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LANDSCOPE Expeditions

Western Australian Department of Conservation and Land Management, Locked Bag 104,
Bentley Delivery Centre, WA 6983

in association with

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

Wildlife and Flora of the Great Victoria Desert 1996 **LANDSCOPE Expeditions Report No. 13**

FROM THE EXPEDITION LEADERS

On behalf of CALM and UWA Extension, we thank the members of the Expedition for their excellent physical and financial support, and good humour which made the Expedition such a success. Data collected greatly enhance our knowledge of the rich biological and conservation values of Queen Victoria Spring Nature Reserve. Such information will be important in the management of the area for nature conservation.

We acknowledge the fine support from our colleagues, Daphne Edinger, Andy Williams and Warwick Roe, and the cheerful communications support from June and Carol in the CALM office in Kalgoorlie. Tom Keating was tremendous, juggling the duties of piloting the bus through difficult country, cooking up a tasty array of meals and still having time to smile and snap a few photos. Thanks also to Kevin Kenneally, Jan Wood and Jean Paton who most ably arranged and organized the substantial logistics for this Expedition.

We enjoyed the Expedition and we hope you did as well. We look forward to meeting you again, perhaps on another *LANDSCOPE* Expedition.

David Pearson and Andy Chapman



Members of the Great Victoria Desert *LANDSCOPE* Expedition 1996 at Queen Victoria Spring

MAJOR EXPEDITION ACHIEVEMENTS

1. The collection of over 100 flowering plant specimens including a new species of *Tecticornia* and specimens of recently discovered *Sida* and *Dampiera* species.
2. The discovery of a Marsupial Mole carcase, extending this animal's known distribution several hundred kilometres.
3. The collection of a specimen of a dragon lizard, *Diporiphora*, which appears to be allied to *D. winnecki*, and is known only from two prior collections.
4. Considerable captures of various mammals and reptiles including breeding Western Pygmy Possums (*Cercartetus concinnus*) and dunnarts (*Sminthopsis dolichura* and *S. hirtipes*) and a large number of rodents.
5. The collection of six species of butterfly, including the first record for Queen Victoria Spring Nature Reserve of the Silky Azure (*Ogyris oroetes*).

DIARY OF THE 1996 GREAT VICTORIA DESERT LANDSCOPE EXPEDITION

This account is based on the daily diary kept by Expedition members, trapping data, group observation sheets and notebook entries of David Pearson, Andy Chapman and Andy Williams. Daphne Edinger has been able to examine some of the plants collected, but further work is necessary so detailed collection notes are not included. While we have endeavoured to ensure the information is accurate, we would like to know of any errors.

Saturday 13 April 1996 The main party left Perth at 0700 h bound for Kalgoorlie with 11 people on board. It proved to be a slow trip with large sections of the Great Eastern Highway being upgraded. Stopped for lunch in Southern Cross, then continued on.

In Kalgoorlie two more expeditioners, Glynne and Jennifer, were picked up and they met Andy Chapman and Warwick Roe from the CALM office in Kalgoorlie. With darkness fast approaching, the expedition headed north-east through eucalypt woodlands along the Kanowna and Pinjin Roads, finally selecting a campsite in Bullock Holes Timber Reserve. Daphne noted that Venus was exceptionally bright this evening.

Sunday 14 April Off to an early start, continuing north-east. A stop was made at the old mining centre of Kurnalpi, where several tins marked "Central Queensland Meat Export Company 1893" were located. This was the same year that gold was found in Kalgoorlie. A saucepan made from a jam tin with a riveted handle, demonstrated the resourcefulness of the pioneers. At this stop, Laurie noticed that the OKA had dispensed with its spare wheel and Andy and Warwick returned to retrieve it.

The expedition was soon halted by processionary caterpillars and there was general agreement that rain could be expected in 19 days. Eight Wedge-tailed Eagles and their attendant Crows were observed feeding on a carcase. A lunch stop was made at Lake Rebecca, where a Ground Cuckoo-shrike was sighted.

After lunch, we turned east travelling through mulga country and then on to the edge of the sand-sheet of the Great Victoria Desert. Gail attempted to doze off, but was awoken by frequent cries of "mistletoe" or "youngiana" (referring to the massive red or yellow flowers of the mallee *Eucalyptus youngiana*) or water flying through the window as Tom negotiated pools left by Cyclone Olivia.

Close to the first camp near Ponton Creek there were many new and interesting plants, particularly Marble Gums (*Eucalyptus gongylocarpa*), the Swordfish Banksia (*Banksia elderiana*) and the tall grass-tree, *Xanthorrhoea thorntonii*. At the Ponton camp, David Pearson and Andy Williams were waiting, having arrived a day earlier to set up camp and open some pitfall and Elliott traps.

Dinner around the fire and stretching out on swags under Marble Gums and a brilliant starlit sky rounded off a long day.

Monday 15 April We arose to the dawn chorus of Pied Butcherbirds, Port Lincoln Ringnecks, Magpies and Red Wattlebirds. Overnight Tom had brewed up a formidable porridge in Kaye's "Wonder Cushions" and this was eagerly devoured.

The group designated for kitchen duty checked nearby pitfall traps with Andy Williams, finding a Hairy-footed Dunnart and a Wongai Ningai. The Elliott traps captured a lone Spinifex Hopping Mouse. The remainder of the group set out to establish pitfall traps and fences at new sites, PC2 (open Marble Gum woodland) and PC3 (low mulga woodland).

After lunch, the kitchen group used rakes to search for cryptic burrowing skinks in the spinifex around camp. Whilst they were rewarded with only 3 skinks, the find of a magnificent *Lerista desertorum* made the afternoon a success. The other groups completed their pitfall grids. One then set out to a distant breakaway (the small abrupt cliff along the edge of an old plateau surface) and set out 48 Elliott traps to sample the mammal fauna along the breakaway top, on the rocky slope and in the valley below. Daphne and assistants collected plants in the samphire shrubland at site PC4 including a new species of *Tecticornia*.

On top of preparing a substantial morning tea of damper, Tom prepared a wonderful dinner of Thai chicken followed by apple crumble. Yum!

Tuesday 16 April After a quick breakfast we set out to check all the newly established traps and Elliotts. We reaped the rewards of the previous day's labour with the capture of many small mammals including; 6 Pygmy Possums, 3 Hairy-footed Dunnarts, 6 introduced House Mice, 2 Sandy Inland Mice and numerous lizards. These were identified, weighed and measured before release back at their sites of capture.

A visit by one group to Mavis Rock resulted in the discovery of a feral cat skull and the collection of some attractive plant specimens such as *Pimelea* sp., *Melaleuca pulchella*, *Hakea preissii* and *Homalocalyx thryptomenoides*, amongst others. On the return trip to camp, a herd of 36 goats was seen as well as a newly described species of *Dampiera* and a rare white-flowered *Eremophila pustulata*.

Meanwhile, another group visited the Breakaway site and observed a Quail-thrush, a Southern Whiteface, a Wedge-tailed Eagle, a flying Bustard and clocked an Emu family travelling at 40 km/h.

In the afternoon, everyone took part in a search for signs of Malleefowl by walking line abreast for about 1 km through open Marble Gum woodland with occasional scrubby patches. A total area of about 100 ha was searched without luck.

Gail made particular note of the evening meal in the diary; remembering with fondness the roast beef, stuffed pumpkin and roast potatoes served with light cream and garlic chives and gravy. A hot shower was also appreciated, complete with sweeping views of woodland around the camp.

Wednesday 17 April A quick breakfast was followed by various groups heading off to check traps. The warm night led to the capture of more reptiles. At the mulga site (PC3), a legless lizard and a burrowing frog (*Neobatrachus kunapalari*) were captured. The Breakaway Elliott traps caught lots of House Mice.

Pollen traps placed in the breakaway caves alongside the ancient remains of Stick-nest Rat nests were collected, as part of an on-going study of techniques to detect vegetation change. The desiccated remains of an Echidna were found by Bill and that night were placed under Andy Chapman's pillow for his sleeping comfort by an unknown person! It was later incorporated into a plaque presented to David Pearson on the final night.

The samphire site (PC4) traps were full of House Mice. At Mavis Rock, a range of birds were observed including Little Falcon, Red-capped Robin, Hooded Robin and Chestnut-rumped Thornbills and a lone butterfly was captured. On the return trip Andy Williams was able to catch a Gould's Sand Goanna (*Varanus gouldii*).

The kitchen duty group walked down to Ponton Creek and then upstream to a lake ("Lake Landscape") remaining from the floods associated with Cyclone Bobby. They observed many different species of waterbirds and some indulged in a refreshing dip after wading through deep mud!

Thursday 18 April An especially early start was made so that traps could be checked and closed before the move to our next camp at Queen Victoria Spring. We were divided into three groups - one to check and cap pitfalls at samphire (PC4), one to collect Elliott traps from the samphire and the Breakaway, and one to release the Sand Goanna.

The other two groups checked and capped traps at PC1, PC2, PC3 and collected up Elliotts in the nearby mulga patch. They then commenced the task of packing up camp.

The overall catch of animals was disappointing at the distant trap sites, dominated by a dozen House Mice. A GPS (global positioning system) fix was obtained for the Malleefowl mound located by Gail. The goanna release proved exciting as it had become entangled in the bag and threatened to escape with it, however, quick reflexes from Andy Chapman prevented its departure and it was cut free. The trap sites close to camp yielded better captures with 3 Hopping Mice, a Pygmy Possum and 3 different species of *Ctenotus* skinks.

A frantic packing session ensued and we finally left for Queen Victoria Spring at 1230 h. The route took us north up old uranium exploration lines (put in during mid-1980s) to the more salubrious dimensions and surface of the "PNC Highway", an unsealed road providing access to Mulga Rock exploration camp (Pan-Nuclear Corporation). Just north of Queen Victoria Spring Nature Reserve, David and Andy Williams observed a Striated Grasswren darting along the side of the road. We stopped for lunch at Argus Corner, the junction where we turned south down gridlines towards Queen Victoria Spring.

En route we stopped to look at the fire study plots of David Pearson which have been studied since 1986. This site was rich in mammals including rare Sandhill Dunnarts and Mulgaras. Andy Chapman and Warwick stopped along the way to open some pit traps on a sand dune about 5 km east of Queen Victoria Spring (QV4).

The last few kilometres before the Spring was slow going and required some pruning of overhanging branches to allow the OKA to pass through unscathed. We finally passed through the impressive "gates" to the Spring, two enormous grass-trees (*Xanthorrhoea thorntonii*) standing over 8 m high, and set up camp at 1730 h. Two hours later we were happily ensconced around the fire enjoying a superb stir-fry followed by prunes whipped up by Tom. Curious dingoes appeared to appreciate the company and were seen around the perimeter of the camp.

Friday 19 April We awoke to a new dawn chorus dominated by the whistles of Grey Currawongs and Daphne's distinct cackle (according to Bill, the day's diarist!). Following breakfast, we had a historical tour of the Spring area (really a claypan that occasionally fills with water). The Aboriginal well (Munyura) which was used by many European exploring parties held some water and the Spring itself had a milky 10 cm covering of water full of tadpoles.

Comparisons with old photos showed how the vegetation around the Spring was now much more dense than previously, probably due to the cessation of Aboriginal burning and their pulling up of *Acacia jennerae* shrubs to obtain bardy grubs from the roots. We sighted 2 Collared Sparrowhawks and stopped to look at the remains of a Marble Gum carved by Dr Elliot of the Elder Scientific Exploring Expedition in 1891 and a memorial post erected by the grandsons of Victor Streich, the Expedition's geologist and meteorologist.

We then split into a number of groups. One travelled over to check traps at QV4 and put out a line of Elliott traps. They found 5 Sandy Inland Mice, a *Ningaui* (a very small insect-eating marsupial) and a House Mouse in the traps. The native and introduced mice were sometimes hard to distinguish, but the House Mouse has a notch on the rear of its incisor, a grey coat with little differentiation in colour between the upper and lower surfaces and a distinctive mousy smell! In contrast, the Sandy Inland Mouse (*Pseudomys hermannsburgensis*) has no incisor notch; is orange-brown on the upper coat with a white underbelly and no strong smell.

The other groups opened traps near Camp (QV2), put out Elliott traps and collected botanical specimens. After identifying and measuring animals, we had lunch and then set about the arduous tasks of collecting some firewood, digging toilet pits (our talented hole-digger Warwick ensured it was a "long drop") and constructing a shower cubicle. An opportunistic find of a small dragon lizard (*Ctenophorus clayi*) was made at camp.

Traps were checked again in the afternoon and caught a number of lizards, particularly the striped and spotted *Ctenotus schomburgkii*. Daphne and helpers collected a range of interesting plant specimens including *Senna* spp., *Banksia elderiana*, *Alyxia buxifolia* and Bitter Quandong (*Santalum murrayanum*). A cloud mass developed to the north-west, threatening rain.

In the evening, a mist net was stretched out alongside Queen Victoria Spring in an effort to catch bats - a lone *Nyctophilus geoffroyi* was captured. Tarps and tents were set up prior to the arrival of the first drops of rain. After yet another superb dinner, steady rain set in.

Saturday 20 April An overcast and grey morning greeted the soggy group at 0600 h the next day. Breakfast was cooked in continuing drizzle and then we set off to check the far-flung traps. Trap success was poor amongst the Elliotts, but the weather did not prevent good captures in the pitfalls. The rain resulted in the capture of 2 burrowing frogs (*Neobatrachus kunapalari*) which looked strangely out of place on a desert sand-dune. Other captures were a Hopping Mouse, several House Mice, a Hairy-footed Dunnart, a Knob-tailed Gecko and a number of interesting invertebrates which Ralph collected for the Museum. The capture of a giant cockroach (*Geoscaphes robustus*) at QV3 indicated this species may penetrate the sand-dunes further than has been supposed.

The weather cleared during the morning lifting spirits and we enjoyed a discussion of the techniques of identifying the various small mammals and reptiles in the area. Bill's lost belt was eventually located underneath Gail's bed. An experimental plan was hatched to leave all belts unattended overnight to study their behaviour and determine where they got to by the following morning.

After lunch, we headed off to climb a large sand-dune, Streich Mound, to the east of Queen Victoria Spring. We drove along gridlines part of the way and then walked the remainder over a rolling countryside of dunes. It was a very pleasant walk with impressive scenery and interesting plants, including several rare species such as *Grevillea secunda*. The first of the group reached the summit of the Mound 33 minutes after leaving the vehicles - others of us took considerably longer, distracted by the many sights along the way. David found the carcass of a Marsupial Mole and was overjoyed. It proved to be a significant range extension for the species, the nearest other known localities being near Warburton and over the border in South Australia.

On top of Streich Mound, Andy Williams pursued a number of butterflies "hill-topping" including a Silky Azure and graceful Wood Whites. The view from Streich Mound stretched in all directions - to the north the rolling dunefields of the Great Victoria Desert disappeared over the horizon; to the east the relief was more subdued as the dunes gave way to the flat limestone plain of the Nullarbor; to the south the dunes merged into an undulating plain; and to the west, the dunes terminated in an untidy jumble beside the valley carved out by Ponton Creek. On its far bank, a different landscape formed by granite exposures and associated weathered soils was visible.

On our return, an enormous nest full of pugnacious 20-22 mm long ants generated intense interest and some consternation when one of its inhabitants decided to latch onto Jennifer's boot.

The evening was clear and cool after some good (and indifferent) singing around the campfire, we retired to bed early in readiness for a big day tomorrow packing up the gear and returning to Kalgoorlie.

Sunday 21 April The night was indeed chilly and we arose early to have breakfast and begin packing. Tom took several photographs of the group beside Queen Victoria Spring with his own and seemingly hundreds of other cameras. We then split into four groups, with three to close traps and to collect up Elliots and the fourth to help Tom pack up.

By 1000 h the traps had been closed and we were ready to depart. We slowly returned along gridlines to the PNC Highway, having to remove some overhanging limbs. We lunched at Argus Corner and then set off for Kalgoorlie. The road proved a little tricky after the recent rain with some deep puddles, but these were negotiated without incident. At a lake near Pinjin Station we had a breather and observed the waterbirds at this scenic spot. We continued on to Kalgoorlie with another stop on sunset to take in a magnificent spectacle of the sun sinking through a bank of feathery clouds over the rolling hills near Kurnalpi. We reached Kalgoorlie at around 1800 h and appreciated a hot shower before dinner.

The dinner at the Tower Hotel was excellent, although without the same charm of the gastronomic delights that Tom had whipped up on the campfire. Andy Chapman awarded various pitfall lid awards for bravery and other acts of human sacrifice during the Expedition and we finally crept away to put tired heads on pillows.

Monday 22 April The OKA was packed by 0800 h and after farewells to the people leaving us in Kalgoorlie; Jennifer, Glynne, Andy C. and Warwick, we departed for a brief tour of Hay St. The group continued west through Coolgardie bound for Perth. A stop was made at Yellowdine for ice-cream and other sweet indulgences.

More singing as the OKA hurtled towards Perth, before it caught up with David and Andy Williams who were gorging themselves with pies at the Merredin bakery. Lunch was in a nearby park at Merredin. At Tammin, the OKA turned off and took a different route home, passing through a range of different country and farmland. Just west of the junction of Badja and Goldfields Roads, a grove of long unburnt Blackboys (*Xanthorrhoea preissii*) were discovered. In York, a brief stop was made for telephone calls to organize lifts and then on to Perth, reaching UWA Extensions about 1800 h.

LIST OF PARTICIPANTS

Andy Chapman	Tom Keating	Ralph Horley	Virginia Morrison
David Pearson	Glynne Dyer	Diana Schupp	Kath Fisher
Andy Williams	Bill Hawthorn	Beryl Chapman	Daphne Edinger
Jennifer White	Kaye Vaux	Warwick Roe	Laurie Anderson
Gail White			

APPENDICES

TRAPPING DATA

Each trapping grid consisted of a 50 m aluminium flywire fence approximately 35 cm high with pitfalls spaced at 10 m intervals. Two types of pitfalls were used; 320 mm diameter buckets 400 mm deep and PVC pipes 160 mm in diameter and 600 mm deep. Although data for the comparative effectiveness of these two pitfalls are lacking, there is general consensus that hopping mice and perhaps some other mammals can escape from buckets. However, buckets appear to be more effective for catching some larger mammals and reptiles such as snakes.

Metal collapsible box traps (Elliott traps) were also used at several sites and were usually laid out in lines of 20-25 about 20 m apart.

Trapping sites near Campsite 1: Ponton Creek

PC1: 30 km NW of Queen Victoria Spring

30° 16' 11" S, 123° 18' 53" E

Eucalyptus gongylocarpa woodland with scattered shrubs on yellow-orange sands. Understorey of *Plectrachne ?desertorum*. Scattered shrubs of *Acacia hemiteles* and *Acacia helmsiana*.

PC2: 29 km NW Queen Victoria Spring

30° 16' 15" S, 123° 19' 25" E

Tall mallee shrubland of *Eucalyptus optima*, *E. rigidula* and *E. concinna* over hummock grass understorey of *Triodia scariosa* and *Plectrachne ?desertorum* on orange clayey sand. Scattered shrubs, predominantly *Acacia hemiteles*.

PC3: 32 km NW Queen Victoria Spring

GPS fix not available

Low mulga woodland of *Acacia aneura* var. *latifolia* with a scattered understorey of *Eremophila* spp. (mainly *E. latrobei*) and dead ephemerals. Soil a crusting clay, with sand content decreasing, and clay content increasing with depth. Soil surface covered with lichen crust and littered with fallen dead timber.

PC4: 25.5 km WNW Queen Victoria Spring

30° 22' 35" S, 123° 16' 38" E

Low shrubland of salt-tolerant shrubs, *Halosarcia* sp., *Cratystylis subspinescens* and *Atriplex* sp. with an understorey of *Zygophyllum* spp., *Calotis* sp. and *Sclerolaena diacantha* on alkaline orange-brown clay.

Breakaway: 31.5 km NW Queen Victoria Spring

30° 19' 43" S, 123° 16' 00" E

Low lateritic breakaway with colluvium valley below. The vegetation on the breakaway plateau (top) consisted of *Eucalyptus celastroides* low open woodland or *Acacia aneura* var. *latifolia* low woodland with a diverse but scattered shrub layer of *Alyxia buxifolia*, *Santalum spicatum*, *Prostanthera althoferi* and *Eremophila latrobei* with scattered ephemerals. The breakaway debris slopes had open woodland of *Eucalyptus celastroides* and *E. salubris* (gimlet) with a scattered understorey of *Frankenia* spp. and *Atriplex bunburyana*. The valley was vegetated mainly by *Atriplex bunburyana* and *Frankenia* spp. shrubland with occasional groves of *Eucalyptus salubris*.

Trapping sites near Campsite 2: Queen Victoria Spring

QV 1: 500 m NW of Queen Victoria Spring

30° 25' 42" S, 123° 34' 24" E

Not trapped during this Expedition.

QV 2: 1.5 km E of Queen Victoria Spring

30° 25' 4" S, 123° 35' 08" E

Dunefield of steep yellow dunes with broad swales with orange clayey sands. Vegetation of *Eucalyptus gongylocarpa* and *Allocasuarina helmsii* open woodland and shrubland on dunes with understorey of shrubs; *Pityrodia* and *Opercularia* with sparse *Plectrachne desertorum*. Swale with open woodland of *Eucalyptus gongylocarpa* and *Callitris* with patchy understorey of *Banksia elderiana*, *Xanthorrhoea* and *Plectrachne* sp. Pitlines are situated at the base of the dune, on the slope and the crest. 25 Elliott traps were laid out in the swale.

QV3: 5 km E of Queen Victoria Spring

30° 25' 52" S, 123° 35' 53" E

Dunefield of steep yellow dunes with very broad yellow sand swales. Vegetation on dunes of open woodland of *Eucalyptus gongylocarpa* and *Callitris* and shrubland of *Grevillea* sp., *Banksia elderiana*, *Conospermum toddii* and other shrubs. Understorey of *Plectrachne desertorum*. Broad swale vegetated by mallee shrubland of *Eucalyptus concinna*, *E. mannensis* and other mallees with occasional emergent *E. gongylocarpa*. Pitlines are situated on dune slopes and crest.

QV4: 1.9 km S of Queen Victoria Spring

30° 26' 46" S, 123° 33' 57" E

Area of *Eucalyptus optima* woodland on red sandy clay soils. Understorey consisted of tall *Melaleuca uncinata* shrubs and *Triodia scariosa*. This site was not pit-trapped, but was sampled using a line of 25 Elliott traps.

ANNOTATED LIST OF MAMMALS CAPTURED

The listing below includes captures in pitfalls and in Elliott traps. The sex of each is listed, unless it was not or could not be determined ("not det."); together with the weight and any interesting comments about reproductive condition.

Hairy-footed Dunnart (*Sminthopsis hirtipes*)

PC1	15/4/96	male	13.5 g	
	16/4/96	female	17.0 g	not breeding
	17/4/96	recapture		
		female	19.0 g	not breeding
QV2	20/4/96	female	13.0 g	not breeding
	21/4/96	recapture		
		male	12.7 g	

Little Long-tailed Dunnart (*Sminthopsis dolichura*)

QV3	20/4/96	male	11.5 g	
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Ride's Ningau (Ningau ridei)

PC1	15/4/96	male	6.5 g	
	17/4/96	male	4.0 g	
		female	5.5 g	pouch indistinct
PC2	17/4/96	male	6.6 g	
QV3		male	6.8 g	
	19/4/96	male	6.0 g	
	20/4/96	male	6.3 g	
		male	7.0 g	
		female	5.5 g	pouch indistinct

Western Pygmy Possum (*Cercartetus concinnus*)

PC1	16/4/96	juv. male	3.5 g	
		juv. female	3.5 g	

		juv. male	3.5 g	
	17/4/96	juv. male	recapture	
	18/4/96	male	10.5 g	
PC2	16/4/96	male	12.5 g	
PC4	16/4/96	male	10.0 g	
		female	13.0 g	pouch undeveloped
QV2	20/4/96	female	14.0 g	3 pouch young
		male	11.0 g	
		male	16.0 g	
	21/4/96	female	not det.	3 hairless pouch young
QV3	20/4/96	male	9.8 g	
		male	13.5 g	
		female	11.3 g	pouch undeveloped
	21/4/96	male	9.5 g	
		female	not det.	3 hairless pouch young

Spinifex Hopping Mouse (*Notomys alexis*)

PC1	15/4/96	male	30.5 g	Elliott trap (#3)
	17/4/96	not det.	27.0 g	Elliott (#2)
	18/4/96	juv. female	23.0 g	Elliott (#25)
		female	31.0 g	Elliott (#11); pregnant
		male	not det.	Elliott (#15)
QV2	20/4/96	female	39.5 g	Elliott (#21)
	21/4/96	female	31.5 g	Elliott (#8)
QV3	20/4/96	female	30.0 g	Pit B4

Sandy Inland Mouse (*Pseudomys hermannsburgensis*)

PC1	16/4/96	male	11.5 g	
	17/4/96	juv.	escaped	Elliott (#9)
PC2	17/4/96	male	10.0 g	
PC4	16/4/96	male	13.5 g	
	18/4/96	male	14.0 g	
QV2	21/4/96	male	10.0 g	
QV3	19/4/96	female	10.5 g	
		male	11.5 g	
		male	10.5 g	
		female	13.5 g	
		male	10.0 g	
		female	9.0 g	dead, kept as a specimen
	20/4/96	male	12.0 g	
		male	10.5 g	
QV4	20/4/96	female	14.5 g	Elliott (#2)

House Mouse (*Mus musculus*) *introduced

PC1	16/4/96	male	14.5 g	Elliott (#25)
		juv. male		Elliott (#24)
		3 more		Elliotts (#1, 2, 6)
	17/4/96	female	14.0 g	Elliott (#21)
		male	11.0 g	Elliott (#5)
	18/4/96	male		Elliott (#21)
		male		Elliott (#17)
PC4	16/4/96	male	13.5 g	Elliott
		male	13.5 g	Elliott
		male	10.5 g	Elliott
		male	7.5 g	Elliott
		female	9.0 g	Elliott
	17/4/96	female		Elliott (#25)
		male		Elliott (#24)
		?		Elliott (#17)

	18/4/96	female	16.5 g	Elliott (#23)
		male	8.5 g	Elliott (#22)
		male	10.0 g	Elliott (#22)
		male	15.5 g	Elliott (#18)
		male	9.5 g	Elliott (#8)
Breakaway Plateau	17/4/96	4 individuals		Elliotts (#6x2, 12, 18)
	18/4/96	escaped		Elliott (#1)
		male	20.5 g	Elliott (#8)
		female	10.0 g	Elliott (#14)
		male	16.5 g	Elliott (#17)
		male	14.5 g	Elliott (#21)
Breakaway Valley	17/4/96	2 individuals		Elliotts (#6, 19)
	18/4/96	female	15.0 g	Elliott (#20)
Mulga Elliotts	17/4/96	female	14.0 g	Elliott (#5)
	18/4/96	not det.		Elliott (#10)
		not det.		Elliott (#16)
QV2	20/4/96	female		Pit D4
		male		Elliott (#12)
		male		Elliott (#18)
	21/4/96	not det.		Elliott (#21)
QV3	19/4/96	male	9.5 g	Pit D1
	21/4/96	male	14.0 g	Elliott (#3)
QV4	20/4/96	not det.		Elliott (#4)
		not det.		Elliott (#18)

NOTES ON OTHER MAMMALS DETECTED

Echidna Tachyglossus aculeatus

near Ponton Camp	16/4/96	diggings
Breakaway	17/4/96	carcase found

Western Grey Kangaroo Macropus fuliginos

Ponton Camp	14-17/4/96	several seen including one with choroid blindness
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Euro Macropus robustus

near Mavis Rock	15/4/96	seen in large area of burnt mulga (fire in 1975)
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Red Kangaroo Macropus rufus

near Mavis Rock	15/4/96	3 seen in large area of burnt mulga (fire in 1975)
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Dingo Canis familiaris

Ponton Camp	13/4/96	tracks
On gridline just east of breakaway	15/4/96	3 pups seen running along the road in the early evening

Feral Cat Felis catus

Ponton Camp	14/4/96	tracks
East of breakaway on gridline	15/4/96	tracks

European Fox Vulpes vulpes

PC4	15/4/96	tracks in samphire shrubland
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Rabbit				
PC4	15/4/96			
near Mavis Rock	15/4/96			tracks in large area of burnt mulga (fire in 1975)
Queen Vic. Sp.	19/4/96			abundant tracks, burrows and dung piles around the Spring
Feral Goat				
Breakaway	15/4/96		2 seen	
W side of Ponton			16/4/96	herd of 36
Creek on grid				
Feral Camel				
Ponton Camp	15/4/96		tracks	
PC2			tracks	
PC4			tracks	

ANNOTATED LIST OF AMPHIBIANS CAPTURED

Neobatrachus kunapalari

PC3	17/4/96	8.9 g	Museum specimen
QV2	20/4/96		body length 34 mm
			body length 37 mm
QV3	20/4/96	10.0 g	

ANNOTATED LIST OF REPTILES CAPTURED

Skinks

Ctenotus atlas

PC1	18/4/96	juv.	1.0 g
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Ctenotus quattuordecimlineatus

PC1	18/4/96	juv.	1.0 g
QV3	21/4/96	not det.	2.0 g

Ctenotus schomburgkii

Ponton Camp	15/4/96	juv. male	0.75 g	raked up
	15/4/96	observed at campsite		
PC1	16/4/96	juv.	1.6 g	
		juv. male	1.5 g	
	17/4/96	juv.	0.5 g	killed by ants
	18/4/96	male	1.0 g	
		female	2.0 g	
PC3	17/4/96	juv.	0.5 g	
		female	1.5 g	
QV2	19/4/96	not det.	2.2 g	
QV3	21/4/96	not det.	1.8 g	
QV4	20/4/96	several observed along Elliott trap line 1030-1045 h		

Lerista desertorum

Ponton Camp	15/4/96	female	3.0 g	raked up; Museum specimen
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Menetia greyii

PC3	16/4/96	juv.	0.5 g
PC4	18/4/96	juv.	0.4 g

Morethia butleri

Ponton Camp	15/4/96	juv.	not rec.	raked up; Museum specimen
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Tiliqua rugosa
On grid west 15/4/96 observed in mallee shrubland
of Ponton Creek

Geckoes

Gehyra purpurascens
Ponton Camp 15/4/96 found sheltering in trapping gear left from last visit

Gehyra variegata
Ponton Camp 15/4/96 caught fleeing collected firewood

Nephurus laevisissimus
QV2 20/4/96 juv. 1.8 g

Heteronotia binoei
PC3 17/4/96 female 3.5 g

Pygopods

Lialis burtonis
PC1 16/4/96 juv. 3.0 g
PC3 16/4/96 juv. 2.4 g

Dragons

Ctenophorus clayi
Queen Vic. 19/4/96 male 3.8 g caught by hand;
Camp Museum specimen

Ctenophorus cristatus
1 km E 14/4/96 observed in mallee
Ponton Camp shrubland
PC3 16/4/96 juv. 1.6 g Museum specimen

Ctenophorus isolepis
Ponton Camp 15/4/96 Observed
QV3 20/4/96 juv. male 2.5 g Museum specimen

Diporiphora aff. winneckii
QV2 21/4/96 female 3.0 g Museum specimen

Moloch horridus
Ponton Camp 17/4/96 not det. 23.0 g caught by hand
QV2 19/4/96 not det. 41.0 g caught beside trap

Pogona minor
PC2 15/4/96 one seen

Snakes

None

ANNOTATED LIST OF BIRDS

Australian Magpie
Seen at PC3 (15/4/96).

Australian Raven
near Ponton Camp (16/4/96).

Australian Shoveller

Two pairs at "Lake Landscape" (30° 16' 58" S, 123° 18' 16" E) near the Ponton Camp (17/4/96).

Black-faced Cuckoo-shrike

Common in a variety of vegetation types, particularly in open woodland surrounding Ponton Camp (15 & 16/4/96), Breakaway (15/4/96), Queen Victoria Spring (18 & 19/4/96).

Black-faced Woodswallow

Four seen on gridline west of Ponton Creek (16/4/96) and at PC4 (17/4/96).

Black Swan

One group of nine on "Lake Landscape" (17/4/96).

Boobook Owl

Heard overnight at Ponton Camp (15 & 16/4/96); two seen during the day during mallee fowl search south of Ponton Camp (16/4/96).

Brown Falcon

Seen at Mavis Rock (16/4/96).

Brown Honeyeater

Occasional in shrubland at Mavis Rock (16/4/96), Queen Victoria Spring (19/4/96).

Bustard

One seen on gridline west of Ponton Creek en route to Mavis Rock (16/4/96 and at same spot 17/4/96).

Chestnut Quail-thrush

One seen near Mavis Rock (14/4/96).

Chestnut-rumped Thornbill

Common in tall shrubland around Mavis Rock (16 & 17/4/96) and at Breakaway (16/4/96).

Collared Sparrowhawk

Two seen at Queen Victoria Spring (19/4/96).

Common Bronzewing

Seen in all parts of Reserve singly or small groups feeding; Mavis Rock (15/4/96), congregations around Queen Victoria Spring in early morning and late afternoon (18 & 19/4/96).

Coot

One group of 6 on "Lake Landscape" (17/4/96).

Crested Bellbird

Heard calling at Mavis Rock (15 & 16/4/96) and Ponton Camp; seen and heard at PC3 (15/4/96) and gridline west of Ponton Creek (16/4/96).

Emu

Tracks and droppings common around Mavis Rock (15/4/96), PC4 and gridline west of Ponton Creek (16/4/96).

Galah

Seen at Mavis Rock (15 & 16/4/96) and gridline west of Ponton Creek (16/4/96). A few pairs came in to drink at Queen Victoria Spring most days (19-21/4/96).

Grey Butcherbird

Abundant at Ponton Camp (15/4/96), Breakaway (15 & 16/4/96), Mavis Rock (15/4/96), PC3 (16/4/96), gridline west of Ponton Creek (16/4/96) and Queen Victoria Spring (19-21/4/96).

Grey Currawong

Common around Ponton Camp (15 & 16/4/96), Mavis Rock (15/4/96), PC3 (16/4/96), gridline west of Ponton Creek (16/4/96) and Breakaway (16/4/96).

Grey Shrike-thrush

Seen at Mavis Rock (17/4/96) and Queen Victoria Spring (19/4/96).

Grey-fronted Honeyeater

Several in shrubland near Queen Victoria Spring (19/4/96).

Grey Teal

One flock of c.70 birds on "Lake Landscape" (17/4/96).

Hoary-headed Grebe

One group of 6 on "Lake Landscape" (17/4/96).

Hooded Robin

Occasional at PC3 (15/4/96), Mavis Rock (17/4/96).

Horsfield Bronze-cuckoo

Seen at Mavis Rock (15/4/96) and PC3 (15/4/96).

Inland Thornbill

Observed at PC3 (16/4/96), PC4 (17/4/96) and Mavis Rock (17/4/96).

Jacky Winter

Occasional at PC4 (17/4/96) and Mavis Rock (17/4/96).

Little Crow

Common at Ponton Camp (15-17/4/96), Mavis Rock (16/4/96), gridline west of Ponton Creek (16/4/96) and Breakaway (16/4/96).

Magpie-lark

One at "Lake Landscape" (17/4/96).

Malleefowl

Long unused mound found on the west side of Ponton Creek (30° 21' 52" S, 123° 14' 14" E).

Mistletoe-bird

Common throughout Reserve. Frequently heard at Ponton Camp (15-17/4/96); seen at PC3 (15/4/96); PC4 (15 & 17/4/96) and prominent in mistletoes at the Queen Victoria Spring Camp.

Mountain Duck

One group of 5 on "Lake Landscape" (17/4/96).

Owlet Nightjar

Heard at Ponton Camp (15/4/96).

Pallid Cuckoo

Seen at PC4 (17/4/96).

Pied Butcherbird

Commonly seen and heard calling throughout the Reserve. Recorded at Ponton Camp (15-17/4/96), PC3 (15/4/96) and gridline west of Ponton Creek (16/4/96).

Pink-eared Duck

One pair at "Lake Landscape" (17/4/96).

Port Lincoln Parrot

Very common around Ponton Camp (15-17/4/96); PC1 (16/4/96), PC3 (15/4/96), PC4 (17/4/96), Breakaway (15 & 16/4/96) and gridline west of Ponton Creek (16/4/96).

Purple-crowned Lorikeet

One flock of 4 birds flew over PC3 (15/4/96).

Red-capped Robin

Common in shrubland around Mavis Rock (15-17/4/96).

Red Wattlebird

Common in mallee and open woodland at Ponton Camp (15-17/4/96), PC2 (15/4/96), PC3 (16/4/96), Mavis Rock (15/4/96) and Breakaway (15 & 16/4/96).

Redthroat

Heard and seen near Queen Victoria Spring Camp (19 & 20/4/96).

Regent Parrot

Small flocks seen at Ponton Camp (15/4/96), PC2 (15/4/96) and area searched for malleefowl south of Ponton Camp (16/4/96).

Rufous Whistler

Occasional at PC3 (15/4/96), gridline west of Ponton Creek (16/4/96) and Queen Victoria Spring (19/4/96).

Singing Honeyeater

Abundant at Mavis Rock (16/4/96) and gridline west of Ponton Creek (16/4/96).

Spiny-checked Honeyeater

Very common in shrubland and woodland communities. Seen at Ponton Camp (15-17/4/96), Breakaway (15 & 16/4/96), PC3 (15/4/96), PC4 (16/4/96), Mavis Rock (15 & 17/4/96) and gridline west of Ponton Creek (16/4/96).

Southern Whiteface

PC4 (17/4/96) and Breakaway (16/4/96).

Spotted Nightjar

One seen at PC3 (15/4/96).

Striated Grasswren

One seen on side of road just north of Queen Victoria Spring (18/4/96).

Striated Pardalote

Frequently seen and heard; including Ponton Camp (15-17/4/96), PC2 (15/4/96), PC3 (15/4/96), PC4 (15 & 17/4/96) and Breakaway (16/4/96).

Tawny Frogmouth

Seen near Ponton Camp (16/4/96).

Wedge-tailed Eagle

Observed amongst dead trees in the bed of Ponton Creek just west of Ponton Camp (15/4/96) and Breakaway (16/4/96).

Weebill

Common around Ponton Camp (15-17/4/96), PC2 (15/4/96), PC3 (16/4/96), PC4 (17/4/96) and Breakaway (16/4/96).

White-browed Babbler

Common at Mavis Rock (15/4/96).

White-fronted Honeyeater

Common in tall shrubland and mallee at Mavis Rock (15/4/96).

White-rumped Miner

Common around Ponton Camp, PC3 (15/4/96), PC4 (15/4/96).

Willy Wagtail

Observed at PC4 (15/4/96).

Yellow-tailed Thornbill

Common in open areas at Mavis Rock (15/4/96).

NOTES ON BUTTERFLIES COLLECTED IN THE RESERVE - Andy Williams

Records of the butterflies found at Queen Victoria Spring Nature Reserve in October 1995 have already been published. Fewer species were encountered on our return trip in the autumn of 1996. However, some specimens of interest were observed or collected, and these records are summarized below.

SPECIES RECORDED

PIERIDAE	
Wood White	<i>Delias aganippe</i>
NYMPHALIDAE	
Australian Painted Lady	<i>Vanessa kershawi</i>
LYCAENIDAE	
Silky Azure	<i>Ogyris oroetes</i>
Amaryllis Azure	<i>Ogyris amaryllis</i>
Icilius Blue	<i>Jalmenus icilius</i>
Miskin's Blue	<i>Theclinesstes miskini</i>

Particular points of interest

Six species of butterflies were recorded at Queen Victoria Spring Nature Reserve in April 1996. Five of these, the Wood White, Australian Painted Lady, Amaryllis Azure, Icilius Blue and Miskin's Blue were recorded on the first *LANDSCOPE* Expedition to this locality in 1995. The Silky Azure, however, is a new record for the Reserve, and the fact that it flies at this time of the year is of interest.

Wood White *Delias aganippe*

Several males were observed hilltopping on Streich Mound. Others were also captured and released flying around high sand dunes in the vicinity of Queen Victoria Spring.

Australian Painted Lady *Vanessa kershawi*

A freshly emerged specimen was observed on Streich Mound.

Silky Azure *Ogyris oroetes*

Numbers of these butterflies were observed flying around flowering mistletoes *Amyema miquelii* on the mature Marble Gums at Queen Victoria Spring. Pupae attended by small ants were found under loose bark on the Marble Gums, and two of these emerged as adult females. This species is widespread but generally uncommon in the arid areas. Its flight times are unpredictable and may well be related to local weather conditions. A male was caught at Streich Mound, also on flowering *Amyema miquelii* growing on a Marble Gum.

Amaryllis Azure *Ogyris amaryllis*

Active around the flowering mistletoe *Amyema fitzgeraldii* growing on acacias at Mavis Rock.

Icilius Blue *Jalmenus icilius*

Only one specimen was collected, at Mavis Rock.

Miskin's Blue *Theclinesstes miskini*

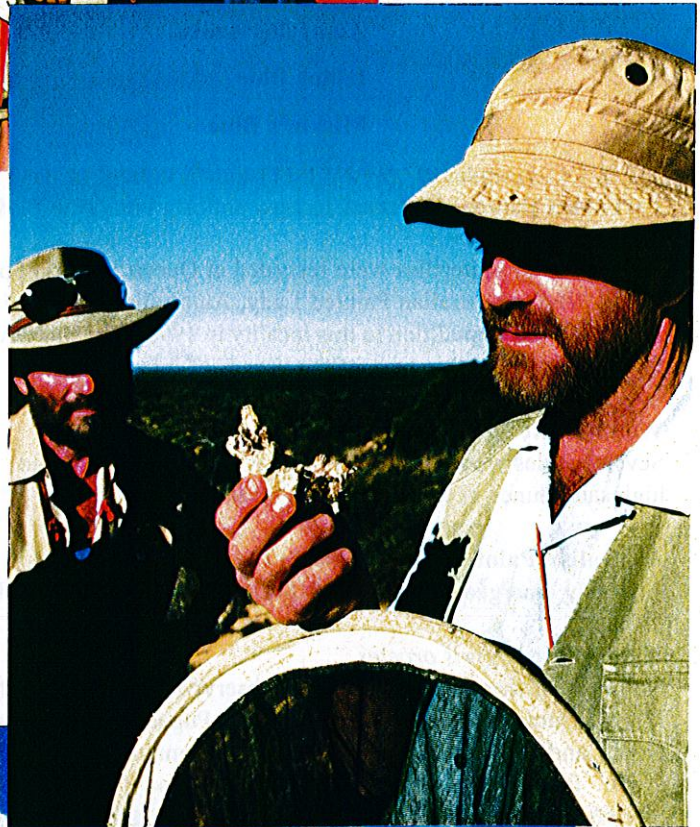
A few of these lycaenids were seen around low shrubs in the sheltered area below the breakaway.

Fourteen butterfly species were recorded in Queen Victoria Spring Nature Reserve in spring 1995, but only six species were recorded in autumn 1996.



The ladies at Streich Mound, from left to right, Diana Schupp, Virginia Morrison, Beryl Chapman, Gail White, Daphne Edinger and Glynne Dyer
Photo: Tom Keating

Andy Williams with Marsupial Mole remains
Photo: Tom Keating



Lake Rebecca
Photo: Tom Keating

