

**The first of two pages of hand-written notes (31/7/1997)
by JL saying, inter alia:**

- **‘Alan [ACI] to get evapn [evaporation] map ... to determine evapn rates at [Lakes] Ballard, Barlee & Marmion in 1995’;**
- **‘Alan to get long term averages (by month? & annual?) for Kal & Meekatharra’. ‘1968-74 average – for Jan, April, July, October for whole of ... [blank]’.**

These are followed by: ‘Alan has arranged to receive & will send [to] me’.

31/7/97

— Alan to get even maps that will enable us to determine even nets at Ballard, Barber + Merion in 1995.

— Grant shows the stake with tape we placed on south side of the island on 15/3/95 wasn't there when we went looking for it.

— We look at photos of Grant + Chris washing on south side of Long Island on 15/3/95. Is the stick in the photo.

— Alan didn't use a camera on any trip.

— Grant has Ballard + Merion photos. He needs to label them (particularly dates). I need to go there + get copies ^{of some} for my collection.

— We to go thru GP's 12/3/97 photos - get in sequence - remember.

— Grant to ~~to~~ correctly sequence, remember + label all his photos.

— Alan to get long term averages ~~to~~ (months?) for Kait + Muckkare.

— 1968-74 average - for Jan, April, July, October for whole of

Alan has agreed to receive + will send me.

Document (two copies, the second with annotations by JL) headed 'Banded Stilt' and beginning 'Aims of Talk (7.10.96)'. Includes a long section commencing with: 'Rainfall: On 02/10/96 I [JL] flipped thru monthly weather reviews from Jan 1985 to Mar 1994 inclusive and picked out months when substantial (>75mm) [rainfall] occurred in the [Lakes] Ballard [and] Barlee area. These are as follows: ... [detailed descriptions of rainfalls in June, 1986, Jan 1987, Dec 1988, Jan 1990, Dec 1991, March 1992, April 1992, Aug 1992 & Feb 1994 then follow]. Then there is the note: 'CHECK APRIL 1994 ONWARDS'.

BANDED STILT

Aims of Talk (7.10.96)

- describe breeding event of Feb-.. last year.
- comment on conservation aspects
- get you looking for leg-flagged Stilt

Banded Stilt is .. only found in Australia SLIDE OF STILT

Habitat is .. salt lakes, estuaries SLIDE OF HABITAT

Distribution is ..OVERHEAD

First described in 1816 by Vieillot in *Nouv. Dict. Hist. nat* 3:103--"Terres Australes"

Breeding unrecorded until 1930 when ..

Since then, breeding has been recorded as follows:

- old eggshells
- abandoned colonies
- flightless chicks
- active colonies

Breeding sites and behaviour a mystery for over 100 years because breeds only on small islands on large lakes, remote areas, few people, irregularly, difficult access following rain.

Rainfall: On 2/10/96 I flipped thru monthly weather reviews from Jan 1985 to Mar 1994 inclusive and picked out months when substantial (>75mm) occurred in the Ballard Barlee area. These are as follows:

- June 1986: band of high rainfall from Onslow to Kalgoorlie (75mm). Menzies had 113mm (previous highest in 88 years was 105mm). This rain caused by moist tropical air moving across the State. Cashmere Downs 86mm, Diemals 74mm, Kalgoorlie 74mm, Yundamindra 109mm
- * January 1987: Cyclone Connie produced heavy falls (>100mm) from Port Hedland thru Menzies to Balladonia. Use rainfall map and cyclone track and cyclone description. Cashmere Downs 107mm, Diemals 60mm, Kalgoorlie 110mm, Menzies 145mm, Yundamindra 101mm.
- * December 1988: Cyclone Ilona produced falls of 50-100 mm in three patches from Port Hedland to near Balladonia. Many highest ever December falls. Cashmere Downs 45mm, Diemals 62mm, Kalgoorlie 89mm, Menzies 68mm, Yundamindra 124mm
- January 1990: a tropical low intensified to a deep complex monsoonal depression and brought heavy rains (>100mm) from Exmouth to Wiluna. Cashmere Downs 58mm, Diemals 63mm, Kalgoorlie 39mm, Yundamindra 70mm.
- December 1991: severe thunderstorms caused heavy falls and flooding in goldfields. Isolated localities had c 100mm. Cashmere Downs 20mm, Diemals 22mm, Menzies 36mm, Yundaminda 94mm.
- ** March 1992: middle level disturbance and deepening trough caused widespread rains and thunderstorms in golfields and surrounding areas between 19 and 23 March. Menzies 154mm (highest March for 94 years. Kalgoorlie 103mm. Cashmere Downs 151mm, Diemals 128mm, Yundaminda 101mm. Band >100mm from Cue to Balladonia.
- April 1992: Troughs and northwest (mid-level) cloud bands and combination with one cold front caused widespread heavy rain between Pilbara and Eucla. Most to north of Barlee, Ballard etc. Kalgoorlie 75mm, Cashmere Downs 20mm, Diemals 23mm, Menzies 60mm.
- * August 1992: cold fronts brought very much above average rain to SW and goldfields. Kalgoorlie 73mm, Diemals 93mm, Cashmere Downs 78mm, Menzies 106mm, Yundamindra 65mm.
- Feb 1994: a tropical ("monsoonal") low brought above to very much above rain to areas south to Murchison. Kalgoorlie 71mm, Cashmere Downs 60mm
- CHECK APRIL 1994 ONWARDS.
- ***Feb 1995: Tropical cyclone Bobby brought >300mm rain to Barlee(?), Ballard area.

Grant Pearson and I have had interest in locating Banded Stilt breeding sites since 1980 when Phil Fuller and I located ... on Lake Barlee during aerial survey of lakes of eastern goldfields. Grant & Phil subsequently visited this colony and found.. See Burbidge & Fuller (1982).

My principle interest is in conservation aspects, e.g. where are the main breeding sites (which lakes and which islands) and are there any threats or conservation measures necessary at these breeding localities. "Program" is to fly lakes after heavy rains to locate colonies, ascertain size and success. Unfunded.

In February last year (1995) tropical Cyclone Bobby crossed the coast near Onslow and headed inland, became rain bearing depression

BANDED STILT

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- get you looking for leg-flagged Stilt

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First recorded in .. by

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1980 Pilbarra + Eucla

Rainfall: On 2/10/96 I flipped thru monthly weather reviews from Jan 1985 to Mar 1994 inclusive and picked out months when substantial (>75mm) occurred in the Ballard Barlee area. These are as follows:

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June + Jul 92 RS, JZ that visit Barlee



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My principle interest is in conservation aspects, e.g. where are the main breeding sites (which lakes and which islands) and are there any threats or conservation measures necessary at these breeding localities. "Program" is to fly lakes after heavy rains to locate colonies, ascertain size and success. Unfunded.

In February last year (1995) tropical Cyclone Bobby crossed the coast near .. and headed inland, became rain bearing depression

A page from one of JL's 1995 (May?) field notebooks with the note: 'Wind direction in period leading up to "the big walk" of BaSt chicks thru' Menzies in the 1980's'. JL's intention was apparently to find out the dominant wind direction(s) during "the big walk" (described in a paper by David Pearson? – check BaSt Publications RMCR) through / near the townsite of Menzies (which is close to Lake Ballard).

working on case -

Probably do an aerial survey on Tuesday - if Jim wants to come that's okay.

Crew will probably stay in the area for a while and see what they can get - maybe 8 days. (at the moment) stay long if good. Also taking a freelance guy who may stay after ABC team.

What direction is forest leading to "the big wall" of B.S. Chiles then Morgan in the 1980s

1 roll 64 ASA
36 exp Kodak
medium 8/5/95

W 078710

TO DO

Reschedule from
Vasa \$661.52
1 point from T.A. clean from ground

end \$48 - 00 from
1 day T.A. clean from March
Michael

\$7.50 for costs for ment
from Allen

JL's field notebook. Printed 10/4/2014

Hand-written notes (undated) by JL recording Andrew Chapman's Ravensthorpe postal address and that of 'John & Kath Finlayson, "Jeedamya" via Menzies WA 6436'. Ian Kealley mentioned to JL in early 2014 that the Finlaysons left Jeedamya pastoral station some years ago (they were there in 1995).

Mr Andrew Clifton
 P.O. Box 264 Barrow Downs
 6346

John & Kath
 Finlayson
 ~~~~~  
 Teedanya ~~~~~  
 via Mengies WA 6436 .

Photo-enlargements (140% of actual size) and then photocopies (actual size) of a number of plant specimens collected by GBP on Lake Ballard in 1995. These are mounted on cards. The cards have been labelled as follows (note that some spelling might be incorrect):

1. '1/4/95, #2, Lake Ballard, Stilt Island, on island in colony. Low, succulent. *Atriplex*.
2. '11/4/95, #2, Lake Ballard. *Eragrostis sp.*
3. '11/4/95, #2, Lake Ballard, *Francenia pauciflora?*
4. '1/4/95, #1, Lake Ballard, Stilt Island. *H. halocnemoides*.
5. '1/4/95, #1, Lake Ballard, Stilt Island. *Halosarcia halocnemoides*.
6. '11/4/95, #2, Lake Ballard, indecipherable [*Maireona?*].
7. '11/4/95, #2, Lake Ballard, indecipherable [*Macreana?*] *sp.*
8. '11/4/95, #2, Lake Ballard, indecipherable [*Maireana?*] *sp.*
9. '11/4/95, #2, Lake Ballard, *Sclerolinai sp.* indecipherable [*densiflora?*].
10. '1/4/95, #3, Lake Ballard, Stilt Island, *M.*
11. '1/4/95, #3, Lake 1 [circled], Pink Eared Duck Nest, *Mel uncinata*.
12. '1/4/95, #4, Lake Ballard, Stilt Island. Low saltbush in centre bird colony. *Atriplex*.
13. '1/4/95, #4, Pink eared Duck nest, Lake 1 [circled], *M. uncinata*.
14. '1/4/95, #5, Lake Ballard, Stilt Island. Low Samphire, Island in centre of colony. *Francinia*.
15. '1/4/95, #2, Lake Ballard, Stilt Island. On island in colony. Low succulent. *Atriplex*.
16. '11/4/95, #2, Lake Ballard. *Eragrostis sp.*
17. '11/4/95, #2, Lake Ballard. *Francinia pauciflora?*

Note that most of the writing on these cards is in hand-writing that JL does not recognise (12/6/2014). The plant names (Genus / species) have subsequently been added in GBP's hand-writing. **TO DO: Tidy up these plant names.**

04/4/12

1.05

Lake Ballens 1995 plant

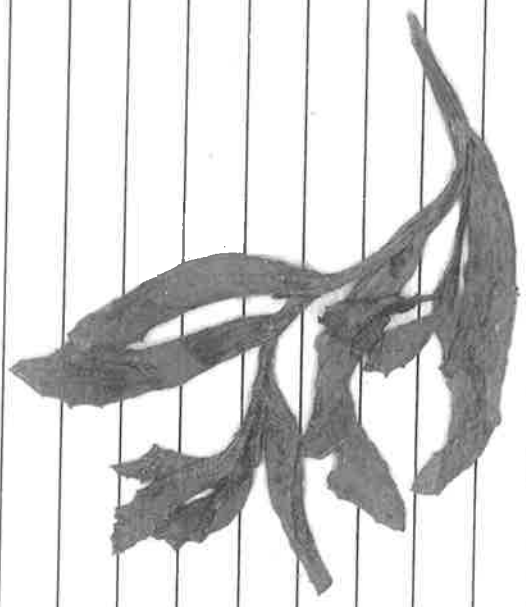
Specimens of Great Peason

(Banda Salt bearing project)



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69 1/4/95 #2  
68 Lake Ballard Shift Island  
67 on island in colony  
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65 Low, succulent  
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63 *Adiantum*  
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Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

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11/4/95 #2

lily Bellard

*Lilium bellardii*



Sands & McDougall (Aust.) Pty. Ltd.  
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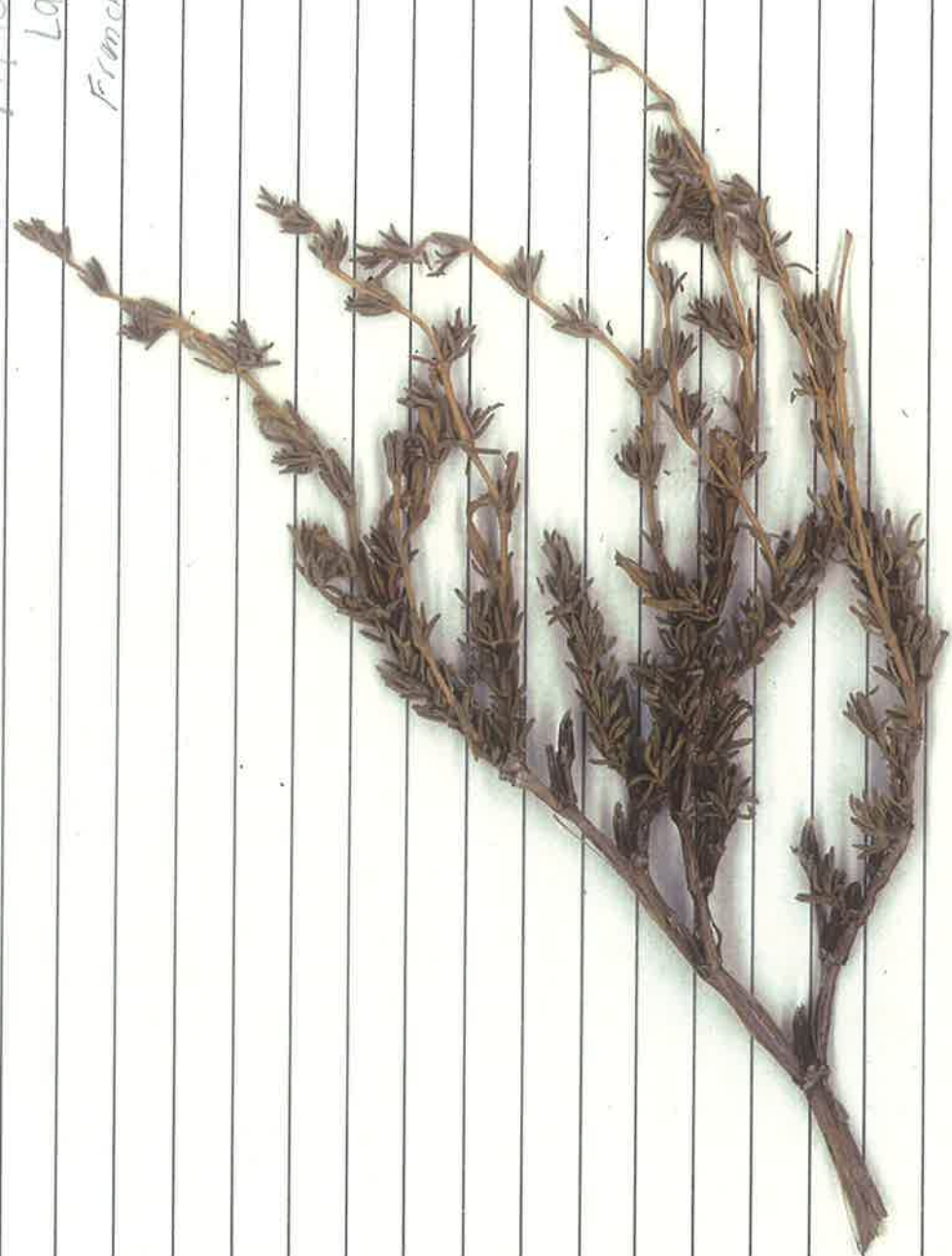
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11/4/95 #12

Lake Ballard

*Fraxinea pauciflora?*



Sands & McDougall (Aust.) Pty. Ltd.  
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1/4/95 #1

Lake Ballard

Stilt Island

*H. halconemoides*



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

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1/4/95

#1

Lake Ballard

Stilt Island

*Salicornia herbicarpa*



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"Inventa" Sorter Cards Pat. No. 4150.

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11/4/95 #2

Lake Bolford

Marion



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

11/4/95 #2

Lake Ballard

*Marenga* sp



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

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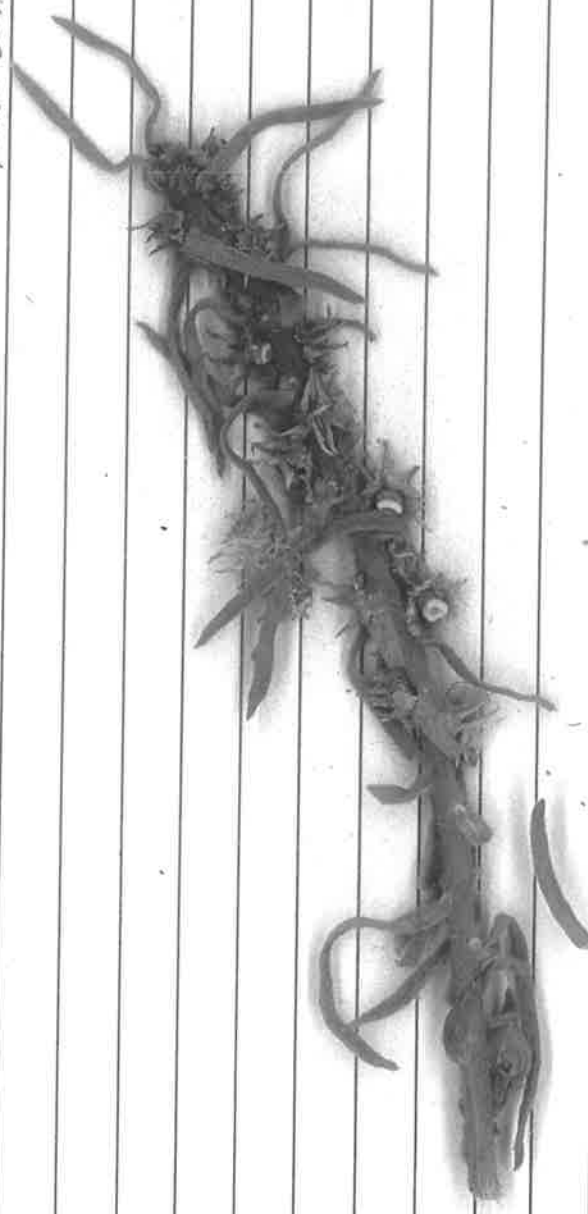
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11/4/95

#2

Lake Ballard

*Matricaria* sp



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11/4/95 #2

Lake Ballard

*Sclerolima* sp. densibora



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 "Invicta" Sorter Cards Pat. No. 4150.

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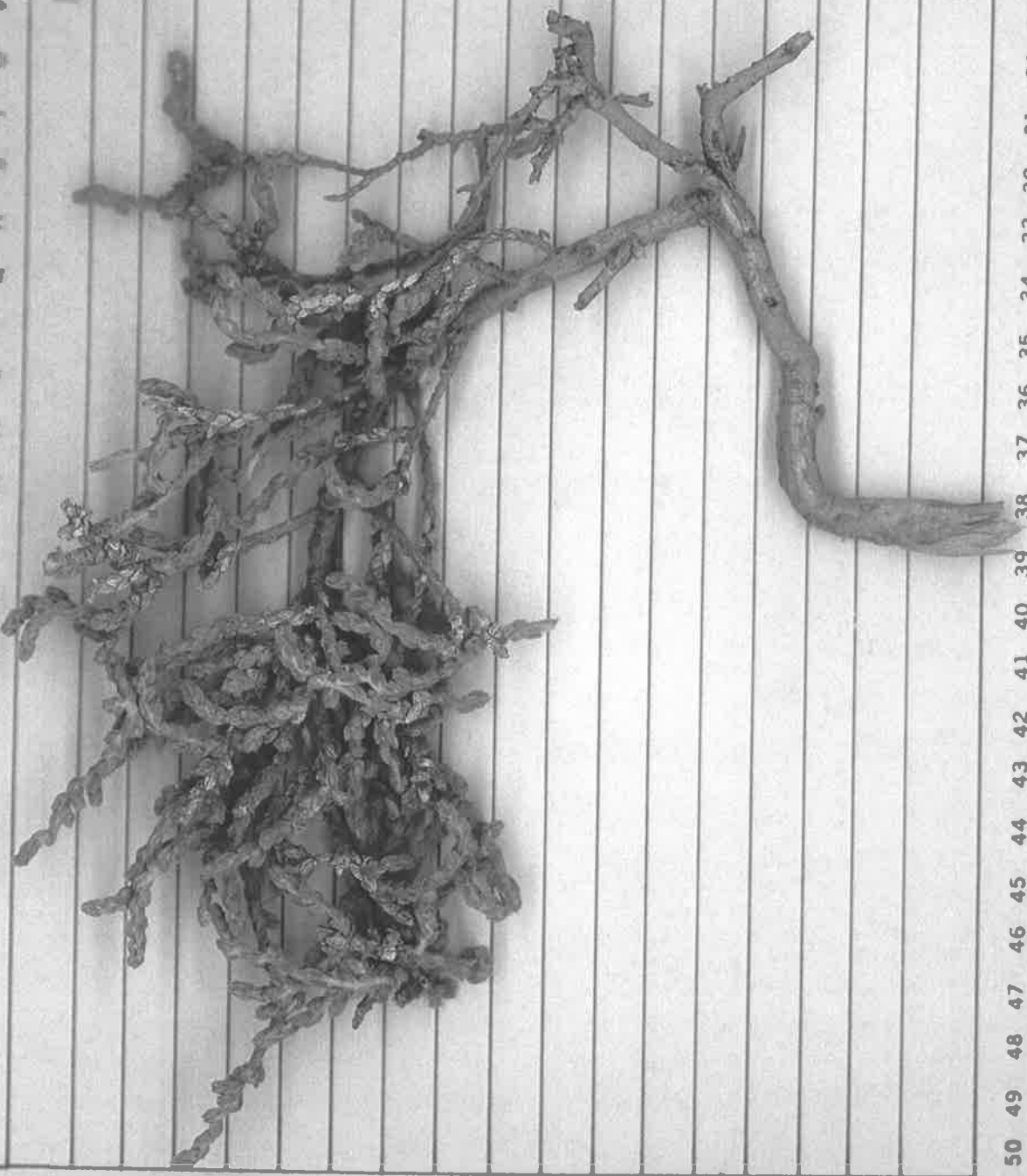
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1/4/05 #3

Lake Ballard

Shilt Island

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"Invicta" Sorter Cards Pat. No. 4150.

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I=1.4 (as 140%)  
photocopy on 15/5/2014

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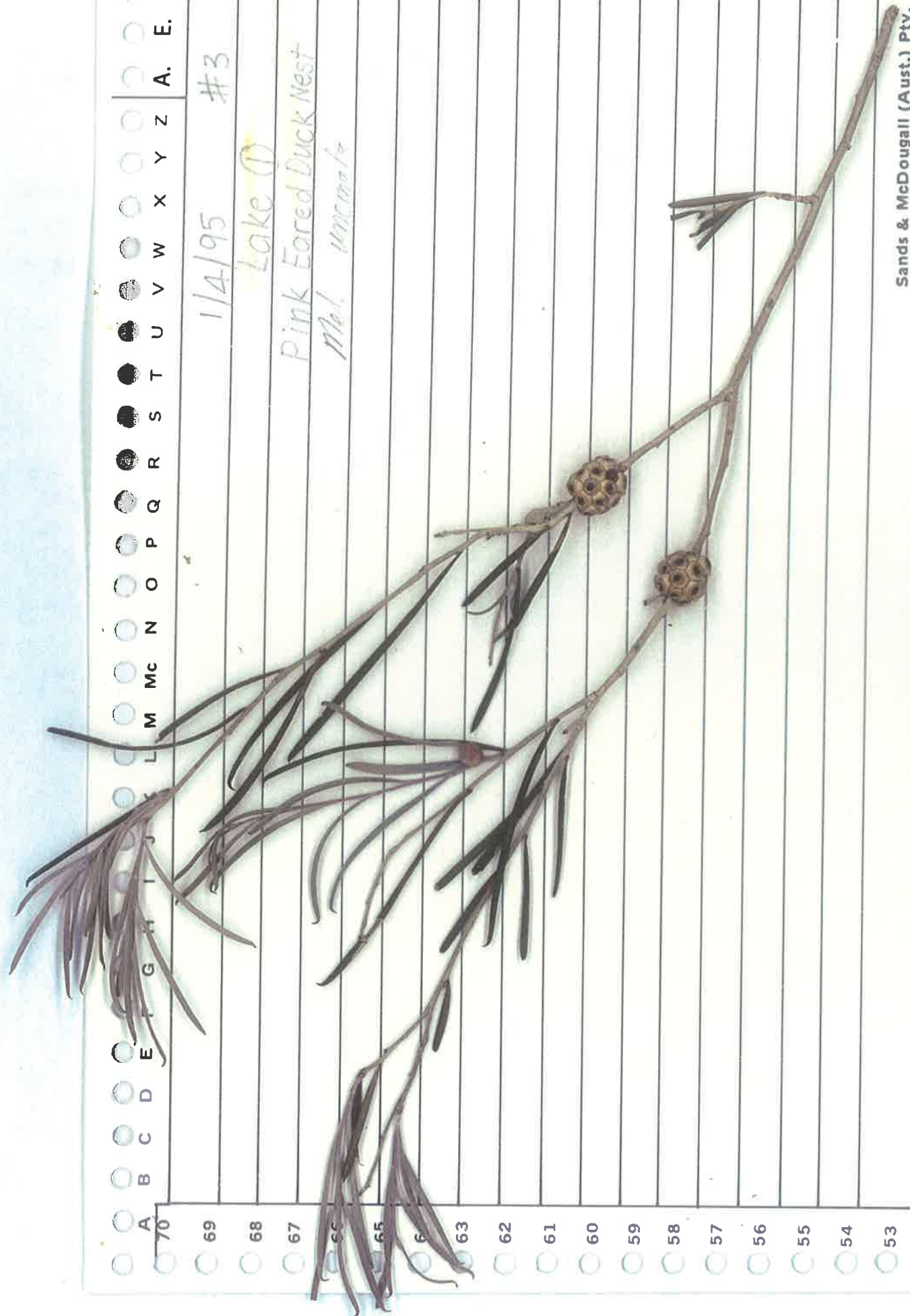
M Mc N O P Q R S T U V W X Y Z

1/4/95 #3

Lake ①

Pink Eared Duck Nest

Mel. uncinata



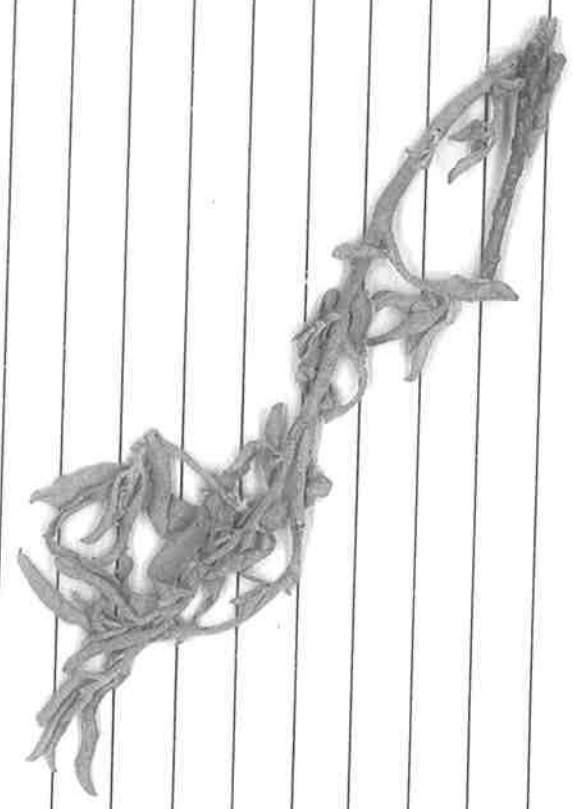
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114/95 #4  
Lake Ballard, Stilt Island

Low saltbush in centre bird  
colony

*Ampelis*



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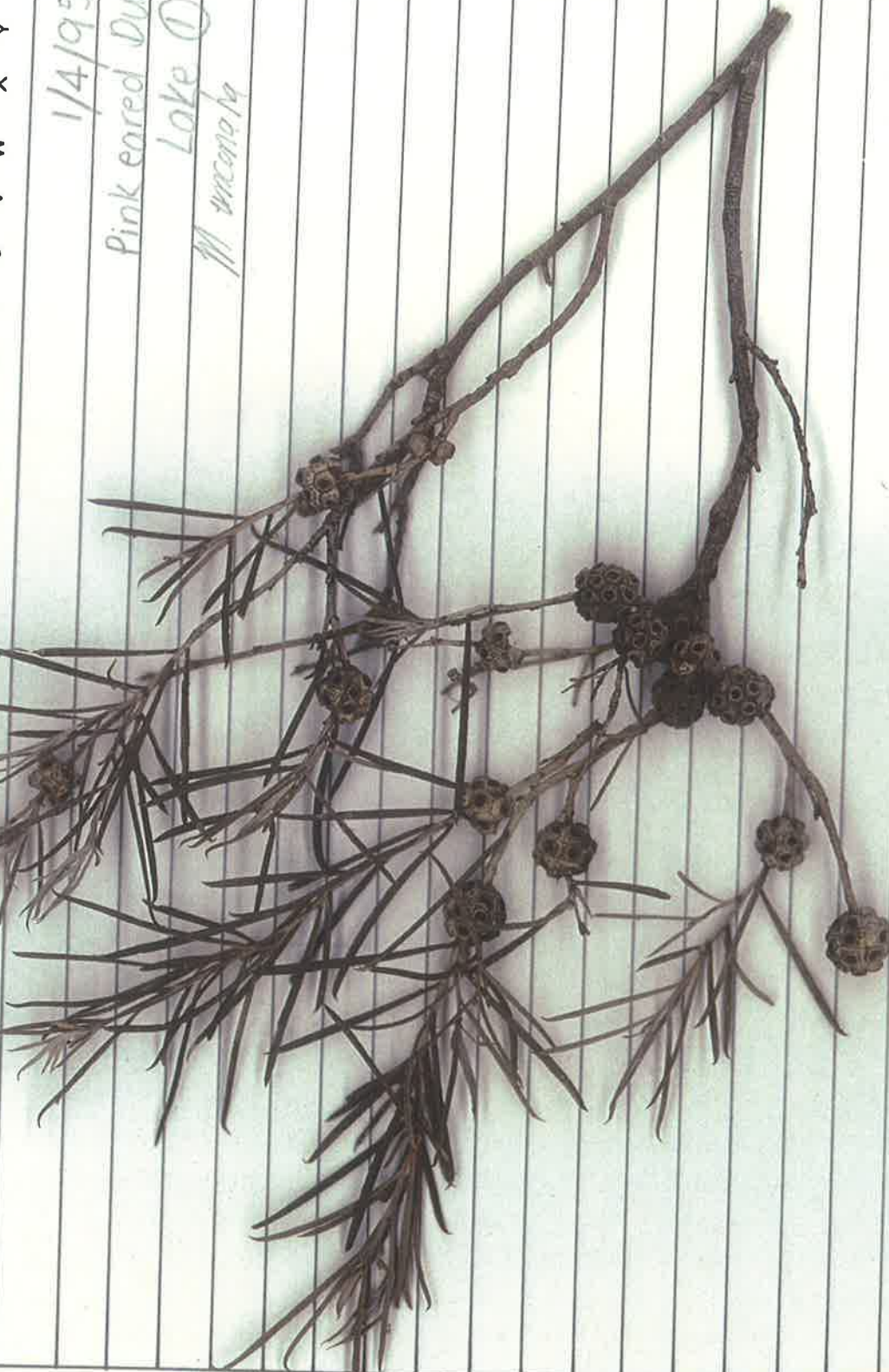
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A. E. I. O.

1/4/95 #4  
 Pink eared Duck nest  
 Lake ①  
 11/11/1914

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 "Invicta" Sorter Cards Pat. No. 4150.

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1/4/95



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

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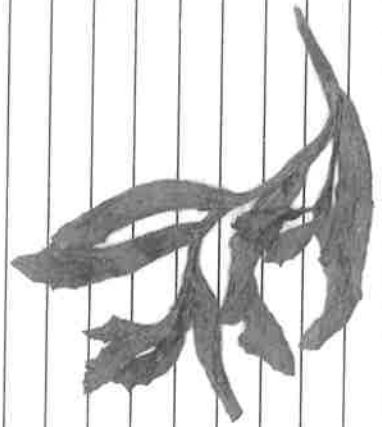
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|    |    | 48 |
|    |    | 49 |

1/4/95 #2

Lake Ballard Stilt Island  
on island in colony

Low, subcurrent

Alumpler



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

1:1 photocopy made 15/5/2014 R

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U.  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53  
 11495 #2  
 Lady Ballard  
 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20  
 Sands & McDougall (Aust.) Pty. Ltd.  
 "Invicta" Sorter Cards Pat. No. 4150.



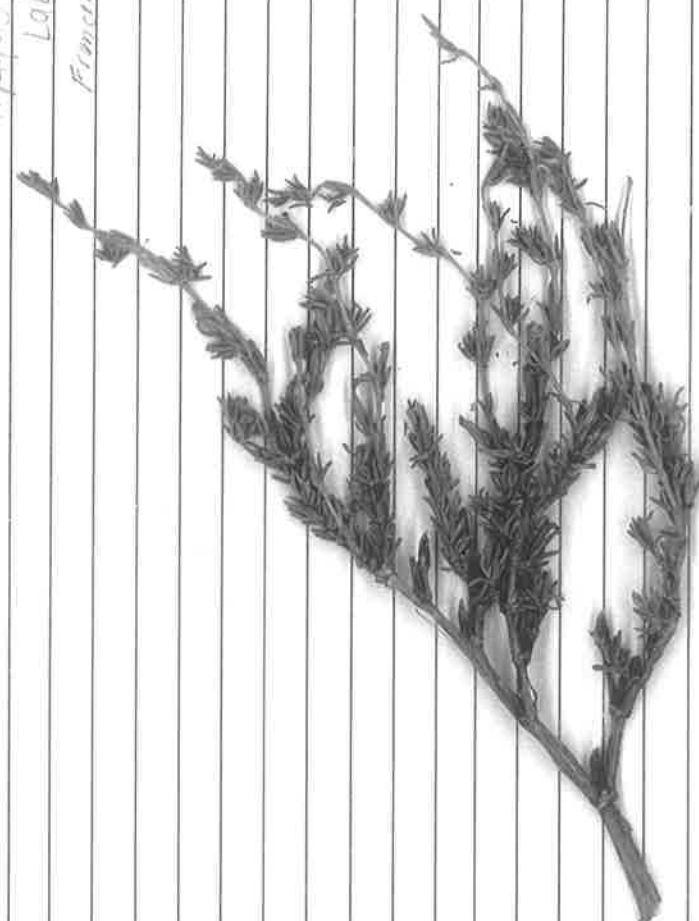
U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O.

11/4/05 712

Lake Ballard

*Fraxino-juncifera?*



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

A. E. I. O.

70 A B C D E F G H I J K L M Mc N O P Q R S T U V W X Y Z

69 1/4/05 #1

68 Lake Bald

67 Stilt Island

66

65 *H. holocnemoides*

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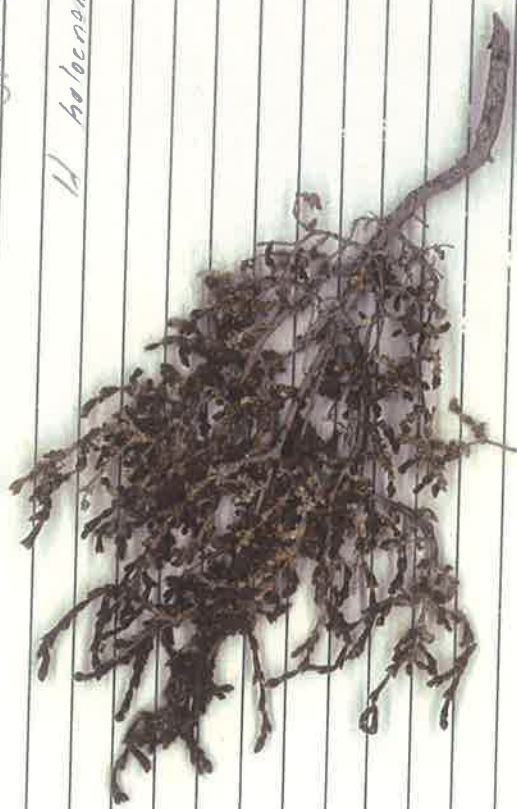
54

53

52

51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.



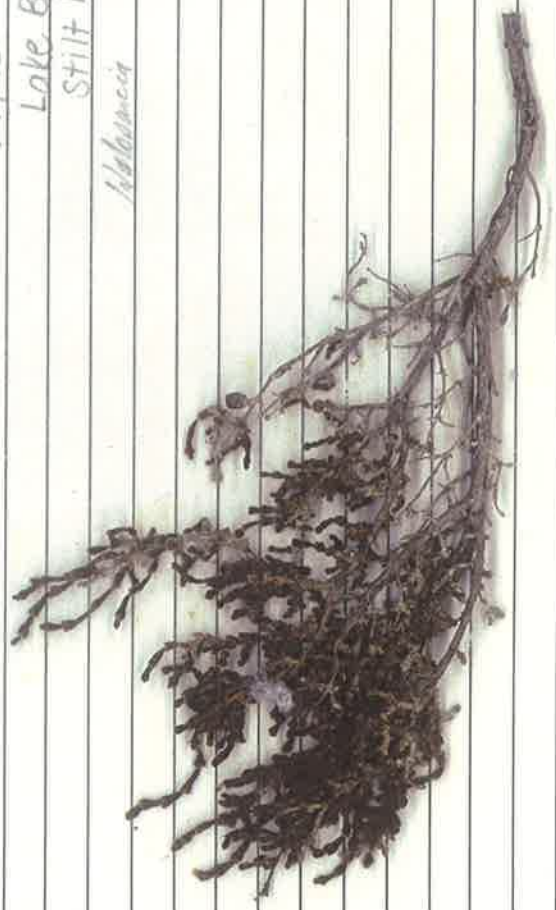
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| A. E. I. O. | 3  |  |
|             | 4  |  |
|             | 5  |  |
|             | 6  |  |
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|             | 70 |  |

1/4/95 #1

Lake Baillard

Stilt Island

*Adiantum barbatum*



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter-Cards Pat. No. 4150.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

11/4/95 #2

Lake Ballard

Minnesota



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53

52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

11/4/95 #2

Lake Ballard

*Mimosa sp*

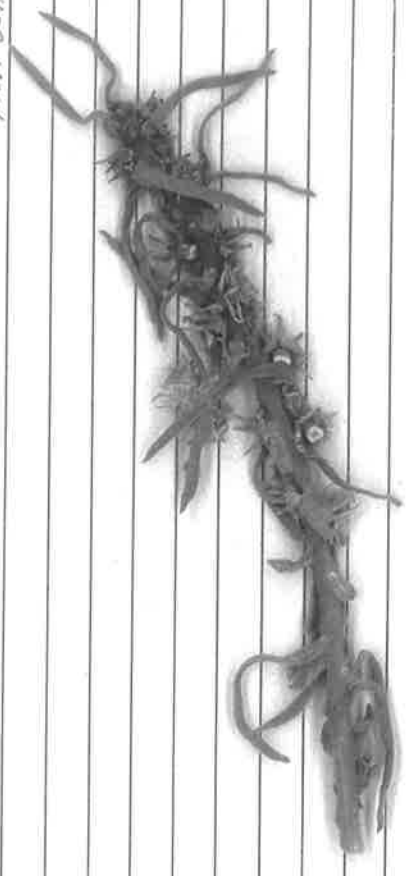


Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

70  
69 11/4/95 #2  
68 Lake Ballard  
67 *Mitrella* sp  
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Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards Pat. No. 4150.

52  
51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20



1:1 photography

8/15/2014



Sands & McDougall (Aust.) Pty. Ltd.  
"Invicta" Sorter Cards, Pat. No. 4150.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U.  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
 69 1/4/95 #3  
 68 Lake ①  
 67 Pink Eared Duck Nest  
 66 Mel. *var. mel.*  
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 53

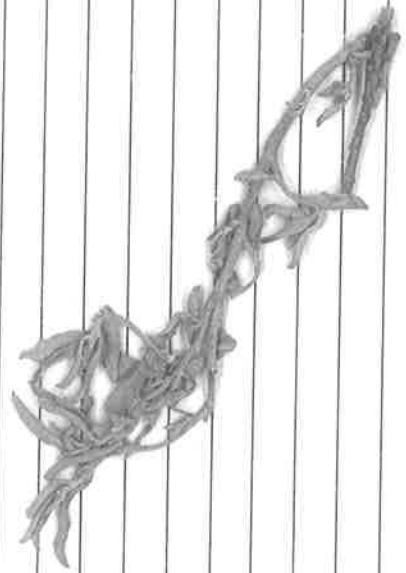


Sands & McDougall (Aust.) Pty. Ltd.  
 "Invicta" Sorter Cards Pat. No. 4150.


51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

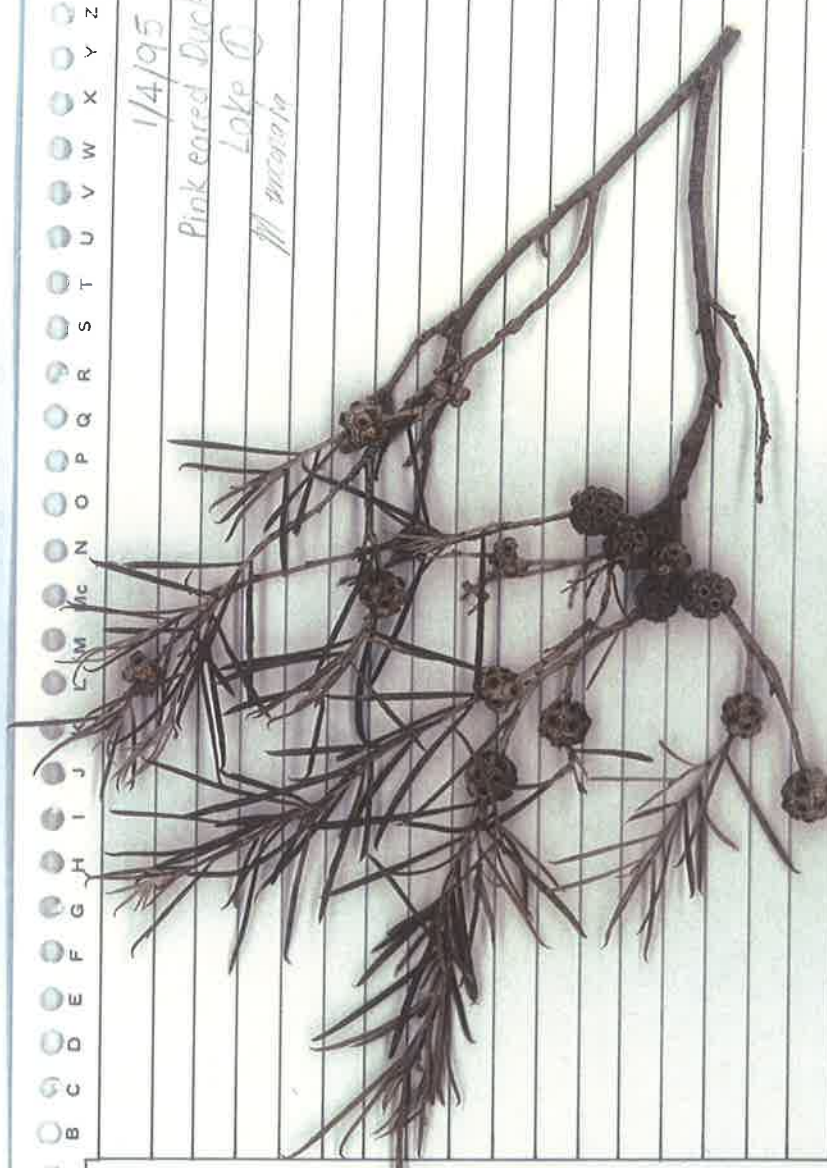
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|----|----|----|
| 70 | A  | U. |
| 69 | B  | 1  |
| 68 | C  | 2  |
| 67 | D  | 3  |
| 66 | E  | 4  |
| 65 | F  | 5  |
| 64 | G  | 6  |
| 63 | H  | 7  |
| 62 | I  | 8  |
| 61 | J  | 9  |
| 60 | K  | 10 |
| 59 | L  | 11 |
| 58 | M  | 12 |
| 57 | N  | 13 |
| 56 | O  | 14 |
| 55 | P  | 15 |
| 54 | Q  | 16 |
| 53 | R  | 17 |
| 52 | S  | 18 |
| 51 | T  | 19 |
|    | U  | 20 |
|    | V  |    |
|    | W  |    |
|    | X  |    |
|    | Y  |    |
|    | Z  |    |
|    | A. |    |
|    | E. |    |
|    | I. |    |
|    | O. |    |

114/95 #4  
 Lake Ballard, Stilt Island  
 Low saltbush in centre bird  
 colony  
 Abuptex



Sands & McDougall (Aust.) Pty. Ltd.  
 "Invicta" Sorter Cards Pat. No. 4150.

70 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U.  
 69 1/4/95 #4  
 68 Pink eared Duck nest  
 67 Lake   
 66 *M. maculata*  
 65  
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 52 Sands & McDougall (Aust.) Pty. Ltd.  
 51 "Invicta" Sorter Cards Pat. No. 4150.  
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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A. E. I. O. U. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

69 #5  
 1/4/95  
 Lake Ballora, Skitt Island  
 Low Samphire,  
 Island in centre of  
 Colony  
*Fragaria*



Sands & McDougall (Aust.) Pty. Ltd.  
 "Invicta" Sorter Cards Pat. No. 4150.

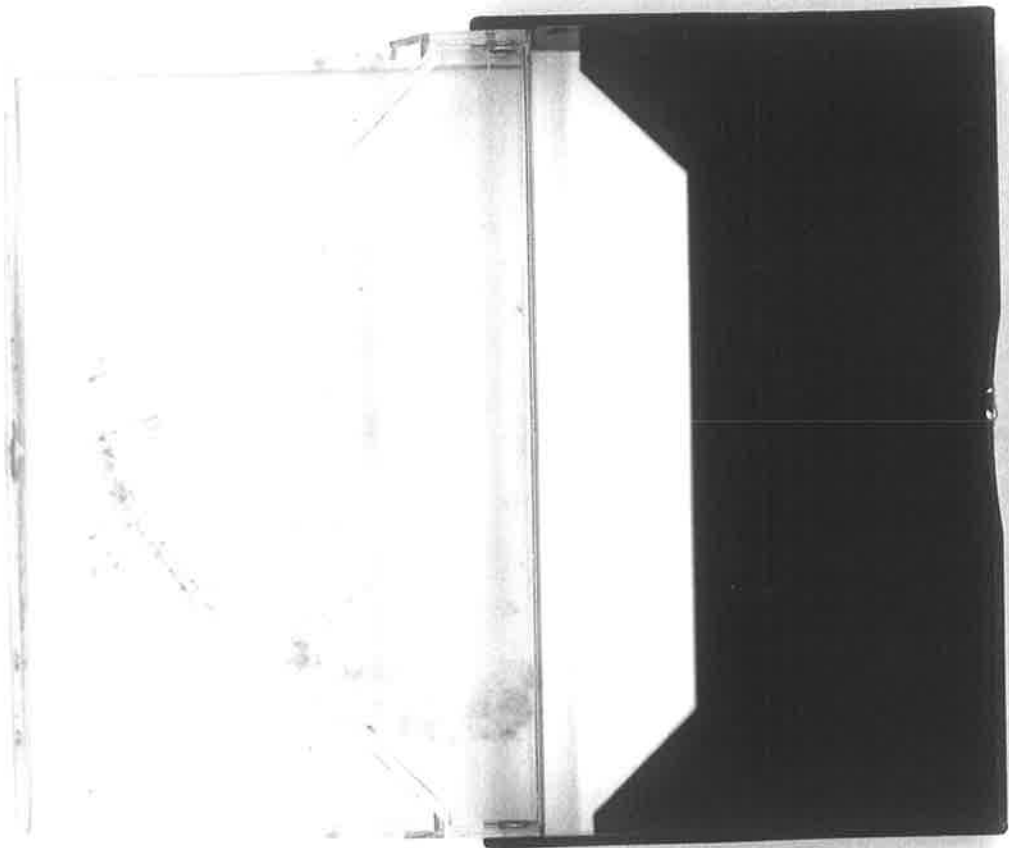
70 51 50 49 48 47 46 45 44 43 42 41 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20

**Photocopy and photo-enlargement of a folded (field notebook?) page on which is written, in JL's hand-writing, 'Butterfly dead on ground on Camp Island (Lake Ballard) by JL on 6 April 95 [1995]'. The butterfly (unidentified) is still inside (as at May 2014).**

Burkhardt dead  
on ground on Camp Island  
(Lake Belland) by JL  
on ~~Apr~~ 6 April 95.

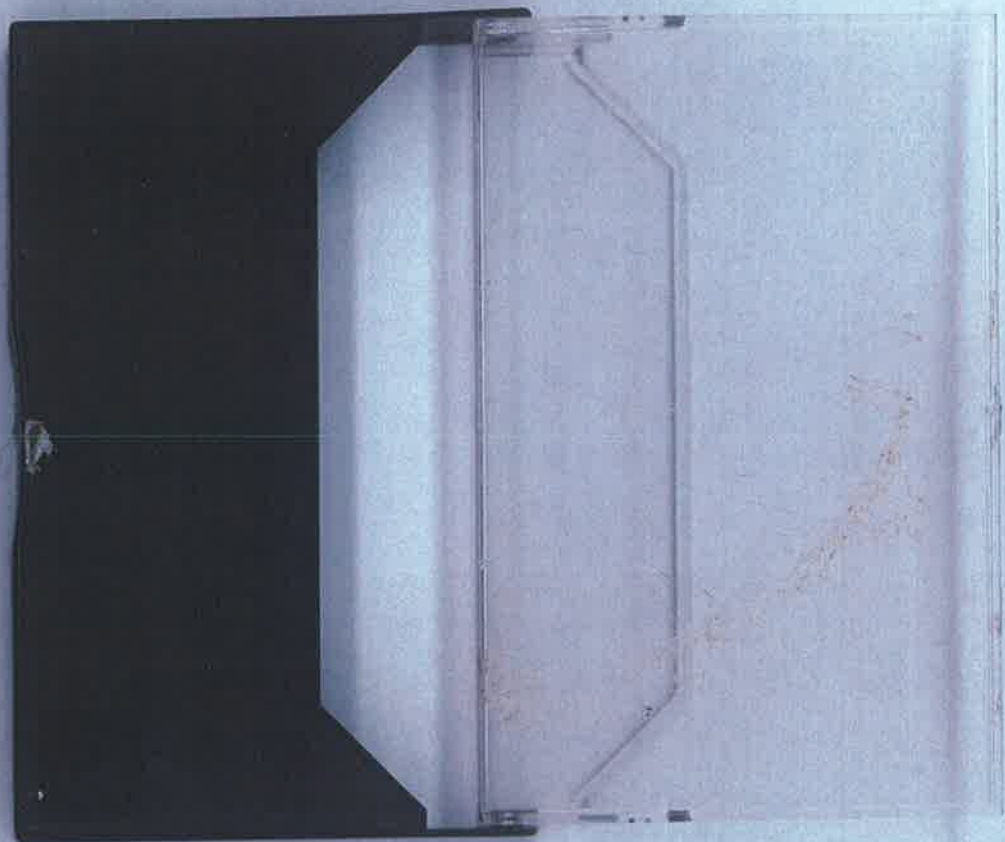
Burkhardt dead  
on ground on Camp Island  
(Lake Bellwa) by JL  
on ~~Apr~~ 6 April 85.

**Photocopy of an empty and unlabelled audio cassette case found in the  
'Banded Stilt Project' storage box on 19/5/2014 by JL. Keep an eye out for  
a stray audio cassette.**



This is an empty audio - cassette case  
found in the "Banded Stilt Project" box  
on 19/5/2014 by J.

J 19/5/2014



This is the other side of an empty audio-cassette  
case found in the "Beaked Shelt Project" box  
on 19/5/2014 by J. Lane.

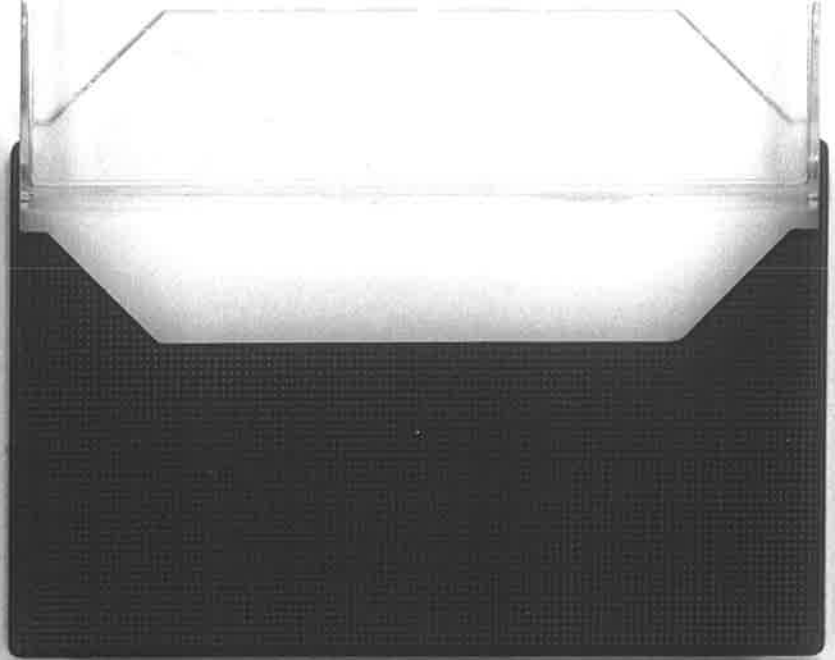
J  
19/5/2014

Photocopy of an audio cassette and its case, labelled '1995 Lake Ballard  
Tape - keep'. Check to see if this tape has been fully transcribed. Is it  
aerial surveys or ground work on both?

*Copying to digital format today.*

*R 12/6/2014*





**SILVER SOUND  
CASSETTE**

**HI-FI LOW-NOISE  
2X45 MINS**



**C90**

**Compact  
Cassette**

**SS**

**SILVER SOUND**

**C90**

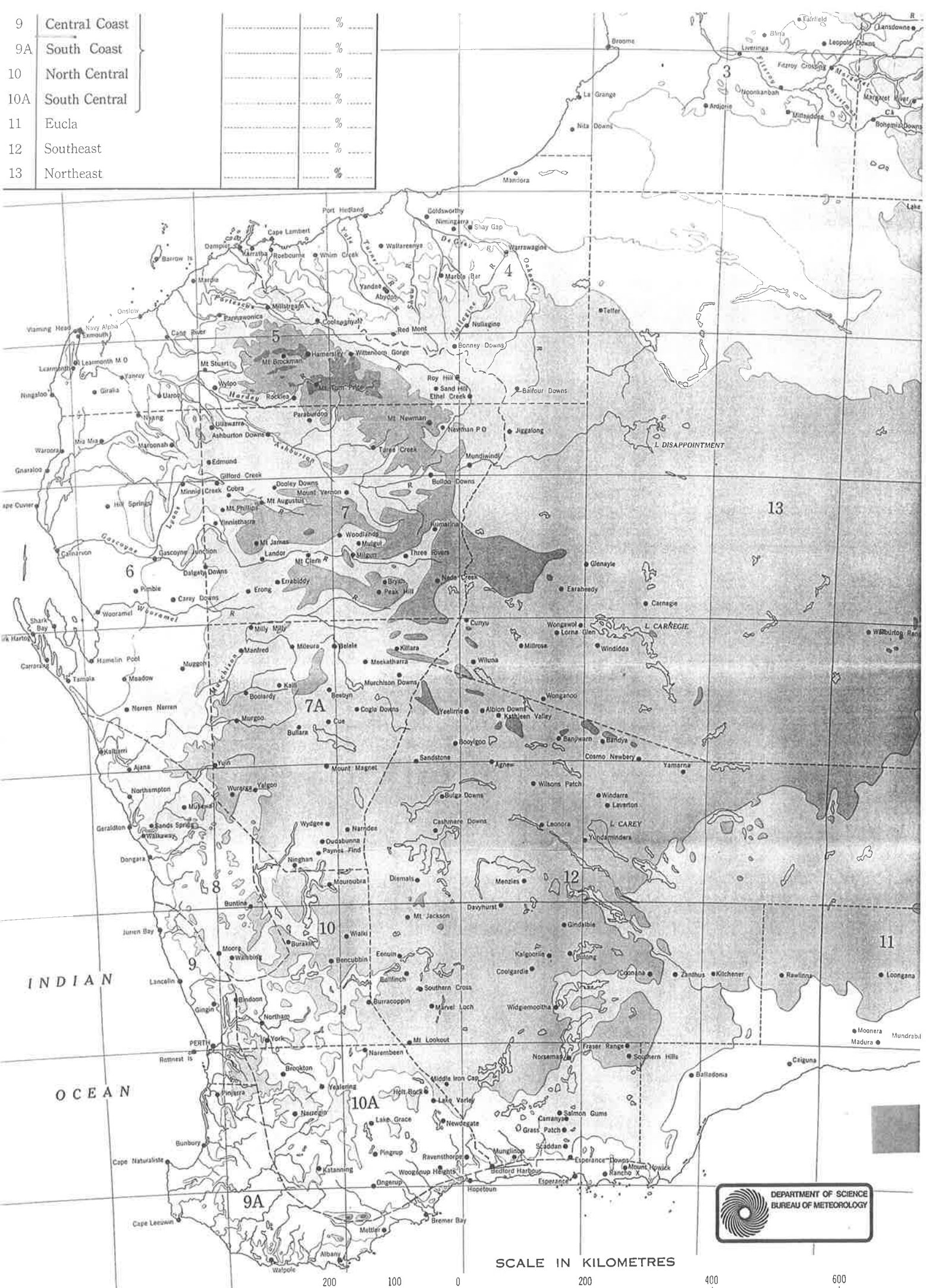
**SS**

- Avoid touching tape: you may cause dropouts.
- Keep cassettes away from heat, high humidity and strong magnetic fields.
- To prevent erasure, punch erase-protect-lug.

**C90**

**Two Bureau of Meteorology maps of Rainfall Districts of WA and the  
Lakes Barlee, Ballard, Marmion, etc. area (Rainfall District 12: Southeast).**

|     |               |   |
|-----|---------------|---|
| 9   | Central Coast | % |
| 9A  | South Coast   | % |
| 10  | North Central | % |
| 10A | South Central | % |
| 11  | Eucla         | % |
| 12  | Southeast     | % |
| 13  | Northeast     | % |

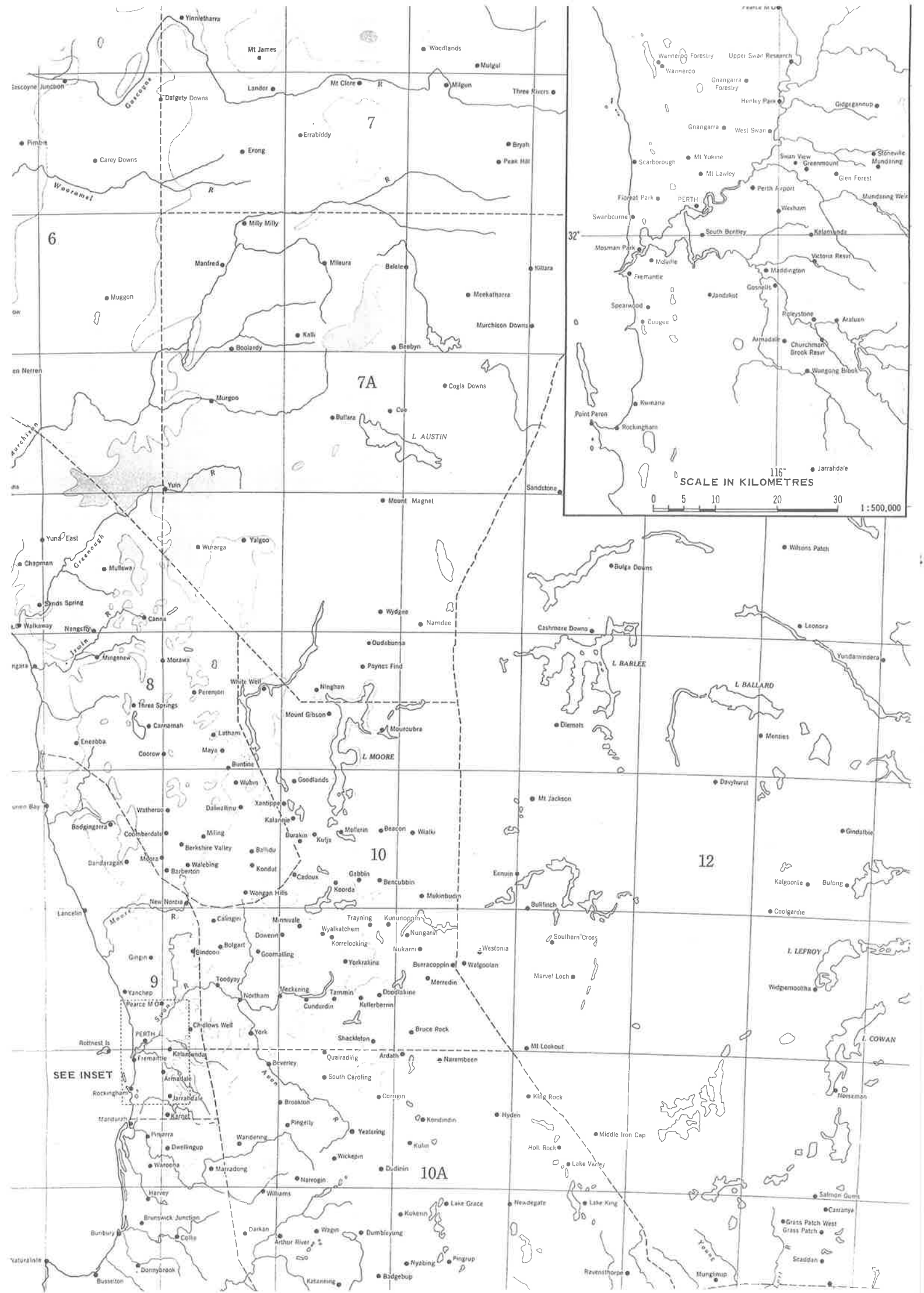


SCALE IN KILOMETRES



at Latitude 25°S

POSTMASTERS ARE REQUESTED TO EXHIBIT THIS MAP IN A CONSPICUOUS PLACE FOR



**A photo-reduction (A3 to A4) of the Bureau of Meteorology's '*Climatic Atlas of Australia, Map Set 3, Evaporation*' (May 1975).**

DEPARTMENT OF SCIENCE  
BUREAU OF METEOROLOGY



CLIMATIC ATLAS OF  
AUSTRALIA

MAP SET 3

EVAPORATION

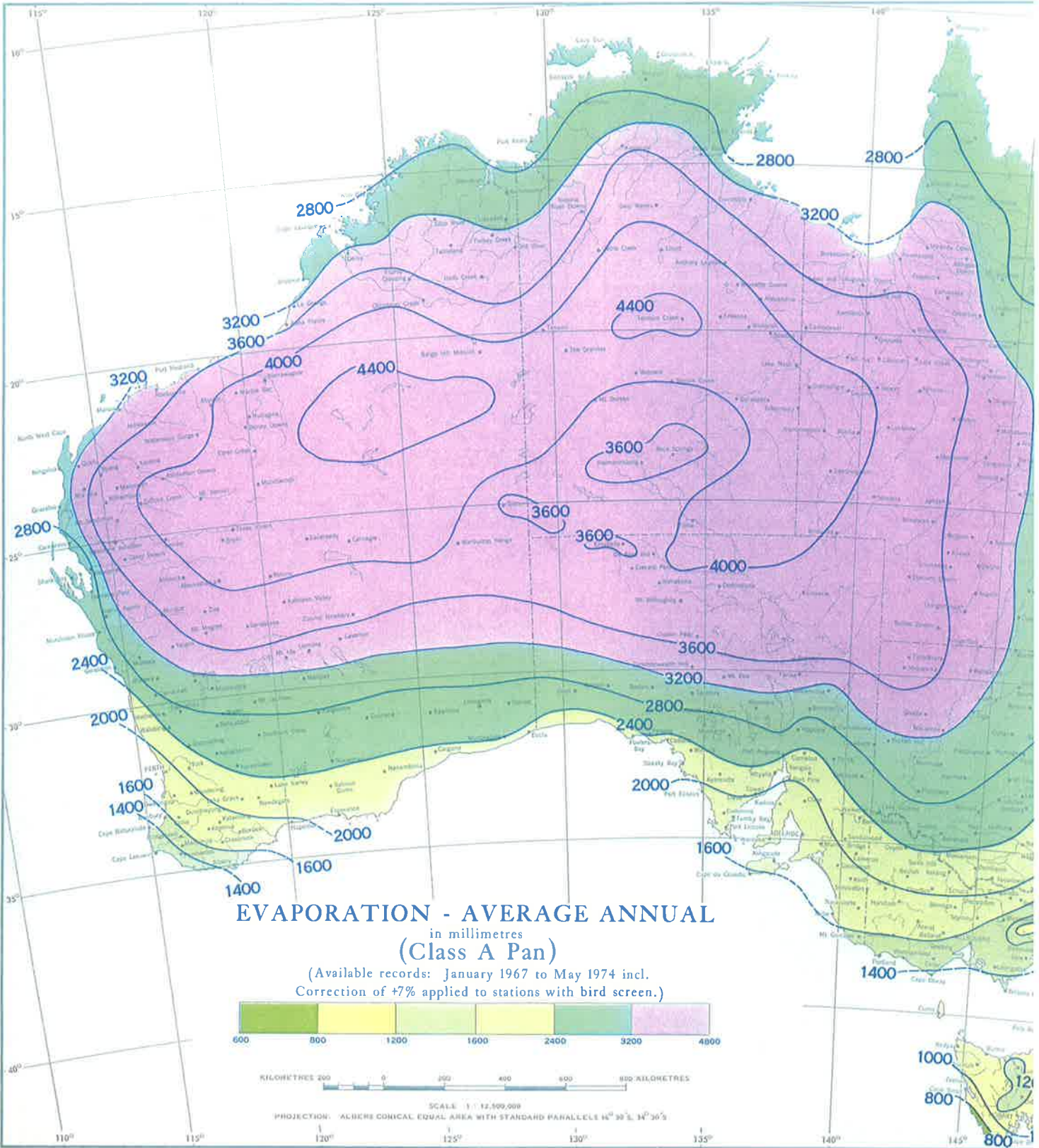
MAY 1975

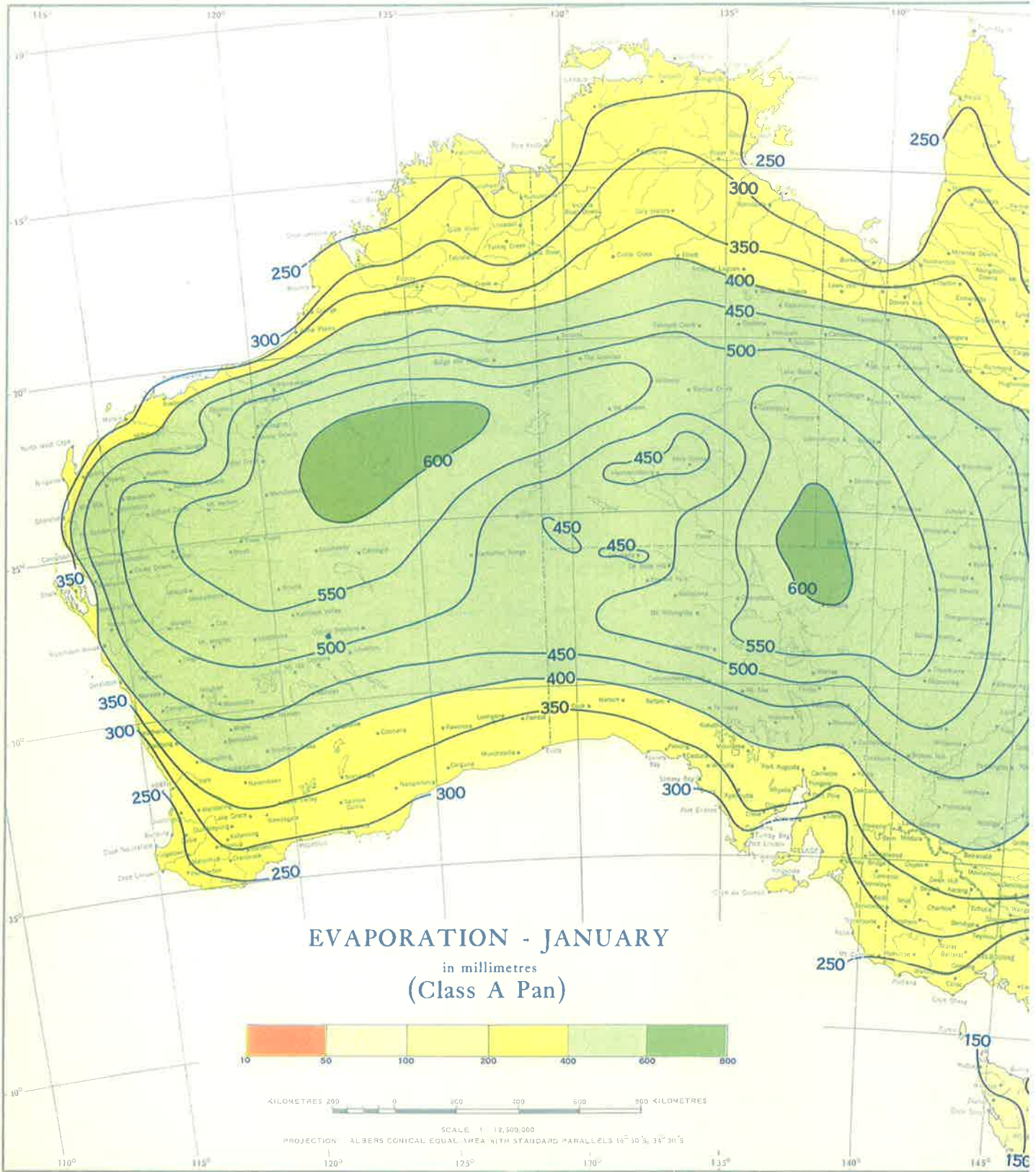


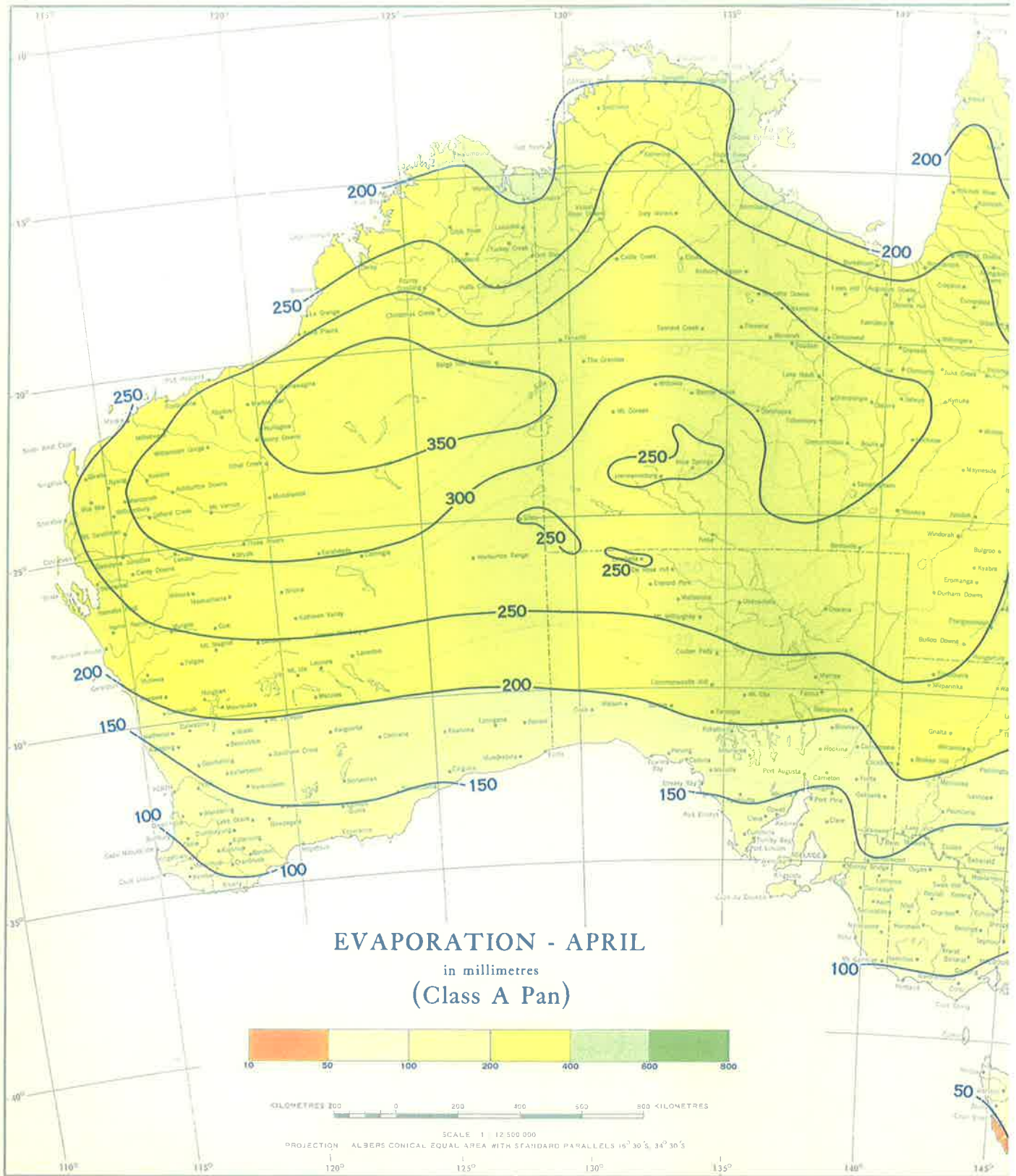
CLIMATIC ATLAS OF  
AUSTRALIA

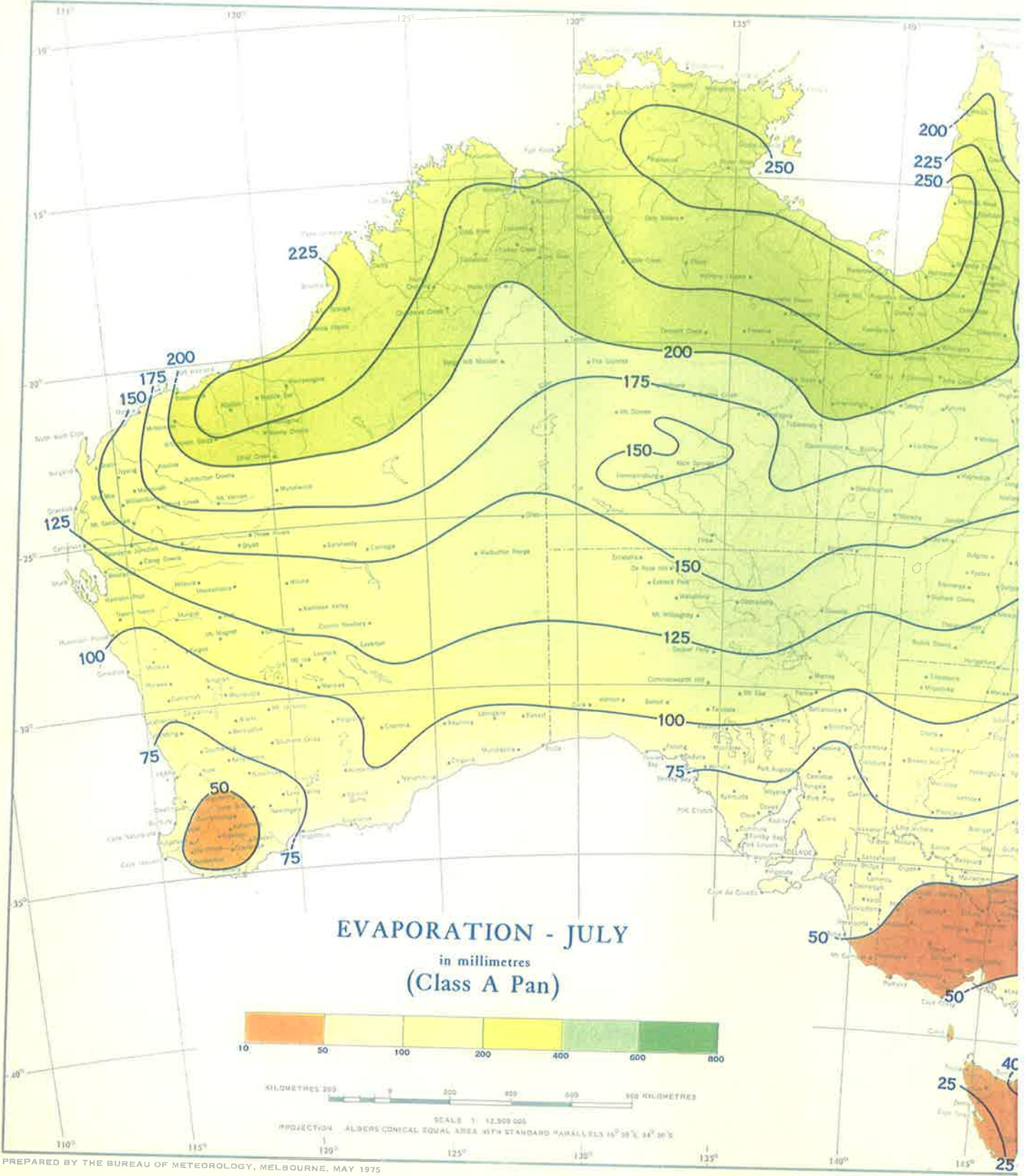
MAP SET 3

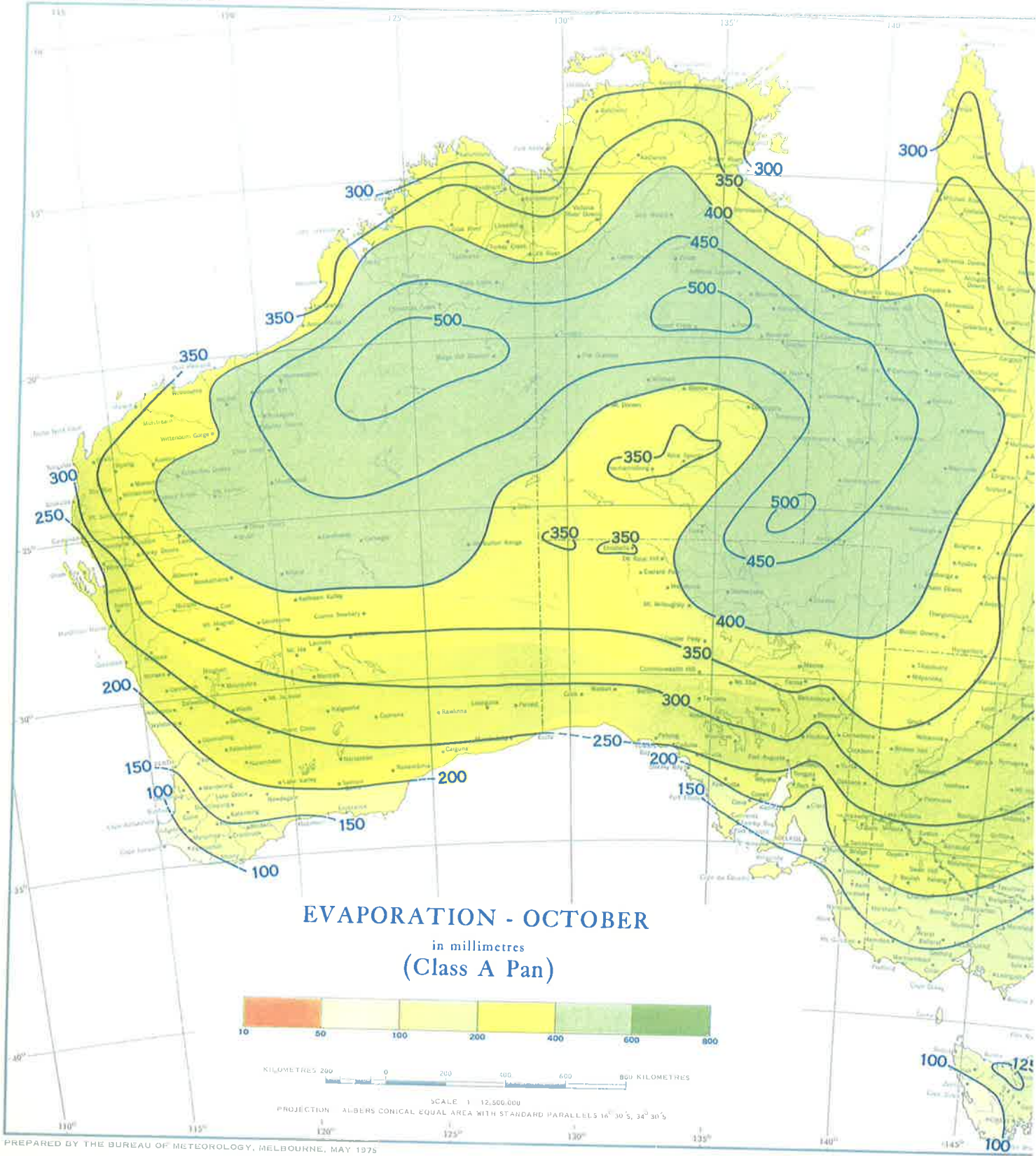
EVAPORATION











**Three B&W aerial photographs (stereo pairs; Commonwealth of Australia, taken on 23/11/1982) of most of Lake Ballard.**

**On these, GBP (JL presumes) has marked in red pen what are likely to be access tracks (parts thereof) to the northern side of the lake. The numbers 1-3 have been written next to parts of these red lines. What do they refer to? Do they cross-reference with any notes?**

**On one of the photos someone (JL? GBP?) has drawn four small circles and numbered three of these '2', '4,5' & '3' extending west from Camp Island. The westernmost circle is not numbered and appears to be over the second studied (in 1995) BaSt nesting colony. The numbered circles perhaps indicate three sites of collection of BaSt families (for gut contents, etc.) and/or sweep samples? Attempt to cross-reference to field notes.**

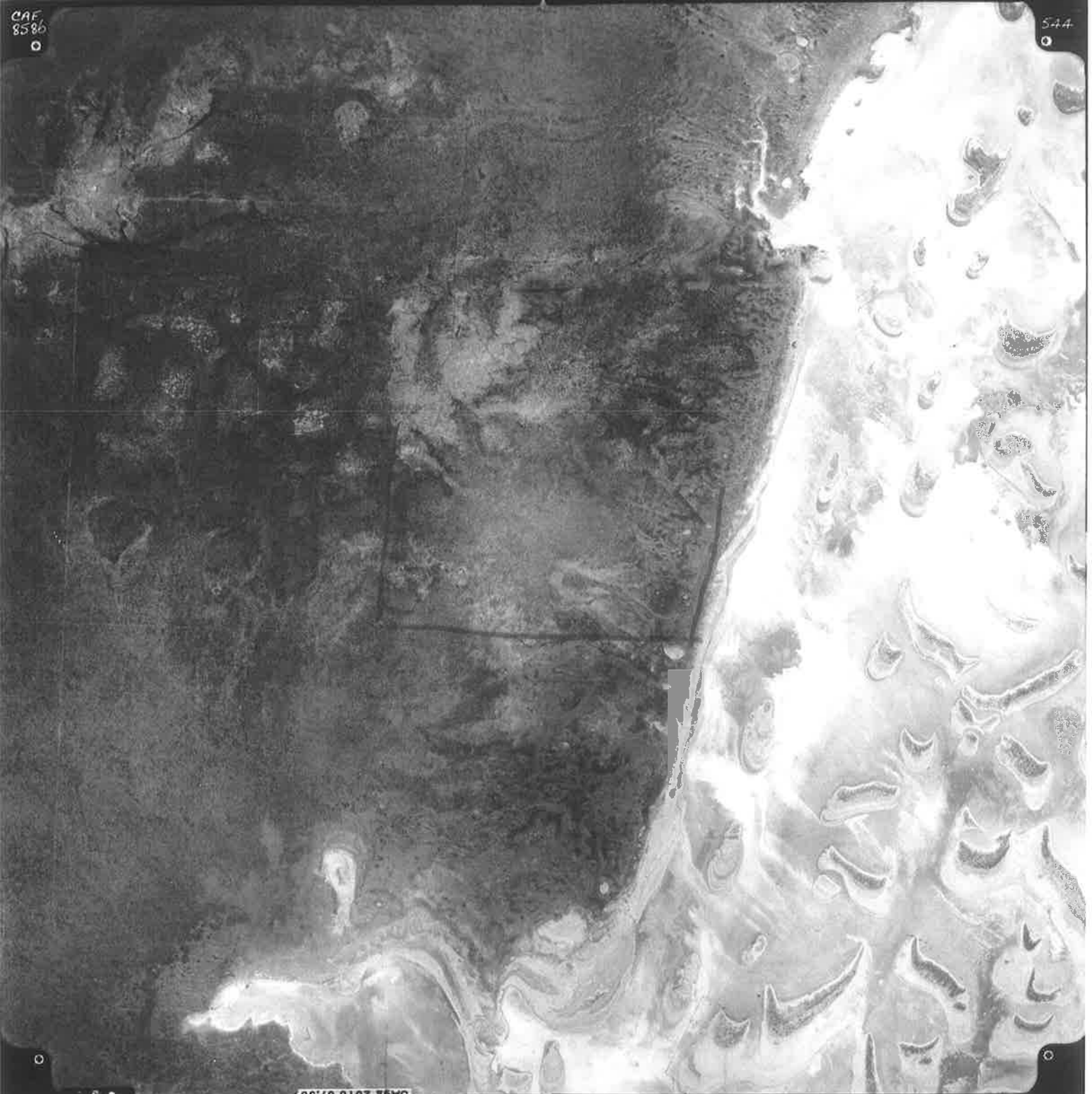
MENZIES SH 51-5 CAF 8586 RUN 4 528-552 K 2402 7620m UT 23/11/1982



MENZIES SH 51-5 CAF 8586 RUN 4. 528-552 K 2402 7620m UT 23/11/1982

CAF  
8586  
○

544  
○

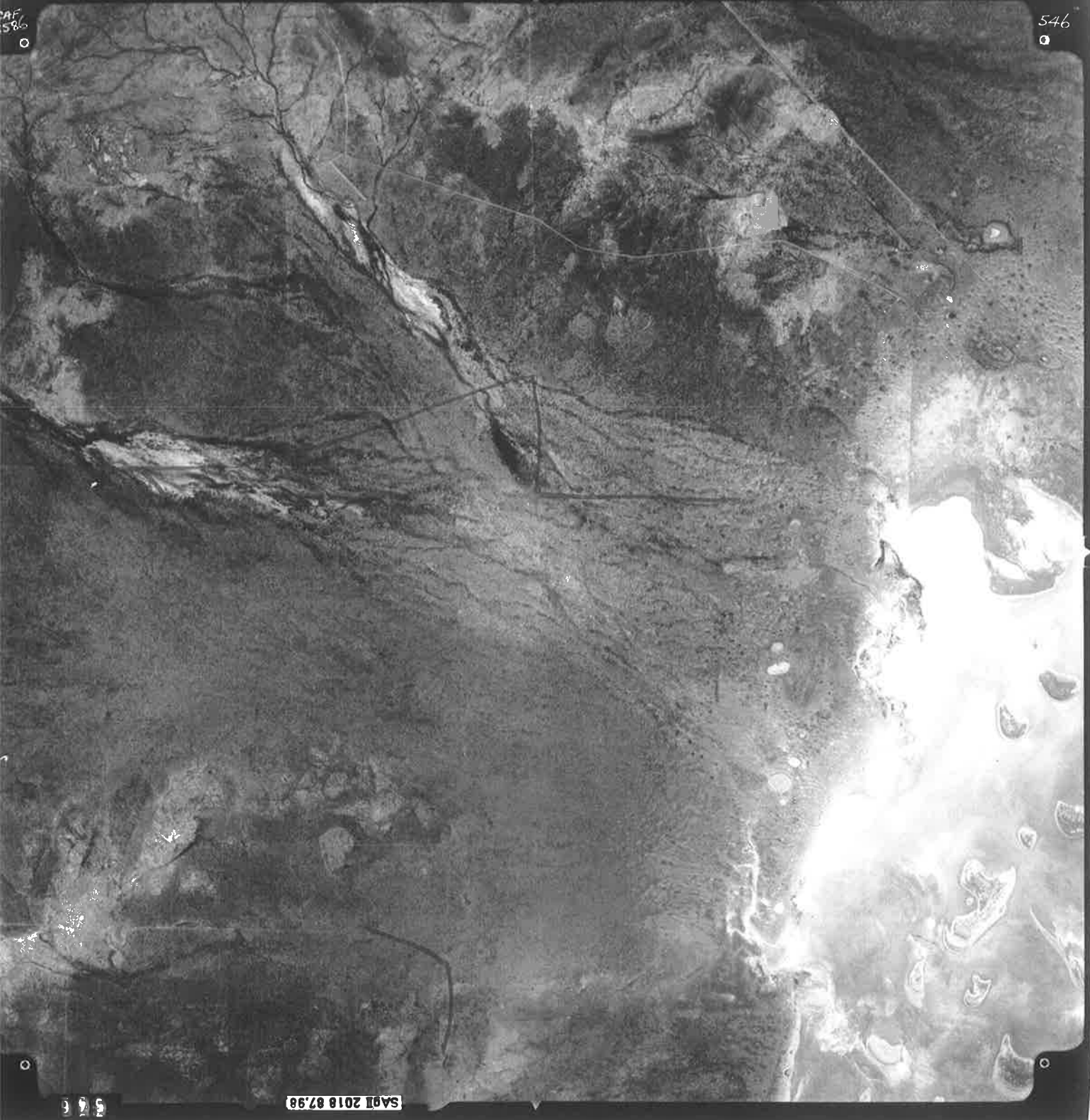


5  
6  
7

SAQT 2018 87.98

MENZIES SH 51-5 CAF 8586 RUN 4 528-552 K 2402 7620m UT 23/11/1982

COMMONWEALTH OF AUSTRALIA  
CROWN COPYRIGHT RESERVED



CAF 586

546

SAOI 2018 07.98

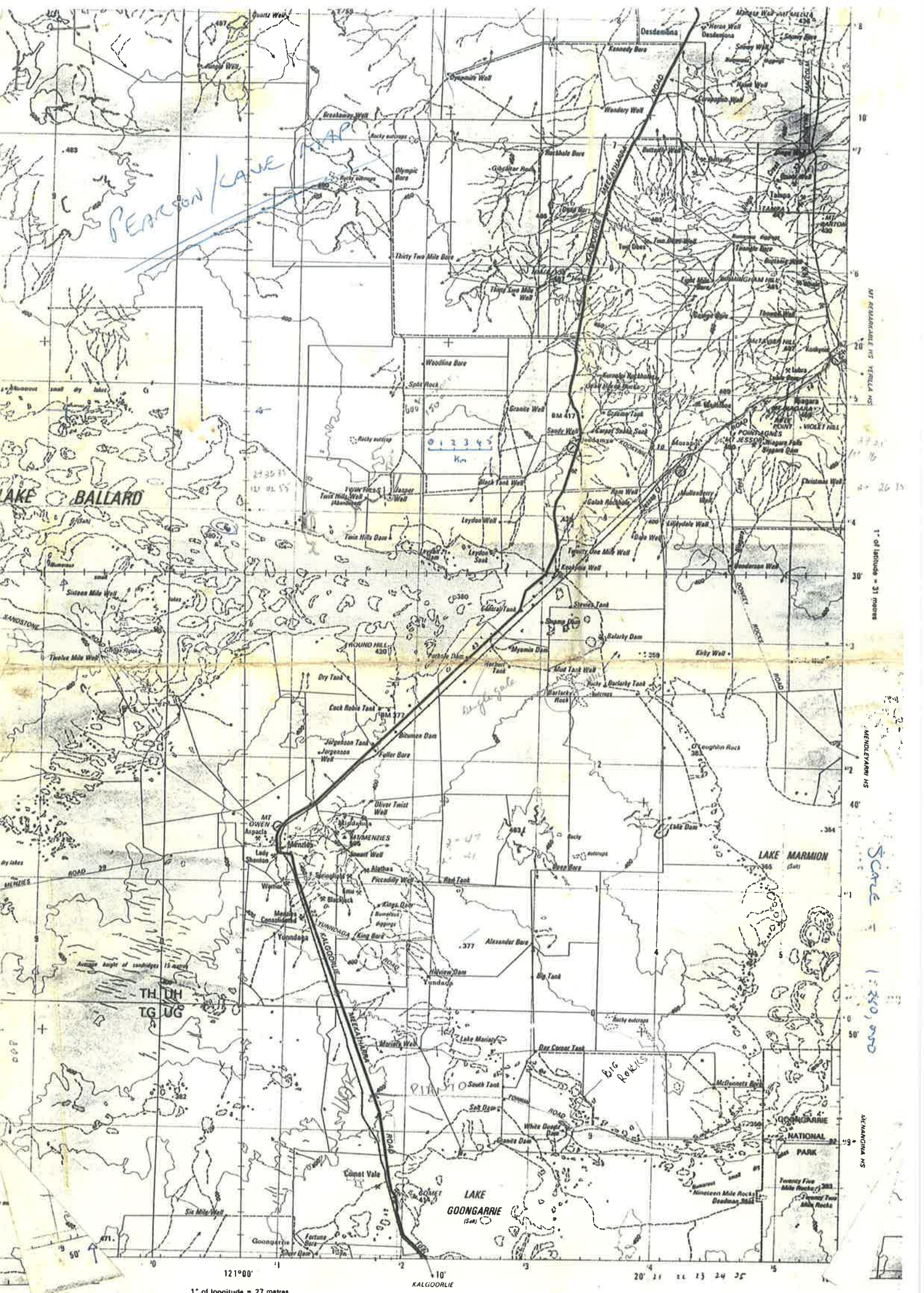
546

**A collection of two maps, and enlargements thereof, that might have been supplied by CALM Kalgoorlie to GBP / JL in 1995 (given the fire-related annotations) on which JL has written 'PEARSON / LANE MAPS' and 'SCALE 1:250,000' and drawn a distance-bar of 0-5km and GBP (probably) has written some coordinates (e.g. '29 26 35, 121 02 55').**

**Someone has also drawn a circle around the site of the second studied (in 1995) BaSt nesting island.**

**Other markings indicate the (or a) track in to the shoreline to the north of Camp Island.**

**The second map (and enlargements thereof) has four circles drawn roughly in blue biro at four locations in the western part of Lake Ballard, near the northern shore. These presumably indicate sites of BaSt (flocks?) seen during an aerial survey (by GBP or JL?) in 1995.**



PEARSON LAKE

Single gate

Big Rocks

121°00' 1° of longitude = 27 metres

KALGOORLIE

20' 21' 22' 23' 24' 25'

MT ORENTHIUM HS

1° of latitude = 31 metres

ANDERWARRI HS

Scale = 1:250,000

ANDERWARRI HS

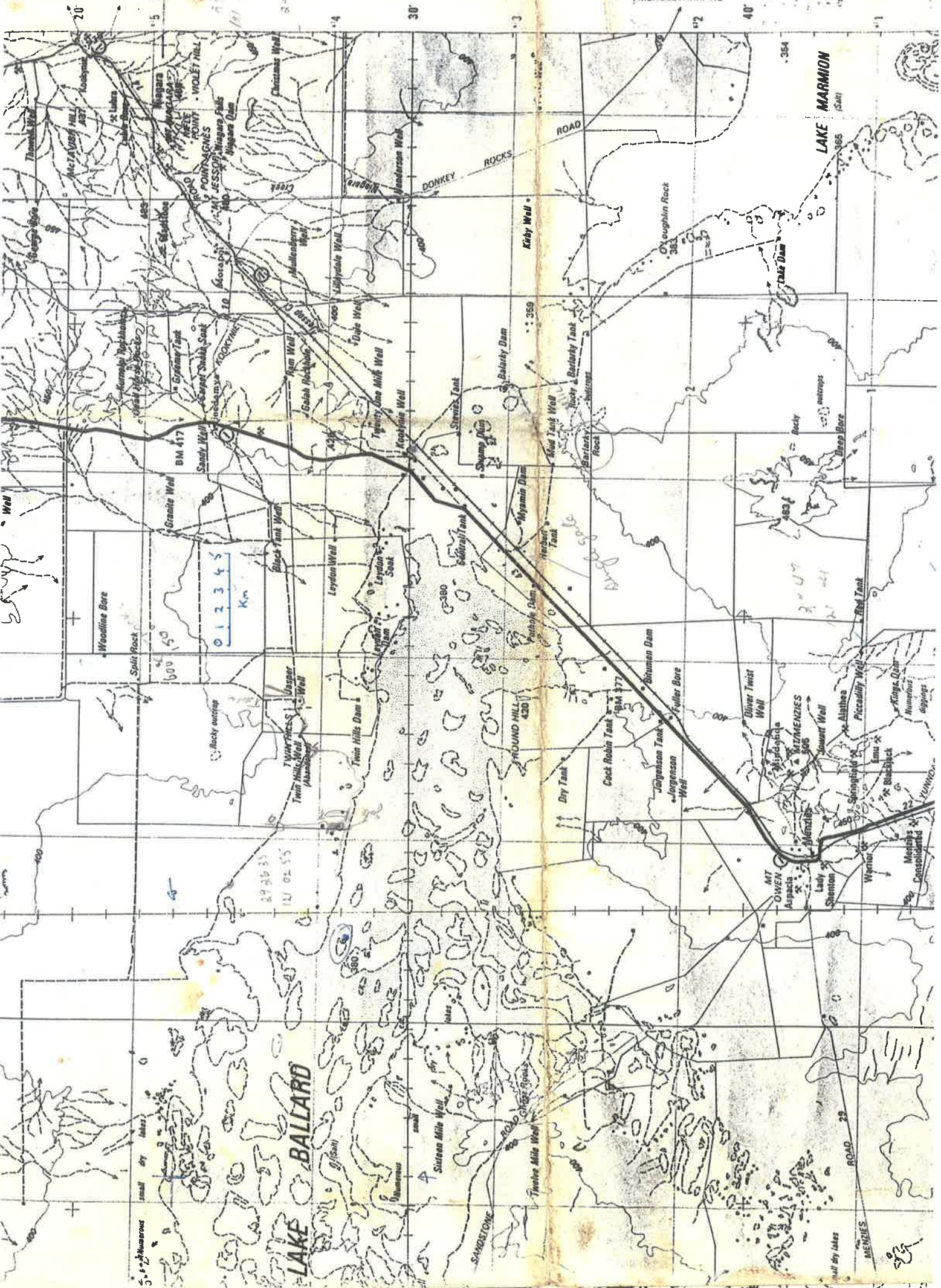


T REMARKABLE HS YERILLA HS

1" of latitude = 31 metres

MENDLEYARRI HS

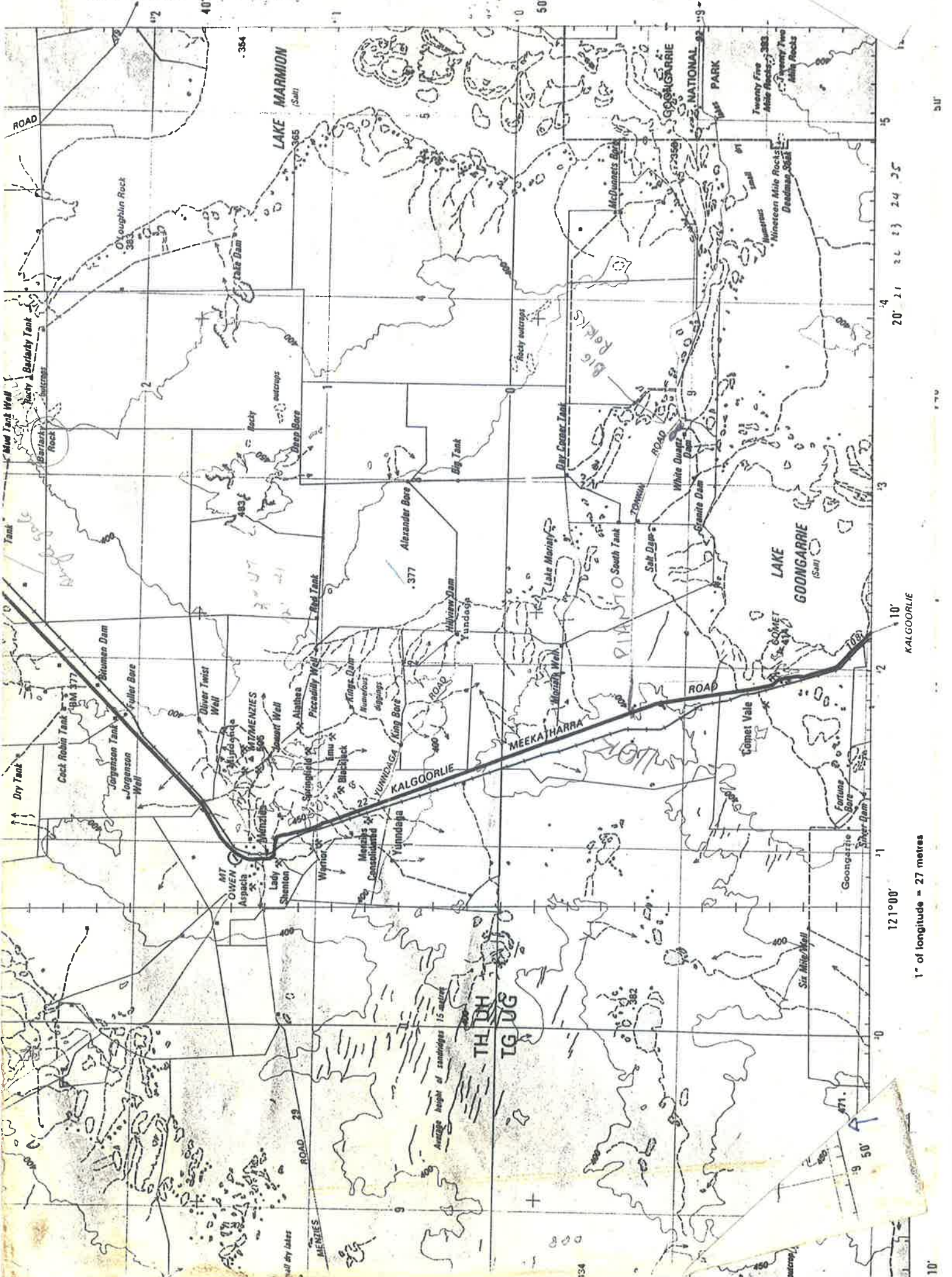
SCALE



SCALE = 1:250,000

MENDLEYARRI HS

MENANGINA HS



20' 21' 22' 23' 24' 25'

10' KALGOORLIE

121°00'

1" of longitude = 27 metres

10'

170

51'

4'

Average height of sandridges 15 metres

THUD  
TGUG

10'

11

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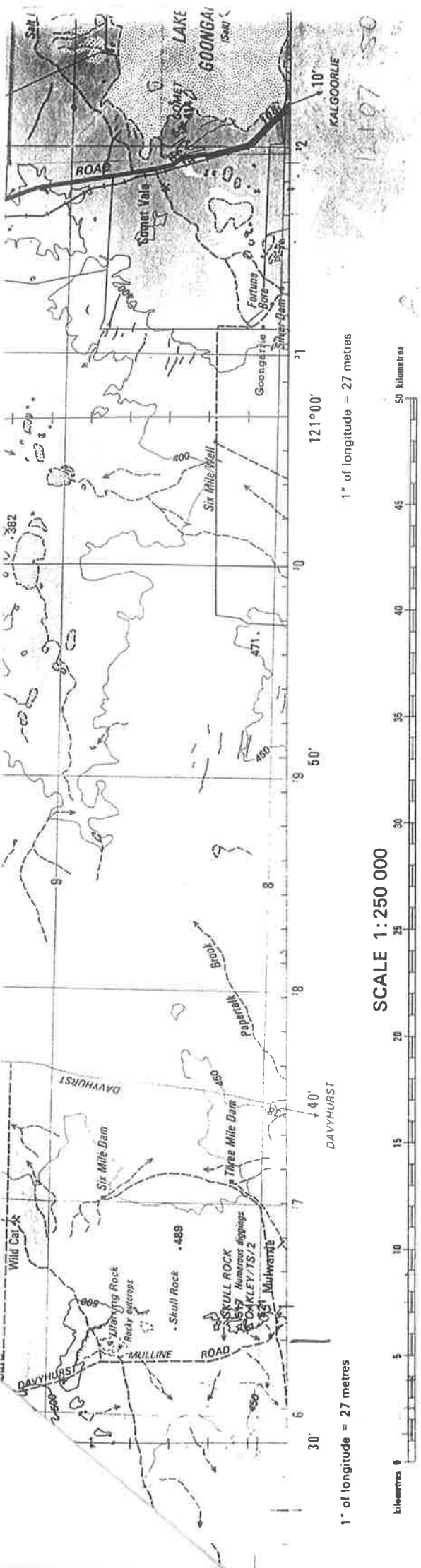
347

348

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351



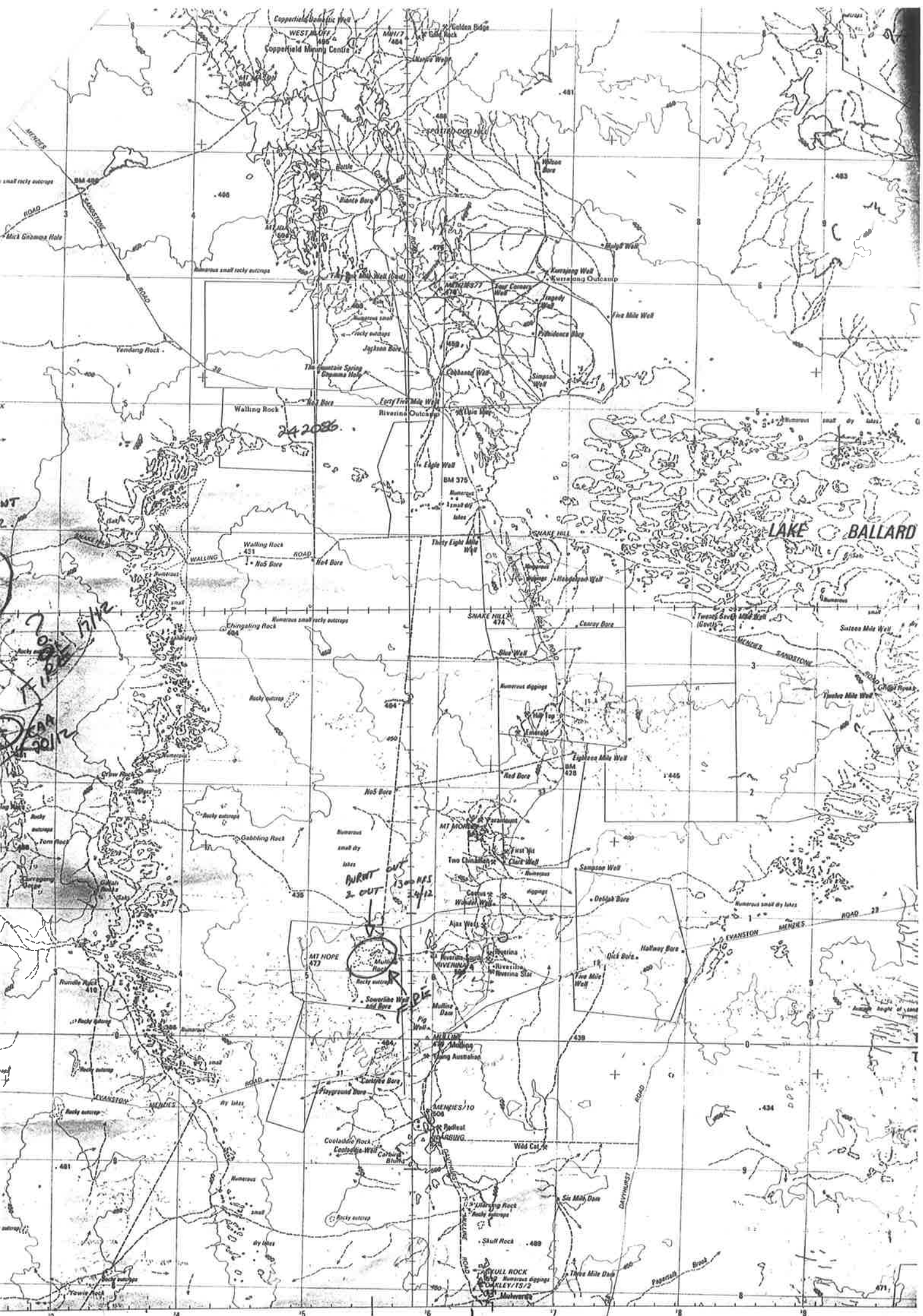
HEIGHTS IN METRES. CONTOUR INTERVAL 50 METRES  
 Horizontal Datum: Australian Geodetic Datum 1966  
 Vertical Datum: Australian Height Datum 1971  
 Transverse Mercator Projection: Australian Map Grid

- Roads Maintained for Public Use** classified according to their intended function as part of the national road system
- Divided road ..... Sealed Unsealed
  - Principal road; National route marker ..... 48
  - Secondary road; Distance in kilometres ..... 16 7
  - Minor road; Road bridge .....
- Other Roads (Use may be restricted)**
- Road .....
  - Vehicle track .....
  - Multiple track railway: Station; Railway bridge .....
  - Single track railway; Railway tunnel .....
  - Light railway or tramway .....
  - Aerodrome; Landing ground ..... ⊕
  - Power line; Fence ..... ×
  - Mine; Quarry or open cut mine .....

- Buildings; Homestead in sparsely settled area .....
- Drive-in theatre; Yard .....
- Trig station; Spot height ..... 287
- Cliff; Contour with value; Depression contour .....
- Sandridges; Sand .....
- Forest or scrub; Scattered vegetation; Mangrove .....
- Pine plantation; Orchard, plantation or vineyard .....
- Perennial lake; Perennial watercourse .....
- Intermittent lake; Intermittent watercourse .....
- Mainly dry lake; Mainly dry watercourse .....
- Swamp; Land subject to inundation .....
- Bore or well; Spring; Tank or small dam .....
- Breakwater or pier; Lighthouse; Exposed wreck .....
- Saline coastal flat; Rock, bare or awash .....
- Freshwater flat; Reef .....
- Bathymetric contour with depth in metres .....

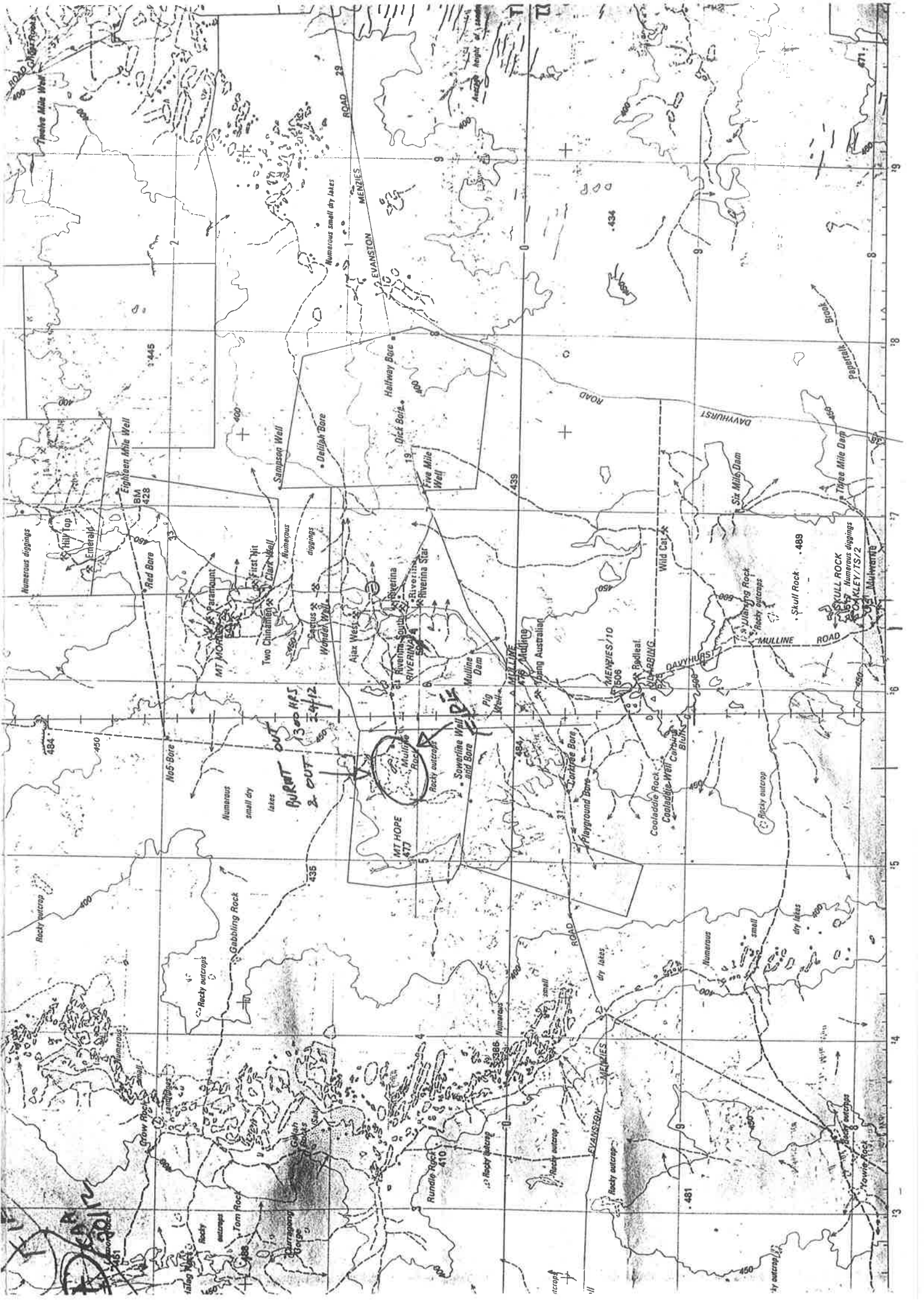
This map has been corrected in the light of information received from air photographs by many organisations. The map reliability note maps get out of date for navigation—To the air and shown on the ground. On the oil map was published. Every effort has been made to ensure that the information is correct. However, if you find an omission or new information, please notify the publisher. Grid reference 2616. Grid reference check the information.

This map is Crown copyright. It is published by the Director, Division of Maps, Canberra, Australia. NMP/85/141

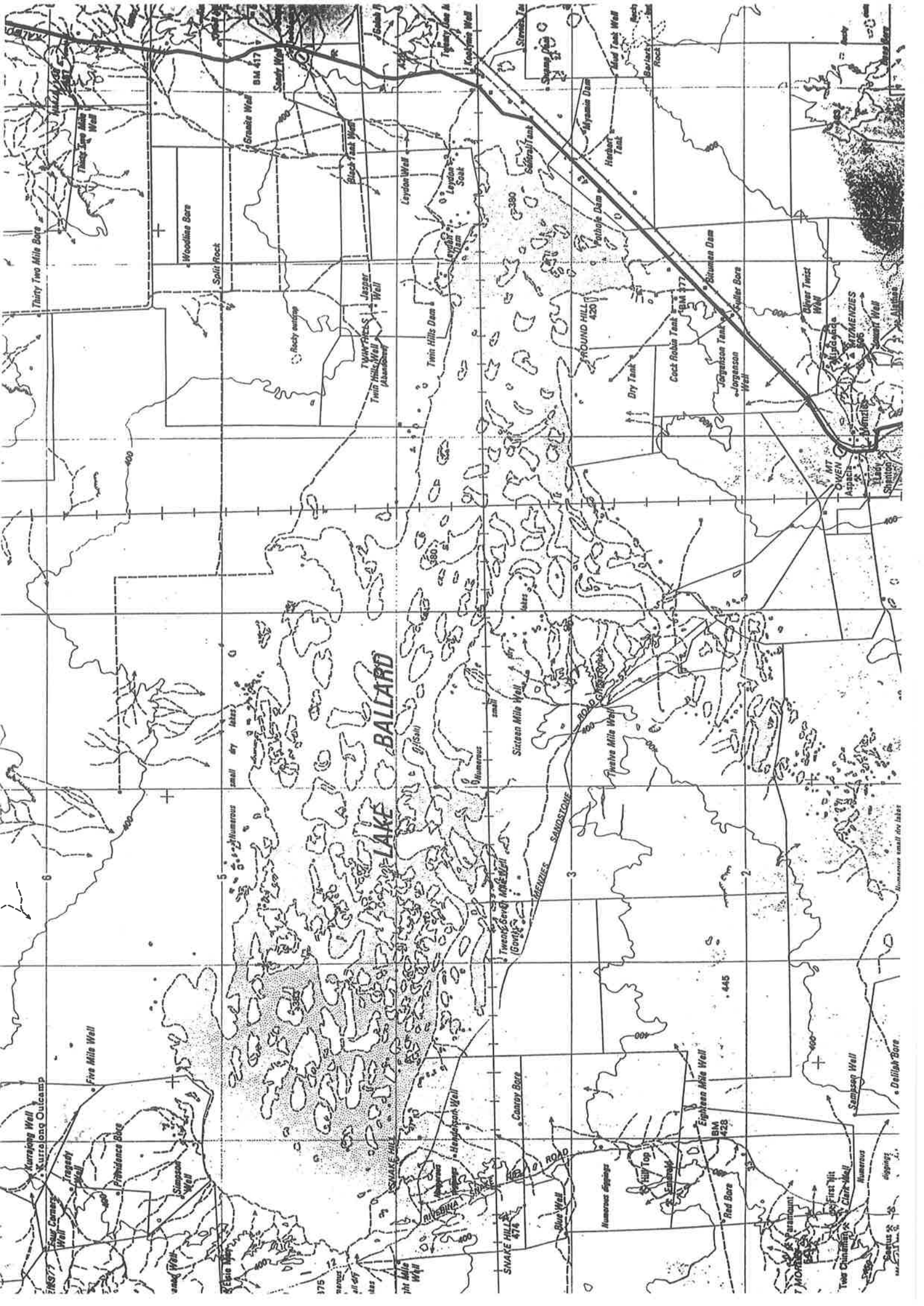








**A single, quality, B&W map (enlarged?) of Lake Ballard. There are no annotations on this map.**



**Two pages of a six page fax (20/3/1995) from JL to GBP with an equipment list for the proposed ground visit to Lake Ballard. Included in JL's list is:  
Obtain a thermometer (max/min?) so we can monitor ambient (air) temperature through the day (and night)'.**

**See the Excel file 'Calendar & Weather Obs. in 1995.xls' for the data that was collected with this thermometer, which may or may not have been a max/min thermometer.**

heavy & bulky gear  
to a minimum  
keep A

Y

Rope  
S/pickets x 4  
Poles  
String  
Tarp x 2  
Water 1 x 20 ltrs, 3 x 5 ltrs  
Table, chairs x 4  
Cutlery 4 sets each supply own  
Cups 4, plates 8 "  
Pots, billy etc  
Fire grate and utensils

## Also

- ✓ Get an extra 10 rolls of Ektachrome 64 ASA (or similar)
- Obtain a thermometer (max/min?) so we can monitor ambient ~~temp~~ (air) temperature through the day (and night).
- Bring a copy of Williams' Aquatic Invertebrate Identification Guide (there should be <sup>an old</sup> 1 copy in my office)
- ~~Also borrow a copy of Sainty's (spelling) little identification book for aquatic plants in Australia (maybe Street or Gray & Gray?)~~
- Jim - <sup>white marks</sup> approx 100 short (30-40 cm) wooden stakes with white tops. (We will number ahead with a broad marker pen so that we can read the numbers from our photos)

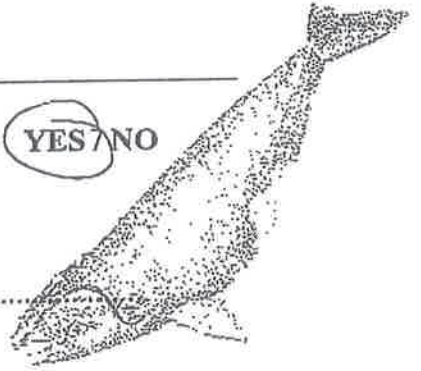
DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT  
BUSSELTON DISTRICT  
FAX NO: (097) 521 432

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TO: GRANT PEARSON URGENT: YES/NO

AT: WOODVILLE

FROM: JIM L. Fax No.



DATE: 20/3/95

Your Ref: .....

Local Ref: .....

As discussed, please have someone (pay if necessary)  
reliably repair the gear, single towing kayak.

No. of pages inc. this page: 6

Please call us on (097) 521 677 if this message was incomplete or illegible

FAXED

**An excerpt from the Tues 28/2/1995 issue of 'The West Australian' newspaper with descriptions of the weather (including 'ex-cyclone Bobby'), temperatures, rainfalls, etc. for WA. Detailed rainfalls recordings are the 24 hrs to 9am on 27/2 with 72 hr rainfall in brackets. Menzies had the most rain in the State to 9am on 27/2 (162mm).**



**Copy of business card of David Rosher, PhD Student, School of Science & Technology, Charles Sturt University, Wagga Wagga, NSW. with an annotation by JL that reads: 'remote sending of wetlands in arid Australia'. JL's recollection (12/6/2014) is that he met DRosher 2-3 decades ago and this card would have been from then.**

General Correspondence  
AWSG Secretary  
... as our quarterly journal  
... option

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**CHARLES STURT**  
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**David Roshier**

PhD Research Student  
School of Science & Technology

*Remote recovery of  
bottles in cold  
Australia*

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bottles in cold  
Australia*

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