reserve because of its diversity of flora and fauna. Although the Nature Reserve had been proclaimed in 1977, little research had been carried out and there was scope for work by members of a *Desert Discovery* Project. John Bylund, who had conducted a revision of the HEMA map of the western Great Victoria Desert in 2001, provided details of tracks. The *Desert Discovery* committee decided on a brief visit to the area at the end of the 2001/2002 summer to check out track condition, campsites and the airstrip.

In early May Bob Hancock flew out to Yulara with Tony Morrison and joined Margaret and David Hewitt at Wingellina. They headed down the south track from Wingellina to Ilkulka and Tjuntjuntjara, then across to Plumridge Lakes. After meeting Stuart Kostera and Meg Carty who had come out from Perth, at the main track junction, the group spent 2 days viewing some of the features in the area and potential campsites. An old sandalwood camp 17km east of the airstrip was the preferred site and after later checking with the Department of Conservation and Land Management (CALM), this was confirmed as the location for the 2002 project. The airstrip was 900 metres long and could be easily made serviceable. Access tracks from the Trans Rail Line in the south, the Anne Beadell Highway in the north and the Connie Sue in the east were all in reasonable condition, though rain during the project could make the road surface very slippery. - fortunately there was no rain for the 3 weeks we were at Plumridge.

In May there was water in several of the lower lakes of the Plumridge system, in Gwynn Creek and in a small clay pan 8 km south of the main track, all very salty and unsuitable even for washing. Stuart Kostera searched the Department of Minerals and Energy files back in Perth for information on bores, but groundwater has never been found in the area. A possibility that a mineral exploration company would be coming in to do some drilling early in 2002 did not eventuate. After looking at distilling saline water, it was finally decided that water would have to be carried in. Placer Dome Asia Pacific made a generous donation towards the cost of transporting water, and a 1500 litre heavy duty water trailer was loaned by the Granny Smith Mine at Laverton. Rory Lamont and Melanie Hayhow, environmental workers at the mine brought out the first load of water, 350 km from Laverton, then John Deckert and Keith Johnson drove across 240km to Tjuntjuntjara, for subsequent loads. All participants in the camp co-operated in limiting their use of water and the water supply situation worked very well indeed.

Previous *Desert Discovery* projects had been held in June/July but September/October was selected because of the very cold winds that can be experienced in the Great Victoria Desert in winter. Also the reptiles and small mammals were more likely to be appearing in the later period.

The project began on 23rd September with the arrival of Stuart Kostera and Meg Carty from Perth towing a heavily loaded trailer with most of the base camp gear. They were followed by Simon Wilkinson the following day with the remainder of the equipment which had been stored at Stuart's place at Kalamunda for the past 2 years. A day later the 10 metre by 6 metre marquee had been erected, the long-drop toilet was in service and the shower was operating. Neil Cocks led a team on the airstrip and after 2 days work removing small shrubs and dragging with a length of railway line, it was ready to take Phil Crocker's Beechcraft Bonanza aircraft which was flying in from Tumut, NSW.

86 people joined the project over the three weeks. This was slightly fewer than for the two previous projects, though the number of person/nights was higher as participants stayed longer. The maximum number in camp at any one time was 44. One of the highlights of a *Desert Discovery* project is the nightly meetings when, around the campfire, reports are presented of the days activities. Special thanks to all who took part in the evening activities, those who were reporting on the desert ecology, the members who gave recitations of Australian poetry, nightly guest speakers, the volunteers who looked after the campfire and prepared suppers, and the younger members who enthusiastically took part. A new and much appreciated feature was Maree Goods' nightly Power Point show where she displayed views of wildflowers recorded that day on a digital camera.

As usual the experts did a wonderful job in sharing their knowledge with other members who were always keen to learn about the desert flora and fauna. Their findings will make a valuable contribution to this report.

The packing up on the final day was carried out by a very willing group. Sincere thanks to those who assisted: David Travis, Graham Young, John Hewitt, John Wilkinson, Karen and Anthony McDonald, Leanne, Loren and Jon Gregory, Meg Carty and Stuart Kostera, Margaret and David Hewitt, and Trish and Graham George. Perhaps the Grand Finale of the camp was the arrival of Aboriginal people in two vehicles heading from Coonana to Tjuntjuntjara. While they filled their water containers from our remaining water, Margaret Hewitt made cups of tea and our resident "Bush Mechanics" Macca and Snake were recorded on film, carrying out essential repairs to a rather aging vehicle.

Members are to be commended on the cleanliness of individual campsites on departure. Being in an A Class Nature Reserve we were particularly conscious of the impact of our presence in a particularly fragile environment. Two of our members called in to the Cooper Hills site on the Connie Sue Highway following the camp. They reported virtually no sign of the *Desert Discovery* project there two years ago - the desert had very effectively reclaimed the campsite.

The Plumridge Lakes Nature Reserve

Conservation & Land Management (CALM)

Plumridge Lakes was declared a Nature Reserve on 22 April 1977 and covers an area of 308,990 hectares. It is one of six reserves in the WA section of Great Victoria Desert, the others being Queen Victoria Spring, Neale Junction, Yeo Lake, De La Poer Range and Great Victoria Desert.
Plumridge Lakes is an A Class Nature Reserve which means that its tenure and purpose can only be changed by agreement of both Houses of the Western Australian Parliament.
The difference between National Parks and Nature Reserves is the same throughout Australia. The purpose of National Parks is for wildlife and landscape conservation, scientific study and preservation of features of archaeological, historic or scientific interest together with recreational enjoyment by the public.
Nature Reserves are for conservation of flora and fauna and as described for National Parks but without the recreational component, so as to minimize human impacts.
Anyone considering visiting one of the Western Australian Goldfields Region Nature Reserves should contact the Kalgoorlie office of the Department of Conservation and Land Management,
Phone: 08 9021 2677 or Fax: 08 9021 7831

A History of the Plumridge Lakes Area

David Hewitt

The lack of water has affected most activities in this part of the Great Victoria Desert. The soaks found in sand dune country further north and rock holes in the range country to the north east are not found here. Gwynne Creek, which flows from the north to the eastern section of the Plumridge Lakes, and the lakes themselves, are very salty and the water totally unsuitable for drinking.

Aborigines traversed the region after heavy rains when wildlife was abundant and good surface water was around. In 1907 Frank Hann described the gorges at Sydney Simpson Cliffs on the northwest boundary of the Nature Reserve as a popular camping place for Aborigines. In the 1922 Mt Margaret Mission was established and Aboriginal people started moving in there and to Laverton. Later, Cundeelee Mission, 40 km north of the Trans Australian Railway line started in 1950 at an old Government ration depot. Regular patrols visited the people living east of Queen Victoria Spring and eventually they all moved in to Cundeelee. In 19 facilities were provided at Tjuntjuntjara, 240 km east of Plumridge which allowed the Spinifex people to return to their tribal country around the SA/WA Border.

The first explorer to cross the Great Victoria Desert was Ernest Giles who had made two previous unsuccessful attempts further to the north. Giles and his party of eight men including William Tietkens who had been with Giles on an earlier expedition, and an Aboriginal guide, set out from Ooldea on 27 July 1875. They reached a waterhole which Giles called Boundary Dam and which he thought was on the SA/WA Border. Later surveys found it to be 32km west of the border. After a week-long break at Boundary Dam, Giles set out for Mt Churchman, the next known feature to the west on what the knew would be a long dry stage. The party crossed just south of the Discovery Project's campsite at Plumridge Lakes. After 17 days, and with the party desperately short of water, Giles' Aboriginal companion, Tommy found "a miniature lake lying in the sand with plenty of that inestimable fluid which we had not seen for more than 300 miles". This place he "honoured with Her Majesty's mighty name", calling it Queen Victoria's Spring and the Desert they had just crossed, the Great Victoria Desert. In 2002 Queen Victoria Spring was dry and had been so for some considerable time.

Giles spent nine days recovering at the Spring, finally heading off on the last leg of the journey via Mt Churchman and New Norcia. In Perth they received a hero's welcome with a brass band, street parade and a banquet.

The next party to enter the region around Plumridge Lakes was the Elder Scientific Exploration Expedition sponsored, as were Giles' travels, by the South Australian pastoralist, Sir Thomas Elder. It was a large party comprising David Lindsay as leader, Frederick Leech as second-in-charge, a surveyor, geologist and meteorologist, naturalist, medical officer and photographer, four assistants, an Afghan contingent to look after the camels and 44 of Sir Thomas's camels bred on his northern SA property at Beltana. Giles had described these camels as "second to none in the world for strength and endurance". Lindsay traveled by train to Warrina on the Oodnadatta railway line and set out from there on 2 May 1891. His party trekked in a huge arc to the Everard Range, then to the Birksgate Range which Lindsay named after Elder's Adelaide home, north west to Mt Squires near the present day Warburton Community and south west to Limejuice Camp, just north of Len Beadell's Neale Junction. Here the expedition's doctor mixed lime juice with whisky in a galvanized water container. After drinking the brew the whole party became sick with zinc poisoning.

Lindsay continued south west passing a salty clay pan with banks about 20 feet high formed of crystalline gypsum. This was probably one of the Plumridge Lakes complex but it was left to Frank Hann, 15 years later, to give it a name. Finally Lindsay's party arrived at Queen Victoria Spring on 23 September, after travelling 632 km from Mt Squires in 25 days, an average of 25 km a day. Despite Giles description of the Spring as permanent, Lindsay was bitterly disappointed to find it dry. Overnight a well was dug to four and a half metres and 270 litres of poor water recovered before it collapsed. Dr Elliott helped the workers momentarily forget their predicament by dealing out a nip of whisky to everyone. A camel died at QV Spring, presumably not from drinking the whisky.

There was no alternative but to press on to Frazer Range Station on the present Eyre Highway, a distance of 200 km, which they reached after a further 9 days.
The expedition then continued through partly settled country to Geraldton where Lindsay was disappointed to be recalled to Adelaide. Lawrence Wells took over as leader and continued through the Murchison Region of WA for a further 6 weeks.

Lindsay was honoured by the naming of a peak in the Birksgate Range, Mt Lindsay. Later Gwynne Creek and Leech Lakes in the Plumridge area were named after members of the Elder Expedition.

Between 1903 and 1908 Frank Hugh Hann made five treks from Laverton through the Great Victoria Desert, the Range country between the Warburtons and the Musgraves and across to Oodnadatta. He financed all his own explorations, hoping to find gold and new grazing country but it is also possible that he also just loved travelling the outback, like many of our four wheel drive tourists today. A faithful companion on all his travels was Talbot a Queensland Aboriginal man who had come across from Hann's Lawn Hill Station with him. Hann taught him to write and Talbot recorded their names in his neat printing on many trees and rock faces as they travelled. Frank Hann probably named more features in Western Australia than any other explorer.

On 21 July 1908 Hann left Laverton on one of his last expeditions - a circuit to Queen Victoria Spring, Warburton Range and back to Laverton using five Government camels and four of his own horses. His second companion on this trip was a white fellow called H Plumridge. On the outward trek he describes camping between two small lakes - a pretty camp - 74 days after leaving Laverton. On Thursday 3 September he called this series of lakes the Plumridge Lakes. He describes the country as splendid saltbush with mulga limestone country ahead and that day Hann saw some Sturt Desert Pea. He mentions crossing the tracks near Sydney Simpson Cliffs of "McOrmish's men going south ……. they are out looking for Streich's supposed find of gold" (Victor Streich was the geologist in the Elder Expedition). In recent years there have not been any reports of gold being found this far east.

The sandalwood cutters followed the explorers into the Great Victoria Desert (since the 1840s sandalwood had been a significant income earner for WA and by 1848 sandalwood was the colony's major export industry). In 1930 Charlie Cable and his brother Douglas led an expedition from Kalgoorlie to the Warburton Ranges, using a camel dray. They were looking for gold and pastoral country but on the way out they discovered an outlying area of sandalwood around the Plumridge Lakes. The Cables later returned to cut the sandalwood and the family continued to work in the area until the early 1990s. Aboriginal people were a key part of the industry in the Great Victoria region, coming out from Cundeelee Mission to work on the pulling. Today there are many signs of sandalwood in the Plumridge area. The *Desert Discovery* Project base camp was at an old sandalwood camp with a very large pile of chips nearby. Tracks lead to the north and south to other former campsites where there are the remains of wiltjas used by the Aboriginal workers and tent frames of the white fellows. A track south to the Trans Rail line is named the Cable Haul Road in honour of the Cable family. Trucks which took out the sandalwood also brought in water and supplies for the pulling teams. One of the 2002 Project members discovered a trailer loaded with sandalwood, still intact but obviously had been there for many years as the tyres were perished. It was left as found.

During the Nickel boom of the early 1970s additional tracks were constructed east from Laverton. Although the nickel search was not successful in the Plumridge area, signs of platinum were found and several companies have held exploration leases over the area. An airstrip was constructed and a camp established in the 1980s near what has become known as Salt Creek junction. Several years ago further south towards Queen Victoria Spring a Japanese company searched for uranium. With the exception of a bore at the Japanese company's Officer Basin camp which was unsuitable for drinking, no underground water has been found in the Queen Victoria Desert west of the Connie Sue Highway.

The Plumridge Lakes Nature Reserve, also another Reserve over the Neale Junction area were proclaimed in 1977. Len Beadell's Connie Sue and the western section of the Anne Beadell Highways, constructed in 1962 as part of the Woomera Rocket Range network of roads, are to the north and east of Plumridge. A good track in to the Nature Reserve runs from the Connie Sue and access is available from the Anne Beadell Highway via Rason

Lake. The sandalwood industry, rocket range activities and mineral prospecting have all assisted in providing good access to the Plumridge Lakes. Although water is still not there, Ernest Giles and David Lindsay would notice big changes if they were to return today.

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Plumridge Lakes Camp - Oct 2002

Bob Lasseter

By comparison with the last 2 previous *Desert Discovery* Camps that my wife Elsie and I attended, here there were a couple of distinct advantages apparent to me.

- The larger type vegetation, Manna Gums, desert oaks, large Mallee, etc, and the greater density of the vegetation. This made for a much more comfortable and enjoyable campsite, offering shelter from the elements.

  Small bare patches of smooth red earth, frequently occurring in various sizes and shapes, amongst the trees, provided excellent one family or two family sized campsites, with a little privacy from neighbours.

  As this had been the site of Sandalwood cutters camps back in the 1930s, the area was well served with a network of old tracks that suited *Desert Discovery*'s large contingent very well. There was also one larger central clearing for the big marquee and campfire circle, well suited for regular evening meetings.

- Being later in the year, the greater hours of daylight allowed for more extensive 1 day trips and provided more moderate night time temperatures making camping a comfortable experience.

  Against this we experienced one afternoon and night of exceptional gale-force winds which collapsed some of the tents and damaged the big marquee. One can assume such a gale could have done greater damage in a more exposed area.

- More of the vegetation was bursting into blossom. My definite favourite was the red flowering Mallee with its huge (50mm diameter) gum nuts in clusters, some with the cap dropping off, and some in full bloom. I discovered for the first time in my life how Gum nuts work – thank you Clive Crouch.

The unavoidable disadvantage of this site was the lack of sufficient hot and cold running water for unlimited showers, laundry and washing the dishes, as had been the regular thing at previous *Desert Discovery* camps. All part of the desert experience.

I travelled to the camp as a passenger in the back seat of Phil Crocker's aeroplane, with pilots Phil and David Fletcher at the controls. The flight from Tumut took 2 days. We enjoyed perfect flying conditions as far as Mildura, but unfortunately from there on we met with a turbulent head wind which caused me motion sickness. We refueled and ate lunch at Port Augusta, landed at Ceduna for this old man to have a short rest on steady ground, before continuing on for an overnight stay at Forrest.

At Forrest (population 3), we were very well attended to by the cheerful Les Plunckett, fuel man, taxi driver, accommodation provider, chef and waiter, who provided a bonza feed and a good night's sleep.

Smooth landing on the camp airstrip

Immigration check

Next morning was only a short hop to Plumridge, where, after locating and circling the campsite, we flew on (9nm) to the airstrip for a smooth landing, as the maintenance crew had done a very good job of rejuvenating the strip. We were made very welcome by the large reception committee (in spite of the pseudo-immigration office specially set up for the occasion).

Due to pressure of business back in Tumut, we could only stay 3 days, but into that we packed a respectable learning programme, as well as some contribution to the overall camp, including inspecting Clive's traps and pit-traps, photographing Pygmy possums, geckos, etc, superficially studying a big range of flowering grevilleas and other shrubs, bird watching with Ken Harris, repairing the marquee with Jon Gregory and Viv Harris, flying kites on the clay pan with the Hancock clan, attending Sunday morning church service, joining in evening campfire discussions, enjoying meals and fellowship with the Strongs, Phillips, Hancocks and others. The aircraft was also used for the Australian Geographic photographer, Kiri Lockmann, to get some aerial shots for writer Ken Eastwood's proposed article.

All too soon our departure was due, and with 60 knots of wind on our starboard rear quarter, we were all the way to Ceduna and our accommodation for the night by early afternoon. Next day still with a good tail wind and after landing at Mildura for lunch and fuel, we reached Tumut with plenty of daylight to spare, and for me a feeling of unreality that such a lot had been achieved in such a short time.

Desert Discoverers 2002

BELL	Mal & Myrene	Forrestfield	WA
BIDDLE	Ian & Carol	Duncraig	WA
BISGROVE	Alexis	Clontarf	QLD
CARTY	Meg	Kalamunda	WA
CHARLES	Roger & Sue	South Croydon	VIC
COCKS	Andrew & Sharon, Ashley, Josh, Ben	Boronia	VIC
COCKS	Neil & Helen	Boronia	VIC
COWCHER	Bruce & Mardi	Prahran	VIC
CROCKER	Phil	Tumut	NSW
CROUCH	Clive	Nhill	VIC
DAY	Bill & Rhonda	Nhill	VIC
DECKERT	John & Bev	Nhill	VIC
DOUR	John & Sue	Croydon	VIC
DRAPER	Lawrie & Pat	Bendigo	VIC
EASTWOOD	Ken	Terrey Hills	NSW
FLETCHER	David & Gail	Tumut	NSW
FOLETTA	Greig & Annemarie	Malvern	VIC
GEORGE	Graeme & Trish	Blacksmiths	NSW
GOODS	Graham & Maree	Horsham	VIC
GREGORY	Jon & Leanne, Loren	Tumut	NSW
HANCOCK	Robert & Kathy	Northmead	NSW
HARRIS	Ken & Viv	Wheelers Hill	VIC
HEWITT	David & Margaret	Tumut	NSW
HEWITT	John	Leeton	NSW
JOHNSON	Keith & Shirley	Wheelers Hill	VIC
JORDAN	Malcolm & Sue	Mt Claremont	WA
KOSTERA	Stuart L	Kalamunda	WA
LASSETER	Bob	Seven Hills	NSW
LOCHMAN	Jiri & Marie	Innaloo	WA
LOWE	Jan	Black Forest	SA
MCDONALD	Anthony & Karen	Kinglake	VIC
MORRISON	Tony	Richmond	NSW
PAWSON	Pat & June	Ringwood East	VIC
PHILLIPS	Bert & Marian	Leopold	VIC
PRIOR	Paul	Wyonga	NSW
RATHBONE	Karen & Wayne, Kelsey, Leigh, Jordan	Ferntree Gully	VIC
STINDL	Walter & Florian	Leimen	GERMANY
STOGDALE	Rob	Clontarf	QLD
STRONG	Jan & Garth	Narrandera	NSW
SUMMERS	John	Black Forest	SA
TRAVIS	David	Bathurst	NSW
WHITING	Eric & Rowena	Leeton	NSW
WILKINSON	John	Coleambally	NSW
WILKINSON	Simon	West Byfleet	SURREY
WYSMAN	Rene & Suzanne	Bowna Via Albury	NSW
YOUNG	Graham	Oberon	NSW

Bird Survey

Ken Harris

Introduction

Bird studies during the Plumridge Lakes Project were conducted principally by Ken Harris, Keith Johnson and Sue Charles. They arrived at Base camp within Plumridge Lakes Nature Reserve (Lat S29º 37' 50" Long E125º 02' 46") on September 23rd. Fairly extensive surveying was conducted within a radius of 2km of Base Camp. A side trip was conducted on September 27th as far as Lindsay Hill, 92km north towards Lake Rason. The above group then left Base Camp on September 29th and travelled to Queen Victoria Spring via the direct easterly track and then south via Officer Basin PNC camp site. From Queen Victoria Spring they then travelled on to Laverton via Lake Minigwal. Keith and Ken then returned to Base Camp via Lake Rason on 5th October and remained there until 8th October when they departed easterly via Leech Lakes. The sightings recorded below cover all birds seen by these three from September 23rd until 8th October except birds seen only within Laverton township area. Additional sightings have been added by other attendees at the Project.

Prevailing Conditions

During a reconnaissance in May 2002 there was some casual water and Gwynne Creek was flowing. However the appearance of the country during the actual Project indicated there had been little or no rain since. The whole of the area covered was exceptionally dry. No casual water was found although some damp salty spots were found around Gwynne Creek and the Lake system in the north of Plumridge Lakes Nature Reserve. There were indications of a water source at Leech Lakes (presence of a small number of species needing water, eg Galah). Queen Victoria Spring was dry even where fairly recent digging had been done to a depth of over one metre.

Habitats

The habitat was varied and included –

- extensive areas of mallee (various species)
- extensive areas of mulga
- occasional rocky outcrops mainly to the north of Base Camp and west of Lake Rason.
- mostly flat country with some dunes
- dry salt lakes

Many areas contained small amounts of flowering mallee. However flowering of different species appeared to be either just beginning or just finishing and only a small number of sites were found with sufficient blossom to attract even moderate numbers of Honeyeaters.

A small number of sites were encountered that had been recently burned and contained fresh herb type growth either in flower or seeding. Experience from the Cooper Hills Project raised hopes these areas might contain large numbers of birds but they were in fact barren due apparently to lack of water.

Summary of Sightings

Overall bird species and numbers were low principally due to the lack of water eliminating seed eaters. The fact that the breeding season was almost completed led to an absence of cuckoos. The modest degree of blossom probably led to fewer insects and therefore reduced numbers of insectivores. These reduced numbers led in turn to reduced raptors such as Spotted Harrier and Australian Hobby. Many birds that were expected were either not seen at all or were seen in very small numbers. Examples of these were –

No sightings - Little Button-quail, Inland Dotterel, Banded Lapwing, Common Bronzewing, Crested Pigeon, Cockatiel, Budgerigar, Horsefield's Bronze-Cuckoo, Boobook Owl, Rufous-crowned Emu-wren, Striated Grasswren, Rufous Fieldwren, Chestnut Quailthrush, Chestnut-breasted Quailthrush, Zebra Finch, Rufous Songlark

Very few sightings - Emu (2 sightings), Spotted Harrier (1), Bustard (2), Pallid Cuckoo (1), Black-eared Cuckoo (2), Owlet Nightjar (1), Spotted Nightjar (1), Splendid Fairy-wren (2), Variegated Fairy-wren (1), Redthroat (1), Slaty-backed Thornbill (1), Crimson Chat (1), Hooded Robin (3), Mistletoebird (3), Brown Songlark (1)

Of the birds seen there were no exceptional sightings. Common birds were Yellow-throated Miner, Grey Butcherbird, Pied Butcherbird, Australian Ringneck, Weebill, Inland Thornbill, Chestnut-rumped Thornbill, Striated Pardalote and Black-faced Cuckoo-shrike.

During the survey period the *numbers of both Yellow-throated Miners and Australian Ringnecks was a surprise* to the observers. It had been assumed that water as part of the habitat was a strong preference for the former and an absolute necessity for the latter. In previous surveys done further north and east in the Great Victoria Desert the Yellow-throated Miner was less common and generally associated with a water source. The presence in numbers of both these species in an apparently dry area was put to three members of Birds Australia with specialist knowledge of them, ie Jon Starks, Rhidian Harrington and Rohan Clark.

The view on the Yellow-throated Miner was that it will drink water if available but being primarily insectivorous, water is not essential to its survival. This led to consideration of other factors influencing the distribution and it was noted that further north and east their presence was often associated with eucalypt species. Eucalypt, especially mallee species is common throughout most of the area surveyed within this project but becomes less common to the north and east within the Great Victoria Desert. It seems likely that vegetation type is the factor influencing distribution rather than the water.

All literature on the Australian Ringneck indicates it requires water for its survival. This was confirmed in discussions with the above mentioned. It was suggested that if there were sufficient large succulent fruits available this may supplant the need for water. Whereas there were numbers of Quandongs in fruit it was considered highly unlikely that these would provide moisture in sufficient quantities. It was suggested that these birds could travel in excess of 20 kilometres to water and perhaps there were still isolated rock holes or soaks supporting these birds. In the light of no other explanation this one must be accepted. However the following facts remain –

- No sign of water was found throughout the project except for some dampish spots on the creek line to the north of Base Camp and these did not constitute a supply for drinking.
- Other birds requiring water were almost completely absent except at Leech Lakes 60 kilometres south east of Base Camp.
- No search was mounted but indications were a water source was available north of the track.
- The territory to the south and west of Plumridge Lakes appears almost devoid of rocky outcrops that could hold a long term water supply. Ground level rock holes that were examined, eg Mulga Rockhole appeared to have been dry for some time as had clay pans and springs, eg Queen Victoria Spring.

- Australian Ringnecks were seen on every day (14) except the one on which the team rested at Base Camp. By comparison other parrots seen were Mulga Parrots (2 days) and Budgerigar (a single bird at Leech Lakes).

Impact of camels on bird numbers and species

A number of camels were seen and there were signs everywhere of their recent presence. Estimates of their population in the Great Victoria Desert alone range as high as 700,000. Obviously this large number of camels is causing available water to disappear at a much quicker rate than prior to their existence. This must reduce the holding capacity of the land for bird numbers and must be curtailing breeding seasons. The impact of camels was noticed in the previous project and cannot be ignored at Plumridge Lakes Nature Reserve, Queen Victoria Springs Nature Reserve and the whole of the surrounding country. The latest Australian Bird Atlas data shows a number of birds dropping in numbers. Many of these are seed eaters such as Emu, Bustard and Inland Dotterel. The latter is now rarely seen away from the Cooper Basin. It seems highly likely; a major contributing factor to the drop in numbers of these birds at least in the western, arid part of their range is the camel.

Birds

Common Name	Genera Species	Observation
Emu	*Dromaius Novaehollandiae*	A group of four seen between Mulga Rock hole and Lake Minigwal and a pair near Laverton.
Spotted Harrier	*Circus assimilis*	One bird seen near the lake system to the north of Base Camp.
Brown Goshawk	*Accipiter fasciatus*	One bird seen near Base Camp and another just south of the reserve on the Cable Haul Rd.
Collared Sparrowhawk	*Accipiter cirrhocephalus*	One bird seen near Queen Victoria Spring.
Wedge-tailed Eagle	*Aquila audax*	Not common. Seen once near Base Camp and occasionally on trips to the north or west. Seen on seven separate days.
Little Eagle	*Hieraaetus morphnoides*	Not common. Single birds seen on four occasions
Brown Falcon	*Falco berigora*	Moderately common. Seen on most days by people doing trips from Base Camp and occasionally close to Base Camp.
Australian Hobby	*Falco longipennis*	Uncommon other than a nesting pair near Base Camp.
Peregrine Falcon	*Falco peregrinus*	Seen on two occasions - once near the airstrip and once near Base Camp
Nankeen Kestrel	*Falco cenchroides*	Moderately common. Usually seen on trips out of Base Camp as for Brown Falcon
Australian Bustard	*Ardeotis australis*	Uncommon other than several sightings, presumably of the same group, of up to three birds on the airport track. Also a sighting of three birds 50km north of Queen Victoria Spring Nature Reserve
Galah	*Cacatua roseicapilla*	One sighting only at Leech Lakes
Australian Ringneck	*Barnardius zonarius*	Common. Seen on most days in most habitats
Blue Bonnet	*Northiella Haematogaster*	One sighting 25km east of the Plumridge Lakes Nature Reserve boundary
Mulga Parrot	*Psephotus varius*	Uncommon. Seen on three occasions outside the Plumridge Lakes Nature Reserve, once to the north, once to the west and once near Leech Lakes.
Budgerigar	*Melopsittacus asuarina*	Uncommon. A single bird seen near Leech Lakes
Bourke's Parrot	*Neopsephotus bourkii*	Uncommon. A small flock seen near Leech Lakes
Pallid Cuckoo	*Cuculus pallidus*	Uncommon. A single bird heard at Queen Victoria Spring.

Birds

Black-eared Cuckoo	*Chrysococcyx osculans*	Uncommon. Seen occasionally on the track to the clay pan south of Base Camp and seen once at Queen Victoria Spring
Tawny Frogmouth	*Podargus strigoides*	Heard and seen on several occasions at Base Camp and a pair flushed near Mulga Rock hole
Spotted Nightjar	*Eurostopodus argus*	One bird only heard calling south of the Laverton Rd *en route* to Queen Victoria Spring. Some night driving was done and no birds seen
Australian Owlet Nightjar	*Aegotheles cristatus*	Uncommon. Heard on two nights at Base Camp
Red-backed Kingfisher	*Todiramphus pyrrhopygia*	Uncommon. One bird seen in the same area on several occasions at Base Camp and two sightings between Laverton and Base Camp
Rainbow Bee-eater	*Merops ornatus*	Migration noted to be occurring. Three birds observed 40 km north of Plumridge Lakes Nature Reserve on 5th October whereas no birds were present at this site on 27th September. Later in the project also seen at Base Camp and one other sighting 100 km east of Laverton
White-browed Treecreeper	*Climacteris affinis*	Uncommon. Single bird seen on two occasions in casuarinas along the track to the clay pan south of Base Camp. Several birds seen near Coglia Mine
Splendid Fairy-wren	*Malurus splendens*	Uncommon. Seen north of Base Camp, at Queen Victoria Spring and 70km east of Laverton. Males in breeding plumage.
Variegated Fairy-wren	*Malurus lamberti*	A party including coloured males seen near Toppin Hill west of Lake Rason.
White-winged Fairy-wren	*Malurus leucopterus*	Moderately common in preferred habitat. Sightings in typical dry salt lake habitat – near lake system in north of Plumridge Lakes Nature Reserve, en route to Queen Victoria Spring, near Lake Minigwal, Lake Rason and Leech Lakes.
Striated Pardalote	*Pardalotus striatus*	Common around Base Camp and anywhere else there was mallee.
Red-browed Pardalote	*Pardalotus rubricatus*	Uncommon. One bird calling near Base Camp on 26th September and three other sightings – one at Queen Victoria Spring and two others just to the north.
Redthroat	*Pyrrholaemus brunneus*	One sighting only 70km east of Laverton.
Weebill	*Smicrornis brevirostris*	Very Common. Seen wherever there was mallee.

Birds

Inland Thornbill	*Acanthiza apicalis*	Common. Seen on all days throughout the project and wherever there was reasonable shrub growth.
Chestnut-rumped Thornbill	*Acanthiza uropygialis*	Common. Seen on all days and was usually present wherever there was mulga.
Slaty-backed Thornbill	*Acanthiza robustirostris*	Seen once just north of Plumridge Lakes Nature Reserve Boundary in company with Chestnut-rumped Thornbill and Inland Thornbill.
Yellow-rumped Thornbill	*Acanthiza chrysorrhoa*	Seen once in Plumridge Lakes Nature Reserve towards northern border. Seen several times between Plumridge Lakes and Lake Rason, at Queen Victoria Spring and from there en route to Laverton.
Southern Whiteface	*Aphelocephala leocopsis*	Uncommon. Seen once west of Lake Rason
Red Wattlebird	*Anthochaera carunculata*	Moderately common. Seen most days and seemed to favour mallee habitat. Seen as far north as Lat S29° 02' 28", 80km east of Laverton
Spiny-cheeked Honeyeater	*Acanthagenys rufogularis*	Moderately common. Seen most days and more often in mulga habitat.
Yellow-throated Miner	*Manorina flavigula*	Very common – the most common bird. Seen in all habitats
Singing Honeyeater	*Lichenostomus virescens*	Surprisingly uncommon apart from a few birds along the stretch between Laverton and Lake Rason. Other than that seen once only within Plumridge Lakes Nature Reserve near the lake system north of Base Camp and once to the north towards Lake Rason.
Grey-fronted Honeyeater	*Lichenostomus plumulus*	Uncommon. Seen regularly in one area near Base Camp. Occasional sightings between Laverton and Lake Rason.
Brown Honeyeater	*Lichmera indistincta*	Uncommon. In good numbers at Queen Victoria Spring and near Laverton but no other sightings.
White-fronted Honeyeater	*Philidonyris albifrons*	Common but not in large numbers. Seen in most habitats in most areas.
Black Honeyeater	*Certhionyx niger*	Uncommon. Seen at Streich Mound in Queen Victoria Spring and three sightings between Laverton and Lake Rason.
Pied Honeyeater	*Certhionyx variegates*	Uncommon. Two sightings within 100km east of Laverton.
Crimson Chat	*Epthianura tricolour*	Uncommon. Seen once between Laverton and Lake Rason in company with Masked Woodswallow (an association seen frequently before).

Jacky Winter	*Microeca fascinans*	Uncommon. Occasional sightings near Base Camp and one sighting north of Plumridge Lakes Nature Reserve. A nest with two eggs was found early in the project near Base Camp but the nest was later abandoned.
Red-capped Robin	*Petroica goodenovii*	Moderately common. Seen in a small number of surveys every day. Early in the Project a pair were observed on several occasions feeding young in a nest near Base Camp. The nest was no longer active on 6th October.
Hooded Robin	*Melanodryas cucullata*	Uncommon. Three sightings only – between Plumridge Lakes and Queen Victoria Spring, Mulga Rock hole (NE from Queen Victoria Spring) and west of Lake Rason.
White-browed Babbler	*Pomatostomus superciliosis*	Uncommon. Seen at Queen Victoria Spring and just to the north of there. A small number of sightings between Laverton and Lake Rason and also seen near Leech Lakes.
Crested Bellbird	*Oreoica gutturalis*	Reasonably common. Seen on most days, particularly in mulga.
Rufous Whistler	*Pachycephala rufiventris*	Moderately common throughout eucalypt and mulga habitats.
Grey Shrike-thrush	*Colluricincla harmonica*	Moderately common. Seen often in association with Rufous Whistler but less common.
Willie Wagtail	*Rhipidura leucophrys*	Uncommon. Recorded once near Base Camp and occasionally between Laverton and Lake Rason.
Black-faced Cuckoo-shrike	*Coracina novaehollandiae*	Common throughout the area in most habitats. A flock of 20+ seen moving steadily southwards on 30th September approximately 60km north of Queen Victoria Spring. Presumably these birds were on migration.
Ground Cuckoo-shrike	*Coracina maxima*	Seen several times over two days en route from Queen Victoria Spring to Lake Minigwal.
Masked Woodswallow	*Artamus personatus*	Seen on one occasion only west of Lake Rason in association with Crimson Chat.
White-browed Woodswallow	*Artamus superciliosis*	A single bird seen near Toppin Hill west of Lake Rason. Possibly in company with Masked Woodswallows but unable to verify due to difficult conditions.
Black-faced Woodswallow	*Artamus cinereus*	Occasional sightings. Less common than expected. Seen on 9 of 15 days including Base camp and Queen Victoria Spring.
Little Woodswallow	*Artamus minor*	Seen at Mt Dennis approximately 70km SE of Laverton.
Grey Butcherbird	*Cracticus torquatus*	Very common throughout the Project area in all habitats. Adults were observed feeding mobile young near Base Camp.

Birds

Pied Butcherbird	*Cracticus nigrogularis*	Very common in all habitats throughout the Project area. Slightly less common than Grey Butcherbird.
Australian Magpie	*Gymnorhina tibicen*	Seen on 9 of 15 days. Seen once in the north of Plumridge Lakes Nature Reserve, once on the airport track and occasionally *en route* between Queen Victoria Spring, Laverton and Lake Rason. Also seen just beyond eastern boundary of Plumridge Lakes Nature Reserve. One flock of 6 seen and another of 12, the latter appearing to be all males.
Grey Currawong	*Strepera versicolor*	Seen at Queen Victoria Spring then occasionally between there and Laverton.
Little Crow	*Corvus bennetti*	Moderately common. Recorded on all but 2 days in most habitats. A flock of 60+ seen just north of Queen Victoria Spring.
Richard's Pipit	*Anthus novaeseelandiae*	Occasional sightings throughout the area when suitable habitat found. Recorded on 6 of 15 days.
Mistletoebird	*Dicaeum hirundinaceum*	Observed on three occasions only - near Base Camp, about 3 kilometres north of the Plumridge Lakes Nature Reserve boundary and at Queen Victoria Spring.
White-backed Swallow	*Cheramoeca leucosternus*	Observed on two occasions, once north of Base Camp and once east of Laverton.
Brown Songlark	*Cincloramphus cruralis*	Observed once about 10km north of the Plumridge Lakes Nature Reserve boundary.

Flora report for Plumridge Lakes Nature Reserve

Graham & Maree Goods

Wednesday 13th November 2002 brought a howling northwest wind gale. As we pointed the nose of the farm ute and camper trailer into the wind to head west from our Wimmera grain property in central western Victoria, we knew we had a tough day's driving ahead of us. A slight detour to our local weighbridge confirmed this as the vehicle combination tipped the scales at 3.5 tonnes, a tall order indeed for the Hilux 2.4 diesel.

Battling to make 70 km per hour, we ploughed through the wind to Nhill, to call briefly on travelling companion Clive Crouch who was to follow the next day and catch us at Telowie Gorge in the southern Flinders Range.

The objective of the long drive across westward state boundaries was some remote spot in Western Australia's Great Victoria Desert called Plumridge Lakes Nature Reserve where we hoped to meet and make new friends and familiarise ourselves with a strange organisation called *Desert Discovery* Inc.

After roadside camping our way along the Eyre Highway to Eucla, plans went somewhat astray, as our fresh food order had not been filled. The staff at the roadhouse did their best to recover the situation with stock from the restaurant cool room. Heaven knows what their customers ate for the next week. On we pressed to Cocklebiddy where fuel tanks were topped up and the luxury of a last ice cream was enjoyed. With Clive taking the lead we took the gravel road north to Arabiddy Station. After Arabiddy a good road became a rough track with the lime stone skeleton of the Nullarbor Plain showing through, slowing us to 10 and 15 kms per hour in places. Perseverance saw us entering Plumridge Lakes Nature Reserve seven days after leaving home.

We were immediately impressed with the quality of vegetation, quite a contrast to the flat open Nullarbor. The track to the campsite took us through woodlands of Mulga (*Acacia aneura*) and western Myall (*Acacia papyrocarpa*) and across ancient clay pans - some covered in dry grass - evidence of some rain earlier in the year.

Acacia papyrocarpa

Eremophila falcata

The first Eremophila (means desert loving) we saw after entering Plumridge Lakes Nature Reserve from the Connie Sue Highway was *Eremophila falcata*. Falcate means sickle shaped which aptly describes the leaves. The plants were about one metre to one and half metres high and the flowers were from various shades of pale pink through to white and were just coming into flower. Later on we found a very spectacular deep pink form, obviously not in flower on our arrival.

Unfortunately on our arrival at camp we found most of the Eremophilas were past their best. Many of the plants only had a sprinkling of flowers. *Eremophila alternifolia* (meaning alternate leaves), *E. latrobei*, and *E. scoparia* were quite common around the camping area. *E. alternifolia* varied from the cream to yellow to lovely deep pinks. *E. latrobe*i was not in flower while *E. scoparia* varied from only having a few pale blue to mauve flowers to

some bushes being quite heavy in flower. Other species were *E. glabra* and a dark green viscid shrub with many different leaf forms and pale blue flowers.

Within walking distance of the camp was *E. fallax*. It has dark green leaves and snow-white flowers. On our arrival it was just starting to come into flower and by the time we left it was at its best. Some were up to three metres high. While photographing one of these plants we spotted another on the opposite side of the track – this one with pale pink flowers and a much finer leaf. On closer inspection it was definitely not *E. fallax* but something we have never seen before. The leaves were about four centimetres long and about two millimetres wide. The leaves appeared to be folded lengthways. We took the appropriate samples for pressing (under permit) and the GPS location and any other details that are required for Herbarium identification. Samples were sent to a botanist friend at the South Australian Herbarium on our arrival home. Four days later we were notified that this was a new species (this species is No 214) and at this stage is known as *Eremophila* "sulcata" (meaning grooved – which refers to the groove along the length of the leaf). A very significant find as we only found one plant even though we searched the area several times.

There were several colonies of *E. forrestii* in amongst the mulga woodland, *Acacia aneura.* Unfortunately this species was not in flower and plants were looking quite stressed due to the dry. If it had been in flower it would probably have been a pale dusky-pink. Throughout the park was a scattering of *E. serrulata* with its green flowers and to the north through Gwynne Creek, *E. longifolia*.

E. miniata was prevalent on the lunettes around the lakes and clay pans. These plants were the largest we saw in the genus, some up to five metres. It was also past flowering but we did see the occasional red one. A very good colour form for this species. Other Eremophilas worth mentioning that were outside the park boundary, were *E. homoplastica* and *E. abietina* on the Rason Lake Road near Bartlett's Bluff. *E. abietina* is a dark green sticky plant that has lovely pink metallic bracts after the flowers have fallen off. Another worth mentioning is *E. caperata* on the Cable Haul road with very fine leaves and delicate pink flowers. It is possible that this location extended the range of this species.

Eremophilas, Grevilleas, Hakeas and Eucalypts are all copious nectar producers. Birds, insects and even humans relish the sweet fluid. Curiously the red, green, yellow and orange *Eremophila* flowers are favoured by Honeyeaters, their beaks being well suited to the longer tubular structure. The shorter, broader white, blue, mauve and to a lesser extent pink Eremophilas are more attractive to insects. These flowers have a tangle of internal anthers and stigmas and are pollinated by the struggling insect as it strives for the nectar at the base of the tube.

The campsite was a delightful place with ample shade and shelter from over story plants consisting of mallee Eucalypts, Mulga and the rather handsome Black-oak (*Casuarina pauper*). These trees grow in limestone on and just under the surface of the dull red sandy clay soil. The dense dark green foliage of the Black oaks belies the desert environment, so their roots must penetrate deeply into hidden moisture reserves. Many of the old trees had numerous hollows providing important habitat for creatures such as birds, possums and bats.

We were too late in the season to see the best of the small ephemerals but we did see a few plants of one of our favourites, *Leucochrysum fitzgibbonii*. It is an attractive white paper daisy with lovely purplish outer bracts. We found some plants around the campsite and again on the road towards Gwynne Creek. Another striking everlasting was the white *Rhodanthe floribunda* flowering on the airstrip, 16 kilometres east of camp. Other ephemerals we saw were *Leucochrysum stipitatum, Waitzia acuminata, Rhodanthe chlorocephala*, and one of the *Lawrencella* species. We believe in a good season this areas would be a haven for many of the smaller annuals.

A big percentage of the ground plants were *Triodia* (at least three species) and the grasses. Unfortunately *Triodia* is not one of the friendliest plants as one of our smaller members, Ava Hancock, found out when she landed it in hands first. An arduous task trying to get the spines out of any ones flesh. In amongst these could be found an occasional *Caladrinia* species with its spectacular bright metallic pink flowers. Some of the perennials were *Chrysocephalum apiculatum, C. eremaeum, C. puteale, Brachyscome ciliaris*, and *Calotis* species, all belonging to the daisy family.

From the ground plants to the larger variety. Without a doubt the Marble gums (*Eucalyptus gongylocarpa*) stood out. Their white mottled trunks with the dark green canopy were a stark contrast to the many mallees that kept us guessing. *Eucalyptus concinna* was the most common of the mallees. Perhaps this is the reason for it being known as the Victoria Desert Mallee. It had small fruit with bright red caps that glistened in the sun, and those trees that were in flower, were unfortunately a great food source for the feral bees. *E. eucentrica* had a very attractive cream to yellow flower, somewhat larger than the smaller flowering *E. orbifolia* (Round-leaved Mallee) found near the western boundary of the Park. Everyone's favourite was *E. youngiana*. It is known as large-fruited mallee and has the largest flowers of any of the mallees. We were blessed with both colour forms, red and yellow. One thing we did notice that most trees here were a grey leafed variety whereas along the Anne Beadell Highway they are mostly green. Our reference books did not allow us to identify the vast majority of Eucalypts present.

Eremophila fallax

Eremophila miniata

Eucalyptus youngiana

Eucalyptus orbifolia

Plumridge Lakes Nature Reserve is renowned for its Sandalwood (*Santalum spicatum*). A few trees still remain and it was identifiable by its thick grey leaves and smooth stones found at the base of the tree. There were piles of remnant sawn up Sandalwood from years gone by and at nights the delicate smell of burning Sandalwood wafted from the campfires across the campsite. *Santalum acuminatum* (Quandong) with bright red fleshy fruit (one of the main ingredients for quandong jam) had greener leaves and was made distinctly different by its pitted stone. Another tree or shrub bearing fruit is *Pittosporum phylliraeoides* (native apricot or weeping pittosporum). It is sometimes known as hen and chickens because it suckers readily and smaller plants often surround the older plant. It has bright orange coloured seed capsules with small sticky red seeds inside.

Outside the western boundary of the Park sand dunes began to appear and the vegetation changed accordingly. *Banksia elderiana* (Swordfish Banksia) with its pendulous flowers, is the only *Banksia* found in the Great Victoria Desert. It clearly had had copious amounts of flowers given the amount of fruit present. Several plants of *Grevillea juncifolia* were covered in burnt orange flowers full of nectar and *Grevillea didymobotrya subsp didymobotrya* had its bright yellow flowers wavering in the wind above the bushes. Other plants were *Calothamnus gilesii, Hakea francisiana, Newcastelia cephalantha*, and *Thryptomene maisonneuvei* (Desert Heath Myrtle)

Grevillea juncifolia

Newcastelia cephalantha

The best area for wild flowers was an area, west of the Park, that had been burnt some one to two years earlier. The variety was immense and many hours were spent trying to identify the many species but, alas, we were not very successful. *Leptosema chambersii*, the red-flowering upside-down pea plant, was prolific and obviously needs a fire to stimulate germination. It was present in other areas within the Park but not to the same extent. Some shrubs of *Gyrostemon brownii* had reached three metres in the short period since the fire. It is a pyramidal shaped shrub and dominated the burnt area with another of the Gyrostemonaceae family, *Codonocarpus continifolius* (Native Poplar). Both plants reached maturity very quickly after a fire and then gradually die out. *Hemiphora elderi* with red velvet flowers dotted the landscape in amongst the many *Dampieras, Goodenias, Lechenaultia* and numerous other plants well beyond our limited knowledge.

Another burnt area to the north near Rason Lake was quite different and not showing as great a variety of plants germinating. Mostly Lomandras and the very quick growing bright yellow *Senna pleurocarpa*. Sennas (previously known as Cassias), Acacias and pea flowered plants have hard seed packed with carbohydrate. They are useful food source for many birds, animals and insects. These durable little morsels can last 10 to 20 years and sometimes even longer in the soil and extend sustenance for desert creatures from good seasons into prolonged drought periods. A few always remain to grow when fires and rain create suitable conditions.

Sometimes people ask what are the uses of some of our native plants?. Towards the end of camp we were visited by some of the local indigenous community. They had shot a kangaroo on the way into camp and decided to stop for awhile to prepare their meal. Selecting from *Senna artemisioides ssp filifolia* and *Eremophila scoparia*, they broke off some branches and laid them out neatly on the ground. This became their table to cut up the kangaroo just before devouring it.

We would like to thank *Desert Discovery* Inc for allowing us to be a part of Plumridge Lakes Project and in particular, our travelling and camp companion, Clive Crouch who "got us in". This was our third trip to the Great Victoria Desert and each time we have come home with some very special memories.

Eremophila "sulcata"
(new species yet to be described)

Senna pleurocarpa

References:

There is no publication on the flora for this region that we are aware of, but the following references we found useful.

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Flora

This list does not include plants that were found outside the Park boundary.

Common Name	Genera Species
Mulga	*Acacia aneura*
Umbrella Bush	*Acacia ligulata*
	Acacia nyssophylla
Miljee	*Acacia oswaldii*
Western Myall	*Acacia papyrocarpa*
Kurara or Dead Finish	*Acacia tetragonophylla*
	Acacia - several other species
Dysentery Bush	*Alyxia buxifolia*
	Bossiaea walkeri
Variable Daisy	*Brachyscome ciliaris*
	Caladrinia sp
	Callitris - 2 species
	Calothamnus gilesii
	Calotis sp
	Calytrix sp
Black Oak	*Casuarina pauper*
	Chrysocephalum apiculatum
	Chrysocephalum eremaeum
	Chrysocephalum puteale
	Davesia sp
	Dicrastylis brunnea
	Dicrastylis - several other species
Lobed Hop Bush	*Dodonaea lobulata*
	Dodonaea rigida
Sticky Hop Bush	*Dodonaea viscosa*
Barrier Salt Bush	*Enchylaena tomentosa*
Poverty Bush	*Eremophila alternifolia*
	Eremophila falcata
	Eremophila fallax
Wilcox Bush	*Eremophila forrestii*
Tar Bush	*Eremophila glabra*
Warty Fuchsia Bush	*Eremophila latrobei*
Berrigan	*Eremophila longifolia*
	Eremophila miniata
	Eremophila patythamnos
Broom Bush	*Eremophila scoparia*
	Eremophila serrulata
	Eremophila "sulcata" (new species yet to be described)
Victoria Desert Mallee	*Eucalyptus concinna*
	Eucalyptus eremicola

	Eucalyptus eucentrica
Marble Gum	*Eucalyptus gongylocarpa*
Round-leaved Mallee	*Eucalyptus orbifolia*
Large-fruited Mallee	*Eucalyptus youngiana*
	Eucalyptus - several other species
Honey-suckle Grevillea	*Grevillea juncifolia*
	Grevillea nematophylla
	Grevillea pterosperma
Wheel Grevillea	*Grevillea sarissa subsp sarissa*
	Grevillea stenobotrya
Pine Spike Hakea	*Hakea francisiana*
Witinti	*Hakea lorea*
	Halgania sp
Upside-down Plant	*Leptosema chambersii*
	Leucochrysum fitzgibbonii
	Leucochrysum stipitatum
	Lomandra sp
Satiny Bluebush	*Maireana georgei*
Pearl Bluebush	*Maireana sedifolia*
	Maireana - several other species
Cogola Bush	*Marsdenia autralis*
Sugarwood	*Myoporum platycarpum*
	Newcastelia cephalantha
Goldfields Daisy	*Olearia muelleri*
Spiked Daisy Bush	*Olearia subspicata*
Weeping Pittosporum	*Pittosporum phylliraeoides*
	Prostanthera althoferi
	Prostanthera sericea
Tall Mulla Mulla	*Ptilotus exaltatus*
Cotton Bush	*Ptilotus obovatus*
	Rhodanthe chlorocephala
	Rhodanthe floribunda
Quandong	*Santalum acuminatum*
Sandalwood	*Santalum spicatum*
	Sarcostemma viminale
	Senna artemisioides
	Senna artemisioides ssp filifolia
	Senna pleurocarpa
	Solanum - several species
Round Templetonia	*Templetonia egena*
Desert Heath Myrtle	*Thryptomene maisonneuvei*
	Triodia - at least 3 species
	Waitzia acuminatum

Report on Fauna Studies

Clive Crouch

Introduction

This fauna survey was carried out as part of the *Desert Discovery* Inc. 'Plumridge Lakes Nature Reserve Project', in the Great Victoria Desert of Western Australia, from 24 September to 13 October 2002, and concentrated on the mammals, reptiles, butterflies and beetles found in and around the reserve, while other members of *Desert Discovery* Inc. studied the avian fauna and compiled bird lists.

Information gained from the survey will be provided to the Department of Conservation and Land Management (CALM) in Western Australia and also to the Western Australia Centre for Wildlife Research (CWR). Such information will be of use in determining the distribution and relative abundance of species found in the Plumridge Lakes Nature Reserve and may be of assistance in preparing management plans for the reserve.

Fauna surveys were conducted at six sites in the reserve. The sites were selected as representative examples of the various habitat types found in the reserve. Site details are as follows:

Site 1. (Base camp). 29º 37' 55" S, 125º 02' 53" E.	Black Oak and Mulga plain, with a spinifex under storey.
Site 2. ('9 km'). 29º 36' 00" S, 124º 57' 40" E.	Marble Gum and Mulga plain, with a spinifex under storey.
Site 3. ('40km'). 29º 33' 13" S, 124º 34' 48" E.	Dune system, supporting Ooldea Mallee and Grevillea, with a spinifex under storey.
Site 4. ('32km'). 29º 33' 42" S, 124º 44' 51" E.	Ooldea Mallee plain, with a spinifex under storey.
Site 5. ('38 km'). 29º 32' 51" S, 124º 40' 37" E.	Spinifex-covered dune.
Site 6. ('Bluebush'). 29º 11' 15" S, 125º 10' 52" E.	Western Myall plain, with Bluebush under storey.

Method

Opportunistic records were kept for the duration of the project and locations were determined with a hand-held GPS (Map Datum AUS 66). In addition to keeping opportunistic records, some systematic sampling was carried out at the six sites. This sampling involved the use of Crouch box traps and pitfall lines, with 20 litre buckets used as the pit traps and these were linked with 45cm drift fences.

Some systematic searching for reptiles was carried out at each of the six sites and involved digging out some burrows and searching under logs and rocks. In addition, spotlight surveys were conducted on several evenings, as was light-trapping for nocturnal insects.

Effort

Site 1.	12 box traps and 5 pit traps, linked with 50 metres of drift fence for 4 nights (25-28 Sept) = 48 box trap nights, 20 pit trap nights. Spot lighting on 3 nights for 45 minutes per night = 135 minutes spotlighting. Light trapping for nocturnal insects on 3 nights for one hour per night = 3 hours light trapping.
Site 2.	8 box traps and 5 pit traps, linked with 40 metres of drift fence for 3 nights (28-30 Sept) = 24 box trap nights, 15 pit trap nights.
Site 3	12 box traps and 5 pit traps, linked with 40 metres of drift fence for 4 nights (29 Sept-2 Oct) = 48 box trap nights, 20 pit trap nights.
Site 4.	8 box traps and 5 pit traps, linked with 40 metres of drift fence for 2 nights (01-02 Oct) = 16 box trap nights, 10 pit trap nights. Spotlighting for 2 nights for 45 minutes per night = 90 minutes spotlighting.
Site 5.	13 box traps and 10 pit traps, linked with 70 metres of drift fence for 3 nights (03-05 Oct). = 39 box trap nights, 30 pit trap nights. Spotlighting for 45 minutes on one night = 45 minutes spotlighting.
Site 6.	18 box traps and 10 pt traps, linked with 80 metres of drift fence for 3 nights (09-11 Oct) = 54 box trap nights, 30 pt trap nights

Results

The following is an annotated list of the fauna species recorded during the Plumridge Lakes Nature Reserve Project.

Mammals

Wongai Ningaui *Ningaui ridei*	One specimen captured in a pit trap at Site 2.
Western Pygmy Possum *Cercartetus concinnus* 	Two specimens captured in pit traps at Site 4 and a further two specimens captured in pit traps at Site 5.
Spinifex Hopping Mouse *Notomys alexis*	Two specimens captured in box traps at Site 4.
Sandy Inland Mouse *Pseudomys herrmannsbergensis* 	One specimen captured in a box trap and another in a pit trap at Site 3, one in a pit trap at Site 5, one in a box trap and one in a pit trap at Site 6.
Echidna *Tachyglossus acculeatus*	Diggings observed at Site 5.

Western Grey Kangaroo *Macropus fuliginosus* 	Common and widespread throughout the reserve.
Red Kangaroo *Macropus rufus* 	Common and widespread, particularly on the grass lands on the northern side of the reserve and beyond.
Euro *Macropus robustus*	One specimen observed in Mallee woodland on the northern boundary of the reserve and another specimen observed near Blue Robin Hill.
? Gould's Wattled Bat *Chalinolobus gouldii*	A bat was observed hawking insects, while spotlighting one night at Site 1. Judging by its size, colouration and flight pattern, it may have been Gould's Bat.
Dingo *Canis lupus dingo*	One specimen observed at the eastern boundary of the reserve and another at Site 1.
One-humped Camel* *Camelus dromedarius*	Six camels were observed near the airstrip, 17 km west of the base camp. Several dead camels, possibly the result of a cull, were observed on the grassy plains north of the reserve boundary.
House Mouse* *Mus musculus*	One specimen captured in a box trap at Site 4 and two specimens captured in box traps at Site 6.
European Rabbit* *Oryctolagus cuniculus*	A few scratchings observed at Site 5.
Feral Cat* *Felis catus*	Tracks seen at Sites 4 & 5.

Gecko *Diplodactylus stenodactylus*	Three specimens captured in pit traps at Site 4 and another in a pit trap at Site 5.
Jewelled Gecko *Diplodactylus elderi*	One specimen captured in a pit trap at Site 5.
Knob-tailed Gecko *Nephrurus laevissimus* 	One specimen captured in a pit trap at Site 3 and another three captured in pit traps at Site 5.
Knob-tailed Gecko *Nephrurus levis*	One specimen captured on the road near Site 1 by Jiri Lochman.
Purple Dtella Gecko *Gehyra purpurascens* 	One specimen captured in a pit trap at Site 6.
Burton's Legless Lizard *Lialis burtonis*	One specimen captured in a pit trap at Site 5.
	
Thorny Devil *Moloch horridus* 	Common and widespread throughout the reserve and in the country surrounding the reserve.

Perentie *Varanus giganteus* 	One specimen observed on the grassy plains to the north of the reserve.
Desert Pygmy Goanna *Varanus eremius*	One specimen sighted on the Trans Continental Line by Alexis Bisgrove and Rob Stogdale
Pygmy Mulga Goanna *Varanus gilleni* 	One specimen observed south of Site 1 by Ken Harris, another observed at Site 1 and one specimen captured in a pit trap at Site 6.
Spiny-tailed Goanna *Varanus tristis*	One specimen sighted on Rason Lake Track by Alexis Bisgrove and Bob Stogdale
Dwarf Bearded Dragon *Pogona minor* 	One specimen captured while foraging near Site 2.
Military Dragon *Ctenophorus isolepis*	Common and widespread throughout the reserve and in the country surrounding the reserve.
Spotted Dragon *Ctenophorus maculatus*	Two specimens captured in pit traps at Site 5.

Central Netted Dragon *Ctenophorus nuchalis* 	Two specimens captured in pit traps at Site 6 and another two sighted on the Cable Haul Road south of the reserve.
Western Netted Dragon *Ctenophorus reticulatus*	One specimen captured in a pit trap at Site 6 and another two sighted on the Cable Haul Road south of the reserve.
Lea's Comb-ear Skink *Ctenotus leae* 	One specimen captured in a pit trap at Site 3 and another in a pit trap at Site 5.
Schomburgk's Comb-ear Skink *Ctenotus schomburgkii*	Two specimens captured in pit traps at Site 1 and another in a pit trap at Site 6.
Spotted Comb-ear Skink *Ctenotus pantherinus*	One specimen captured in a pit trap at Site 2.
Lined comb-ear Skink *Ctenotus quattuorodecimlineatus*	One specimen captured in a pit trap at Site 3.
Striated Skink *Egernia striolata*	One specimen captured in pit trap at Site 1.
Broad Banded Sand Swimmer *Eremiascincus richardsonii*	One specimen captured in a pit trap at Site 5.
Boulenger's Skink *Morethia boulengeri*	One specimen captured in a pit trap at Site 6 and another captured while foraging at Site 6.
Grey's Skink *Menetia greyi*	One specimen captured in a pit trap at Site 6.
Western Blue-tongue *Tiliqua occipitalis*	One specimen captured on the road near Site 3 by Paul Prior.
Blind Snake *Ramphotyphlops bituberculatus*	One specimen found on the track at Site 1
Blind Snake *Ramphotyphlops enderterus*	One specimen captured in a pt trap at Site 1
Desert Death Adder *Acanthophis pyrrhus*	One specimen reported at Site 1 by the Cox children and their friends
Yellow-faced Whip Snake *Demansia psammophis*	One specimen found by Alexis Bisgrove and Ron Stogdale
Orange-naped Snake *Furina ornata*	One specimen captured at Site 1 by Jiri Lochman.
Ringed Brown Snake *Pseudonaja modesta*	One specimen captured near Site 1 by Jiri Lochman.

Insects

Lepidoptera

Wood White Butterfly	*Delias aganippe*	Six specimens observed on saltbush near Cocklebiddy. Twelve specimens observed hill-topping at Bartlett Bluff to the north of the reserve.
Cabbage White Butterfly	*Pieris rapae*	Five specimens observed at Madura on the Eyre Highway.
Grass Yellow Butterfly	*Eurema smilax*	Four specimens observed at site 1.
Amaryllis Blue Butterfly	*Ogyris amaryllis*	Six specimens observed feeding on mistletoe on the Connie Sue Highway east of the reserve and a further two specimens observed near Border Village on the Eyre Highway.
Lesser Wanderer Butterfly	*Danaus chrysippus*	Fourteen specimens observed at Site 1 and a further six specimens observed 6 km south of Site 1.
Grass Blue Butterfly	*Zizina labradus*	Five specimens observed at Madura on the Eyre Highway.
Double –spotted Line Blue Butterfly	*Nacaduba biocellata*	Six specimens observed on the Connie Sue Highway east of the reserve, eight specimens at Bartlett Bluff to the north of the reserve and two specimens observed at Site 3.
Rayed Blue Butterfly	*Candalides heathi*	One specimen captured near Site 3.
Lemon Migrant Butterfly	*Catopsilia pomona*	Eight specimens observed at Madura on the Eyre Highway.

Coleoptera—Buprestidae

Carnaby's Jewel Beetle	*Melabasis ?carnabyi*	The remains of a Jewel Beetle, possibly of this species, was found at Blue Robin Hill to the north of the reserve.
Jewel Beetle	*Cisseis* sp.	One specimen, which is possibly an undescribed species, was found by Graeme Goods on the Cable Haul Road, south of the reserve.
Fire Jewel Beetle	*Merimna atrata*	Two specimens attracted to light at Site 1

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Discussion

The information presented in this report serves as a record of observations, which gives an indication of the distribution and relative abundance of the species recorded during this survey and which may be useful in future reference.

Although the Plumridge Lakes Nature Reserve, and the country surrounding it, was extremely dry, due to a prolonged drought in that area, the country was still in remarkably good condition, with very little erosion, few, if any, weeds and with very low numbers of introduced pest animals.

No rabbits were sighted during the survey, although some scratchings were noticed at Site 5. No feral cats were seen, although some tracks were found at Sites 4 & 5. No evidence of foxes was found and only one small herd of camels was recorded, although several dead camels were found on the grassy plains to the north of the reserve, presumably the result of a cull.

It is imperative that camels be eliminated from the reserve, to ensure that no environmental damage is caused, and in particular, the exploitation of the limited surface water, which is so important to the maintenance of populations of seed- eating birds in the reserve.

While the reserve is in very good condition at the present time, it is essential that regular and on-going monitoring is carried out by CALM staff, or by volunteers working under permits from CALM, to ensure that pest plants and animals are kept out of the reserve, to maintain accurate records of the species of native plants and animals occurring in the reserve and thus enable 'best practise' management of the reserve to occur.

Acknowledgements

This survey was carried out in compliance with the conditions of Research Permits No.s SF003875 and CE000041, issued by the Western Australia Department of Conservation and Land Management on 18.07.02 and valid from 24.09.02 to 16.10.02. The assistance of CALM in the provision of these permits is gratefully acknowledged.

My sincere thanks goes to David Hewitt and *Desert Discovery* Inc. for allowing me to participate in the Plumridge Lakes Nature Reserve Project, as well as to the many interesting, friendly and helpful people who helped to make this survey so successful.

In particular I would like to thank the following people:

- Graeme and Maree Goods, for being such wonderful travelling and camping companions and for their tireless support in conducting the fauna survey.
- Jiri and Marie Lochman for their support and interest in all aspects of the survey.
- Rene and Suzanne Wysman, John Wilkinson, Bob Lasseter, Ken and Vivienne Harris, David and Margaret Hewitt, Anthony (Macca) and Karen McDonald, Neil, Helen, Andrew and Sharon Cox and their family and friends, Ken Eastwood, Garth and Jan Strong, John and Leanne Gregory, David Travis, Graham Young and the many other members of *Desert Discovery* Inc. who helped in any way to make this fauna survey such a success.

Thank you all for your wonderful support, interest and friendship—it was very much appreciated.

Clive hard at work!

Some culinary notes and ponderings re Santalum acuminatum – Quandong and related species.

Jan Strong

Quandong, or native peach, is widespread throughout the arid zones of southern Australia, becoming less frequent in the north. For centuries, its flesh and kernel formed an important part of the diet of indigenous people. Like many other native plants it is becoming increasingly rare in the cropping areas for a variety of reasons – not the least of which is the decreasing biodiversity which leads to the trees being more vulnerable to insect attack. On our property, Arcadia, in the Riverina of NSW, there was apparently a tree in the house paddock about 35 years ago, but it, too, has long disappeared. Old timers, including my parents, (who spent much of their young lives in the Balranald district), would often wax lyrical about desserts made of quandong. So, partly out of a desire to use the fruit in cooking, and partly because of our local native species revegetation program, I decided to try to propagate this fascinating species. I have found it to be quite a challenge.

The tree is, to some extent, parasitic on the roots of others – either native or introduced- although the exact nature of the relationship is not known. It is able to make at least some of its own food, but may need to obtain water and minerals from the roots of the host plant. Initially it is very slow growing, and is extremely difficult to transplant (even with the host attached), presumably because of the relationship with the host. If it survives into its fourth year, it should flower after good late summer or autumn rains, and fruit will be ripen in September/ October. They are quite different than any other fruit I have ever used in the kitchen.

They are very dry, and must be covered with water during boiling in a saucepan or microwave. Even then, care must be taken to stir regularly to prevent them 'catching' or drying. More water can be added during cooking- a small amount of fruit goes a long way! I add sugar to taste at the end of cooking when the fruit has broken up and formed almost a puree. One of our favourite desserts is quandong tart (use a good slightly sweet short crust pastry), or just use the puree as a sauce over ice-cream. I have made jam, only adding sugar and a small amount of lemon juice to the cooked fruit. It is such a distinctive fruit that I think the fewer additives the better. When in the Flinders Ranges, I sampled the local savoury quandong sauce for accompanying meats, and it is OK, but I think this delicious typically Australian fruit is best without too many spices. We use the jam as an accompaniment to our saltbush lamb, and may try it with the turkey this Christmas – instead of cranberry sauce.

A close relative of quandong is sandalwood – Santalum spicatum. I was quite delighted to find so many around the camp at Plumridge Lakes NR. This species was harvested for wood in huge quantities up until the 60's – as was evident by all the sandalwood camps. S. spicatum differs from the species in the eastern states – Santalum lanceolatum – of which there are very few specimens in the Riverina today. Those that do survive are generally isolated trees without any regeneration, since they, like the quandong, are very palatable to stock. Both of these are very slow growing – 60-70 years for a mature tree, and the fruit and kernel are edible – although I have not eaten them.

My ideal garden would contain numerous Santalum species, and other desert plants which would not need watering – especially after this drought! Imagine the water which could be saved if people would include these in some sections of their gardens. They may even find more wildlife inhabit their gardens as a side benefit.

Desert Discovery – Our First Experience

Eric and Rowena Whiting

Strange to say in a drought, wet conditions allowed us to think of a desert trip but when the Committee settled on Plumridge Lakes as a venue the relatively short distance from a main highway and the report that the Connie Sue had been graded suggested that it might be feasible for a Subaru Forester to make the trip into camp.

I had done a lot of off-road tracks in National Parks and State Forests around western New South Wales but never for more than three days from facilities and usually with only equipment and supplies for one that is, never really loaded.

After much consultation (and cajoling from John Hewitt), Rowena and I put our names down. The plan was to incorporate a trip round the Eyre Peninsula and other National Parks in South Australia, to keep the daily travel distance down to pleasant stints. Rowena applied for six weeks holiday and after more delay got it all. For me the drought conditions meant that the probability of contract work doing floral surveys was diminishing as spring approached.

The first job was to prepare the vehicle and get ourselves equipped – one day in Wagga Wagga was spent buying a car fridge (esky will only do for a few days), battery pack to keep the fridge going, UHF set and roof bars to attach John's old roof rack onto the Subaru's rails and camping mats. Another three days was spent trying to get the various bits to connect satisfactorily. Of course this was all done a few days before departure!

With much apprehension we set out across the Hay Plains, for the first section of our holiday – a relatively orthodox tour across South Australia, round the Eyre Peninsula and then onto the Eyre Highway to Cocklebiddy. Water and food were stocked up at Ceduna (with certified fruit and vegies to take through the quarantine point), and extra fuel added at Cocklebiddy. The car was now well and truly loaded with 40 litres of petrol, 20 litres of water and the spare wheel on top. Another 20 litres of water was stowed inside.

The testing came soon after passing Arubiddy en route to Rawlinna. With at least 5 cm less clearance underneath, there was always the decision whether to follow the tracks and pass over a rock or pick a way round. I got it right <u>most</u> of the time!

We had been told in Cocklebiddy that the tracks through Rawlinna Station were confusing and a better route was to follow the dog fence north to the Trans line. Arubiddy confirmed this and we were glad we took the advice as we met Greg coming down the fence on his way home. Greg recommended we took the Cable Haul route rather than the Connie Sue as the southern part of the latter was rough. We found it harder driving into the wind and dust along the Trans Line than any part of the Cable Haul. In fact we had very few places along the desert tracks that we found in anyway trying. Even on excursions from the camp the Forester handled the tracks with no problems at all. We did draw the line at the lesser tracks around the Sidney Simpson Bluff. One, because of the uncertainty of the condition – most embarrassing getting stuck in the middle of a convoy, and two, because of the spinifex cover catching up around the catalytic converter. Thanks to Clive, and later David and Graham for taking us in their vehicles for these parts.

Only once did I go down into low ratio and that was for the last part into the Plumridge Lakes – even then it was as much to keep the speed down. Although John Hewitt did say he watched the clearance of the back going through the Gilgai dips.

All in all the Forester came out very well – just one puncture on the last day. We couldn't even boast much in the way of 'character marks' down the sides – well nothing much more than was already there.

Going again? Well Plumridge Lakes was really the maximum range – we could not reasonably take any more with us. Also we cannot expect to have such good tracks in other deserts. We never really tested the vehicle over sand dunes, or really corrugated tracks. We'd love to go again – we thoroughly enjoyed the experience. Anyone give us a good trade-in price for a very accomplished (and comfortable) Forester?

Desert Camel Trips

John Wilkinson

"Patient to a degree, enduring hunger, thirst and pain with a stoical courage beyond all others, the first sign a camel may give that it is being asked to do the impossible is to drop down dead."

This was written for the British War Office after the experience gained in the Middle East campaigns during 1917 / 18, when 35000 camels were used in the Camel Corps and for the transport of supplies and the wounded.

For the same reason camels were used for later exploration of Australia's arid areas and when the settlers and prospectors moved in.

During the second expedition of Ernest Giles in 1875, his camels did a dry march of 325 miles in 17 days with their only drink of 4 gallons (18 litres) each on the 13th day.

The Elder Expedition explored the Great Victoria Desert in 1881. They started with 44 camels and only lost one. At one stage they travelled 536 miles over sand ridges and spinifex and through dense mallee scrub in 35 days, the only water being 3 gallons (13.6 litres) each on the 2nd day, 2.5 gallons (11.4 litres)on the 8th day and 2.5 gallons on the 25th, a total of 8 gallons (36 litres) each. And they did this on poor feed.

In the late 1800's camel strings and wagons almost displaced the horse and bullock teams in the backcountry and they were also used for station work being ridden or driven in buggies. A good riding camel could cover 40 miles every day. In the strings the camels carried big loads day after day, a common loading being 2 bales of wool for cow and bullock camels and 4 bales for bulls. I 1905 a bull camel carried a heavy saddle plus a load of 912 lbs. (414 kilograms). As there were up to 70 camels in a string, imagine the work entailed in loading each morning. The strings were mainly managed by so called "Afghans" who actually came from the present Pakistan. Australian teamsters preferred to use wagons on which the loading was often 1 ton per camel.

Camels are ruminants, with the same type of digestion as cattle and sheep but with some vital differences. The first stomach is lined with cells that store water, the urine is sparse and extremely concentrated and most of the frugal sweating is done through a gland at the back of the head so full use is made of drink.

The hump is filled with fat, which can be used for sustenance and because of their height and long, strong neck they can reach and pull down branches of fodder trees.

Their feet are marvels of design, being large, flat and spongy. Ideal for travel over sand or stone but no good for slippery mud, over which they can do the splits with disastrous results.

During dust storms they can close their nostrils and filter the air through fine hairs and they have thick eyelashes to keep sand from their eyes.

So far I have told you the good things, but camels can be baddies too. They sometimes complain when being loaded with loud roars and the spitting of bad smelling cud. They can bite with a very big mouth and strike with the front legs and kick, with a long reach, with the back legs even when "hooshed" down. Another peculiarity is that the bulls come on rut for about 3 months each year, and during this period can become very dangerous. Their method of fighting is to grab the leg of the opponent, throw him to the ground and crush him with the weight of their neck and body. An enraged camel will do this to humans too.

So now you are possibly wondering why I am so fascinated by these creatures. As a boy my favourite reading was of the explorers and pioneers and camels were a vital part of this. Then my first contact with them occurred when I was working on Mount Ridduck Station, NE from Alice Springs, in 1941. The station had a string of camels to carry supplies to outstations and also used them to operate whips for the watering of cattle.

In 1987 Jo and I with 4 friends went on a camel trip out from Birdsville. I wanted to learn more about them, so asked the operator, Rex Ellis, (who had been a jackeroo with me years before) if he had a vacancy for a "cameleer". And in 1988 I helped truck 15 camels to Steep Point in WA and walked with to Cue, some 400 miles (644 Km.) to the east. And I have been doing long trips with them ever since.

On that first trip the lead camel was Sam, a large and lovable old rogue. When we arrived at Cue, after a very hot 3 weeks, we hooshed the string down opposite the pub. The publican brought a carton of tinnies and one was offered to Sam. He then drank 7 of them. I was given the job to give rides to the scores of children, mostly aboriginal, who had gathered around us. I used Sam, who had the most suitable saddle, expecting him to cross his legs or go to sleep but he was perfectly behaved. On another trip, in the Great Victoria Desert, we camped beside the dog fence. The camels are tethered at night but Sam was allowed to roam. In the morning, however, Sam was on the other side of the 6-foot high fence and couldn't be persuaded to jump back again. So we left him and a couple of hours later Sam rejoined us.

Trips with this operator are usually of three weeks duration and finish where there is vehicle access, so that passengers can change over and supplies brought in. One advantage of this form of travel is being able to traverse country that has not been disturbed by vehicles or stock so the wildlife is not alarmed. Unfortunately, cats, foxes, rabbits and house mice now occupy a lot of the deserts.

A typical day starts at daylight, with a cameleer untying and shepherding the hobbled camels, who have been tied to fodder trees overnight. In the meantime, the camp rolls swags, has breakfast and packs gear. The camels are then hooshed down opposite their own saddles and loaded. Everyone helps and it takes between 2 to 3 hours from daylight to march. At midday the string is hooshed down and the billy boiled for lunch. This takes about an hour, giving the camels time to chew their cud.

A camp is sought between 4 and 5 o'clock. When a suitable site is reached, requirements being food for the "humps" and firewood and shelter for the humans, for desert nights can be cold. The "humps" are unloaded and shepherded to graze, firewood is gathered and a meal prepared. Just before dark the "humps" are tethered to edible trees for the night . As we travel between 15 and 30 Km per day, depending on need or the type of country, it is a delight to sit on swags around a fire consuming drinks, a hot meal and the yarns of the day. Sleeping is in swags, with each person issued with a tarp, in case of dew or rain.

Another operator, Philip and Ifeta Gee, run a different type of trip. Their headquarters are at William Creek, west of Lake Eyre, and their trip is for 4 or 5 days. They move with camels to an area where they are licensed to trap wildlife and set traps for a night or two. Then move to another area and again set traps, returning to William Creek, where there is an excellent bush pub. Their method is mostly as described previously. As the Gees have a good knowledge of the birds, beasts, plants and history of this area and are delightful raveling companions as well. I can thoroughly recommend this trip to anyone interested in the nature of deserts.

There has been some discussion in the camp about the environmental damage caused by camels. Because they are browsers they tend to take a mouthful and move on. The exceptions are quandongs, kurrajongs and some mistletoes which they decimate.

Regarding waterholes, camels drink a lot in a drought (competing with native animals). If there is fresh munjeroo or parakeclya they do without water for weeks.

Camels do not leave deep pads as cattle, horses, donkeys and sheep do.

On the credit side, there is now a strong export market for live camels for slaughter in the Muslim countries to our north. It is estimated that 8000 – 10,000 will be shipped from Darwin in 2002. These camels provide valuable income for the stations bordering our deserts.

Great Victorian Airscapades

David Fletcher

I felt excitement and anticipation as Bob Lassetter, Phil Crocker and I gathered at Tumut airstrip just after first light for our departure – excitement over preparations for the third trip by Phil and me in a light plane into a remote desert location and anticipation at the challenges of the flight from the perspective of a newly qualified pilot.

We had flown out to the Warri (1998) and Cooper Hills (2000) projects in the Gibson and Great Victorian Deserts earlier. Phil is an experienced outback pilot and owner of the Beechcraft Bonanza aircraft used for the trips. Earlier this year I took up the challenge of learning to fly with the firm aim of earning my wings and gaining the required endorsements in time for the Plumridge Lakes project.

Learning to fly was exhilarating but I found it also required a great degree of perseverance, dedication to study and family understanding to enable me to reach my goals. The final endorsement was granted just two weeks before our flight.

The groundwork of flight planning, fuel calculations and route selection was then completed.

Shortly after loading our luggage, water, food and emergency supplies we were airborne and soon found the lush green of the Tumut Valley giving way to a sparse and isolated landscape as the towns became smaller and further apart.

The first leg took us to Port Augusta for refueling and a look over the Royal Flying Doctor planes. One of the new single engines PC12's touched down and we witnessed an emergency evacuation to Adelaide.

Our flight path then took us over the head of the Bight where the Southern Right whales come each year to mate and calve. Then we flew over the featureless Nullabor to Forrest, a small siding on the Trans Continental Railway where we re-fuelled and "overnighted". Forrest has a sealed strip with lighting and a huge old Nissan hangar in which we found the remnants of a disused picture theatre and a full size tennis court!

Then it was on to Plumridge Lakes. The vegetation change from the Nullabor to the salt lake and sand dune country was quite noticeable from the air. It can be a challenge navigating long distances over featureless and hostile country and whilst the GPS was principally relied upon, we found the following measures helpful:

- Navigate all the time and keep the map on the lap and mark the time when passing a recognised feature such as airfield, station homestead, river bed, railway line or road/track.
- Watch the big picture – look to see if the powerline, road, coastline is going off at the correct angle to the planned track.
- Look at the small symbols – the blue mark that indicates a bore or water hole translates to the centre of radiating animal tracks leading to other water sources when viewed from the air and the little brown sand ridges in the 1:1000000 aeronautical maps give a reliable indication of direction.
- Be conscious of the effect of wind drift when no forecast is available.
- Use every radio navigation aid at your disposal.
- Keep a sense of humour and a cool head.

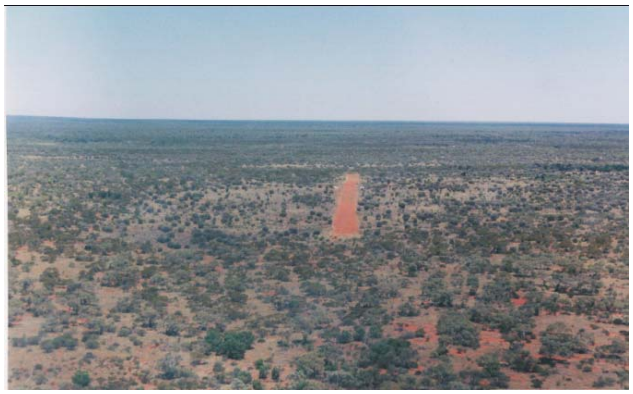
After identifying the Connie Sue and Rason Lake Road we located the campsite, Gwynne Creek and then the airstrip. The touchdown and welcoming committee was a real buzz. Our thanks to the airport construction gang who successfully reclaimed the airstrip from the desert – it was in excellent condition. We had a second landing after a sortie with Jiri Lochman and Ken Eastwood from Australian Geographic who carried out an aerial reconnaissance to record and photograph some of the interesting features of the area including the round clay pan, Plumridge Lakes system, Gwynne Creek and the campsite.

The weather was generally clear for the return trips, with strong westerlies giving us a ground speed up to 220 knots (407 kph) on the first leg and some travelling (Plumridge Lakes to Ceduna in 2.5 hours!). The vastness of the desert was truly awe inspiring from the air with 360 degree views blending into the curvature of the earth. We were out of radio contact for most of the remote region.

Apart from the treacherous cross winds to deal with, the trip home was without incident.

We camped at Ceduna and enjoyed the local oysters and King George Whiting and a chat with a French National who had just cycled down the West Coast and across the Nullabor Plain and was to tackle Siberia!

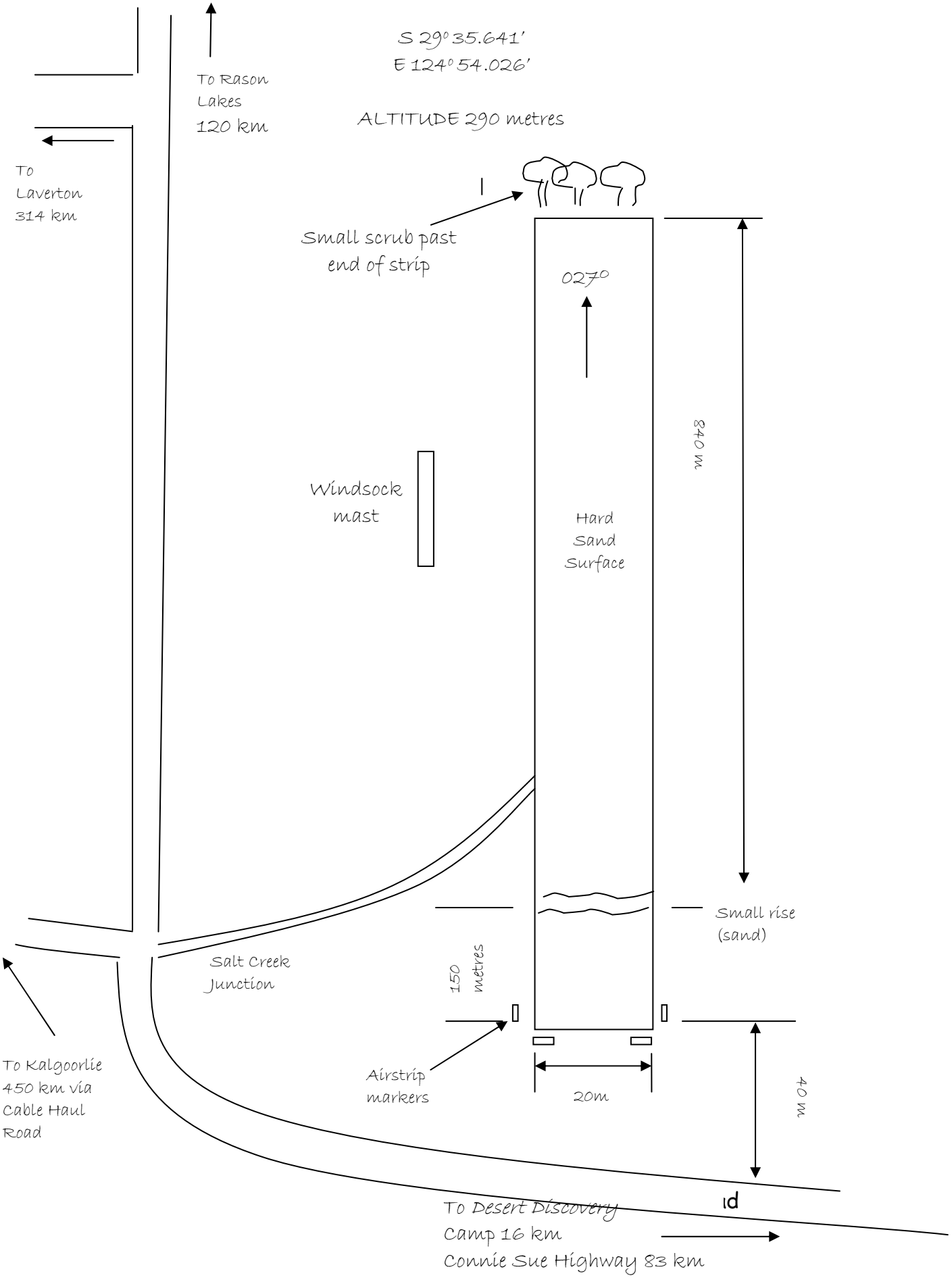
Our flight waypoints were Tumut – Hay – Mildura – Port Augusta – Ceduna – Nullabor – Forrest – Plumridge Lakes and reciprocals. Total distance flown 4,578 kms, total airtime 18.75 hours and fuel cost $1,256.00. All in all, a great adventure. See you in 2004.



Plumridge Lakes Airstrip

Dry Clay pan

PLUMRIDGE LAKES AIRSTRIP



Desert Discovery, a personal perspective

Simon Wilkinson

This trip to Plumridge Lakes, under the auspices of *Desert Discovery*, was a significant personal landmark for me, being the 21st anniversary of my first experience of the West Australian desert regions.

In 1981, I was a member of an undergraduate expedition from Durham University (UK), to the Great Sandy Desert, an experience which had a far-reaching impact on many facets of my professional life as a photographer. I was fortunate to participate in the inaugural *Desert Discovery* project in 1996, which was also in the Great Sandy Desert, and so I was able to revisit many of our 1981 sites, and to some extent relive those earlier experiences.

For me, the essence of *Desert Discovery* is as much about the people on the project as it is about the locale in which it occurs. It really is very hard to think of anything else in which a large disparate group of often unrelated people, varying in age from 3 to 80+, can enjoy each other's company, share knowledge and experiences, and gain from their involvement in something in such a diverse number of ways.

I have to admit to being a little envious of our youngest Desert Discoverers. Ava and Ian Hancock are part of an elite group who have been on all four projects to date, and just think, Ava is still only 10! Ashley, Josh, and Ben Cocks have all been on three projects, and Loren Gregory has started her involvement at the age of 3!

The children on *Desert Discovery* benefit in so many ways that they may well not fully appreciate for some years. I have been so impressed by their self-confidence and enquiring minds. I believe that the *Desert Discovery* experience has benefits for them which go far beyond the obvious acquisition of knowledge of the desert environment. Let us not forget the role of parental influence in this, but, by the time they complete their formal education, they will have been engendered with a "can do" attitude which will impact on their entire lives.

Moving up the age range, we come to what I regard as a bit of a problem area for *Desert Discovery*, namely the lack of people in their 20's and early 30's. The reasons for this are not hard to fathom, namely time, money, career building, and the lack of a suitable vehicle. Whilst there aren't any obvious solutions to this, their presence would enhance the overall balance of the group. The one saving grace is that there are a fair number of the over 40's who have no intention of growing-up just yet!

At the senior end of the age group, one can only admire the likes of Bob Lasseter and John Wilkinson (no relation) for their continuous enthusiasm, to say nothing of their experience.
They should be an example to us, and I would love to think that I too will be as active in mind and body as these two icons when I'm packing for the 2040 *Desert Discovery* project.

Which brings us neatly to the future of *Desert Discovery*. Having been involved with other groups in putting several expeditions together, I am under no illusions about the amount of work which goes on behind the scenes in order to make *Desert Discovery* happen. Those of us who merely turn up at a Project should be eternally grateful to the minority of members who make the whole thing possible.

However, it has become evident that there is an inherited logistical problem. In 1996, the numbers of people involved were not only much smaller, but the majority also came from the Perth metropolitan region. It was therefore completely logical that most of the communal equipment should be kept in and then brought up from Perth for the next project. However, as *Desert Discovery* has grown, the numbers coming from Perth have if anything diminished, and yet most of the communal camp equipment is still stored in Perth. Stuart Kostera has borne the brunt of transporting this equipment for the last four projects.

It is an inescapable fact that if Stuart had been unable to be in the vicinity of Plumridge Lakes for the duration of this last project, there would have been major problems either transporting the communal equipment in, or out, or both. Perhaps the time has come to consider an alternative equipment depository so that the burden of transportation can be more widely shared by those from the Eastern States.

One of the attractions of *Desert Discovery* is that it enables people who might not otherwise be comfortable with the idea of travelling in remote areas, to participate within the framework of a larger group. Amongst our numbers, we have a formidable range of practical skills and talents, and it was suggested to me by Sue and Malcolm Jordan that we might find a way of sharing that knowledge more widely. Whilst the evening meetings undoubtedly have a place in the project, they also felt that there might be considerable scope for informal sessions, perhaps during the day, at which assorted "experts" could impart some of their practical skills to anyone who was interested. I believe that this would prove very popular with many participants.

Finally, it has to be said that the ethos of *Desert Discovery* is to some extent paradoxical. On the one hand, we want to encourage a larger audience to have the opportunity to experience all the things that we value about the projects, and yet, on the other hand, in publicising the very things we cherish, we make it harder to find remote areas in which to practice what we preach.

Clearing the airstrip

Weather Report

Simon Wilkinson

At the risk of completely destroying the integrity of the temperature readings at the outset, it has to be said that the temperature readings should only be taken as a guide to the actual temperatures, since they were not taken using a Stevenson Screen.

The Stevenson Screen is the standard shelter used for thermometers on meteorological stations and enables the true temperature of the air to be taken by protecting the thermometers from direct solar radiation or insolation. It consists of a wooden box, painted white and raised about 1.5 metres above the ground on legs. It has a double roof, with intervening air space, and the sides are louvered to allow the free flow of air.

As a makeshift substitute for a Stevenson Screen, I suspended the thermometer about 1.5 metres above the ground on the south side of a tree, and then further protected it from direct insolation by shading it with clothes hung from adjacent branches. This ensured that there was plenty of air circulation and that no direct sunlight fell on the thermometer. I thus believe that the readings taken were a good approximation of the true readings, but they should certainly not be taken as being definitive.

The official data from the Bureau of Meteorology for Laverton, the nearest place to Plumridge Lakes with long-tern weather data, suggested that we should have expected average maximums of about 27C and average minimums of about 11C. Although we recorded a considerable range of maximums and minimums, the average maximum recorded was in fact 27 C and the average minimum just under 8C.

The night of October 3rd-4th was remarkably cold and, with the temperature plummeting from around freezing point about an hour before dawn to a very low minimum at dawn. It was also remarkable that the overnight minimum the following night was a very balmy 16C, which is a great example of how dramatically the temperatures can change in Western Australia as weather systems move through the Australian Bight and thus influence the wind direction.

For those who are interested in following this up further, the comprehensive information on rainfall percentiles for Laverton shows that we should not have been surprised to have only had a trace of rainfall whilst at Plumridge Lakes.

Although we didn't have any way of measuring them, the sunshine hours seemed to conform very closely to the expected averages.

The one phenomenon which everybody who was in camp for any reasonable period will have found most uncomfortable, were the periods of very strong, and at times destructive winds. Wind and deserts make very uneasy bedfellows!

Several people commented on the fact that I never made any attempt to forecast the weather at the evening meeting. There were good reasons for this, as Suzanne discovered to her cost!

I would like to thank both David Hewitt and Kathy Hancock for the loan of thermometers, and also Suzanne Wysman, Margaret Hewitt, and Leanne Gregory for being "weathergirls" during those periods when I was out of camp.

Weather Data - Plumridge Lakes

Date	Max temp C	Min Temp C	Rainfall	Phenomena
Sep-24		1		
Sep-25	24	3		
Sep-26	27	5		Strong gusty wind pm & overnight
Sep-27	22	5		
Sep-28	22	5		
Sep-29	24	8		
Sep-30	30	3		
Oct-01	34	10		Very strong winds
Oct-02	24	3		
Oct-03	24	0		
Oct-04	27	-4		
Oct-05	34	16	Trace	Violent destructive winds
Oct-06	23	11		
Oct-07	24	10		
Oct-08	23	2		
Oct-09	27	7		
Oct-10	33	10		
Oct-11	30	17		
Oct-12	24	10		
Oct-13	28	6		
Oct-14	37	9		
Oct-15		14		

Wind takes hold!

Weather averages for Laverton – Western Australia

	Jan	Feb	Mar	Apr	May	Jun
Mean Daily Max Temp (deg C)	35.8	34.8	31.9	27.2	22.1	18.5
Mean Daily Min Temp (deg C)	20.5	20.0	18.0	13.9	9.5	6.6
Highest Max Temp (deg C)	46.1	45.0	42.8	40.0	33.3	30.2
Lowest Daily Temp (deg C)	7.2	7.5	9.8	4.0	-0.4	-0.6
Mean 0900 Wind speed (km/hr)	13.1	12.3	12.0	10.9	9.8	9.5
Mean 1500 Wind speed (km/hr)	10.6	10.1	9.6	9.9	8.8	11.3
Mean Monthly Rainfall (mm)	23.5	27.8	30.7	22.8	24.4	24.9
Highest Monthly Rainfall (mm)	179.0	233.6	181.0	204.5	123.8	126.2
Lowest Monthly Rainfall (mm)	0.0	0.0	0.0	0.0	0.0	0.0
Highest Daily Rainfall (mm)	92.6	86.6	67.1	54	51.6	40.4
Mean no. of Rain days	3.0	3.4	3.9	3.5	4.6	5.2
Mean Daily Sunshine (hours)	10.5	9.5	9.0	8.0	7.0	6.5

	July	Aug	Sep	Oct	Nov	Dec
Mean Daily Max Temp (deg C)	17.8	20.0	24.5	28.0	32.1	34.9
Mean Daily Min Temp (deg C)	5.2	6.4	9.5	12.8	16.6	19.3
Highest Max Temp (deg C)	28.4	31.4	35.6	40.0	43.3	44.4
Lowest Daily Temp (deg C)	-2.4	-1.7	1.1	2.8	7.7	9.4
Mean 0900 Wind speed (km/hr)	9.4	11.2	12.4	13.1	12.6	11.5
Mean 1500 Wind speed (km/hr)	10.4	12.0	11.9	10.9	12.0	10.5
Mean Monthly Rainfall (mm)	16.5	13.9	8.3	7.9	13.7	16.5
Highest Monthly Rainfall (mm)	66.1	84.8	67.3	50.3	152.0	134.6
Lowest Monthly Rainfall (mm)	0.0	0.0	0.0	0.0	0.0	0.0
Highest Daily Rainfall (mm)	32.5	40.6	43.7	49	90.9	87.2
Mean no. of Rain days	4.6	3.5	2.0	2.0	2.6	3.1
Mean Daily Sunshine (hours)	7.0	8.0	8.5	9.5	9.8	10.0

We feed and water them, but where are the kids in-between?

Kathy Hancock.

Strangers to the desert may wonder what the kids (or adults for that matter) actually do out there. I'm sure those of us who frequent such regions have all been asked this. As the parent of two children, Ian aged thirteen and Ava ten, time spent in our desert regions has arguably been some of the best quality family time we have spent anywhere. Even before leaving home for instance, the children are involved in thinking and planning the food and equipment required for activities they will participate in, such as running their own pit-trap lines (as they did at Warri).

Once at camp, they are involved with daily jobs. Ava for example sets up the satellite phone, while Ian attends to the fire. But these only take minutes, so what do they do for the rest of the day? They let their imagination take over. Toys are never packed. In their place is Mother Nature. At Plumridge lakes, Ava and her friend Dimity spent several days constructing tee-pees from fallen branches and spinifex. Frequently a prototype is made, then hours are spent improving the design. Ian and Mitchell did similarly.

When not playing, they are socializing with adults. They visit other camps, enjoying cups of tea, while asking questions about cameras, engines, eremophila and snakes. They make trips out of camp with other family groups, all the while adding to their knowledge of arid regions.

I have always considered *Desert Discovery* camps to be not unlike the old fashioned concept of a small village community. One where doors are not locked and children can roam around safely calling in on neighbours at their whim.

Not only are children learning new and interesting facts from our expert zoologist and botanists, importantly they are comfortable in the presence of adults, unafraid to ask questions, facets of life that hold them in good stead for the rest of their lives.

Following, are a few comments by Ava and Ian.

"I like Desert Discovery trips into the desert because they give me new experiences in different parts of our beautiful country. When people visit Australia they never visit or even think about coming to one of Australia's prettiest parts. They think that it's too harsh or too dry to bring their kids or even themselves. I would be disappointed if my parents thought the same way.

I especially like all the things that Clive teaches us about all the creatures that we don't see or hear much of, and learning of the fascinating plants that grow in the desert with little water and no care.

Sometimes to have fun means not having showers everyday or wearing the same clothes more than once as occurs in the desert. But I don't let that bother me because its fun to have a change from being lady muck all the time".
Ava, 10 years

"*After seven trips into Australia's deserts I am very pleased that I have had the opportunity to do so because of the memories and experiences. Many people would probably love the experience once they are introduced to the world of 4x4-ing. My friend Mitchell, who joined us on the Plumridge Lakes trip, was unsure of the idea at first, however at the end, he was looking forward to the next Desert Discovery camp.*

Some of my best memories have been while camping such as watching the stars from my swag beside the campfire or fishing for yellow-belly in the Diamantina River. Apart from memories, I have learnt some very valuable lessons from our trips away. An example of this is water consumption. I never really considered how valuable water is, however at home we waste it by way of the sprinkler system or washing cars.

"I especially like learning about Clive's animals because it makes me think about the amazingly detailed and fascinating place we live in. Also, it is great to have some change from everyday life and slow down (hopefully!) to relax. That is what holidays are for, aren't they?"
Ian, 13 years

Ava tries her hand at desert photography

A D.D. Experience

Ashley, Josh and Ben Cocks

Our family gets a lot of experience and learning out of *Desert Discovery*. We have a whole heap of fun and we enjoy seeing and learning about all the different animals, plants and the environment of the desert.

What we most enjoyed about this trip was going out with Clive to check his drop traps and other traps. On one day we found a skink and about 4 spiders. He showed us a Blind Snake, a thorny Devil and a Bearded Dragon. The most exciting find was the Pigmy Possums. They were the smallest kind of possum we have ever seen. We learnt that their babies are about the size of a grain of rice. The possum was cute, it had floppy pink ears, it was grey all over, and had a white belly with a small tail.

On one day, Clive also helped us to make a 'Scott Sledge' kite. He had brought along sticks, plastic for the body, string streamers for the tail, and wood to wrap the string around. After making them we gave them a try and they succeeded in flying evening a gusty wind.

One of our favorite things we did at Desert Discover this year was with our friends Kelsey, Jordan & Leigh and that was to build a Mia Mia. It was built using the dead trees from around our camp. It started with one room and then we put on an extension. We held our own meetings in there.

Journey into the unknown

Sue & John Dour.

Desert Discovery 2002 was our first outback experience. We had spent considerable time outfitting our Nissan X Trail for this trip under the guidance of Neil Cocks, with whom we would be travelling and felt ready for our adventure, although still nervous of the unknown that confronted us.

Our departure day started badly. It was pouring with rain and I had a very painful eye, which had to be asses as an emergency before we could leave. I hoped this was not a bad omen of things to come, however, we were able to set off at 12 Midday and didn't have any further problems.

We traveled to Ceduna where we joined Pat Pawson and traveled along the Eyre Highway to Bellandonia where we joined Neil and the rest of the party.

Up at sunrise, early start, setting camp at 4:30pm, cooking in daylight – a way of life totally foreign to us recreational campers, who would sit and have a few drinks in the evening and then decide on a meal usually well after 7pm and retiring late. It was interesting to observe the way various people conserved water, including re-heating the previous nights dishwater for the breakfast dishes. The *Desert Discovery* camp proved to be very enjoyable. The enthusiasm of the various interest groups, the birdo's botanists, zoologists became quite infectious and we fund the nightly meeting fun and interesting. Everyone at the camp was very welcoming and we made many acquaintances and friends.

The group we were travelling with strengthened the whole experience. We felt secure under Neil's guidance and had many fun experiences Camping with the group – Neil & Helen, Pat, Andrew, Sharon and their children, Wayne, Karen and their children and Alex & Rob. This camaraderie combined with our first encounter of the beautiful and contrasting scenery of the places we traveled through ensured that this trip will remain special.

Mystery of the "Sydney Simpson Cliffs"

Jon & Leanne Gregory

Besides the Plumridge Lakes system and Gwynne Creek the other major landform of interest on the Plumridge 1:250 000 map is the Sydney Simpson Cliffs (SSC). These cliffs, some Gnamma holes, Blue Robin Hill and Bartlett's Bluff are all mentioned in Explorer Frank Hann's Diary of his 1908 Expedition into the Plumridge Lakes area. (Refer Hann's Diary "Do Not Yield to Despair" pages 395 - 397). Having lived and worked in the region north of Laverton, we have gained an interest and respect for Frank Hann's Exploits in this area and were keen to follow this up during our Plumridge visit.

After some discussion with interested parties at our regular campfire meeting on the night of the 9th Oct., we decided to take a run out to this area to investigate.

A group of nine vehicles and occupants left camp at approx 10.30 am on 10th Oct. We headed NNE along the Lake Rason Road. At a spot approx. 62 km NNE of camp we came across a minor track leading into the SW in the general direction of the Sydney Simpson Cliffs. A kilometre in on this track we stopped for lunch at a spot adjacent to an interesting "Breakaway". Some of the party went for a walk to this Breakaway while Leanne and I continued on along this track in the hope that it would lead to the Sydney Simpson Cliffs. The track continued on for several km winding around in a general direction towards the map location of cliffs passing two Gnamma Holes. The track petered out in thick scrub a spot approx. 4.4 km from the map location of SSC. The remainder of the party rejoined us here.

We had a discussion at this location on whether we should try to walk into the map location of SSC. Because of the lateness of the day we decided to return back to camp and maybe return at a latter date. On the way back out to the Lake Rason Rd, Jiri, Marie, Paul and Ken walked into some interesting hills to the NW of the track. Bob Hancock's party and ourselves stopped and investigated the area around the Gnamma Holes. One interesting aspect was that we found some old cow manure on the ridge above the holes.

On Sunday the 13th Oct. we arranged a return trip back to the area of SSC this time we left at approx. 8.30 am which would give us more time to explore the area. David and Graham located another track heading into the SSC area approx. 1km past the track that we all went in on our previous trip. Several dead camels were noticed in the area of this intersection. We followed this second track in, passing numerous well worn kangaroo/camel pads and a large number of Kangaroos, until it stopped, this time approx. 1.2km from the map location of SSC.

The spot where the track finished was very pretty with a small rocky hill, the beginnings of a creek and a stand of stunted Salmon Gums, which are quite rare in this area. In one of these stunted Salmon Gums was a large Wedgetail Eagles nest with a pure white chick inside. Simon Wilkinson climbed a nearby tree and was able to photograph it. Also there was evidence that an aboriginal ceremony may have taken place here. Certainly a lovely spot, but from Hann's description definitely not the SSC. While at this location during our lunch break, Paul volunteered to walk to the point marked on the map as SSC, on his return, he confirmed that there was no major landform at this point. We all now agreed that the map was definitely in error however we were yet to confirm by how much.

We returned back to the Lake Rason Rd with Macca and Graham, David and Graham investigating several of the Kangaroo/Camel Pads for water on the way out, unfortunately none was found. We then headed back cross-country to the interesting hills where Jiri, Marie, Paul and Ken investigated on the 10th Oct. We took several GPS readings and referred them back to the Plumridge 1:250 000 topographic map. This indicated that we should have been on a flat, open area.

We were now very confident that the map is indeed wrong and this spot could well be SSC. We all agreed that this Cliff area was very interesting and pretty. It is the most significant landform in this area. We spent over an

hour exploring these cliffs and felt that the scenery could rival the "Painted Desert" in South Australia. It was well worth the time and effort visiting this area and was certainly a highlight of the day.

Keen to solve the mystery of these locations, on our way out of camp, on the 15th Oct; we took an extract from Frank Hann's diary back to the spot where we found the "Gnamma Holes" on the 10th Oct. We believed that these could be Frank Hann's "Relief Gnamma Holes". From the holes, we took some bearings to the various landmarks that he mentions in his diary. From this we are confident that the Gnamma Holes are in fact Hann's "Relief Gnamma Holes" Pages 396 -397 Hann's Diary - Do Not Yield To Despair.

Hann also mentioned in his diary that from the NE end of SSC the "Relief Gnamma Holes" are 1/2 a mile at a bearing of 250 degrees which also ties into the location of the cliffs we visited on the evening of the 13th Oct. So I believe the Plumridge 1:250 000 Topographic Map is wrong by up to 8 - 10 km.?? I also checked to ensure that the GPS was on the correct datum in case this was contributing to the error however this was found to be correct.

References

- Hann, Frank Hugh, *Do not Yield to Despair. Exploration Diaries in the Arid Interior of Australia, 1895 – 1908*. Compiled by M Donaldson, & I Elliot, Hesperian Press, Perth, 1999.

Sydney Simpson Cliffs

Desert Discovery 2002

Meg Carty & Stuart Kostera

As we were primarily involved in logistics and transportation of equipment we arrived at the site for the main camp early to assist in the assembly of the infrastructure. This was finally completed on time with the help of many other willing souls. After a few days in camp to ensure all was in working order we headed out of camp to try and follow in the footsteps of some of the early explorers who had preciously passed this way, so to speak. Armed with "Do not Yield to Despair", Frank Hann's diary of his journey's, numerous maps and our trusty GPS we headed towards Lake Rason. Along the way we ventured down any tracks we came across that appeared to lead to some of the sites we had pinpointed from our readings from Hann's diary along with markings on our maps.

The first site we came across was the Relief Gnamma Holes. They are in a granite slab but were dry at the time of our visit. We followed the track further south until it ended. At this point we did some exploration on foot around the area which was mainly breakaway formations. We also noticed cliff formations to the west. We then continued west along the Lake Rason road until we came upon another track which we hoped would take us into Blue Robin Hill. It actually took us SW past Blue Robin Hill and onto more magnificent breakaway country and rock holes. We sited a rather large perentie in one of the many cave formations in this area. Once again we backtracked to the Lake Rason Road and continued north until we came across the track that lead to the Yaljeri Rock Hole. This rock hole is found in a very open circular shaped low grass area. The initials EB 30 7 05 are carved into the granite. We believe EB stands for the East Brothers. Once again everything was dry and the rock hole was full of sand etc.
We returned to the Lake Rason Road and continued north/north west until we came upon a very large, old sandalwood cutters camp. After an obligatory look around we continued on to Bartlett's Bluff which we considered after much searching and rechecking of GPS points etc to be somewhere other than marked on current maps.

We now headed for Bobbie's Point. Once again we found ourselves in breakaway country which was both very interesting and pleasing to the eyes. We continued along another old track hopefully heading towards McKay Creek. Unfortunately the track disappeared about 2kms from the intersection marked on our maps. There is a large creek system in this area and we could not find a way to proceed any further north. Consequently we had to backtrack once again. Undeterred (well, one of us was…), we headed back to the Lake Rason Road until we actually reached the eastern most point of the lake. The vistas along the lake's edge were beautiful but the whole Lake system was completely dry.

We headed north along a track which followed the lake's edge in a north/north westerly direction until it headed almost due north towards Cape Marten and then onto the Dr Hicks Range. This was an incredible area in terms of the beauty of the surrounds. We felt we could have spent a lot longer poking around but as we had to return to camp we added it to our list of "must dos".

After the needs of returning to camp were attended to, and catching up with all that was happening with everyone else at DD we once again took off to continue our exploration of another lake in that area – Lake Miningwal.
For a few days we followed a similar pattern of following tracks along the lakes edge to Surprise Granite Rock Hole before we returned to the PNC line and headed towards Queen Victoria Springs and Streich Mound. We actually walked the 1.8kn through the sand dunes to the monument. The spectacular views made all the huffing and puffing worthwhile.

It was now time to head back to base camp and assist in the dismantling and packing up of same.
In all our travels we were constantly amazed at all the kangaroos we saw in such dry conditions i.e. no visible ground water. The bird population varied from area to area. We reported any finds as best we could to Ken Harris. We had a wonderful experience and all parts visited are well worth the effort.

PLUMRIDGE PRESS

Edition No:1 September, 2002
Editor for this copy: Vivien & Ken Harris

WELCOME TO THE PLUMRIDGE LAKES PROJECT !

The local weather:

Tuesday 24 Sept O.5c31c Nil
[unofficial max as thermometer was in sun]

Wednesday 25 Sept 3c 24.5c Nil
Cloud Cover at sunrise zero octas and no wind

Thanks to:

Placer Dome Granny Smith mine for loan of water trailer and Rory Lamont & Melanie Hayhow for towing in the trailer from Laverton loaded with 15OO litres of water.

Wingella School for loan of the trailer that brought fuel and the marquee in to the camp.

Stuart Kostera & Meg Carty who organized all the camp equipment and fruit and vegetables from Perth. Also to Simon Wilkinson who assisted Stuart with transport from Perth.

Everyone who worked Monday and yesterday in setting up the camp and this morning on the airstrip.

Best Wishes for the Project from:

Connie Beadell who is sorry she can't be with us this year.

Bill Baker from Perth, a great friend of *Desert Discovery* who is laid up following an operation on his shoulder. Bill is keeping in touch with the camp by radio.

Bob & Elsie Lasseter send their regards. Bob is also recovering from an operation and they had to cancel their plans to drive out. However Bob is now flying in with David Fletcher and Phil Crocker on 5th October.

Ruth Boulton who was not well enough to join us this year.

Some camp guidelines:

Please conserve water. The first load of water was brought in 360km from Laverton. Subsequent loads will come over 220km from Tjuntjuntjara or Rawlinna.
Drive slowly through the camp.
Conserve firewood. Where possible, collect wood well away from the camp and consider sharing a cooking fire with someone else.
As the camp and most of our day trips will be within the Plumridge Lakes Nature Reserve, a WA A-class reserve for the preservation of flora & fauna, please keep to the defined tracks. Most of these were created during the sandalwood cutting days, going back to the 193O's.
It would be appreciated if all rubbish which cannot be burned be taken out of the Nature Reserve.

At Wednesday night's meeting Simon Wilkinson from UK will be speaking on his introduction to the Australian deserts, 21 years ago.

Bird Sightings

Bird sightings to date are listed below. It would appear at this early stage of the project that bird numbers are low due to obviously extended dry conditions.

Brown Goshawk	Little Eagle	Brown Falcon
Peregrine Falcon	Nankeen Kestrel	Australian Hobby
Australian Bustard	Western Ringneck	Tawny Frogmouth
Red-backed Kingfisher	Striated Pardalote	Inland Thornbill
Chestnut-rumped Thornbill	Weebill	Red Wattlebird
Spiny-cheeked Honeyeater	Yellow-throated Miner	Singing Honeyeater
Yellow-plumed Honeyeater	White-fronted Honeyeater	Jacky Winter
Red-capped Robin	Crested Bellbird	Rufous Whistler
Grey Shrikethrush	Black-faced Cuckooshrike	Grey Butcherbird
Pied Butcherbird	Little Crow	

Thanks to Meg & Stuart and Clive for their contributions to the list. Any others with additions please advise Ken Harris.

Botanical Sightings

Future newsletters will list some of the major botanical sightings. Please advise Graeme or Maree Goods who will co-ordinate this list.

Kite Flying

Rumour has it that the Victorian Western District Kite Flying Champion is in attendance and is aiming to add the Plumridge Lakes Championship to his trophy cabinet. Further bulletins can be expected. All kids are welcome to join in the challenge. Kids over 50 years of age will be handicapped.

PLUMRIDGE PRESS

Edition No: 2 28 September, 2002
Editor for this copy: Sharon Cocks & Maree Goods

WELCOME TO THE PLUMRIDGE LAKES PROJECT !

The local weather:

Thurs 26 Sept: Min 0.5c Max 27c Rain Nil
Cloud cover at sunrise zero octas and no wind

Frid 27 Sept Min 0.5c Max 22c Rain Nil
Cloud cover at sunrise zero octas and no wind

Sat 28 Sept Min 0.5c Max 22.5c Rain Nil
Cloud cover at sunrise zero octas and no wind

Welcome

To new members of the camp, John Summers and Jan Lowe from Adelaide who arrived in via Rawlinna and the Connie Sue Highway.
Also to Justin and Mark, geologists from Placer Dome who spent Friday night in camp while on a reconnaissance of the Plumridge area. Their company will be commencing some aerial surveys out here from 17th October.

Thanks

To our evening guest speakers so far:-
Simon Wilkinson for his brilliant description of the 1981 Durham University expedition to the Great Sandy Desert.
John Deckert & Bill Day, ably supported by Bev & Rhonda, for their interesting account of 10 days away with the Mars society. When we see man on Mars we will think of John & Co's contribution in getting him there!
Zoologist, Clive; weatherman, Simon; plant experts, Graham and Maree; and leaders of the birders,
Ken & Keith for their valuable reports at the evening meetings.
Thanks also to the airstrip builders led by Neil and Andrew for a great job on the strip. Phil Crocker, David Fletcher & Bob Lasseter will be arriving in the Beechcraft Bonanza on Friday the 4th October and will no doubt be awarding top marks to the construction team.

Farewell

To Walter and Fllorian Stindl who will be leaving on Monday for Perth, then the long flight home. We have really appreciated having some visitors from Germany and their contribution to the Plumridge Camp. We trust that they may be able to join *Desert Discovery* again in 2 years time.
To the Cocks group (Neil, Helen, Pat, John, Sue, Alex, Rob, Wayne, Karen, Kelsey, Jordan, Leigh, Andrew, Sharon, Ashley, Joshua and Benjamin) and Simon who will be moving out for a few days in the direction of Rason Lake.
Ken & Viv Harris, Keith & Shirley Johnson, Roger & Sue Charles who are heading down to Queen Victoria Spring, then into Laverton.
Stuart and Meg have also moved out for a few days. Our sincere thanks to them for all their work in the first week of the project.

Bird Sightings

Bird sightings to date are listed below. It would appear at this early stage of the project that bird numbers are low due to obviously extended dry conditions.

Brown Goshawk	Little Eagle	Brown Falcon
Peregrine Falcon	Nankeen Kestrel	Australian Hobby
Australian Bustard	Western Ringneck	Tawny Frogmouth
Red-backed Kingfisher	Striated Pardalote	Inland Thornbill
Chestnut-rumped Thornbill	Weebill	Red Wattlebird
Spiny-cheeked Honeyeater	White-Browed Treecreeper	Red-Browed Pardalote
Willie Wagtail	Black-Faced Woodswallow	White-Faced Swallow
Owlet Nightjar	Magpie	Yellow-Rumped Thornbill
Wedge Tailed Eagle	Mulga Parrot	Brown Songlark
Richard's Pipit	Yellow-throated Miner	Singing Honeyeater
Yellow-plumed Honeyeater	White-fronted Honeyeater	Jacky Winter
Red-capped Robin	Crested Bellbird	Rufous Whistler
Grey Shrikethrush	Black-faced Cuckooshrike	Grey Butcherbird
Pied Butcherbird	Little Crow	Black-Eared Cuckoo

Thanks to Meg & Stuart and Clive for their contributions to the list. Any others with additions please advise Ken Harris.

Botanical Sightings

The plants listed below can be found within walking distance of the camp. Unfortunately it has been difficult to identify many plants due to the dry

Acacia aneura	Acacia oswaldii	Alectryon oleofolius
Casuarina pauper	Dodonaea rigida (syn filifolia)	Eremophila alternifolia
Eremophila falcata	Eremophila forrestii	Eremophila glabra
Eremophila latrobei	Eremophila miniata	Eremophila platythamnos
Eremophila scoparia	Eucalyptus concinna	Eucalyptus eucentrica
Grevillea sp	Halgonia sp	Leucochrysum fitzgibbonii
Maireana georgei	Maireana sedifolia	Olearia muelleri
Olearia subspicata	Podolepis capillaris	Prostanthera sericea
Ptilotus exaltatus	Ptilotus obovatus	Santalum acuminatum
Santalum spicatum	Senna artemisioides	Senna artemisioides ssp filifolia
Waitzia acuminatum		

This list is not complete. If you have seen a plant you would like added to the list see Graham or Maree Goods.

Reptiles to Date

Thorny Devil 'Moloch Horridus'	Comb-Ear Skink 'Ctenotus Schomburkll'	Dwarf Bearded Dragon 'Pogona Minor'
Blind Snake 'Ramphotyphlops Endoteris'	Military Dragon 'Ctenophorus Isolepis'	Crested Dragon 'Ctenophorus Cristatus'
Pygmy Mulga Monitor 'Varanus Gilleni'	Perentie 'Varanus Giganteus'	Painted Dragon 'Ctenophorus Pictus'

Kite Flying

This was a great success and fun was had by all. A big thank you to Clive from all kids big and little.

PLUMRIDGE PRESS

Edition No: 3 2 October, 2002
Editor for this copy: Margaret and David Hewitt

WELCOME TO THE PLUMRIDGE LAKES PROJECT 2002 !

The local weather

Sunday 29 Sept Min 8c Max 24c Rain Nil
Thanks to the assistant weather observer, Suzanne Wysman for filling in while Simon was away visiting Rason Lake.

Monday 30 Sept Min 3c Max 31c Rain Nil

Tuesday 1 Oct Min 10c Max 34c Rain Trace
Very strong wind from the north, then from the south west.

Wednesday 2 Oct Min 2c Max 24c Rain Nil
Gusty winds from south west.

Welcome to new members of the camp

Greig and Annemarie Foletta, Bruce and Mardie Cowcher from Melbourne who came up from Cocklebiddy to Rawlinna, then west along the Trans Line and up the Cable Haul Road, Saturday evening.
Malcolm and Sue Jordan, Ian and Carol Biddle from Perth who arrived via the Cable Haul Road on Sunday.
Tony and Dimity Morrison from Sydney who arrived Sunday afternoon from Kalgoorlie after spending a few weeks touring the south of WA.
Garth and Jan Strong, John Hewitt and John Wilkinson from the Riverina in NSW who have had one of the most interesting trips to Plumridge - from Glendambo on the Stuart Highway, along the Trans Line to Watson, then up through Oak Valley and Tjuntjuntjara Aboriginal communities, down part of the Connie Sue and in to Plumridge from the east. They report that the roads across the desert from SA are in excellent condition.
Bob, Kathy, Ian and Ava Hancock and Ian's friend, Mitchell, all from Sydney who came in along the more conventional route of the Eyre Highway, then Cable Haul Road. This is the Hancock family's fourth *Desert Discovery* project and Bob is a member of the *Desert Discovery* committee.

Thanks

To John and Bev Deckert who towed the water trailer to Tjuntjuntjara on Sunday and brought back the second load of water - a long round trip of over 440km.
To Rene Wysman who has done an excellent job of leading the last two evening meetings while David with Paul's help has been in Laverton picking up another load of fuel.

Farewell

To John Summers and Jan Lowe who left for Adelaide yesterday.
To the Cocks family and friends who are just back from a 3 day trip up to Rason Lake and will be leaving for home before the next edition of the *Plumridge Press* hits the streets.
John and Bev Deckert and party who moved out this morning for Queen Victoria Spring, then east in the direction of their home town of Nhill.
We would like to thank all these people for their contribution to the Plumridge Lakes Project.

Some camp guidelines:

These have been published before but we repeat them for the benefit of newcomers.

1. Please conserve water. The first load of water was brought in 360km from Laverton. Subsequent loads will come over 220km from Tjuntjuntjara or Rawlinna.
2. Drive slowly through the camp to keep down the dust.
3. Conserve firewood. Collect wood well away from the camp and consider sharing a cooking fire with someone else. When bringing in wood load on a bit extra for the communal evening fire.
4. As the camp and most of our day trips will be within the Plumridge Lakes Nature Reserve, a WA A-class reserve for the preservation of flora & fauna, please keep to the defined tracks. Most of these were created during the sandalwood cutting days, going back to the 193O's.
5. It would be appreciated if all rubbish which cannot be burned be taken out of the Nature Reserve.
6. Before leaving the campsite for the last time, please bury your fire (after removing all unburned rubbish). Leave only footprints at your camp !!

Bird Sightings

We look forward to the return of Ken and Viv Harris and Keith and Shirley Johnson for the next report. They will also have details of birds seen around Queen Victoria Spring over the past couple of days.

Plants of interest

Seen on the 50km loop trip Saturday 28th September. ie out to the airstrip, onto the Rason Lake road to Plumridge Lakes and back to camp.
Senna pleurocarpa
Dicrastylis sp.
Prostanthera althoferi (at the airstrip)
Rhodanthe floribunda (at the airstrip)
Myoporum platycarpum
Eucalyptus youngiana
Eucalyptus gongylocarpa
Eucalyptus gypsophila
Eremophila miniata (at Plumridge Lakes)
Grevillea nemotophylla (at Plumridge Lakes)
Thryptomene maisonneuvei (at Plumrodge Lakes)

Sunday 29th and Monday 30th
Trip out on the Laverton/Queen Victoria Spring Road.
Approximately 45 kms from camp to the park boundary and a few kilometres beyond. From park boundary onwards we came upon some sand hills which produced a different group of plants. Some of these were:
Leptosema chambersii
Hakea francisiana
Pityrodia sp.
Grevillea juncifolia
Grevillea didymobotrya ssp didymobotrya
Calothamnus gilesii
Lechenaultia sp.
Dampiera sp.
Stylidium sp. Plus many more plants we were unable to name.

Sincere thanks to Maree and Graham for their interesting evening talks on plants and for the valuable lists being supplied for the Plumridge Press.

Wildlife

Clive is away for a couple of days, "out west" with Maree and Graham looking at the western region of the Nature Reserve. However he has passed on the following discoveries to Ian Hancock :
Sandy Inland Mouse 'Pseudomys Hermannsburgensis'
Spinifex Hopping Mouse 'Notomys Alexis'
Western Pigmy Possum 'Cetcartetus Concinnus'

Expected Camp Movements.

Phil Crocker, David Fletcher and Bob Lasseter will be arriving by aircraft on Friday morning from Tumut, NSW, having stayed Thursday night at Forrest. They will be with us for 3 days, leaving on Monday. This is the third project for Phil, David and Bob.
Ken Eastwood and Mari and Jiri Lochman from Australian Geographic will be coming in by vehicle on Saturday.
Jon, Leanne and Loren Gregory from Tumut expect to arrive on Saturday. Jon and Leanne were played a key role in the first DD project, in the Great Sandy Desert in 1996. This will be young Loren's first project.
Next week Rory Lamont and Melanie Hayhow will be returning for a few days. The were here last week towing in the first load of water on a trailer from Placer Dome's Granny Smith mine at Laverton. Rory and Melanie will again be very welcome visitors.
On Monday we are expecting two representatives from Conservation and Land Management Department in Kalgoorlie who will be interested in the wildlife and plant reports.

Guest Speaker

We would like to welcome John Wilkinson as the speaker at tonight's meeting. He will be talking on an Anzac tour this year to World War 1 battlefields, including Gallipoli.

PLUMRIDGE PRESS

Edition No: 4 — 8th October, 2002
Editors-in-chief: — David & Margaret Hewitt.
Editors for this copy: — Ian and Kathy Hancock.

WELCOME TO THE PLUMRIDGE LAKES PROJECT 2002 !

The local weather

Thursday 3rd October Min 0c Max 24c Rain Nil

Friday 4th October Min -4c Max 27 Rain Nil

Saturday 5th October Min 16c Max 34c Rain Trace
Very strong winds.

Sunday 6th October Min 11c Max 23c Rain Nil

Monday 7th October Min 10c Max 24c Rain Nil
Strong afternoon winds

Many thanks to Simon for his ongoing contributions in recording the Plumridge weather.

Welcome:

Eric & Rowena Whiting from Leeton NSW who arrived in their Subaru, and who did well to make camp in a day from Cocklebiddy.
Marie & Jiri Lochman from Perth and Ken Eastwood from Sydney representing Australian Geographic who came in from Kalgoorlie on Sunday.
Jon, Leanne & Loren Gregory from Tumut, NSW. Loren is the youngest participant of *Desert Discovery* this year, at 3 years of age.
Early this week we are expecting some new arrivals:
Warwick Rowe from CALM in Kalgoorlie.
Anthony & Karen McDonald from Melbourne.
David Travis & Graham Young from Bathurst and Oberon, NSW.
Rory Lamont & Melanie Hayhow from the Granny Smith mine at Laverton. who were also in camp on the first day with the water trailer.

Thanks

To Keith Johnson and Paul Prior who went to Tjuntjuntjara yesterday (in record time!) for a load of water.
To everyone who assisted with standing up the marquee yesterday morning following fierce winds of the past couple of days, and to Viv Harris and Bob Lasseter who repaired a tear in the canvas roof.
To Jon Gregory and Bob Hancock for relocating the toilet.

Farewell

Since the last *Plumridge Press*, Malcolm & Sue Jordan and Ian & Carol Biddle have left to return to Perth via the Cable Haul road and Trans Line Track.

Greig & Annamarie Foletta and Bruce & Mardie Coucher who are returning to Melbourne via Rawlinna and the Eyre Highway.

Yesterday, Rene & Suzanne Wysman, Lawrie & Pat Draper and Bert & Marion Phillips headed out along the Anne Beadell Highway and home to Victoria and NSW.
Phil Crocker, David Fletcher and Bob Lasseter also departed yesterday in the Beechcraft Bonanza after 3 days in camp. They intended flying via Forrest, followed by an overnight in Ceduna. They anticipate arriving in Tumut on Tuesday. Bob Lasseter will then return to Sydney in his trusty Landrover.
This morning Ken & Viv Harris and Keith & Shirley Johnson departed camp, driving home via Tjuntjuntjara to Melbourne.
Our sincere thanks to all these people for participating in the Plumridge Lakes Project and for their contribution to the camp.

Some camp guidelines:

These have been published before but we repeat them for the benefit of newcomers.
Please conserve water. The first load of water was brought in 360km from Laverton. Subsequent loads will come over 220km from Tjuntjuntjara or Rawlinna.
Drive slowly through the camp to keep down the dust.
Conserve firewood. Collect wood well away from the camp and consider sharing a cooking fire with someone else. When bringing in wood load on a bit extra for the communal evening fire.
As the camp and most of our day trips will be within the Plumridge Lakes Nature Reserve, a WA A-class reserve for the preservation of flora & fauna, please keep to the defined tracks. Most of these were created during the sandalwood cutting days, going back to the 193O's.
It would be appreciated if all rubbish which cannot be burned be taken out of the Nature Reserve.
Before leaving the campsite for the last time, please bury your fire (after removing all unburned rubbish). Leave only footprints at your camp !!

Bird Sightings

There will be an updated listing in a following report.

Plants of interest

An updated listing of plants will be a following report.
Sincere thanks to Maree and Graham for their interesting evening talks on plants and for the valuable lists being supplied for the *Plumridge Press*.

Wildlife

Clive and Jiri have been successful in capturing and photographing more wildlife both in the pit traps and around the camp area over the last couple of days. A comprehensive listing will follow in a future report.

Quote from Westprint newsletter:

How long can litter last??? Orange peels-2 years, Cigarette butts-5 years, Wool socks-5 years, Leather-up to 15 years, Plastic bags-20 years, Nylon fabric-40 years, Tin cans-50 years, Plastic six pack holders-100 years, Aluminium cans and tabs-500 years, Glass bottles-1000 years, Plastic bottles-indefinitely, Styrofoam-indefinitely.

PLUMRIDGE PRESS

Edition No: 5 2th October, 2002
Editors for this copy: David & Margaret Hewitt

WELCOME TO THE PLUMRIDGE LAKES PROJECT 2002 !

The local weather:

Tuesday 8th October Min 2c Max 23 c Rain Nil

Wednesday 9th October Min 7c Max 27c Rain Nil

Thursday 10th October Min 10c Max 33c Rain Spots/Trace

Friday 11th October Min 17c Max 30c Rain Nil

Saturday 12th October Min 10c Max Not recorded Rain Nil

Many thanks to Simon and his assistants, Suzanne and Margaret for their ongoing contributions in recording the Plumridge weather.
A full report on weather during the past 3 weeks will included in the project report.

Welcome to new members of the camp :

Anthony (Macca) & Karen McDonald from Melbourne and Graham & Trish George from Newcastle NSW who came in via Rawlinna and the Connie Sue Highway.
David Travis & Graham Young from Bathurst and Oberon, NSW, arriving in near record time of 4 days from home, via the Trans Line access road.
Rory Lamont & Melanie Hayhow from Placer Dome's Granny Smith mine at Laverton who were especially welcomed back in camp. They were also here on the first day with the water trailer.

Thanks

This will be the last issue of Plumridge Press and there are many people whom we would like to thank for the smooth running of the camp over the past 3 weeks. They are too numerous to mention all in person but there are a few that should be acknowledged : Stuart and Simon brought all the gear up from Perth, and along with Paul, Ken and Viv, Keith and Shirley, Roger and Sue were here on the first day to start with assembly of the toilet, and tent. Neil led the airstrip construction team and John, Wilko and Jon stood up the marquee after the big wins storm of last weekend. Garth and Jan looked after the disposal of a trailer load of 200 litre drums from the Nature Reserve.

Many members have assisted with the evening campfires and taking care of the generator.

Farewell

Since the last *Plumridge Press*, the Hancock family and Mitch have left camp, Bob and Ava driving the OKA back to Sydney while Kathy, Ian and Mitch caught the train from Rawlinna at 4.00am this morning (Saturday).
Garth and Jan Strong left later yesterday, hoping to catch up with the Hancocks to overnight at Rawlinna.

Jiri and Marie Lochman and Ken Eastwood from Australian Geographic will be leaving for Kalgoorlie and Perth, via Queen Victoria Spring on Sunday. We have really appreciated having them in camp over the past week and thank them sincerely for their participation in the Plumridge Project.
Also we will be saying farewell to Clive, Maree and Graham tomorrow. Their contribution has been outstanding and has added so much interest for other members.
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Bird Sightings

Ken Harris and Keith Johnson have already provided a comprehensive bird list, however several additional birds from the past couple of days were reported around the campfire last night.

Grey Currawong
Australian Bustard
White-winged Wren
Red-backed Kingfisher

Plants of interest

"What plant is that?" has been our catch cry since we have arrived. One plant that has been puzzling us has been an Acacia similar to Acacia Tetragonophylla (Dead Finish). We have finally keyed it out to Acacia Nyssophylla, a plant very similar to Acacia Colletioides. The mallees have been in the same category. so far we have identified Eucalyptus Concinna, eremicola, eucentrica and youngiana.

Other plants we have noted in the last couple of days have been:

- Calytrix sp. (at Plumridge Lakes)
- A Callitus with a different seed case to what we have been seeing
- Duboisia hopwoodii which is often used as a narcotic by the aboriginals
- Eremophila homoplastica – an uncommon species only found in the Great Victoria Desert
- Eremophila falcata – a deep pink form (generally much paler). Also one of 2 or 3 forms found in the area which are sweetly perfumed.

You will have noticed Casuarina pauper (Black Oak) around the campsite and it always seems to be associated with limestone. It is a great habitat tree because the older ones develop many hollows for birds. We have also

noted that Yellow –throated Miners have a nest with chicks in one where Rennie and Suzanne Wyseman had their camp.

Wildlife

Clive and Jiri have been successful in capturing and photographing recording and releasing more wildlife both in the pit traps and around the camp area over the last couple of days.
The following is a complete fauna list for the project:

Reptiles

Goulds Goanna Varanus Gouldii	Pygmy Mulga Goanna Varanus Gilleni	Perentie Varanus Giganteus
Thorny Devil Moloch Horridus	Striated Skink Egernia Striolata	Spotted Comb-Ear Ctenotus Pantherinus
Lea's Comb Ear Ctenotus Leae	Brook's Comb Ear Ctenotus Brooksi	Schomburk's Comb Ear Ctenotus Schomburkii
Boulenger's Skink Morenthia Boulengeri	Grey's Skink Menetia Greyii	Lined Comb Ear Ctenotus Quattorodecimlineatus
Military Dragon Ctenophorus Isolepis	Central Netted Dragon Ctenophorus Nuchalis	Crested Dragon Ctenophorus Cristatis
Reticulated Dragon Ctenophorus Reticulatus	Spotted Dragon Ctenophorus Maculatus	Winnecke's Dragon Diporiphora Winneckei
Jewelled Gecko Diplodactylus Elderi	Gecko Diplodactylus Stenodactylus	Knob Tailed Gecko Nephrurus Laevissisimus
Knob Tailed Gecko Nephrurus Levis	Purple Dtella Gecko Gehyra Purpurascens	Burton's Legless Lizard Lialis Burtonis
Dwarf Bearded Dragon Pogona Minor	Banded Sand Swimmer Eremiascincus Richardsonii	Western Blue Tongue Tiliqua Occipitalis
Blind Skink Ramphlotyphlops Endoterus	Desert Death Adder Acanthopis Pyrrhus	Dugite Pseudonaja Nuchalis
Ringed Snake Pseudonaja Modesta	Orange Naped Snake Furina Ornata	

Mammals

Echidna Tachyglossus Acculeatus	Wongai Ningaui Ningaui Ridei	Sandy Inland Mouse Pseudomys Hermannsbergensis
Spinifex Hopping Mouse Notomys Alexis	Western Grey Kangeroo Macropus Fuliginosus	Euro Macropus Robustus
Dingo Canis Lupus Dingo	Gould's Wattled Bat Chalinolobus Gouldii	*One Humped Camel Camelus Dromedarius
*Feral Cat Catus Felis	*European Rabbit Oryctolagus Cuniculus	*House Mouse Mus Musculus
*Red Fox Vulpes Vulpes		

Butterflies

Grass Blue Theclinisthes Sp.	Grass Yellow Eurema Smilax	Lesser Wanderer Danaus Chrysippus
Wood White Delias Aganippe	Amaryllis Blue Ogyris Amaryllis	Azure Brown Ogyris Idmo Group

GPS Points of Interest

Point	Location:	LATITUDE:	LONGITUDE:
1	Intersection to SSC on Lake Rason Rd	29 deg. 17' 25.5" S	124 deg. 44' 18.3" E
2	End of Track, 10th Oct.	29 deg. 21' 54.3" S	124 deg. 40' 44.6" E
3	Hann's Relief Gnamma Holes	29 deg. 19' 40.1" S	124 deg. 44' 12.0" E
4	Sydney Simpson Cliffs	29 deg. 19' 55.3" S	124 deg. 43' 34.1" E
5	Salmon Gums/ Eagles Nest Lunch Spot	29 deg. 21' 05.1" S	124 deg. 38' 46.1" E
6	Gywnne Creek NW of Base Camp	29 deg. 31' 29.3" S	124 deg. 55' 38.9" E
7	Clay Pan 8 km South of Base Camp	29 deg. 41' 44.9" S	125 deg. 04' 12.7" E
8	Plumridge Lakes Airstrip	29 deg. 35' 38.5" S	124 deg. 54' 01.6" E
9	Plumridge Lakes Base Camp	29 deg. 35' 40.8" S	124 deg. 54' 01.2" E

GPS Type- Garmin 45 GPS Receiver.
Map Used - Plumridge 1:250 000 Topographic
Horizontal Datum - AGD 1966

Note: All GPS locations have been given in good faith, no responsibility will be taken for any outcomes resulting from inaccuracies.

Bush Mechanics

The future for Desert Discovery

David Hewitt

Plumridge Lakes is the fourth project to be run by *Desert Discovery* and the third as an incorporated organization. Since 1996, three deserts, the Great Sandy, the Gibson and the Great Victoria have been visited. The areas covered are some of the most remote in Australia and if it were not for the resources provided by *Desert Discovery*, ready access to these areas would not have been available.

The experience and knowledge of the experts offering their services to a 3 week desert camp has been one of the highlights of the Discovery projects. This professional expertise is increasing with each project. However the projects would not have been possible without the support of other people who provided the equipment, transport, backup and the interest to just be there, share in the experience and assist in the surveys and research.

340 people have joined in the four expeditions, and 10 members have 'endured' all three. They are Neil and Helen Cocks, Bob, Kathy, Ian and Ava Hancock, David Hewitt, Malcolm and Sue Jordan and Stuart Kostera.

The Official Report is a fine record of each project. Copies of the reports from the 1996, 1998 and 2000 projects are still available and may be purchased from the secretary.

Another major project will be held in 2004 with the possibility of a "mini project" in conjunction with the bird expeditions in 2003. A reconnaissance will be conducted around June-July on possible sites for 2004. It will again be in a very remote area where the solitude of the desert can be experienced. The committee feels that the mix of experts, family groups, students and four wheel drive enthusiasts has worked well and this policy will be continued. The project will again be for three weeks. A minimum stay of five days will be expected so that members will have an opportunity to meet other participants and be a part of the project. Everyone contributes towards camp expenses in the form of a fixed rate and a daily levee, with a reduced rate for students. Camp expenses include Public Liability Insurance, fuel for the generator for evening activities, expenses in publishing the camp news sheet, maintenance of camp equipment and supplies for the evening suppers. All participants are expected to accept some of the daily camp duties, one sure way of getting to know other people in the camp.

Equipment owned by *Desert Discovery* includes a 9 metre by 6 metre marquee, plumbing fittings for the shower and hand basin, enclosures for toilet, shower and hand basin, an onsite water tank, 240 volt portable generator and submersible pump. Thanks to excellent guidance since its inception from *Desert Discovery* secretary-treasurers, Bob Hancock and Ken Harris, the organisation is in a good financial position, despite the increasing burden of Public Liability Insurance. The financial contribution from mining company, Placer Dome, for the Plumridge Project was of great assistance in 2002. The Rice Growers Co-operative, Leeton NSW had been a supporter of the first three projects. They were not able to extend this relationship to the Plumridge Project but may again assist in the future.

The Committee is always open to suggestions – from past project members or from readers of the report - to make the next camp an even more valuable experience for all those who participate.

Thanks

Desert Discovery Incorporated wishes to thank the following individuals and organizations for their assistance with the successful running of the 2002 Plumridge Lakes Project :

Bob Lasseter for design of a new tank stand which it is hoped will be in use for the next project.
Bob Hancock for supply of water containers and donation of a submersible borehole pump.
David Travis for use of his Satphone in setting up an interview with Radio National 'Bush Telegraph' program.
Desert Sands Cartage for storing fuel in Laverton.
Granny Smith Mine, Laverton and Melanie Hayhow and Rory Lamont for assistance with the water trailer.
Ian Kealley and Mark Cowan, CALM, Kalgoorlie
John Deckert & Keith Johnson who transported water from Tjuntjuntjara
John Wilkinson for his fascinating campfire talks on camels and the ANZACS.
Karen and Anthony McDonald for so willingly taking on the job of editing the Plumridge Project Report. They would like to especially acknowledge their friend Deb Swinley for providing expert assistance.
Jan Lowe for the expert proof reading of the document.
Ken Harris ably supported by Viv who once again co-ordinated the bird surveys and introduced many members to birding for the first time.
Murray Thomas, President, Laverton Shire Council for his wealth of local knowledge.
Margaret and David Hewitt for loan of computer, printer and photocopier for publishing the camp news sheet 'The Plumridge Press'.
Maree and Graham Goods and Clive Crouch who were present through the entire project and who so willingly shared their knowledge of flora and fauna.
Mark Gunther and Justin Baulch from Placer Dome.
Neil Cocks for directing work on the airstrip.
Paul Prior who towed the water trailer back to Kalgoorlie.
Partners of committee members who endured many e-mail, phone and fax messages as preparations before the project proceeded.
Placer Dome Asia Pacific Pty Ltd, for a donation towards Project costs.
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Ray Smith who transported drum fuel to Laverton.
Simon Wilkinson for assistance with transport of equipment from Perth and for sharing his 1981 desert experiences.
Stuart Kostera and Meg Carty for co-ordinating assembly of camp equipment in Perth, transport out to Plumridge Lakes then return to Perth, and storage until the next project
Suzanne and Rene Wysman who will be hosting a weekend reunion of Plumridge Project participants at their property near the Hume Dam, NSW in March 2003.
Tjukayirla Roadhouse, Great Central Road, WA for assistance with fuel supplies to the camp.
Tjuntjuntjara Aboriginal Community for access to their water supplies.
Wingellina School for loan of their trailer.

Finally, sincere thanks to all who took part at Plumridge Lakes. The assistance of many participants in the setting up of the camp and with the day-to-day camp duties, thus ensuring the smooth running of our fourth desert project, is much appreciated.