

**BANDED STILT *CLADORHYNCHUS LEUCOCEPHALUS*  
RESEARCH IN WESTERN AUSTRALIA IN 1995**

**LEG FLAG SIGHTINGS, LEG BAND RECOVERIES  
IN 1995 AND SUBSEQUENT YEARS**

**AND**

**COUNTS AT NON-BREEDING SITES  
PRE AND POST THE 1995 BREEDING EVENT**

**RESEARCH MATERIALS CONSOLIDATION REPORT**

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This **Research Materials Consolidation Report** is a preliminary stage in the preparation of research reports and/or publications on Banded Stilt research in Western Australia in 1995.

The purpose of an RMCR is to consolidate and conserve all of the research materials relating to a research project. The material reproduced here is in its original form, with limited or no reformatting.

## FUTURE WORK

The next steps to be taken in finalising this RMCR and then preparing a report or publication based on its contents should be to:

- Prepare a Table of all leg-flag (and Band) sightings listed in this RMCR (and any band-recoveries known to ABBBS, see below) and add the Table to this RMCR.
- Perhaps prepare a Table with summary details of trips conducted specifically to look for leg-flagged and leg-banded Banded Stilts (e.g. the trips made by ACI for that purpose); other trips where the primary purpose was different, but flagged/banded BaSt were looked for (e.g. SW wetland monitoring runs by GBP, ACL & JL in Septs and Novs each year) and add the Table to this RMCR.
- Add to this RMCR the original Field Notes of any leg-flag sightings (those already listed in this RMCR) by JL, GBP and ACI.
- Search for GP's ABBBS files for any reports to/from ABBBS of sighted or recovered leg flags or leg-bands.
- Ask ABBBS for copies of any records they have of sightings or recoveries of BaSt leg-flagged and/or Banded at Lakes Ballard and Marmion in 1995.
- Ask CDTM if he has any additional records of sightings or recoveries of BaSt leg-flagged and/or banded at Lakes Ballard and Marmion in 1995.
- Search 'The Tattler' (and 'The Stilt'?) 1995 onwards, for any articles relating to the 1995 BaSt leg-flagging and banding work (and the breeding event more generally) (Done by searching internet in January 2014 by JL, but not all issues are online (yet) and maybe a few relevant articles are yet to be discovered).
- Attempt to put approximate dates on some of the undated materials in this RMCR.
- See yellow highlighted text in the remainder of this RMCR summary for other Future Work needed / desirable.

## Photographs

See a separate RMCR(s) (yet to be prepared, in the interim see digital (scanned) images on JL's work PC).for copies of photographs that were taken (by JL, GBP, ACh, CDTM and possibly others) while doing the 1995 BaSt research work.

## Field Notes

A separate RMCR of 1995 Field Notes has been prepared containing copies of all the Field Notes made by J Lane, G Pearson, A Clarke, A Chapman in 1995 while undertaking collaborative research with C Minton on Banded Stilts in Western Australia in 1995.

## CONTENTS

Note that from early 1995 to early 2000s, JL (Jim Lane) was based in Busselton and technical officers GBP (Grant Pearson) and AC1 (Alan Clarke) were based at Woodvale, Perth – hence the many faxes and emails between JL and GBP + AC1 listed below.

This RMCR contains:

1. Results of an 18/01/2014 online search by JL of ABBBS Database for Banded Stilt banding and recovery summary data. Seek details of all records held by ABBBS of sightings and recoveries of BaSt chicks leg-flagged and/or banded at Lakes Ballard & Marmion in 1995.
2. File note by JL (original 02/05/2012; most recent notation 17/01/2014) indicating ‘There are some papers concerning ... Banded Stilt Research (breeding) in Grant Pearson’s ABBBS file(s)’ and ‘I looked for this (these) [GBP’s ABBBS file(s)] today but was unable to find. Maybe in my pelican research papers? (in boxes). Keep an eye out for them’.
3. An article in the ‘Community update November 2012’ section of ‘WATER FOR GOOD’ headed ‘Satellite trackers unlock Banded Stilt secrets’ by Reece Pedler, PhD Candidate, Deakin University. Describes ‘early results from satellite tags fitted to banded Stilts on Lake Eyre’. Two of the satellite-tagged birds were tracked to Western Australia. This article has been added to this RMCR as a ‘connector’ to this more-recent work by Pedler.
4. Extract (pp. N227-N228) from ‘Olympic Dam Expansion, Draft Environmental Impact Statement 2009, Appendix N – Terrestrial Ecology’. Inter alia this extract reads ‘In 2000, a bird marked with a coloured flag in Western Australia in 1995 was observed at Lake Eyre North, South Australia (Baxter 2003)’. Note that this extract also includes a tabulation (p.N227) of (all or most) documented breeding records of BaSt.
5. Article on p.5 of ‘Tattler’ (No.9, April 2008) headed ‘More on Banded Stilts’, by Maureen Christie. Inter alia refers to several BaSt leg-flagged in WA in 1995 being sighted at Lake Eyre in 2000 and one at Lake George in April 2001 [See the reports of these birds in Gosbell & Christie (2006) and other papers below].
6. Extract from Victorian Wader Study group website referring (under heading ‘2008 News Snippets’ [Feb 2008]) inter alia to ‘... several yellow flags were seen at Lake Eyre in 2000. And Iain Stewart saw one at Lake George in April 2001. These were flagged at Lake Ballard after Cyclone Bobby in April 1995’. Also reads ‘A single yellow flag means it was banded at Lake Ballard in Western Australia. OY/- [sic] means that it is one of the chicks banded in the Coorong in 2006’.
7. Copy of Gosbell, K and Christie, M (2006). The breeding of Banded Stilt and Red-necked Avocet in the Coorong, South Australia: December 2005 – February 2006. Stilt 50:277-284. Inter alia reads (p.283) ‘At least two yellow flagged birds [leg-flagged as chicks at Lakes Ballard & Menzies in 1995] were sighted in the Lake Eyre breeding population in 2000 (Baxter 2003). Another was sighted at Fosters Point, Lake George on 28 April 2001 (Iain Stewart pers. comm.)’.
8. Copy of Minton, CDT (2005). What have we learned from banding and flagging waders in Australia? Refers to banding of ‘850’ Banded Stilt at ‘Lake Ballard’ by CALM in 1995.
9. Copy of Baxter, CJ (2003). Banded Stilt *Cladorhynchus leucocephalus* breeding at Lake Eyre North in year 2000. South Australian Ornithologist No.34, pp. 33-56. Inter alia it gives details (pp.47, 54) of year 2000 sightings on Lake Eyre North of at least two of the Banded Stilts leg-flagged in WA in 1995. This paper also reports (pp. 50, 52) information on ‘Post-breeding dispersal of Banded Stilts from LEN [Lake Eyre North]’.

Seek copy of Minton et al. (2000) report referred to on pp. 54 & 56 and in accompanying internet forum message (18/04/2000) from Hugo Phillips of Birds Australia headed 'Banded Stilts at Lake Eyre report'.

10. Fax of 1<sup>st</sup> July 2001 from Clive Minton (CDTM) to GBP advising he had '...just heard via ABBBS that a yellow-flagged Banded Stilt was seen on 28 April [presumably 2001] at Lake George, in the SE corner of South Australia'.

CDTM also writes 'You were already aware that there were several sightings of yellow-flagged Banded Stilt breeding at Lake Eyre last year [2000] – at least three individuals involved'.

11. Forum posting (08/10/2000) by Ian May that refers to '... some of the Banded Stilts at Lake Eyre North recently were described by Dr Clive Minton in his paper, these birds were apparently tagged at Lake Ballard in WA ...'.

12. Email (06/10/2000 – or 10/06/2000?) from CDTM to GBP advising that '... we've had at least 3 different yellow-flagged Banded Stilts breeding at L. Eyre this year'. Requests flagging details that would enable him to put these records '... into the system for processing by ABBBS'. GBP has annotated the email hardcopy with the coordinates of (the main?) breeding colony and nearby 'Camp Island' on Lake Ballard.

13. 'Report of Recovery to Bander' (dated 14/09/2000) sent by ABBBS to CDTM, copied to GBP, reporting the sighting of a live, yellow leg-flagged bird (Banded Stilt) by Ros Jessop and Peter Collins at Hughes Island, Lake Eyre North, SA, on April 3<sup>rd</sup>, 2000. Banding details given as 'Lake Bollard [sic; should be 'Ballard'] WA' 'on 00/04/1995'.

14. Email (19/04/2000) from GBP to CDTM saying *inter alia* 'Jim [JL] would like to know what colour combination did you use at Eyre. No doubt we should keep a look out for flags from Eyre?"

15. Several emails (16-19/04/2000) between CDTM, GBP and JL. The email of 18/04/2000 from JL to GBP *inter alia* reads 'There is a list of yellow tag sightings reported to us in an early 1996 (or thereabouts) issue of WA Bird Notes. There have been a few since but I don't have time to dig them out just now'.

16. Email (18/04/2000) from JL to GBP *inter alia* referring to list of yellow flag sightings reported by JL in WA Bird Notes circa 1996 and that 'There have been a few since ...'.

17. Emails from CDTM to GBP (16/04/2000) and GBP to JL (17/04/2000) seeking '... the requested list of all yellow leg flag sightings'.

18. Email (13/04/2000) from CDTM to GBP and 'Allan' [Alan Clarke] *inter alia* referring to 'A yellow flag adult Banded Stilt nesting in the Lake Eyre colony. This is the first example of the intermixing of the WA and SA populations'. CDTM also requests GBP prepare '... a consolidated list of all yellow tag sightings'.

This email (13/04/2000) also indicates that 'Allan' sent CDTM metal bands and yellow leg flags for potential use at Lake Eyre, but it turned out that they were unable to be used there. CDTM asks whether he should return them to GBP / 'Allan'.

19. Faxes from CDTM to GBP (23/03/1999) and JL to CDTM (25/03/1999) in which references are made to monitoring BaSt numbers at Rottnest Island 'and other known haunts' [in WA], including the Vasse-Wonnerup wetlands at Busselton, following recent rains in the WA interior.

20. Email (04/11/1998) from JL to Clive Napier thanking him and referring to the opportunity that the November 1998 'South Wetlands Monitoring Program' runs (Coorow to Esperance) to be undertaken the following week would provide for JL, GBP and ACI to look for leg-flagged BaSt.

21. Email (04/11/1998) from Clive Napier to JL reporting their sighting of a yellow leg-flagged BaSt on Lake Ninan, near Wongan Hills, WA, on Fri 30<sup>th</sup> October 1998.
22. Email (25/09/1998) from ACI to JL advising he had looked closely at 1000 of 10,000 BaSt at Yarra Yarra Lakes (near Three Springs, WA) during 'last week's depth gauge [routine Sept wetland monitoring] run' but did not see any leg flags. JL replies (25/09/1998) asking ACI for a memo with more details as 'It all adds to the picture'.
23. Sighting of yellow leg-flagged Banded Stilt by Mavis Russell at Martin's Tank (Yalgorup National Park, WA) on Mon 6<sup>th</sup> April 1998. This sighting was reported by Mavis to JL on 6<sup>th</sup> & 7<sup>th</sup> April, 1998.
24. Article on page 26 of 'Busselton – Margaret Times' of Thurs March 12<sup>th</sup>, 1998, headed 'Banded stilt [sic] visits tagger' and reporting sighting 'this week' of a yellow leg-flagged BaSt on Vasse-Wonnerup, Busselton, '... the second such bird to visit Busselton from the 500 stilts that were tagged during the field trip in March, 1995'. **Check JL's field notes for (a) exact date of second sighting and (b) all details of the first.**
25. Item on p.6 of WA Bird Notes, No.83, Sept 1997, where 'The West Australian Wader Study Group' (WAWSG) refers to leg-flagging of BaSt at Lake Ballard in 1995 and calls for people to report sightings of leg-flagged BaSt. 'All information will be passed on to CALM who are currently doing the research ...'.
26. Letter (May 1997) from Sue Palmer, Secretary, Busselton Naturalists Club Inc., to JL inter alia referring to presentation by JL to club members on April 9<sup>th</sup>, 1997, concerning 1995 BaSt studies in WA, including leg-flagging program.
27. Incomplete and complete copies of handwritten memorandum faxed (04/04/1997) from ACI to JL detailing his plans for surveying south-west wetlands for BaSt numbers and leg-flags during the week beginning April 7<sup>th</sup>, 1997. First page headed 'Banded Stilt Census and flag sighting week beginning 7/4/97' and second page headed 'These lakes to be visited begin [sic] of the week 14-18/4/97'. **This was to be ACI's 3<sup>RD</sup> extensive ground search of SW WA for leg-flagged Banded Stilt, in April 1997. Look for ACI's report on this trip – or his field notes.**
28. An undated (but must be 19/03/1997 or later) tabulation by GBP headed 'Tagged Banded Stilt Observations' with sightings from 31/01/1996 to 17/03/1997 listed and column headings 'Date Reported', 'Reported By', 'Seen By', 'Location', 'Obs date', 'Tot No BAST', '% w/- chest band', 'No yellow Flags', 'Flagged Stilt w/- chest band', 'Comments'. Find field notes of JL's (and GBP's and ACI's – and Andy Chapman's? flagged stilt records and add to this RMCR.
29. 'Observation' on p.3 of WA Bird Notes, No.81, March 1997, of 20,000 Banded Stilt seen at Lake Dumbleyung on 12/12/1996 by 'AC' [Alan Clarke] **during ACI's 2<sup>ND</sup> extensive ground search of SW WA for leg-flagged Banded Stilt, in Dec 1996.**
30. Article (Page 1 of 26/02/1997 edition of 'Great Southern Herald', Katanning WA) headed 'Stilts a stunning sight on lake' inter alia reporting Alan Clarke saw 15-20,000 Banded Stilt on Lake Dumbleyung 'late December last year [1996]'. Article also says 'Some of the birds may have been wing tagged ... [incorrect, should have referred to leg-flagging]'. Article also quotes 'Katanning CALM wildlife officer Tony Zidarich' ask asking people to report sightings of wing-tagged [should instead have said leg-flagged] BaSt to CALM.. **This sighting was during ACI's 2<sup>ND</sup> extensive ground search.**
31. Letter (undated, but must have been written between 24<sup>th</sup> and 27<sup>th</sup> Feb 1997) from Marcus Singor to JL reporting sighting of a yellow leg-flagged (flag on left leg) BaSt (without metal band) on February 24<sup>th</sup>, 1997, at Thomsons Lake (Perth, WA). Also reports BaSt numbers here and at several nearby lakes in Jan-Feb 1997.

32. Letter (12/02/1997) from Dr David McConville, RFDS Port Hedland, to GBP returning the telescope GBP had lent him. Some remarks regarding his searches for Banded Stilt at the Port Hedland salt works.

33. Notation on hardcopy of ACI's fax (see below) of 07-08/01/1997 to JL. The notation reads 'Note: Returned [to Lake Coooolongup] Thursday 9<sup>th</sup> of January [1997]. 2<sup>nd</sup> flagged Banded Stilt observed by ALAN CLARKE. Flag on right tibia. Ring on left tibia. 90% chest band development'. Check whether any BaSt were knowingly (accidentally or mistakenly) flagged on right (as opposed to left) tibia at Lakes Ballard or Marmion in 1995.

34. Fax (07-08/01/1997) from ACI to JL advising of his sighting of a yellow leg-flagged (left tibia) BaSt with a metal band (right tibia) at Lake Coooolongup (near Rockingham, WA) on Mon 6<sup>th</sup> January, 1997. This bird had '... a 90% chest band'.

35. Undated (though has some dates on it, most recent being 04/01/1997) tabulation in GBP's handwriting of locations, names, contact details, and some BaSt observations including one 'tag' sighting (21/01/1996 from/at Rottnest Island). This appears to be a tabulation of people (known to / organised by GBP) searching for / monitoring BaSt, especially for leg-flags, in WA. Accompanying is a page of more details of the same and some other people involved (and/or potentially involved?) in looking out for BaSt in WA.

36. Handwritten, undated, incomplete, draft report by ACI headed 'December 1996 south coast and wheatbelt Banded Stilt leg flag survey'. Reports on the first three days (Mon 9<sup>th</sup> – Wed 11<sup>th</sup> Dec 1996) of this survey of SW wetlands. No leg-flagged stilt were seen during these 3 days. **This was to report ACI's 2<sup>ND</sup> extensive ground search, in Dec 1996.** Note that fax below (05/12/1996) indicates it was to have been 9<sup>th</sup>-13<sup>th</sup> Dec 1996. Note also the 'Observation' reported March 1997 of ACI seeing 20,000 BaSt at Lake Dumbleyung on 12<sup>th</sup> Dec 1996.

Was this report finalised? If not, check ACI's field notes.

What does notation 'record, dumbleyung no birds, wed 22/1/97' on 3<sup>rd</sup> page refer to?

37. Fax (21/12/1996) from JL to ACI with some followup comments/questions re three numbered responses in ACI's fax of 20/12/1996 to JL. **The first relates to ACI's 2<sup>ND</sup> extensive ground search.**

38. Fax (20/12/1996) from ACI to JL with three numbered responses to JL's queries in his fax of 20/12/1996 below. Inter alia ACI reports 8000 BaSt at Lake Gore and '20,000 [BaSt] at Lake Dumbleyung on an island in the middle. Pairs were attempting to copulate! I am still trying to contact locals to keep an eye on them'. **These sightings were during ACI's 2<sup>ND</sup> extensive ground search.**

Extract from Lane *et al.* (2013) shows the water levels, salinities and pH values at Lake Dumbleyung in Sep & Nov 1996 and other years before and after.

39. Fax (20/12/1996) from JL to ACI with three numbered queries, including 'How did it go? (BaSt s)'. **This query refers to ACI's 2<sup>ND</sup> extensive ground search.**

40. JL's faxed reply (09/12/1996) to ACI. 'Are you visiting all lakes / estuaries which our printouts [computer printouts of RAOU / DFW+CALM data, see further below] show have historically held 1000+ BaSt around this time of year. I will finalise Peel-Harvey waterbird surveys [see Lane *et al.* 2002] on Sat 14 Dec [1996]. Ring me to see if there are any flocks you need to check the following week'.

41. Fax (05/12/1996) from ACI to JL detailing his plans for surveying SW wetlands for BaSt numbers and leg-flags during the week 9<sup>th</sup> – 13<sup>th</sup> Dec 1996, and on 17<sup>th</sup> Dec (Yarra Yarra Lakes) and possibly on 18<sup>th</sup> Dec (any lakes missed during the previous week). **This relates to ACI's 2<sup>ND</sup> extensive ground search.**

42. Letter (03/12/1996) from GBP to Dr David McConnville, c/- RFDS, Port Hedland, WA, thanking him '... for agreeing to check the flocks of Banded Stilts at Cargill for yellow leg flags; advising him of the information being sought; referring to '... four records [of yellow leg-flagged BaSt] at Cargill [Port Hedland salt works], one at Rottnest and one at Dampier', and lending him an old telescope.
43. Article 'Leg-Flagged Banded Stilts' (including sightings received by JL to date) as appeared on pp.16-17 of WA Bird Notes No.80, Dec 1996. Draft is below (at 23/10/1996).

Note that a different article with the same heading, with authorship of JL not acknowledged, appeared (page 18) in the March 1996 issue of WA Bird Notes (No.77). That article did not list leg-flag sightings to date.

44. 'Observations' on p.3 of WA Bird Notes, No.80, December 1996, of approx 10,000+ BaSt at Yarra Yarra Lakes Nature Reserve near Three Springs on 29/09/1996 by Brenda Newbey and 7000 BaSt at 'south of Austin Bay' (Peel Inlet) on 20/10/1996 by John and Judy Blyth. See 02/10/1996 and 20/10/1996 in this RMCR for details of these sightings.
45. Fax (27/11/1996) from JL to ACI with JL's comments on ACI's Sept 10<sup>th</sup>, 1996, 'Itinerary and costs for the proposed December 1996 search for leg-flagged Banded Stilt'. ACI will search wetlands north to Cataby – Wongan Hills and east to Esperance. **This would be ACI's 2<sup>ND</sup> extensive ground search.** JL notes '[GBP] will try to organise surveys/counts of northern sites (Dampier, Port Hedland) for December [1996] also'.
46. Fax 27/11/[1996]) from JL to Mike Bamford saying 'Thanks for the BaSt info. The only flag sighting we have to date is a Ballard / Marmion to Kalgoorlie movement ([recorded] by Andy Chapman)'.
47. Fax (04/11/1996) from JL to GBP with map showing GBP where John Blyth recently (20/10/1996, see below) saw Banded Stilts (presumably a large flock). The BaSt were in Austin Bay, Peel Inlet.
48. Fax (undated, probably early Nov 1996) from JL to CDTM advising of recent high counts of BaSt in WA (7000+ at Peel Inlet and 11,000 at Walyormouring Lake); advising that 'We are encouraging birders in WA to look out for flagged Banded Stilt and organising a Dec/Jan survey' and asking 'Are people in the east on the lookout'.

The above fax includes an email chain (started on 31/10/1996) by Richard Alcorn advising of 50,000+ BaSt on the Natimuk-Douglas saline wetlands in the Wimmera region of Victoria on 27th October 1996.

49. Letter (Nov 1996) from Colin Davis (RAOU Wader Study Group) to ACI inter alia inferring that ACI perhaps surveyed the waterbirds of Lake Logue on 06/02/1996 [If so, he would have been looking for leg-flagged BaSt, even if that wasn't the primary purpose of the survey].
50. Fax (23/10/1996) from JL to John Blyth with copy of article 'Leg-Flagged Banded Stilts' (including sightings received by JL to date) for December 1996 issue of WA Bird Notes.
51. Fax (23/10/1996) from JL to Verna Costello (CALM Corporate Relations) with information '... that could be used as basis for article in Bush Telegraph'. Aim is to encourage people to look for and report leg-flagged Banded Stilts. **Obtain copy of article, assuming it eventuated.**

An attached page, not sent to Verna, indicates that the final numbers banded and flagged at Lakes Ballard and Marmion in 1995 were 500 leg-flagged and 800 leg-banded. Presumably these are rounded (i.e. approximate) numbers.

52. Fax (23/10/1996) from JL to GBP with copy of 'Leg-flagged Banded Stilts' article to appear in December issue of WA Bird Notes. Article reports yellow leg-flag sightings to date (24/10/1995 to 29 Sep 1996), requests further sightings to be reported to GBP or JL,

and offers participation in proposed trip by Alan Clarke in summer 1996/97 to search for leg-flagged BaSt.

53. Draft (23/10/1996) of article 'Leg-Flagged Banded Stilts' (including sightings received by JL to date) that was published (pp.16-17) in WA Bird Notes No.80 December 1996 (copy above).
54. A page of notes by JL recording John Blyth's count of 7000 ( $\pm 25\%$ ) Banded Stilt in Austin Bay (Peel Inlet) on Sun 20<sup>th</sup> October, 1996. See JL's fax to GBP of 04/11/96 above for map of location.
55. Map headed 'Leg Flag & Band Sightings' that was JL projected during his presentation (on behalf of JL, CDTM *et al.*) at the 'Southern Hemisphere Ornithological Conference' in Albany, WA, on 07/10/1996. Shows distance travelled and days elapsed of BaSt flagged at Lakes Ballard & Marmion in 1995 and subsequently sighted at various locations (5) in WA.
56. A table providing details of the five BaSt leg-flag sightings shown in the map (see above) presented by JL at SHOC, Albany, on 07/10/1996 (see above). This table was not included in the presentation.
57. JL's notes of Brenda Newbey's sighting (reported by Brenda to JL by phone on 02/10/1996) of a yellow leg-flagged Banded Stilt on Yarra Yarra Lakes (Near Three Springs, WA) on Sun 29<sup>th</sup> September 1996.
58. 'Rough jottings [by JL] made in preparation for talk at 'Sthn. Hem. Orn. Congress', Albany 07/10/1996'. Includes calcns of numbers of BaSt chicks banded and flagged at Lakes Ballard and Marmion in 1995 and by whom, plus some details of leg-flag sightings from 24/10/1995 to Sept 1996. Note: scanned over two pages due to length.
59. Fax (10/09/1996) from JL to ACI with editing of ACI's proposal (of 06/09/1996, below) 'Itinerary and costs for the proposed December 1996 search for leg-flagged Banded Stilt'.
60. Memorandum (06/09/1996) from Alan Clarke (ACI) to JL headed 'Itinerary and costs for the proposed December 1996 search for leg-flagged Banded Stilt'. This was a proposed ground survey of likely wetlands in SW Australia (north to Wongan Hills – Cataby and east to Esperance, including Wheatbelt). **This would be ACI's 2<sup>ND</sup> extensive ground search.** See above (10/09/1996) for JL's edits.

Includes a comment that 'Mike Bamford suggested I drop him a note explaining the proposed survey and he will bring it to the attention of RAOU [now Birdlife Australia] members at the next meeting [presumably of the RAOU WA Group]'.

61. An undated page of jottings that appear to be distances (km) and vehicle costs for a proposed leg-flagged BaSt survey of SW WA by ACI. Refers to proposed purchase of a survey ski. Also reference to Colin Davis and Lake Logue.
62. Undated composite map of south-western Australia with the following wetlands highlighted: Culham Inlet to Oldfield River estuary; Lake King area, Wilson Inlet, Kwornicup Lake, Balicup Lake area, Coyrecup Lake, Lake Chinokup (Chinocup), Lake Altham, Lake Grace, Lake Coomelberrup, Lake Dumbleyung, Wagin lakes area, Toolibin Lake area, Whitewater Lake, Brown Lake, Lake Mears, Lake Champion, Cowcowing Lakes, Lake Dowerin, Walyormouring Lake, Lake Ninan, Lake Hinds?, Guraga Lake. Kilometres are tallied. Presumably this was prepared (by ACI?) when planning a ground survey for leg-flagged Banded Stilts.
63. Undated collection of maps of SW WA with some wetlands marked and a list of numbers that are perhaps distances (km).
64. Collection of undated pages of notes (ACI's handwriting) referring to many wetland locations, people (including Mark True) and their contact details. Clearly this was in preparation for a trip around SW WA to search for leg-flagged Banded Stilt. Note

reference to 'canoe shop \$35, spirit 4m ... [indecipherable] and 'arrange car for 9<sup>th</sup> to 20<sup>th</sup>'. This info can be used to link these pages to the corresponding survey(s) of ACI. See Memo (06/09/1996) from ACI to JL.

65. Fax (03/09/1996) from JL to ACI and GBP requesting ACI to '... prepare a plan and detailed costing for a survey of most-favoured Banded Stilt habitats from Geraldton to Esperance to be conducted by the latter half of December this year'. **This would be ACI's 2<sup>ND</sup> extensive ground search.** 'The objective will be to locate leg-flagged Stilts, record numbers, plumage stages etc. as per the survey you conducted in June this year'. JL requests final draft.
66. 'Observation' on p.3 of WA Bird Notes, No.79, Sept 1996, of 3000 Banded Stilt seen at Lake Gore on 12/06/1996 by Alan Clarke.
67. Notice on p.26 of WA Bird Notes, No.79, Sept 1996, advising of a proposed excursion to Austin Bay Nature Reserve, Peel Inlet, on 20<sup>th</sup> Oct 1996, to be led by John & Judy Blyth.
68. Undated (but must be post 25/06/1996) handwritten report by ACI headed 'Banded Stilt Survey of SW June 1996' in which ACI reports observations made by him during ground survey for leg-flagged Banded Stilt from Mon 10/06/1996 to Tues 25/06/1996. Many Banded Stilt were encountered, but none were seen to have leg-flags (or leg-bands). Many notes made about BaSt plumages observed. **This report is from ACI's 1<sup>ST</sup> extensive ground search of SW WA for leg-flagged Banded Stilt, in June 1996.**
69. Radio message (12/06/1996) from ACI to JL reporting 'He [ACI] is at Lake Gore with 3000 Banded Stilts'. This is during ACI's survey reported below, i.e. **during ACI's 1<sup>ST</sup> extensive ground search**
70. Fax (05/06/1996) from ACI to JL with a '... rough guide to the lakes and estuaries that have water' with the aim of searching these (during the next couple of weeks) for Banded Stilt. The listed waterbodies extend from Esperance to north of Perth. **This would be ACI's 1<sup>ST</sup> extensive ground search.**
71. Undated map of coastal wetlands in Lake Shaster Nature Reserve and immediately west, with the following numbers annotated over the wetlands: '275-350, 4-10, 30-50, 1-4, 1-4, 4-10, 350-500, 1-4, 10-20, 1-4, 1-4, 500+' On the back of this map are annotations '1500, 2000-3000, eastern shore, unicup, Roger Hearn'. Maybe the numbers on the map are areas, i.e. size classes? Maybe the numbers on the back are BaSt numbers? at Lake Unicup? Seen by Roger Hearn of CALM Manjimup?
72. Undated message from Mark True (spelling?) to ACI that appears to refer to BaSt numbers? ('Hammersley 200-300') and to rainfalls? ('23mm', '60mm').
73. Undated jotting of contact details of 'Mike & Ann Buckmann' (Esperance) and 'Alan Rose. Ranger. Esp. (Cape Arid)'.
74. Message (probably 3<sup>rd</sup> April, but of which year?) from [Ranger] Steve Dutton of Yalgorup National Park. Annotation refers to 'Bill Russell' and his contact details.
75. Undated A3 map with message attached, from Leon Sylvester (spelling?) (CALM Wildlife Officer) to ACI, that reads 'FYI. You should be able to get a good coverage of water using these tracks. Gets a bit wet in winter though!' map has roads and tracks in Yenjenning (Beverley) Lakes – Channel Lakes area highlighted in yellow and pink.
76. Undated map of Lake Dumbleyung with annotations including 'Terri Lloyd ... [phone / fax number] and 'Stilts seen here ... [indecipherable] 95 [presumably referring to 1995]'. On reverse side of this map is a sketch map of access to south side of lake Dumbleyung and annotations including 'Owen Dare [spelling?] is the owner of property'. Is this GBP's advice to ACI post 1995?
77. Undated photocopy of old computer printout of Banded Stilt data from RAOU (Roger Jaensch and volunteers) Survey (DFW / CALM funded and supervised by JL) of Wetland

Nature Reserves in SW WA from 1981 to late 1980s). Annotations (mainly by JL?) suggest the data in this printout was used to plan the survey for leg-flagged BaSt of 'undated composite map' described above.

78. Copy of JL's fax of 27/05/1996 (below) with some annotations by ACI.
79. Fax (27/05/1996) from JL to AC with '... a copy of fax I sent Grant (GBP) on 23/08/1995. It contains the list of sites in WA at which sizeable numbers of Banded Stilt have been counted in the past'. JL requests AC to prepare draft itinerary for AC to search Geraldton to Esperance area. **This would be ACI's 1<sup>ST</sup> extensive ground search, in June 1996.** 'I [JL] will do northern [Pilbara?] sites next month'. **Check JL's field notes for this 'northern' trip.**
80. Hardcopy (16/05/1996) of document 'Banded Stilt *Cladorhynchus leucocephalus* Seminar' '... compiled [by JL] 14-16 May 1996 in preparation for seminar at Woodvale [CALM's Wildlife Research Centre] on Fri 17 May [1996]. Only the first page and the two pages (pp.8-9) concerning searches for and sightings of leg-flagged BaSt are reproduced here. See another RMCR, yet to be prepared, for the full document.
81. Fax (25/04/1996) from Jeremy Hogarth (formerly with ABC Natural History Unit, now with TVNZ) attaching '... the transcript of Clive's [CDTM's] comments when we were watching the stilts rushes on a film editing machine'. On page 17 CDTM says 'We've got people watching for when numbers of birds [BaSt] start to reappear around Perth and Albany and if they've got tags on them ...'
82. Note (23/04/1996, or is it 23/01/1996?) from Steve van Leeuwin to GBP reporting BaSt numbers at Dampier Salt in the preceding month or so.
83. Letter or fax (20/03/1996) from GBP to Terri Lloyd referring to her and her friends efforts to find leg-flagged BaSt and advising that he (GB) had '... turned up 3 leg flags and a leg band on young Banded Stilts at the [Port] Hedland salt works [on 28/02/1996?] and received a report of one other [when?] at Dampier Salt'. **Find original details of these sightings by GBP.**
84. Undated note (attempt to date this) from GBP to CDTM with 'Attached summary [of BaSt flag sightings] as requested'. Listed sightings span the period December 1995 to March (7<sup>th</sup>) 1996 and are of flagged birds seen near Kalgoorlie and at Rottnest, [Port] Hedland Salt and Dampier Salt.
85. Cover sheet of fax (11/03/1996) from JL to GBP with copy of JL's notes of a phone call (08/03/1996) from Steve van Leeuwin (see below). Notation on cover sheet reads 'ESP, Mike & Ann Buckmann, Pink Lake Rd, 090 713517, 30mm'. Perhaps they were prospective BaSt observers?
86. JL's notes of phone call (08/03/1996) from Steve van Leeuwin relaying a message from his wife Regina [who works for Dampier Salt] that a truck driver saw a leg-flagged Banded Stilt on a pond at 'Levee 3 (main haul road)' at Dampier Salt on March 7<sup>th</sup> 1996. JL also notes 'Steve says BaSt have only appeared in Dampier/Karratha in last 2 weeks. None seen previously'. Copy of notes faxed by JL to GBP on 11<sup>th</sup> March, 1996.
87. Copy of fax (14/02/1996) from Mal McKenzie of Cargill Salt, Port Hedland, WA, to GBP. This copy has some notations in GBP's handwriting including one that seems to indicate that on 26<sup>th</sup> Feb 1996 there were 2,000-3,000 BaSt at Cargill Salt.
88. Fax (14/02/1996) from Mal McKenzie of Cargill Salt, Port Hedland, WA, to GBP, re-faxed by GBP to JL on 15/02/1996, reporting inter alia that 'Banded Stilts returned yesterday. Approx 200. Further arrivals today. As yet no leg bands apparent. Some juveniles present'.

89. Article titled 'Leg-flagged Banded Stilts' on page 18 of WA Bird Notes, No.77, March 1996. Reports recent leg-flagging activity and requests sighting to be reported to GBP. Doesn't list any sightings to date. Author (JL) of article not acknowledged.

Note that a different article with the same heading, with authorship by JL acknowledged, appeared in the December 1996 issue of WA Bird Notes (No.80). That article did list leg-flag sightings to date.

90. Fax (06/02/1996) from JL to Allan Burbidge with '... info we are seeking [any sightings of leg-flagged BaSt, plus associated observations]'. The 'info' is contained in a copy of JL's letter of 30/10/1995 to Fran Head at Rottnest Island.

91. Fax (06/02/1996) from GBP to Steve van Leeuwen at 'K' [probably Karratha] with 'Banded Stilt information [copy of JL's letter of 31/10/1995 confirm date to Fran Head with details of information to be recorded when searching for leg-flagged BaSt] as discussed'.

92. Fax (02/02/1996) from GBP to Andy Chapman advising that a yellow-flagged BaSt was recorded on Rottnest Island on 20th January 1996. GBP asks Andy 'Any chance of checking south coast lakes etc'

93. An undated note, in GBP's handwriting, that reads 'Rottnest Island. Fran Head. 1 tagged BAST sighted at Lake Herschell [one of numerous lakes on Rottnest Island]. No chest band on 20 & 21 Jan 96. 7PM. by a visitor to the island'.

94. Fax (02/02/1996) from GBP to JL advising that a yellow-flagged BaSt was recorded on Rottnest Island on 21<sup>st</sup> (or 27<sup>th</sup>, handwriting unclear) of January 1996.

95. Fax (17/01/1996) from JL to CDTM inter alia advising 'Only one sighting of a flagged stilt so far – by Andy Chapman, from Ballard / Marmion to Kalgoorlie area'.

96. Letter (16/12/1995) from Terri Lloyd to GBP with results of recent wader (including BaSt) counts (10<sup>th</sup>, 19<sup>th</sup>, 25<sup>th</sup> Nov and 16<sup>th</sup> December 1995) on Lake Dumbleyung by her, Geoff Burrow and Barbara Dawson. 'None of us observed leg bands'. 'The old causeway across the lake is obvious and this is usually so when it [the water level] is awfully low'. As a matter of interest, unrelated to BaSt research, find out about more about this causeway.

97. Notice (on p.22 of WA Bird Notes, No.76, December 1995) of Mon 22<sup>nd</sup> April 1996 meeting of RAOU WA Group. JL to talk about Banded Stilts' 1995 breeding event at Lake Ballard (and Lake Marmion).

98. Article on pp.16-17 of WA Bird Notes, No.76, December 1995, titled 'Banded Stilts Complete the Job', authored by 'Clive Minton, Jim Lane and Grant Pearson' and reprinted from 'The Tattler 4 July 1995'. The article concludes with 'Would everyone in Western Australia, please keep a lookout for banded/flagged birds? Please also monitor, by regular counts, the return of birds to traditional non-breeding areas as they leave the drying salt lakes in the near future'.

99. Fax (22/11/1995) from Terri Lloyd [of 'Eden Valley'?] to GBP advising inter alia that 300 Banded Stilt were on Dumbleyung Lake 'on Sunday' and 'Barbara to survey again Friday and one on Dec. 16'. Re-faxed by GBP to JL on 27/11/1995.

100. Letter (undated, but probably late November 1995) from Mike Bamford to JL reporting Banded Stilt (but no leg flags seen) on a lake on Mt Monger Station, east of Kalgoorlie, on 14/11/1995. Also refers to encouraging someone to 'check out Banded Stilts at Walyoumoring (sic) Lake' and that person saying '... he had seen them breeding on a salt lake between Little Wongan Hill and Kondut in the late '60s/early '70s'.

101. Letter or fax (16/11/1995) from GBP to Alan Rose (Ranger, Cape Le Grande National Park) with '... a list of the details [including yellow leg-flag sightings] we would like on

any Banded Stilts you may get the chance to observe [particularly at Lakes Warden and Gore in the Esperance area].

102. Letter or fax (14/11/1995) from GBP to Bernie [Haberley of CALM] inter alia asking him to use a radio broadcast to recruit someone to search for leg-flagged BaSt in the Esperance area.
103. Note by JL recording Andy Chapman told him on 8<sup>th</sup> November 1995 that he saw a leg-flagged Banded Stilt at Lake Arrow, near Kalgoorlie, on Tues 24<sup>th</sup> October 1995.
104. Fax (31/10/1995) from JL to ACI with a copy of JL's 30<sup>th</sup> Oct 1995 letter to Fran Head at Rottnest Island. Fax reads 'For info – plse have a good look for flagged Stilt next week' ['next week' refers to November wetland monitoring run].
105. Fax (31/10/1995) from JL to Mike Bamford (of RAOU WA Group) with a copy of JL's 30<sup>th</sup> Oct 1995 letter to Fran Head at Rottnest Island. Fax reads 'For info – we haven't had any sightings yet'.
106. Fax (31/10/1995) from JL to GBP with a copy of JL's 30<sup>th</sup> Oct 1995 letter to Fran Head at Rottnest Island. Fax reads 'Would you follow up (visit Rotto) plse (ASAP). Plse have a good look for flagged Stilt next week' ['next week' refers to November wetland monitoring run]. Plse also ring me about progress with observers'.
107. Fax (31/10/1995) from JL to Ms Fran Head, Environmental Department, Rottnest Island, providing information on the 1995 BaST leg-flagging program and listing the details being sought concerning any sightings of leg-flagged BaSt and BaSt numbers, plumage (% with chest bands), etc. Refers to telephone conversation 'last week' and '... Grant [GBP] will come over to Rottnest some time soon to meet you and any other volunteers'.
108. Fax (10/10/1995) from Mike Flood, Rottnest Island Authority, to GBP offering to meet (regarding 'Banded Banded Stilts') with GBP, JL – and others from Rottnest Island – on Thurs 19<sup>th</sup> Oct 1995, at Rottnest.
109. Undated (but presumably late 1995) page of notes by GBP that appears to be mainly or entirely a list of possible contacts on Rottnest Island
110. Notice (on p.15 of WA Bird Notes, No.75, Sept 1995) of Mon 22<sup>nd</sup> April 1996 meeting of RAOU WA Group. JL to talk about Banded Stilts' 1995 breeding event at Lake Ballard (and Lake Marmion).
111. Article in WA Bird Notes (No.75, p.4, Sept 1995) by Mal McKenzie headed 'Disappearing Stilts' reporting that 'At the Cargill salt works, Port Hedland, there are up to 1000 Banded Stilts and Red-necked Avocets during winter. This year, both species left ... after rain in the middle of February [Cyclone Bobby]. ... It will be interesting to see when they [the BaSt] return'.
112. Fax (29/08/1995) from JL to GBP referring to his fax of 28/08/1995. Fax refers to '... split up of lakes between you, me and Alan [ACI]' [This is a reference to who will visit which lakes during Sept 1995 routine wetland monitoring]. Time to be allowed during monitoring runs to check out any BaSt for leg flags. ACI is to also conduct waterbird surveys of Lakes Logue and Indoona. GBP to extend his run (to Esperance) up to Lake Ballard to retrieve the water level logger and '... go (walk?) out to Camp Island and do standard sweeps, water samples, etc. as before'.
113. Fax (28/08/1995) from GBP to Bernie Haberley (CALM Esperance] that begins with 'Attached is the outline for recording Banded Stilts as discussed'. Urges Bernie to '... regularly visit at least one of the major lakes around Esperance'.
114. Fax (28/08/1995) from GBP to Kathy Sanderson that begins with 'As discussed attached list of details for recording observations of Banded Stilt'.

115. Fax (28/08/1995) from JL to Mike Bamford (of RAOU, now Birdlife Australia, WA Group) with a copy of JL's fax of 23/08/1995 to GBP, for info.

116. Fax (23/08/1995) from JL to GBP headed 'Banded Stilt Monitoring' saying that recent aerial survey by Andy Chapman shows Lakes Marmion and Ballard will soon be dry so 'What we need are a few observers (one each) at a few key localities where Banded Stilt are known to congregate as inland water dry out to record the following on a regular basis'. JL lists the information required (BaSt numbers, leg-flag sightings, % with chestnut chest bands, etc.) and provides a list of sites in WA at which sizeable numbers of Banded Stilt have been counted in the past. GBP is to choose sites from the list and 'Mike Bamford will be able to give you advice on who might be approached about which sites'. 'It also occurs to me that we can count/check the BaSt at each of the lakes we monitor in Sep and Nov this year' [this is a reference to routine Sept and Nov monitoring of approx 60 (in 1995) of SW (Eneabba to Esperance) wetlands under CALM's 'South West Wetlands Monitoring Program', now known as SWWMP]. Note that JL found (January 2014) several copies of this fax amongst GBP's and ACI's papers, some with annotations on the first page. These are also reproduced here.

117. Article titled 'Banded Stilts Complete the Job' (p.3 in 'The Tattler No.4, July 1995) authored by 'Clive Minton, Jim Lane and Grant Pearson'. The article concludes with 'Would everyone in Western Australia, please keep a lookout for banded/flagged birds? Please also monitor, by regular counts, the return of birds to traditional non-breeding areas as they leave the drying salt lakes in the near future'. Note that this article was reprinted on pp.16-17 of WA Bird Notes, No.76, December 1995.

118. Article in WA Bird Notes (No.74, p19 – June 1995 issue) headed 'STOP PRESS Leg-flagged Banded Stilts' inter alia stating 'During the first week of May, Alan Clarke, Andy Chapman and I leg-flagged 170 chicks at various stages of growth. The leg-flags are small, made of stiff yellow plastic and located above the left 'knee' (on the tibia)'. Article calls for people to report the details of any leg-flagged BaSt they see to JL at CALM's Busselton office.

119. Article by Marcus Singor on p.7 of WA Bird Notes (No.74, June 1995) headed 'Cyclone Bobby', inter alia describing how Banded Stilts were totally absent from the Creery wetlands a few weeks after Cyclone Bobby flooded the [eastern] Goldfields in Feb/March 1995. 'Editor's note' refers readers to report on p.3 (see below) of BaSt recorded breeding at Lake Ballard in early April 1995. Note that ACI (plus GBP & JL) conducted regular counts of BaSt numbers at Creery Lagoon in late 1990s. Data held by JL.

120. Article by Marcus Singor on p.7 of WA Bird Notes (No.74, June 1995) headed 'Anti-predator Behaviour of the Banded Stilt at Creery Wetlands', inter alia describing BaSt forming 'very tightly packed groups' ... 'when alarmed by a raptor' (in mid Feb 1995). Also refers to somewhat similar response by breeding BaSt reported by Kolichis (1976). Note that JL observed and photo'd (photos 4153, 4154) similar behaviour in response to a raptor by BaSt chicks on Lake Barlee during aerial survey on 27<sup>th</sup> April, 1995.

121. 'Observation' on p.3 of WA Bird Notes (No.74, June 1995) of 15,000 pairs of Banded Stilt '... nesting in several colonies, early April 1995, Lake Ballard (Menzies), attributed to JL. Also '4/95, nesting at Lake Barlee (Menzies)', attributed to Ron Johnstone (of WA Museum).

122. Fax (30/05/1995) from JL to CDTM with copy of 'Leg-flagged Banded Stilt' faxed to John Blyth (editor of WA Bird Notes) on 16/05/1995. Fax (to CDTM) cover note reads 'Accompanying is the article that will appear in the June issue of 'WA Bird Notes''.

123. Fax (16/05/1995) from JL to John Blyth (editor of WA Bird Notes) with hand-written article titled 'Leg-flagged Banded Stilt' for publication in WA Bird Notes. This article inter alia asks people to report sightings of leg-flagged BaSt to JL at Busselton.

124. Fax (16/05/1995) from JL to John Blyth (editor of WA Bird Notes) asking when is next deadline for material for WA Bird Notes and when that issue will appear. John Blyth replies by fax (16/05/1995) to JL saying 'first week in Aug' and 'first week in Sept' and 'Jim. You have just missed the deadline for the June issue'.
125. Record (notes) of phone conversation (13/04/1995, or soon thereafter) between Mike Bamford and JL. JL's notes indicate MBamford said 'There were 10,000 Banded Stilt at Port Hedland prior to Cyclone Bobby and none one week later'.
126. Letter (23/03/1995) from Australian Bird and Bat Banding Scheme (ABBBS), Canberra, to GBP giving approval to attach yellow leg flags to left tibia of 500 juvenile Banded Stilt of '1995+ cohort'. Also approved individually marking 50 adult BaSt with 'master colour over metal' on left tibia and '1 colour' on right tibia. JL's recollection (14/01/2014) is that no adults were banded, flagged or otherwise marked during the 1995 work, but maybe CDTM managed to catch and mark a few. Confirm that no adult BaSt were marked by CDTM or JL at Lakes Ballard or Marmion in 1995 (they had hoped to be able to capture some on nests and individually mark them).

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**Results of an 18/01/2014 online search by JL of ABBBS Database  
for Banded Stilt banding and recovery summary data. Seek  
details of all records held by ABBBS of sightings and recoveries of  
BaSt chicks leg-flagged and/or banded at Lakes Ballard &  
Marmion in 1995.**

# Bird and bat banding

## Frequently asked questions

You are here: [Environment home](#) » [Biodiversity](#) » [Bird and bat banding](#) » [ABBBS Database](#)

### ABBBS Database Search: *Cladorhynchus leucocephalus* (Banded Stilt)

<b>Free Text Search</b>	Banded Stilt
<b>Scientific Name</b>	<i>Cladorhynchus leucocephalus</i>
<b>Family</b>	Recurvirostridae
<b>SPRAT Database</b>	<a href="#">SPRAT Listing</a>

[Search the Species Profile and Threats Database](#)

#### Banding Data

<b>Total Banded</b>	508
<b>First Banded</b>	March 1959
<b>Last Banded</b>	February 2005

#### Recovery Data

<b>Total Recoveries</b>	5
<b>Resightings</b>	
<b>Recovered Only Once</b>	5
<b>Distinct Recoveries</b>	5
<b>Most Frequent Resighting</b>	Once
<b>First Recovery</b>	September 1986
<b>Last Recovery</b>	April 2012

#### Maximum Movement and Elapsed Time Details

**Movement** Minimum: 2 km Average: 311 km Maximum: 1181 km  
 Band 08302581, banded in December 2000 at WERRIBEE SEWERAGE FARM (SPIT, PT WILSON), VIC (-38 deg 5 min, 144 deg 31 min). Recovered after 11 years 3.4 months at CENTRE ISLAND, MIDDLE OF LAKE EYRE SOUTH, SA (-29 deg 21 min, 137 deg 13 min) in April 2012 after moving 1181 km.  
 Recovery method: BAND NUMBER READ IN FIELD (BIRD NOT TRAPPED) Recovery status: WAS ALIVE IN THE WILD WITH THE BAND.

**Elapsed Time** Average: 2 years 11.5 months Maximum: 11 years 3.4 months  
 Band 08302581, banded in December 2000 at WERRIBEE SEWERAGE FARM (SPIT, PT WILSON), VIC (-38 deg 5 min, 144 deg 31 min). Recovered after 11 years 3.4 months at CENTRE ISLAND, MIDDLE OF LAKE EYRE SOUTH, SA (-29 deg 21 min, 137 deg 13 min) in April 2012 after moving 1181 km.  
 Recovery method: BAND NUMBER READ IN FIELD (BIRD NOT TRAPPED) Recovery status: WAS ALIVE IN THE WILD WITH THE BAND.

## Caveat

This database is designed to provide information on bird and bat species, banded under the auspices of the Australian Bird & Bat Banding Scheme (ABBBS) managed by the Australian Government Department of the Environment, Water, Heritage and the Arts. It has been compiled from a range of sources including information provided by banders and recoveries of banded birds and bats made by members of the public. While reasonable efforts have been made to ensure the accuracy of the information, no guarantee is given, nor responsibility taken, by the Commonwealth for its accuracy, currency or completeness. The Commonwealth does not accept any responsibility for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the information contained in this database. The information contained in this database does not necessarily represent the views of the Commonwealth. This database is not intended to be a complete source of information on the matters it deals with.

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Last updated: Friday, 13-Apr-2007 13:11:35 EST

[Department of Sustainability, Environment, Water, Population and Communities](#) | [Australian Government](#) | [Caring for our Country](#) |  
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+61 2 6274 1111 [ABN](#)

File note by JL (original 02/05/2012; most recent notation 17/01/2014) indicating 'There are some papers concerning ... **Banded Stilt Research (breeding) in Grant Pearson's ABBBS file(s)**' and 'I looked for this (these) [GBP's ABBBS file(s)] today but was unable to find. Maybe in my pelican research papers? (in boxes). **Keep an eye out for them**'.

There are some papers concerning

Pelican Research

+ Banked Shalt Research

↑ (breeding) - in Joint Pearson's

ABBS files(s)

I looked for this (these) today  
but was unable to find.  
Maybe in my pelican research  
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eye out for them.

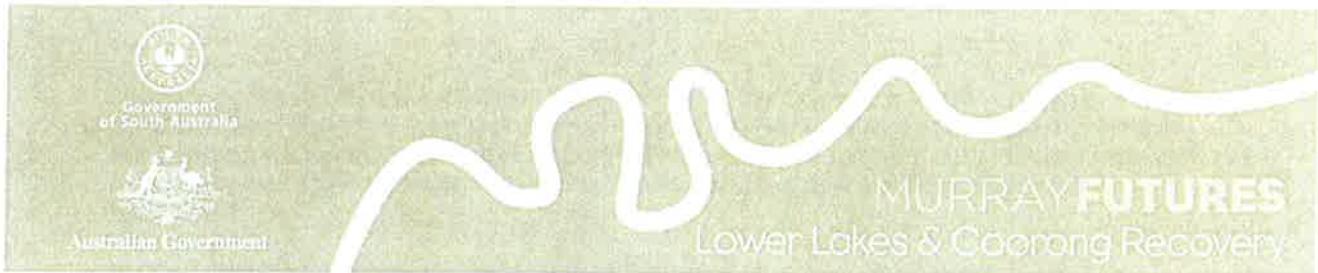
17/01/2014

R 02 May 2012

I think I have found them all & merged  
them into the pelican research boxes.

R 17/6/2012

**An article in the ‘Community update November 2012’ section of ‘WATER FOR GOOD’ headed ‘Satellite trackers unlock Banded Stilt secrets’ by Reece Pedler, PhD Candidate, Deakin University. Describes ‘early results from satellite tags fitted to banded Stilts on Lake Eyre’. Two of the satellite-tagged birds were tracked to Western Australia. This article has been added to this RMCR as a ‘connector’ to this more-recent work by Pedler.**



## Community update

November 2012

This email newsletter is published by the Department of Environment, Water and Natural Resources (DEWNR) to update the community about work being done to secure the future of the Coorong, Lower Lakes and Murray Mouth (CLLMM) region as a healthy, productive and resilient wetland of international importance.

### Highlights

- Clayton and Narrung removal work completed
- Vegetation program delivers real benefits
- Meningie Lakefront Habitat Restoration Project update
- Positive signs for native fish
- Satellite trackers unlock Banded Stilt secrets
- National acid sulfate soils experts visit the Lower Murray
- 2011-12 acid sulfate soils research findings

### Clayton and Narrung removal work completed

Final dredging work to remove the regulator at Clayton Bay and the bund in the Narrung Narrows has been completed.

All navigation buoys, markers, cables, and signage have been removed, and the Department of Planning, Transport and Infrastructure (DPTI) has published a Notice to Mariners lifting the exclusion zones around the dredging operation areas. The notice can be found at:

[www.webapps.transportsa.com.au/news/templates/dtei\\_template2010.aspx?articleid=2153&zoned=15](http://www.webapps.transportsa.com.au/news/templates/dtei_template2010.aspx?articleid=2153&zoned=15)

In response to community concerns regarding siltation in Clayton Bay as a result of works associated with the removal of the Clayton regulator, an investigation was undertaken by the University of Adelaide's School of Civil, Environmental and Mining Engineering.

This investigation confirmed that no material from the dredging work to remove the Clayton regulator migrated into the Clayton Bay Channel.

Meantime, tenders for the removal of the Currency Creek regulator close on Thursday 22 November, with a contract hoped to be awarded before Christmas. Once a contract has been let, a better indication of removal timelines will be made available to the community.

### Vegetation program delivers real benefits

Some recent discussion in the media has confused a Riverland tree planting program with the Coorong, Lower Lakes and Murray Mouth Program's vegetation work. This provides an excellent opportunity to present some **facts** about the work being undertaken in the CLLMM region.

**WATER IS GOOD**

*Schoenoplectus validus* was translocated from areas of dense growth to form lines 15m off shore. The lines of reeds run parallel to the foreshore and help diffuse water energy before the waves hit the bank. Many water birds such as ducks and swans seek refuge and feed in and around the reeds.

As seen during the storm in early September, the translocated reeds are robust and are unaffected by winds and swell. It is hoped that as these reeds grow they will offer increased bank protection during storm events without obstructing views across the lake.

Signage has been installed on the new bird viewing platform on Narrung Road, and on the viewing platform behind the Bowling Club in Lions Park. The signage will help the local community and visitors to identify local birds, plants, and also – look out – snakes!

For further information, or to get involved in the Project's activities, contact the Meningie Hub on (08) 8575 1830.

### Positive signs for native fish

There are positive signs for native fish species released back into their natural habitat as part of the CLLMM Program's *Critical Fish Habitat* project.

The populations of four key species of native fish – the Murray Hardyhead, the Southern Purple-Spotted Gudgeon, the Yarra Pygmy Perch, and the Southern Pygmy Perch – collapsed when their natural habitat dried out during the drought.

The remaining populations of fish were rescued and bred in captivity with the aim of returning them to the region when water levels returned to normal.

Monitoring conducted earlier this month re-captured a number of the fish re-introduced to the region last year, along with a number of offspring from those re-introduced fish. This is a significant find, as it shows many of the re-introduced fish bred during winter.

The results of the monitoring are also being used to determine potential re-introduction sites for final fish releases planned for the end of November.

The CLLMM Program has partnered with SARDI, Aquasave Consultants/Nature Glenelg Trust, and the Flinders University to undertake this project.



Murray Hardyhead - photo: Dr M Hammer

### Satellite trackers unlock Banded Stilt secrets

By Reece Pedler, PhD Candidate, Centre for Integrative Ecology, Deakin University

Early results from satellite tags fitted to Banded Stilts on Lake Eyre have provided some amazing insights into the lives of these enigmatic birds.

This Deakin University project, with funding from BHP Billiton, has fitted tiny 5-gram solar-powered satellite tags to ten Banded Stilts which were captured at a major nesting colony on Lake Eyre South.

As Lake Eyre has dried the birds have dispersed throughout Australia, with some travelling more than 1,700 km to the Canning Stock Route in Western Australia. Others have headed south, with some currently on Yorke and Eyre Peninsulas.

Interestingly, three of the ten stilts have stopped over in the Coorong, with one arriving fresh from a 700 km direct flight from Lake Callabonna, north of the Flinders Ranges. Another stilt arrived in the Coorong via some ephemeral lakes north of Woomera and salt fields near Pt Wakefield. After a short stopover it continued on to Colac in Victoria, and has now moved north to near Horsham.

Banded Stilts are renowned for their unusual life strategy which involves breeding only during high rainfall years in the Australian interior. They somehow manage to arrive just hours or days after major downpours and quickly establish nesting colonies of tens of thousands of pairs in vast salt lakes.

It is hoped that this project can continue to shed light on some of this fascinating behaviour which is relevant to the conservation of this species.

Special thanks to the Coorong locals and Friends of Shorebirds SE volunteers who have played a significant role in this project in many ways, including assistance in tagging birds and going to considerable lengths to observe them in the field as they have travelled across southern Australia.



The first of ten Banded Stilts captured at Lake Eyre. The 5 gram solar-powered transmitter sits in the middle of the back, attached by a ribbon harness. Each bird had individually numbered leg flags for identification in the field.



Summary of stilt movements March-October 2012 – some birds have travelled as far as the Western Australia; three have visited the Coorong on their way further south and east.

**Extract (pp. N227-N228) from ‘Olympic Dam Expansion, Draft Environmental Impact Statement 2009, Appendix N – Terrestrial Ecology’.** Inter alia this extract reads ‘In 2000, a bird marked with a coloured flag in Western Australia in 1995 was observed at Lake Eyre North, South Australia (Baxter 2003)’. Note that this extract also includes a tabulation (p.N227) of (all or most) documented breeding records of BaSt.

Table N11.1 Documented breeding record of the Banded Stilt

Year	State	Location	No. of pairs or nests	Comments
1904	WA	Lake Cowan	Not known	Large colony but unconfirmed
1923	WA	Quinns Find, 64 km SW of Nannine	Not known	Unconfirmed
1929–1930	WA	Near Menzies	Not known	Hundreds of thousands of dead chicks
1930	WA	Lake Grace	40,000	
1930	WA	Lake King	n.a.	Tens of thousands of adults and countless chicks
1930–1931	SA	Lake Callabonna	27,000	
1936	SA	Lake Callabonna	n.a.	
1945	WA	Lake Grace	n.a.	
1946	WA	Lake Grace	500	
1960	WA	Lake Wagga Wagga	40–50	
1963	WA	Lake Ballard–Menzies district	n.a.	Chicks walking through town
1971	WA	Lake Disappointment	Not known	Probable colony
1973	WA	Lake Ballard–Menzies district	60	
1974	WA	Lake Ballard–Menzies district	n.a.	
1975	WA	Lake Ballard–Menzies district	Several thousand	
1975	WA	Lake Marmion	50,000	March figure quoted; 2,500 still nesting in May
1980	WA	Lake Barlee	179,000	
1980	WA	Lake Goongarrie	n.a.	
1980	WA	Esperance	n.a.	
1981	WA	Lake Ballard–Menzies district	n.a.	Chicks on road
1984	SA	Lake Eyre North	n.a.	One chick observed
1986	WA	Lake Ballard–Menzies district	n.a.	Chicks walking through town
1988	WA	Lake King	6,000–8,000	21,000–28,000 chicks
1989	SA	Lake Torrens	50,000	Breeding failed due to silver gull predation
1992	WA	Lake Barlee	n.a.	10,000–15,000 adults observed also flightless young
1992	WA	Lake Giles	n.a.	Small flock of flightless young
1995	WA	Lake Ballard	n.a.	
1997	SA	Lake Eyre North	n.a.	
2000	SA	Lake Eyre North	18,000	Mostly successful after culling of silver gulls; recruited 50,000 young
2003	WA	Lake Disappointment	n.a.	500 dead juveniles found
2005–2006	SA	The Coorong	n.a.	1,006 juveniles of total of 92,500 counted; difficult to find nesting scrapes

Sources: McGilp and Morgan 1931; Burbidge and Fuller 1982; Marchant and Higgins 1993; Chapman and Lane 1997; Baxter 2003; Clarke et al. 2004; Gosbell and Christie 2006.

Note: n.a. = not available.

These data indicate the key sites for breeding are the large ephemeral salt lakes of the Goldfields region of Western Australia (particularly Lakes Grace, King, Ballard, Barlee and Marmion) and less frequently (but perhaps no less importantly) those in the Lake Eyre Basin of South Australia (Lakes Eyre, Torrens and Callabonna are known sites to date). Sites outside of these two key regions, such as The Coorong (SA), Esperance area (WA) and Lake Disappointment (WA) are used less frequently.

#### N11.2.3 Movements of the Banded Stilt

The Banded Stilt is dispersive and is known to move widely and quickly in response to changes in rainfall that affect food availability. Until recently, it was believed that there were two largely separate populations of Banded Stilt – one breeding in South Australia and the other in Western Australia (Minton et al. 2000). In 2000, a bird marked with a coloured flag in Western Australia in 1995 was observed at Lake Eyre North, South Australia (Baxter 2003). Recently a bird originating from South Australia was seen in Western Australia (I Veltheim, pers. comm., 3 March 2008). Therefore, there is some interchange of birds between eastern and western Australia but the extent of this interchange is not yet known.

#### N11.2.4 Habitats of the Banded Stilt

Banded Stilts are primarily birds of large, open, shallow (10–60 cm deep), saline waters, both when breeding and not breeding. Large numbers also may congregate on seashores and other sheltered marine waters, especially when salinities increase due to evaporation (e.g. in Spencer Gulf, South Australia). Brackish and freshwater wetlands such as sewage farms are used less often (Marchant and Higgins 1993) and usually by smaller numbers of birds (PS Lansley, pers. comm., 9 March 2008). The range of salinities at which stilts have been recorded varies from 20 to 145 parts per thousand (Marchant and Higgins 1993). Since 1975, an increase in numbers of Banded Stilts in the Sunraysia district centred on Mildura, Victoria, has occurred (Sonter 1987). This increase is likely a result of increased salinities in the River Murray catchment and associated salt diversion works into lakes such as Lake Woorinen and Lake Tutchewop near Swan Hill (Lane 1987).

#### N11.2.5 Occurrence of the Banded Stilt near Olympic Dam

From Table N11.1, it can be seen that a number of lakes within easy stilt flight range (i.e. several hundred kilometres) of Olympic Dam are occasionally used by the Banded Stilt for breeding. These include:

- Lake Torrens
- Lake Eyre North
- Lake Callabonna.

It also seems likely that if suitable water levels were attained, the following large salt lakes within a similar distance might also be used for breeding:

- Lake Gairdiner
- Lake Eyre South
- Island Lagoon
- Lake MacFarlane
- Lake Gregory
- Lake Blanche
- Lake Frome.

Where the Banded Stilt has bred in the region, it bred in the following years (numbers in brackets, if known):

- 1984
- 1989 (100,000 birds)
- 1997
- 2000 (36,000 birds).

This is four times in 24 years or an average of once every six years.

Lakes where breeding occurs need to fill sufficiently to isolate sandy islands on which the species can breed. When the lakes are full enough, Banded Stilts move into the region and probably stay within their chosen lake for the duration of the breeding event.

Observations of breeding events (e.g. Minton et al. 2000) show that they continue breeding until water levels decline and/or predation by gulls and raptors reaches a high level and they depart the site.

The period soon after heavy inland rainfall and lake filling, and the point in the breeding event when activity winds down, may be periods when large numbers of Banded Stilts wander more widely within the region. As breeding occurs, on average, every six years, there would be two periods (arrival and departure) when large numbers of Banded Stilts may move across the mine site every six years.

Although it is not known what size flocks Banded Stilts move in, observations in the Victorian Wimmera (Alcorn and Alcorn 2000) show that 50,000 birds can move into an area in a very short time, suggesting that at times they move in very large flocks.

To summarise:

- Banded Stilts may move to the larger salt lakes in the wider region around the Olympic Dam mine on average once every six years (although more frequent visits may characterise wetter periods).
- At the beginning and end of the lake filling cycle and stilt breeding event, large numbers of Banded Stilts would move into and out of the region and, at times, may fly over the Olympic Dam mine site.
- When lakes fill in the area, Banded Stilts would spend most of their time at the lakes where they are breeding and would not move far.
- Mobile flocks of tens of thousands of birds are likely to be a regular feature of the movements of this species.

8/8/2014

Significantly reports sighting of a Banded Stilt leg-flagged at Bellarine/Moorabbin in 1995 at Lake Eyre North in 2000

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# **OLYMPIC DAM EXPANSION**

## **DRAFT ENVIRONMENTAL IMPACT STATEMENT 2009**

**APPENDIX N**  
**TERRESTRIAL ECOLOGY**

**Article on p.5 of 'Tattler' (No.9, April 2008) headed 'More on Banded Stilts', by Maureen Christie. Inter alia refers to several BaSt leg-flagged in WA in 1995 being sighted at Lake Eyre in 2000 and one at Lake George in April 2001 [See the reports of these birds in Gosbell & Christie (2006) and other papers below].**

## Interim results of % juvenile monitoring in SE Australia

We now have satisfactory samples of Red-necked Stint, Curlew Sandpiper and Sharp-tailed Sandpiper to have good confidence in the level of juvenile birds in the population this summer.

The most pleasing result is the very high breeding success (32.2% juveniles; average 9.8%) of Curlew Sandpipers. This is the highest proportion of juveniles since the 1991/92 season and the second highest ever in the 29 years for which we have data on this species. It also tallies well with the high figure found in north-west Australia during the November 2007 AWSG Expedition. It is particularly pleasing that they have had such good breeding success given that they have experienced such a prolonged and extensive downturn in their population in Australia over the last 20 or more years.

Red-necked Stints (10.7% juveniles; average 13.8%) have again had a year of below average breeding success. This is now the fourth consecutive similar year for this species. It is noticeable that everywhere Red-necked Stint populations have declined to more normal long-term levels, after the huge peaks in the late 1990s and early 2000s when a run of ultra-good breeding seasons occurred.

Sharp-tailed Sandpipers also had above average

breeding success (19.9% juveniles; average 11.1%). This is the fifth year out of the last six that they have done so. Their numbers are now well and truly established at much higher levels than were present in the decade up to the 2002/03 season.

The VWSG have also caught a reasonable sample of Bar-tailed Godwits and these are showing an exceptionally high proportion of juveniles (56.5% juveniles; average 15.4%). Whilst a part of this may be caused by sampling effects the result is certainly an indication that 2007 was a very good year for the *baueri* subspecies which breeds in Alaska and spends the non-breeding season in eastern Australia and New Zealand.

Unfortunately we've not yet managed to get anywhere near catching a useable sample of Red Knot and there is a danger we will miss out on data for this species this year.

Overall so far it seems that 2007 was a good, or above average, breeding year for most wader species that spend the non-breeding season in south-eastern Australia with only Red-necked Stint faring poorly.

Clive Minton

VWSG

## More on Banded Stilts

It was always thought that the eastern and western Australian Banded Stilt populations were discrete. But a growing number of sightings of western birds in eastern Australia, and now vice versa, are being reported.

With 250,000 Banded Stilt in the Coorong, and reports of flocks up to 10,000 elsewhere, the chances of seeing any of the 333 Banded Stilt chicks flagged with South Australian (SA) colours (orange/yellow) in the Coorong in January 2006 would seem remote....but not so. On the 18<sup>th</sup> February, Danny Rogers saw one of 'our' chicks in 85% breeding plumage at the Avalon Saltworks in Victoria. It was in a flock of 2000. This follows on from a series of sightings (Jan, March & Dec 2007) at Cheetham Saltworks, Laverton.

And then recently, news of a sighting that I had hardly dared hope for - on 8<sup>th</sup> February a SA Banded Stilt was sighted at Yalgorup National Park, WA (about 1/2 way between Mandurah and Bunbury, on the coast). This is the first recorded movement of Banded Stilt from eastern Australia to western Australia.

Other sightings of interest have been of a Victorian flagged (151 were banded at Werribee in 2000) Banded Stilt seen in the Coorong in August 2007 and two seen in February 2005. We have had WA birds visiting us - several yellow flags were seen at

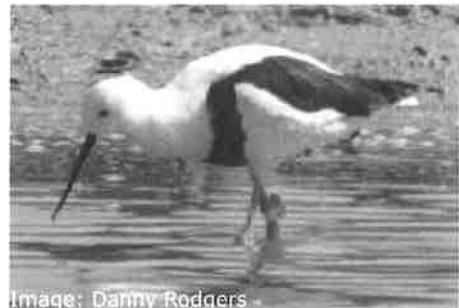


Image: Danny Rodgers

Lake Eyre in 2000, with one sighted at Lake George in April 2001. These were flagged at Lake Ballard after Cyclone Bobby in April 1995.

We are slowly building up a picture of Banded Stilt movements throughout Australia and it is exciting to be so closely involved with extending our knowledge of this beautiful but enigmatic species.

We are asking everyone who sees any Banded Stilt to not only make an estimate of how many there are, but to also check their legs! Check for flags but also note that the colour of their legs is important - pink means an adult, grey means a juvenile.

Maureen Christie

Friends of Shorebirds, SE: [twinpeppers@icisp.net.au](mailto:twinpeppers@icisp.net.au)



**Extract from Victorian Wader Study group website referring (under heading '2008 News Snippets' [Feb 2008]) inter alia to '...**  
**several yellow flags were seen at Lake Eyre in 2000. And Iain Stewart saw one at Lake George in April 2001. These were flagged at Lake Ballard after Cyclone Bobby in April 1995'. Also reads 'A single yellow flag means it was banded at Lake Ballard in Western Australia. OY/- [sic] means that it is one of the chicks banded in the Coorong in 2006'.**

*Banded Stilt extract from material headed "2008 News Snippets"*  
(Feb 27, 2008) STOP PRESS - South Australian Banded Stilt reported from opposite sides of the continent!

Maureen Christie again reports on the Banded Stilts - "With 250,000 Banded Stilt in the Coorong, and reports of flocks up to 10,000 elsewhere, the chances of seeing any of the 333 Banded Stilt chicks flagged with OY/- in the Coorong in January 2006 would seem remote. But not so. On the 18th February, Danny Rogers saw one of 'our' chicks in 85% breeding plumage at the Avalon Saltworks - just south of the Werribee Sewerage Farm in Victoria. It was in a flock of 2000. This follows on from a series of sightings (Jan, March & Dec 2007) at Cheetham Saltworks, Laverton.

And then today (Feb 23rd) came news of a sighting that I had hardly dared hope for - on 8th February a OY/- Banded Stilt at Yalgorup National Park, WA. (about half way between Mandurah and Bunbury, on the coast) This is the first recorded movement of Banded Stilt from eastern Australia to Western Australia.

Other sightings of interest have been of a Victorian flagged Banded Stilt seen in the Coorong in August last year and two seen in February, 2005. 151 were banded at Werribee in 2000.

And, of course, we have had West Australians visiting us - several yellow flags were seen at Lake Eyre in 2000. And Iain Stewart saw one at Lake George in April 2001. These were flagged at Lake Ballard after Cyclone Bobby in April 1995.

And so we are slowly building up a picture of Banded Stilt moving throughout Australia, rather than there being a WA flock and an Eastern Australia flock. It is exciting to be so closely involved with extending our knowledge of this beautiful but enigmatic species.

Do keep the flag sightings coming in. It makes all of the work of flagging worth while!

(Feb 27, 2008) Clive Minton recently reported on the percentage juvenile monitoring fieldwork program for the 2007/08 season. He said that we now have satisfactory samples of Red-necked Stint, Curlew Sandpiper and Sharp-tailed Sandpiper to have good confidence in the level of juvenile birds in the population this summer. Red-necked Stints (10.7% juveniles) have again had a year of below average breeding success. This is now the fourth consecutive similar year for this species, with 2003 being the last breeding season in which they produced an above-average proportion of young. It is noticeable that everywhere Red-necked Stint populations have declined, to more normal long-term levels, after the huge peaks in the late 1990s and early 2000s when a run of ultra-good breeding seasons occurred.

The most pleasing result in this year's data is the very high breeding success (32.2% juveniles) of Curlew Sandpipers. This is the highest proportion of juveniles since the 1991/92 season and the second highest ever in the 29 years for which we now have data on this species. It also tallies well with the high figure found in north-west Australia during the November 2007 AWSG Expedition. It is most noticeable that Curlew Sandpipers are present in higher numbers this year at many locations. It is

particularly pleasing that they have had such good breeding success given that they have experienced such a prolonged and extensive downturn in their population in Australia over the last 20 or more years.

Yet again Sharp-tailed Sandpipers had above average breeding success (19.9% juveniles). This is the fifth year out of the last six that they have done so. Their numbers are now well and truly established at much higher levels than were present in the decade up to the 2002/03 season.

The VWSG have also caught a reasonable sample of Bar-tailed Godwits and these are showing an exceptionally high proportion of juveniles (56.5%). Whilst a part of this may be caused by sampling effects the result is certainly an indication that 2007 was a very good year of breeding success for the baueri subspecies of Bar-tailed Godwit which breeds in Alaska and spends the non-breeding season in eastern Australia and New Zealand.

Unfortunately we've not yet managed to get anywhere near catching a useable sample of Red Knot. This can normally only be done in Corner Inlet or at Swan Island, Queenscliff, because elsewhere in Victoria Red Knot numbers are small and ephemeral. There may be a chance of getting some Red Knot at Queenscliff over the Easter weekend, if the birds have not already departed on northward migration, but it will be technically just after our monitoring season closes on March 20th. So there is a danger we will unfortunately miss out on this species this year. Gaps in long-term data series are undesirable because they make interpretation of the results and correlation with causal factors more difficult.

We've only had single samples so far of Ruddy Turnstone and Sanderling. Both suggest that 2007 was a reasonable breeding year and much better than the almost complete washout for these two species in 2006.

Overall so far it seems that 2007 was a good, or above average, breeding year for most wader species in the parts of the Arctic from which waders come to spend the non-breeding season in south-eastern Australia. Only Red-necked Stint seems to have fared rather poorly. .

(Feb 20, 2008) Maureen Christie from the SE of South Australia reports on the recent (Feb '08) wader count for the Coorong where reports suggested that there were few waders about, and so it was with low expectations that they all headed out on Saturday morning. But excitement filled the air when Glen Hill's boat returned as Glen, Inka, Pam and Janet had seen a HUGE flock of Banded Stilt on the western shore. They were packed tightly together, feeding. Inka and Glen made a determined effort to count them and estimated that there were 250,000!!!!!! This is more than the estimated Australian population!!!

So, lots of questions to be answered. Is this a mixed flock of birds from the west and from the east? Has there been a successful breeding event that we don't know about? Are there any Banded Stilt anywhere else?

And so we are asking everyone who sees any Banded Stilt to not only make an estimate of how many there are, but to also check their legs! The colour of their legs is important. Pink means an adult. Grey means a juvenile. A single yellow flag means it was banded at Lake Ballard in Western Australia. OY/- means that it is one of the chicks banded in the Coorong in 2006. Please let Maureen know if you see Banded Stilt around.

**Copy of Gosbell, K and Christie, M (2006). The breeding of Banded Stilt and Red-necked Avocet in the Coorong, South Australia: December 2005 – February 2006. Stilt 50:277-284. Inter alia reads (p.283) ‘At least two yellow flagged birds [leg-flagged as chicks at Lakes Ballard & Menzies in 1995] were sighted in the Lake Eyre breeding population in 2000 (Baxter 2003). Another was sighted at Fosters Point, Lake George on 28 April 2001 (Iain Stewart pers. comm.)’.**

## THE BREEDING OF BANDED STILT AND RED-NECKED AVOCET IN THE COORONG, SOUTH AUSTRALIA: DECEMBER 2005 – FEBRUARY 2006.

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In July 2005, a large roost of 100,000 Banded Stilt *Cladorhynchus leucocephalus* was observed in the South Lagoon of The Coorong. In January 2006 there was evidence of some breeding having taken place with the observation of several young chicks in the care of adult birds. During the annual AWSG wader survey undertaken on 4 and 5 February 2006 a count of 1,006 juvenile Banded Stilt was made. In January Red-necked Avocet *Recurvirostra novaehollandiae* were also observed breeding along the margins of the South Lagoon. This is the first time that either of these species has bred in the Coorong. The conditions in the Coorong have progressively deteriorated over the last eight years due to the lack of freshwater inflows from the Murray River leading to extreme hypersalinity in the South Lagoon with resultant change in environmental conditions. This caused a large hatch of brine shrimp and an abundance of other food sources such as chironomid larvae. Several attempts were made to find the breeding colony of the Banded Stilt and to assess the degree of success of this event. In addition, teams from Victoria and South Australia banded and flagged a total of 334 chicks. While these events are interesting, they result from a severe worsening of water quality conditions in the Coorong exacerbated in recent years by the lack of river flows over the barrages. While this problem persists, it is essential that monitoring the water quality and biodiversity throughout the Coorong is undertaken to provide information for land and water managers to improve this critical situation and to ensure the restoration of the values which made it a Ramsar site.

### INTRODUCTION

The Coorong is a body of water, some 140 kilometres long, confined by the coastal dunes of the Younghusband and Sir Richard Peninsulas. The Coorong is the natural drainage point for the extensive Murray-Darling Basin. The Ramsar Convention accorded the Coorong and Lakes Alexandrina and Albert Wetlands the status of Wetland of International Importance in 1985. The national and international significance of the site has recently been further acknowledged by it being nominated as one of six Significant Ecological Assets within the river Murray catchments as part of the 'Living Murray Initiative' (DWLBC 2005). The area is the traditional home of the Ngarrindjeri people for whom the land and waters of the site are a living body (Ngarrindjeri Ramsar Working Group 1999). See Figure 1 for map.

The Coorong is separated into the North and South Lagoons by rocky shallows and a narrow connection at the Needles and Parnka Point. The lagoons are relatively shallow ranging from mudflats to water 2 to 3 metres deep and vary in extent both with the season and the tide. Although it is a coastal lagoon with an estuarine influence, it is not a typical estuary. Fresh water from the River Murray occurs near the barrages and Mouth while salinities generally increase with distance from this area, particularly in the South Lagoon. For this reason it can be considered a 'reverse estuary' (Geddes 2003). The ecology of the Coorong is essentially influenced by the flow of water from the barrages at the Murray Mouth, the tidal signature at the Mouth, and any inflows from Salt Creek to the South Lagoon. In February 2006 the salinity levels of the South Lagoon were at historically high levels and had a significant impact on the aquatic biota and dependant birdlife.

The first evidence of a possible breeding event was when mating was observed early in December. In early January, Banded Stilt chicks were sighted by a local resident following which extensive searches for breeding colonies were undertaken. These were continued as part of the scheduled population survey of shorebirds (waders) in the Coorong that the Australasian Wader Studies Group (AWSG) undertook in February 2006. A report of this survey was published in May 2006 (Gosbell & Christie 2006). Two of the key observations of the surveys were first, the large number of Banded Stilt *Cladorhynchus leucocephalus* present in the South Lagoon and secondly, the breeding activity of both Banded Stilt and Red-necked Avocet *Recurvirostra novaehollandiae*. The initial objective of the surveys was to ensure the safety of the breeding colony and to arrange any predator control that was considered necessary. Also, as this is thought to be the first record of such breeding events in the Coorong, there was the added objective of establishing the nesting behaviour, distribution and breeding success of these species. The opportunity was also taken to band and leg flag Banded Stilt to assist the study of future movements. The banding was carried out by the Victorian Wader Study Group (VWSG) and Friends of Shorebirds SE.

### Banded Stilt

The Banded Stilt is an endemic Australian wader that is mainly found in Western Australia (WA), South Australia (SA), Victoria, and, to a lesser extent, New South Wales in both coastal and inland locations (Marchant & Higgins 1993). The eastern population is thought to be separate from the Western Australian population (Minton *et al.* 2000). The total population estimate is 206,000 (Watkins 1993) with the sites of significance being The Coorong, SA, 77,000; Lake

reducing since the 1980s. In 2006, 75% of migratory waders were utilizing the area north of The Needles compared to proportions ranging from 45% to 65% over the eight previous years of records. On the other hand record numbers of Banded Stilt were found in the South Lagoon in February 2006 following previous observations in excess of 100,000 birds in July and October 2005. At the same time there were either few or no Banded Stilt found in the traditional sites of western Victoria, Lake George or Port Augusta (P. Collins, pers. comm., KG and MC pers. obs.) leading to the view that almost the whole of the south-eastern Australian population of Banded Stilt was attracted to the Coorong from July 2005 to March 2006.

#### Breeding success

The number of Banded Stilt observed in the AWSG Wader Survey in February 2006 was 92,500 (Gosbell & Christie 2006). However, as the number of juveniles counted on the survey was 1,006, this indicated a relatively small breeding event when compared to events such as Lake Eyre in 2000 where approximately 18,000 pairs nested and recruited around 50,000 young (Baxter 2003). The reasons for this low recruitment rate are not fully understood but are possibly a combination of uncertain food resources, lack of suitable nesting sites and predator activity. In a year when traditional breeding sites are unsuitable, even this small number of chicks is a bonus for the species. Of course, if this were to become an annual event it would be a substantial benefit to the population; it may even be possible to facilitate such an event by ensuring suitable and safe nesting sites.

Nesting sites were very difficult to find for several reasons. Firstly, hatching had finished and secondly, nesting had occurred in sites usually considered atypical of the species. Two major sites were found, one on the eastern shore of the Coorong, the other on the sandy eastern shores of small offshore rocky reefs in shallow bays. Based on the density of the scrapes located, the first site had the potential of producing 1,800–2,400 chicks and was deserted by 16 December 2005. On two occasions during January, two chicks of an age consistent with this site were observed. The fate of any others is unknown. The adults may have abandoned the nests without completing laying or they may have been subject to predation from foxes or Silver Gulls. The latter would have been feeding young at the time. Alternatively, the advanced young may have come from another, unknown site.

On the same basis the second site had the potential of 500–700 chicks, and yet 1,006 chicks were observed. With several nearby areas not searched, it seems likely that there were several locations each with a relatively small number of scrapes. Without knowing the full extent of the colony, it is not possible to judge whether they had been subjected to any significant predation. The scrapes found, although on an offshore reef, were not beyond the reach of foxes. No predation by Silver Gulls was witnessed, but the stilt chicks were possibly already old enough to escape predation by the time they were under observation. At that time Silver Gull breeding was well advanced, with the majority of parents no-longer feeding young. A fresh water release from Morella Basin was also providing a prime gull feeding site at that time.

Unlike the Banded Stilt, the Red-necked Avocet appeared to experience a relatively successful breeding event although it was difficult to judge how much predation this species experienced. Breeding was spread throughout the South Lagoon and occurred over several months. A breeding colony of Silver Gulls were observed with nesting avocets in mid January (in the vicinity of Policeman Point) and a small number of predated eggs were found in early February (in the vicinity of Stony Well). The control and protection afforded to the chicks by the parents probably minimised predation following hatching. The survey in February counted 2,400 birds. A complete count of nests and juveniles was not undertaken during this count although there were many observations of parent birds shepherding groups of two to four young. Over the term of the complete survey, 140 nests were counted. As large areas of suitable habitat were either not counted, or only superficially counted, this can be considered a significant breeding event.

#### Movements

Little is known of the movements of Banded Stilt, and of interactions between the populations of Western Australia and south eastern Australia. In 1995, 800 chicks were banded and flagged with a yellow flag on the tibia at Lake Ballard, WA (Clive Minton pers. comm.) At least two yellow flagged birds were sighted in the Lake Eyre breeding population in 2000 (Baxter 2003). Another was sighted at Fosters Point, Lake George on 28 April 2001 (Iain Stewart pers. comm.). It is hoped that the banding and flagging of the chicks in the Coorong will add to this knowledge.

#### What of the future?

The abnormal conditions of the Coorong, particularly in the South Lagoon, attracted the large numbers of Banded Stilt and contributed to the unique breeding events of this species and the Red-necked Avocet. It is not possible to predict future conditions in the Coorong or its usage by these species. A requirement of being a Ramsar site is for management to maintain the 'ecological character' of the Coorong and Lakes Alexandrina and Albert wetlands (Phillips *et al.* 2005). Management strategies that lead to the water quality in the southern lagoon being restored to conditions previously applying would eventually encourage the return of a more diverse flora and fauna. However, if immediate actions are not taken and conditions in the southern lagoon remain the same it is possible that another influx of Banded Stilt and Red-necked Avocet may occur to utilise the plentiful food resources that are likely to be found in the hypersaline conditions. If, however the salinity levels became higher the brine shrimp would be killed off together with any chance of further breeding (Savage 1964). The impact of anthropogenically caused salinisation has become increasingly important not only in south-eastern Australia but its effect on wildlife is a conservation issue of global concern (Hannam *et al.* 2003).

The observations of these breeding events provides several guidelines for the future. The most important is to initiate a continuous monitoring program following the first indications of any 'breeding frenzy' of Banded Stilt. This will hopefully provide for the early location of colonies

**Copy of Minton, CDT (2005). What have we learned from banding and flagging waders in Australia? Refers to banding of '850' Banded Stilt at 'Lake Ballard' by CALM in 1995.**

# What have we learned from banding and flagging waders in Australia?

Clive Minton

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## Abstract

More than a quarter of a million waders have been banded in Australia over the last 45 years, 95% being migratory species. Around 126,000 of these have also been colour leg-flagged since this process was introduced in 1990. There have so far been 534 recoveries and 3903 sightings of leg-flagged birds overseas, as well as 150 recoveries and 225 leg-flag sightings in Australia of waders marked overseas. Overseas recovery rates for species varied widely, between 0.03% for Red-necked Stints banded in NW Australia and 1.1% for Red Knot from SE Australia. The average recovery rates for migratory waders banded in these two regions were 0.32% and 0.12% respectively, and 0.21% for Australia as a whole. Overseas flag-sighting rates were on average 30 times higher for birds marked in SE Australia and 5.6 times higher for NW Australia than banding recoveries. Flag-sightings have now been reported from 16 different countries in the Flyway. There is a strong preponderance of flag-sightings in Asia, of birds on northward migration over birds on southward migration. Maps of recoveries and flag-sightings show the marked differences in migration routes and destinations between different species, and even between different populations of the same species. Other knowledge gained from banding activities is briefly outlined, and future priorities discussed.

## Introduction

Waders comprise nine percent of the Australian avifauna. Of the 73 species recorded in Australia, 37 are migrants (36 being from the Northern Hemisphere), 17 are vagrants (again, all from the Northern Hemisphere), and 19 are residents (nine being endemic to Australia).

As in many parts of the world intensive studies of waders have lagged behind studies of other groups of birds, especially land birds, seabirds and waterfowl. Systematic widespread population censuses of wader populations in Australia only commenced in 1981. The chicks of some resident species of waders have been banded ever since the inception of bird-banding in Australia in 1953. However large-scale banding of adult waders, especially of the migratory species, only commenced in the 1970s, when mist-nets and cannon-nets were first employed to catch the birds.

This paper concentrates on information that has come out of banding and colour leg-flagging activities via recoveries and re-sightings of colour-marked birds in the last 25 years. Other knowledge (such as biometric and moult data, age data, survival and reproduction rate information) gained during catching and banding operations is only briefly covered.

## History

In comparison with many other banding activities, wader banding is very much a team operation. This is partly because of the logistics of handling heavy and bulky catching equipment, often in difficult terrain, but also because, in both mist- and cannon-netting, quite large numbers of birds may be caught at once. To process these birds quickly and collect the maximum amount of data, a large team is needed.

Wader banding activities around Australia have resulted largely from the efforts of a few experienced and enthusiastic individuals who gathered teams together to carry out the fieldwork. These teams have operated at different periods in time and at different locations over the last 45 years. Some programs operated for just a few years whilst others have been sustained over more than 25 years.

The main programs are summarised below:

- a) Dom Serenty and Lexie Nichols caught waders on the Swan Estuary, Perth, from 1958 to at least 1961, using walk-in style traps (Serenty et al. 1962).
- b) Jim Lane continued wader studies on the Swan River using mist-nets from 1972 to 1978. In 1979 the WA Wader Study Group (WAWSG) took over responsibility for wader banding in the Swan River Estuary, later introducing cannon-nets. This activity is continuing under the guidance of Mike Bamford,
- c) Fred van Gessell, assisted by others including Bill Lane, commenced cannon-netting and mist-netting waders in New South Wales in 1970, mainly on the Hunter Estuary near Newcastle. These activities have continued intermittently up to the present time. The NSW Wader Study Group was also active in cannon-netting waders from 1991-97, under the leadership of Phil Straw.
- d) Wader mist-netting was commenced by David Robertson and others at Werribee Sewage Farm in Victoria in late 1975. These efforts were augmented in late 1978 when Clive Minton introduced large-scale cannon-netting, as developed in Europe. The Victorian Wader Study Group (VWSG) was formally constituted at this time. These activities have been consistently maintained over a 26-year period.
- e) The Australasian Wader Studies Group (AWSG) held the first of its expeditions to Northwest Australia (NWA) in 1981. These visits have become almost

annual, covering Roebuck Bay (Broome), 80-Mile Beach, and Port Hedland Saltworks. Since the formation of Broome Bird Observatory (BBO) in 1988, BBO staff and other local enthusiasts have maintained wader banding operations between expeditions and in recent years these have been led by Chris Hassell.

- f) Wader banding in the Hobart region, Tasmania, took place for about six years from 1979 to the mid-1980s, mainly employing cannon-nets. Mark Fletcher was the main co-ordinator.
- g) Regular small-scale wader banding was commenced by Vic Smith in Albany, southern Western Australia, in 1985 and is continuing. Mist-nets were initially used and were later complemented with cannon-nets.
- h) Extensive wader banding activities were carried out by the Queensland Wader Study Group (QWSG) in Moreton Bay, near Brisbane, between 1989 and 1999. Most birds were caught with cannon-nets. These activities terminated when the licensed cannon-netter, Peter Driscoll, became unavailable, then moved away from the area.
- i) Attempts over the years to start regular wader banding in the Adelaide area, South Australia, have been unsuccessful. Max Waterman made a couple of good cannon-net catches of Red Knot in the Spencer Gulf in 1981-82, but activities then ceased. However since 1993 the VWSG has made annual visits to the southeast coast of South Australia, mainly to catch Sanderling and Ruddy Turnstone (see Tables 1 and 2 for scientific names). This is continuing, and is now supplemented by cannon-netting carried out by Maureen Christie, who lives in the area.
- j) Some wader banding has taken place over the years in the Darwin region, Northern Territory. Occasional mist-netting by a number of people (Tony Hertog, Fred van Gessel) over the years has been augmented by short periods of cannon-netting, organised by Ray Chatto and assisted by visits of experienced people from elsewhere in Australia.
- k) The WA Department of Conservation and Land Management carried out a major banding exercise on chicks at a Banded Stilt colony at Lake Ballard in 1995, with Grant Pearson the principal person involved.

## Methods

Total numbers of individuals of each species banded in Australia were obtained directly from the groups and individuals (or their publications) involved in wader-banding activities over the last 45 years. This was necessary because some of the banding data submitted to the Australian Bird and Bat Banding Scheme (ABBBS) Office prior to the introduction of computerisation in 1984, have not yet been incorporated into its database. Also, several years of the most recent banding data are not yet incorporated into the database. I estimate that I have gathered at least 98% of the banding data on migratory waders but a smaller proportion of the banding data for resident waders, mainly because many of the latter were marked as chicks by very many individual banders over many years. Where the ABBBS figure for a species exceeds the total obtained from my direct approach to known major wader-banders, the ABBBS total has been used.

All recoveries have been provided by the ABBBS. A recovery is any report of a banded bird that can be identified individually, either by the number on the metal band, by unique colour-markings (e.g. multiple colour bands / leg flags), or by alphanumerically engraved leg flags. Recoveries may be of dead or injured birds, birds recaptured alive by banders away from the site of banding, or birds sighted as colour-marked individuals. Recoveries up to 29 November 2003 are included in this analysis.

The placing of a coloured PVC leg-flag on waders began, in Victoria, in December 1990. Leg-flagging in NW Australia began in August 1992 and leg-flagging has subsequently been introduced in other areas. To co-ordinate the introduction of flagging throughout the East Asian – Australasian Flyway, a Protocol was developed in the late 1990s under the auspices of Wetlands International and the ABBBS. The number of birds flagged each year in Australia, up to the end of 2003, has been collected from each wader-banding group or individual.

Flag-sightings have been gathered from a variety of sources, especially the groups and individuals responsible for the flagging. Since 2001 the AWSG has operated a centralised leg-flagging database on behalf of the ABBBS, with the financial support of the Federal Department of Environment and Heritage (previously Environment Australia). The numbers of birds flagged are provided up to the end of 2003. Flag-sightings (all of which relate to live birds) are provided up to 1 December 2003.

A recovery is a unique event (though very occasionally birds may be recovered more than once) but the number of flag-sighting reports doesn't necessarily equal the number of different flagged birds that have been seen, because a bird carrying a flag cannot be individually identified. For example, at regularly monitored migration stop-over locations, such as Mai-Po Marshes in Hong Kong, an individual bird may be re-sighted and recorded on a number of different days during its stop-over. Also, when a bird permanently changes its non-breeding area, for example from Victoria to an interstate location such as Moreton Bay or Roebuck Bay, it may be sighted several times over a period of months, or even years. Each sighting on a different day is added to the database as a new record. This potential multiplicity of records for a flagged bird needs to be considered when interpreting sightings data.

There is also potential for duplication of records when several flagged birds are present at a particular locality on the same day, often in the same flock. Many regular observers of flagged birds are skilled at determining the number of individual flagged birds present by using criteria such as the proportion of breeding plumage on the bird, its sex (determined by plumage or size), the position of the metal band, and the position of the flag(s). Duplication of records is more likely when two independent observers see a flagged bird on the same day at the same location. Follow-up discussion with the observers can often resolve this situation.

Table 2. Resident Waders Banded in Australia

	STATE	VIC	WA	NSW	TAS	QLD	NT	TOTAL	ABBS
	Region	NWA	Lake Ballard CALM	Perth	Albany				Totals
Bander/s		WWSG	AWSG/BBO/ NWWSG	WAVSG	Serventy & Nichols	Fred van Gessell	NSWWSG	BOAT	Ray Chatto
Period	1975- 1981-	1995	1979- 1985- 1985- 1995-96	1958-60	1985- 1991-97	1980-87	1989-99	1995-96	Hertoq 1978-85
Species	Scientific name								
Pied Oystercatcher	<i>Haematopus longirostris</i>	2081	205	6			451	164	
Red-capped Plover	<i>Charadrius ruficollis</i>	631	884	546	108	47	183	86	245
Banded Stilt	<i>Cladorhynchus leucocephalus</i>	151	92	850	23	4		12	
Red-necked Avocet	<i>Recurvirostra novaehollandiae</i>	312	232	36		287	252		
Black-winged Stilt	<i>Himantopus himantopus</i>	24	409	51		218	205	6	
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>	638	50				14		
Red-kneed Dotterel	<i>Erythrogenys sinicus</i>	135	192	2	1	84	3	9	
Masked Lapwing	<i>Vanellus miles</i>	169	99		10	6	62	2	
Black-fronted Plover	<i>Eleoscyornis melanops</i>	56	109	6		76	2	44	
Hooded Plover	<i>Thinornis rubricollis</i>	26		10			24		
Banded Lapwing	<i>Vanellus tricolor</i>				3	1	12		
Painted Snipe	<i>Rostratula benghalensis</i>	6							
Beach Stone-curlew	<i>Esacus neglectus</i>					1			6
Bush Stone-curlew	<i>Burhinus grallarius</i>						1		2
Comb-crested Jacana	<i>Irediparra gallinacea</i>						1	1	1
Inland Dotterel	<i>Charadrius australis</i>								13
<b>TOTAL</b>		<b>4214</b>	<b>2278</b>	<b>850</b>	<b>680</b>	<b>109</b>	<b>51</b>	<b>866</b>	<b>556</b>
<b>Species</b>		<b>10</b>	<b>10</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>8</b>
As at Dec. 2003									

ABBS totals are ex their data bank as at Sept. 2003

\* Summation using the higher figure for each species in the two "totals" columns

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# Status and Conservation of Shorebirds in the East Asian-Australasian Flyway

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**Copy of Baxter, CJ (2003). Banded Stilt *Cladorhynchus leucocephalus* breeding at Lake Eyre North in year 2000. South Australian Ornithologist No.34, pp. 33-56.** Inter alia it gives details (pp.47, 54) of year 2000 sightings on Lake Eyre North of at least two of the Banded Stilts leg-flagged in WA in 1995. This paper also reports (pp. 50, 52) information on 'Post-breeding dispersal of Banded Stilts from LEN [Lake Eyre North]'. Seek copy of Minton et al. (2000) report referred to on pp. 54 & 56 and in accompanying internet forum message (18/04/2000) from Hugo Phillips of Birds Australia headed 'Banded Stilts at Lake Eyre report'.

## BANDED STILT *Cladorhynchus leucocephalus* BREEDING AT LAKE EYRE NORTH IN YEAR 2000

CHRIS I. BAXTER

### ABSTRACT

In year 2000 thousands of Banded Stilts *Cladorhynchus leucocephalus* arrived at an inundated Lake Eyre North (LEN) from coastal summering habitats and nested on four occasions. During March–May they nested twice on Hughes Island but breeding failed primarily due to Silver Gull *Larus novaehollandiae* predation of Banded Stilt eggs and young.

In July, c. 18,000 Banded Stilt pairs nested on Ibis Island and recruited about 50,000 young. An alpha-chloralose baiting programme on the island successfully targeted breeding Silver Gulls resulting in 3,000 being culled and 1,000 deserting the island, thus freeing the stilt colony from gull predation.

In late July to early August, Banded Stilts nested again on Ibis Island but abandoned their colony as warmer weather evaporated LEN's shallow waters, leaving the island surrounded by many kilometres of mudflats.

During late August and early September Banded Stilt adults and young dispersed from LEN and tens of thousands arrived at their usual coastal haunts at the Dry Creek Saltfields and Coorong in South Australia, and Natimuk–Douglas wetlands in the Wimmera region of Victoria. Their spectacular and widespread dispersal also resulted in vagrant birds at rare localities, namely Tasmania, central coastal New South Wales and southern Northern Territory.

It is recommended that the Banded Stilt be listed as nationally vulnerable and further research, particularly into its conservation status and the interaction between east and west populations, occurs. Banded Stilt management and action plans are required to ensure breeding success. Silver Gull management and action plans are recommended due to the over-population of gulls as a result of the increased availability of food scraps associated with a range of human activities. Finally, there are recommendations on overcoming excessive Silver Gull predation of Banded Stilt breeding colonies.

### INTRODUCTION

The Banded Stilt *Cladorhynchus leucocephalus* (Figure 1) is an endemic Australian wader that specialises in breeding on small isolated islands in vast ephemeral inland salt lakes (Hayman, Marchant and Prater 1991; Marchant and Higgins 1993; Pizzey and Knight 1999; Morecombe 2000).

Its non-breeding distribution is coastal and inland South Australia (SA), Western Australia (WA) and Victoria (Vic.). Lesser numbers occur in New South Wales (NSW), mostly in the west and Riverina regions (Blakers, Davies and Reilly 1984; Marchant and Higgins 1993). It is a rare visitor to Queensland (Qld) and Tasmania (Tas.) and there are few records from the Northern

Territory (NT) (Marchant and Higgins 1993).

An eastern population in SA, Vic. and NSW is suspected to be largely separate from a western population in WA (Minton, Jessop and Collins 2000). Total population estimates range from at least 133,000 (Robinson and Minton 1989) to c. 200,000 birds (Marchant and Higgins 1993).

Banded Stilts mostly occur in large compact flocks, sometimes numbering tens of thousands. Flocks spread widely over shallow lakes; wading, up-ending like ducks or swimming with half-webbed feet like buoyant black and white gulls. They are dispersive, nomadic and irruptive, with their movements influenced by the effect of weather on water-levels, salinity and food availability, particularly brine-shrimps *Parartemia* sp. (Hayman *et al.* 1991; Marchant and Higgins 1993; Pizzey and Knight 1999; Morecombe 2000).

Non-breeding flocks favour commercial saltfields, shallow salt lakes, saltmarshes, tidal mudflats and sewerage ponds in coastal areas.

They breed irregularly and intermittently when water conditions are suitable, generally immediately after heavy rains. Most nest in close-packed colonies numbering thousands on low islands in large inland salt lakes (Figure 2) in SA (Lakes Eyre, Torrens and Callabonna) and WA (Lakes Grace, Ballard, Marmion, Barlee and others). Generally the clutch is three or four (sometimes two or five) eggs in a scrape in sand (Figure 3). They occasionally breed on stony soil in a nest consisting of a simple rim of plant material (Robinson and Minton 1989; Marchant and Higgins 1993).

One or two days after hatching, the precocious downy young usually are escorted by adults from nest to water to immediately begin feeding. They generally form large crèches of juveniles with few adults present. Downy young numbering thousands are known to walk cross-country as lakes dry up (Marchant and Higgins 1993; Pizzey and Knight 1999).

### Past breeding

Banded Stilts are known to have bred in SA during only six of the past 70 years, namely: c.

Silver Gulls to prey opportunistically on exposed stilt eggs and young.

On another occasion, during the afternoon of 20 July 2000, a solitary Little Crow *Corvus bennetti*, 'bailed-up' an adult Banded Stilt and several chicks as they attempted to cross the 100+ m wide mudflat to water. The adult stilt sat tight on the chicks, sometimes making short running bursts and pecking ineffectively at the impending attacker when it came too close. At times the crow was close enough to put its head and beak

down next to the sitting stilt, but failed to remove a chick from beneath the adult and the crow flew away after about ten minutes.



#### Yellow leg-flagged Banded Stilts from WA

During 1–5 April 2000, Clive Minton and colleagues observed within the Hughes Island colony a breeding adult Banded Stilt with a single yellow leg-flag. This bird had been banded as a chick at a breeding colony at Lake Ballard, WA in 1995 (C. Minton, pers. comm.). This was the

first evidence of interaction between the SA and WA Banded Stilt populations.

Whilst on Ibis Island during 17–22 July 2000, I. May and CIB observed a yellow leg-flagged breeding adult within the stilt colony. It nested at the extreme northern end and was one of the first to depart with its chicks on 19 July.

On the morning of 27 July 2000, CIB returned to Ibis Island and observed the last three adult stilts with chicks departing from the extreme southern end of the colony. One of these adults was yellow leg-flagged and likely to be a different bird to the leg-flagged bird that had departed with its chicks eight days earlier. At least two WA birds were within the Lake Eyre breeding population during the year 2000.

#### Monitoring off-target effects of alpha-chloralose baiting

After many hours of monitoring, Silver Gulls were found to be the only vertebrates attracted to the baits at LEN. On Ibis Island Little Crow was

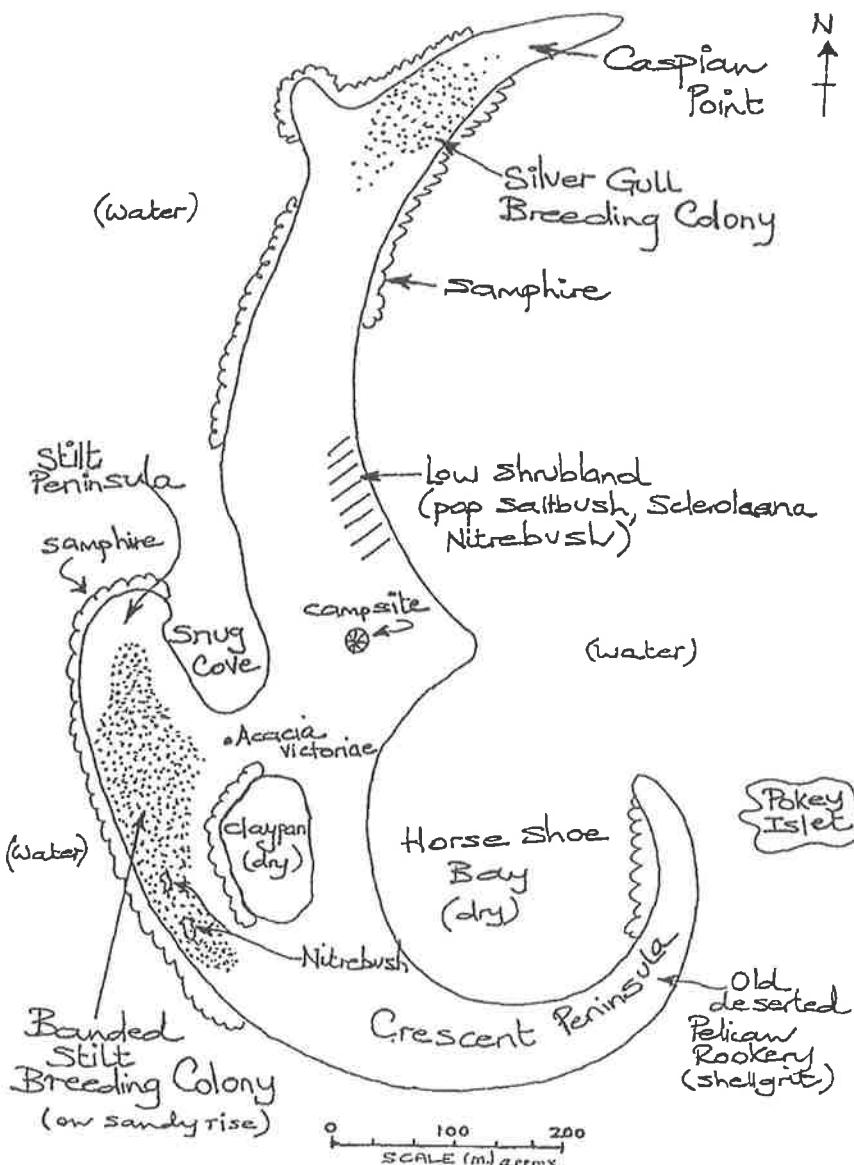


Figure 14. Sketch map of Ibis Island showing the location and general size and shape of Banded Stilt and Silver Gull breeding colonies (by CIB).

although some predation of stilt chicks might have occurred, none was detected by aerial observation.

The chicks seemed to be progressing very well with no sign of decrease in numbers. There was obvious variation in size ranging from small chicks to larger runners. The largest flocks of chicks were generally <100 and most often <50 birds, with no sign of large crèches.

On 11 August many thousands of adult Banded Stilts and their young (the oldest ones now showing pronounced black markings on their wing coverts) were observed feeding in extremely shallow waters between Dulhunty and Hughes Islands ('D' in Figure 18). There was also a significant movement of adults and young marching SSE about 1 km from the eastern side of Dulhunty Island. Many Silver Gulls were foraging in these waters and thousands more were nesting on Hughes, Dulhunty and Silcrete Islands, but there were no signs of gulls harassing or preying on stilt chicks. An estimated 45,000–50,000 immature birds were expected to fledge and be recruited into the population during late August and early September 2000.

By 28 August 2000 the northern two thirds of LEN was dry and tens of thousands of adult and juvenile stilts were encountered continuously in the shallows around Belt and ABC Bays ('E' in Figure 18). The highest concentrations were around the southern and eastern shores of Belt Bay, particularly in coves just south of Bonython Head. Only 11 stilts were observed in Jackboot Bay. Although difficult to count accurately, the total Banded Stilt population at LEN at this time was c.100,000.

#### Second nesting attempt on Ibis Island

On 27 July 2000, when the first nesting event on Ibis Island was ending, a second wave of nesting commenced, representing the fourth breeding attempt by Banded Stilts for the year. An estimated 4,000 stilts were sitting on new egg clutches in the northern part of the original colony (see Table 4, page 43). By 1 August the colony increased to 5,000 pairs (nests). About 100 Silver Gulls were in and around the stilt colony but there was no sign of gull breeding. These late-winter eggs were predicted to hatch on 16 August.

On 11 August, dry mudflats surrounded Ibis Island with the nearest water being about 8 km to the west, and the Banded Stilts deserted their nests and the island. See Figure 19 for LEN water coverage throughout year 2000.

#### Post-breeding dispersal of Banded Stilts from LEN

Two flocks of Banded Stilts, six and 54, returned to the shores of upper Spencer Gulf at Port Augusta on 6 September 2000 (pers. obs.). This was the first observation of Banded Stilts at this locality since the entire population of several thousand birds departed Port Augusta's ETSA ponds for Lake Eyre National Park following heavy rains in mid-February 2000. About 80% of these birds had clean white underparts (no trace of a breast band) and grey legs, and they were therefore identified as immature birds (I. May, pers. comm.; Marchant and Higgins 1993).

Banded Stilts continued to take up their usual summer residence on the saline ETSA cooling ponds, with c. 1,000 birds noted feeding there on 7 October 2000. There were approximately equal numbers of adults and immature birds (pers. obs.). The total increased to 7,000 birds by late February 2001 (pers. obs.).

Hundreds (maybe thousands) of Banded Stilts were at Penrice Saltfields near Adelaide on 10 September 2000, with 70% being immature birds (Tony Russell, pers. comm.). This was indicative of a substantial exodus from LEN due to the completed fledging of Banded Stilt young and the fast drying of Lake Eyre floodwaters. Widespread observations of post-breeding Banded Stilts are summarised in Table 5.

#### DISCUSSION

It is generally accepted that maintaining a healthy population of the Banded Stilt species, which breeds only irregularly on vast ephemeral inland salt lakes, is dependant on achieving outstanding breeding success when the opportunity arises, i.e. the boom or bust cycle (Minton 1989; Minton *et al.* 2000).

Recent Banded Stilt breeding events in SA (e.g. Lake Torrens, 1989 and Lake Eyre North, 2000) have suffered a significant and catastrophic increase in Silver Gull numbers and predation compared with those of earlier years. For instance, Banded Stilts nested at Lake Callabonna in 1930 seemingly free of Silver Gull predation (McGilp and Morgan 1931) and nested at LEN in 1984 with hundreds or at most a few thousand Silver Gulls present (I. May, pers. comm.).

This paper documents the catastrophic impact of Silver Gulls on Banded Stilt breeding at Lake Eyre during 2000 (see Table 6, page 53). Two

Table 5. Summary of post-breeding observations of Banded Stilts after they departed LEN and dispersed across widespread parts of Australia. Most of this information was sent into NPWSA by birdwatchers courtesy of the Birding-Aus mail list (birding-aus@vicnet.net.au).

Date	Location	No. of Birds	Observer	Comments
3 Sept. 2000	Alice Springs Sewerage Ponds, NT	15	Robert Read	Mostly in breeding plumage (bold breast bands, orange-pink legs).
6 Sept.	Port Augusta, SA	60	CIB	ETSA Ponds; c. 80% were immature birds.
10 Sept.	Penrice Saltfields, SA	1,000+	Tony Russell	70% immature birds; N side of Adelaide.
21 Sept.	150 km NW of Alice Springs, NT	3	Robert Read	Freshwater swamp near Lake Lewis.
25 Sept.	Lake Gregory, SA	Several 1,000	Ian May	Noted during aerial observation of Cooper Creek region.
2 Oct.	Tuggerah Lakes, NSW	1	Allan Benson	An immature bird; second record for NSW central coast since Sept. 1996 (pers. comm.).
4 Oct.	Cooper Creek, SA	30	Julian Reid	All immature birds; Kanowana region between Coongie Lake and Lake Hope.
7 Oct.	Port Augusta, SA	c. 1,000	CIB	ETSA Ponds; adult to immature birds c. 50:50.
8 Oct.	Penrice Saltfields, SA	1,000s	Tony Russell	Mix of adult and immature birds.
10 Oct.	Werribee Sewerage Farm, Vic.	3	Lawrie Conole	Two adults and 1 immature bird.
11 Oct.	Port Augusta, SA	500	CIB	ETSA Ponds; population dwindled; adult to immature birds c. 50:50.
21 Oct.	Natimuk-Douglas Saltpans, Vic.	10,960	R. and M. Alcorn	W Vic.; normally arrive Sept.-Nov.; 20,000-60,000 most years (R. Alcorn, pers. comm.).
22 Oct.	Werribee Sewerage Farm, Vic.	30	Stuart Dashper	No other details.
23 Oct.	Swan Bay, NSW	1	Alan Stuart	Adult; c. 30 km N of Newcastle (Port Stephens).
24 Oct.	Pakenham Sewerage Farm, Vic.	1	Graham Beal	Immature bird; SE of Melbourne.
24 Oct.	Tuggerah Bay, NSW	2	Alan Morris	Both immature birds; on western side of Chittaway Point.
25 Oct.	Werribee T Section Lagoon, Vic.	100	John Boyce	In company with Red-necked Avocets and Black-winged Stilts.
25 Oct.	Kerang Sewerage Ponds, Vic.	60	Bob Berry	Mostly without breast bands; on a lake adjacent to the sewerage ponds.
1 Nov.	Penrice Saltfields, SA	15,000+	Ian May	Ratio of adults to juvenile birds not ascertained due to birds swimming at distance offshore.
5 Nov.	Tuggerah Lakes, NSW	2	Alan Morris	Same two immature birds as reported from this location on 24 Oct.
2 Dec.	Lake Linlithgow, Vic.	c. 600	Stuart Cooney	15 km E of Hamilton; most birds without breast bands but leg colour not reported.
15 Dec.	Woorinen Lake, Vic.	1,700	Simon Kennedy	Near Swan Hill.
9 Dec.	Lake Tutchewop, Vic.	'good numbers'	Chris Coleborn	Recently flooded lake with large concentration of brine shrimps; mostly immature birds.
18 Dec.	Orielton Lagoon, Tas.	1	Tim Reid	SE Tasmania; present for one week; faint and mottled breast band; rare species in Tasmania.
23 Dec.	Austin Road Lagoon, Vic.	200+	Stuart Cooney	Part of Werribee Sewerage Farm.
24 Dec.	Lake George, SA	c. 12,000	Christopher Wilson	Near Beachport Conservation Park; SE of SA.
5 Jan. 2001	Murray's Lagoon, Kangaroo Is., SA	c. 1,000	CIB	Adult to immature birds c. 50:50; birds feeding in muddy shallows.
5 Jan.	Birchmore Lagoon, Kangaroo Is., SA	360	CIB	Roosting on E shore; mostly with breast bands.
5 Jan.	Rush Lagoon, Kangaroo Is., SA	c. 2,000	CIB	Presence of immature birds not established; birds swimming/feeding at distance offshore.
6 Jan.	Wisanger Oval Lagoon, Kangaroo Is., SA	1,600	CIB	Ratio of adults to immature birds not ascertained; swimming/foraging on open water.
6 Jan.	Moolap Saltworks, Vic.	200	Russell Woodford	Near Geelong; 48 birds without breast bands but leg colour not seen.
7 Jan.	Karatta Lagoon, Kangaroo Is., SA	180	CIB	Breast bands on most, some with only a trace; tight huddle standing on claypan near shallows.
15 Jan.	Penrice Saltfields, SA	40,000	Tony Russell	Adults and immature birds; no other details.
24 Jan.	Coorong, SA	'thousands'	Jack Bourne	Between Jack's Point and Hack's Point; mostly without breast bands.
6 Feb.	Tullakool Saltworks, NSW	'sizeable flocks'	Chris Coleborn	SW NSW; associating with Black-winged Stilts.
7 Feb.	Woorinen Lake, Vic.	7	Simon Kennedy	Dwindled from 1,700 on 15 Dec. 2000.
23 Feb.-3 Mar.	ETSA saline ponds, Port Augusta, SA	7,000	CIB	Adults to immature birds c. 60:40.

pers. obs.). It is also likely that other inland bird species are adversely affected by gull predation during a colonial breeding event, e.g. Gull-billed Tern *Sterna nilotica*. Unless a significant Silver Gull reduction programme is undertaken at state and national levels, the cull of large numbers of gulls at Banded Stilt breeding sites will be an ongoing concern and reactive management practice.

The success of future Banded Stilt breeding events in SA now relies heavily upon the stilt colony being located in time and protected by gull reduction measures if necessary. This assumes that all Banded Stilt breeding events will be found, which is not guaranteed except at prominent locations such as Lake Eyre. Given the expense, it may be naïve to assume continuing political will to undertake the work as required.

There is some concern that widespread Silver Gull baiting, i.e. treating more than just the gulls residing near breeding stilts, may cause displaced gulls to move to the stilt breeding islets and compound the problem of managing gull predation on stilt eggs and young. Whilst this must be considered due to its potential to jeopardise stilt breeding success, when compared to the danger that tens of thousands of unbaited gulls may pose to recently hatched mobile chicks on the open water, it tends to pale somewhat into insignificance. The losses inflicted by Silver Gulls on recently hatched stilt chicks at Lake Torrens in 1989 (Bellchambers and Carpenter 1992) and Hughes Island in LEN in 2000 (Minton *et al.* 2000) indicate their predatory capabilities. These past events clearly illustrate the magnitude of the problem that managers face in protecting future breeding Banded Stilt colonies from Silver Gull predation.

#### CONCLUSION AND RECOMMENDATIONS

Wildlife managers, ornithological associations, conservation agencies, the general public and others need to work as a team to manage Banded Stilt and Silver Gull populations wisely. A Banded Stilt Management Plan and an Action Plan for Banded Stilt Breeding Success, would provide wildlife managers with clear guidelines on how to best manage this species. To achieve this there needs to be immediate and ongoing funding and support for scientific research into this poorly understood species. It may be wise to list this species as nationally vulnerable until further scientific research reveals its exact conservation

status.

Banded Stilts appear to breed in WA in the natural absence of Silver Gulls (e.g. Lake Ballard, 1995), which is in stark contrast to recent breeding events in SA. Unfortunately there are negligible data on the interaction of eastern and western populations, but it would be invaluable to know if the two populations naturally supplement each other. During future breeding events there needs to be increased communication between SA/Vic and WA wildlife officers to determine if breeding stilts originated from local populations or if there was a ~~mass exodus of stilts from the 'other' population~~. The yellow leg-flagged individual that Clive Minton observed at Hughes Island during 1–5 April 2000 was the first evidence of movement between the SA and WA populations (Minton *et al.* 2000).

Minton collected blood samples from 14 dead Banded Stilt chicks on Hughes Island during 1–5 April 2000 and forwarded them to Prof. Allan Baker, University of Toronto. Baker's wader classification studies will help to determine if the eastern and western stilt populations have developed different DNA characteristics over time. Hopefully the results will be available soon (Minton *et al.* 2000; C. Minton, pers. comm.).

After the LEN breeding event, most Banded Stilts turned up at their usual coastal haunts, namely Spencer Gulf, Penrice Saltfields and the Coorong in SA. As expected, thousands also dispersed to widespread coastal and inland localities in Victoria, such as the Natimuk–Douglas wetlands in the Wimmera region, Lake Linlithgow, Lake Tutewop and Werribee Sewerage Farm. However, vagrant Banded Stilts turned up where rarely recorded before, e.g. Orielton Lagoon in Tasmania, Tuggerah Lake and Port Stephens on the central coast of NSW, and Alice Springs Sewerage Farm in southern NT (see Table 5, page 52 for details). Protection and wise management of both breeding and non-breeding wetland habitats throughout the southern half of Australia is imperative for the future wellbeing of Banded Stilt populations.

The reduction and ongoing control of Silver Gull populations at state and national levels would be a major boost to the breeding success of several Australian birds including the Banded Stilt. Primarily, a Silver Gull Management/Action Plan needs to be developed and implemented to facilitate the successful reduction of Silver Gull numbers. This may be best achieved

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*Chris Baxter: 'Panorama Park', Rose Cottage Road, Wisanger, Kangaroo Island, S.A. 5223*

Received 12 March 2001; accepted 15 February 2003

## APPENDIX

Gazetteer of LEN place names mentioned in the text (Hs. = Homestead, R. = River).

Place name	Latitude (S), Longitude (E)
ABC Bay	28°46'00", 136°55'00"
ABC Point	28°46'00", 136°56'00"
Artemia Point	28°41'00", 137°21'00"
Belt Bay	28°57'00", 137°02'00"
Bonython Headland	28°53'30", 137°06'00"
Brooks Island	28°39'00", 137°26'30"
Cooper Creek (mouth)	28°15'00", 137°37'00"
Dulhunty Island	28°43'00", 137°09'00"
Eric Island	28°33'00", 137°34'30"
Hughes Island	28°38'00", 137°08'00"
Hunt Peninsula	28°50'00", 137°20'00"
Ibis Island	28°33'00", 137°26'30"
Jackboot Bay (north)	28°52'00", 137°17'00"
Jackboot Bay (south)	29°02'00", 137°19'00"
Madigan Gulf	28°48'00", 137°34'00"
Muloorina Station (Hs.)	29°14'30", 137°54'00"
Neales R. (mouth)	28°04'00", 136°54'00"
Silcrete Island	28°53'00", 137°06'00"
Warburton R. (mouth)	27°55'00", 137°10'00"



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## Banded Stilts at Lake Eyre report

from [Hugo Phillipps]

[Permanent Link] [Original]

To: [birding-aus@vicnet.net.au](mailto:birding-aus@vicnet.net.au)

Subject: Banded Stilts at Lake Eyre report

From: Hugo Phillipps <[h.phillipps@birdsaustralia.com.au](mailto:h.phillipps@birdsaustralia.com.au)>

Date: Tue, 18 Apr 2000 17:04:42 +1000

Hi everybody -

I now have the report:

Minton et al. (2000)

↗

'Visit to Banded Stilt breeding colony on Hughes Island, Lake Eyre North 1st - 5th April 2000' by Dr Clive Minton, Dr Rosalind Jessop and Peter Collins.

I can send this as an email attachment as an MS Word document file. It contains a couple of graphs and is about 117KB in size. Let me know if you are interested.

Cheers,  
Hugo

Hugo Phillipps  
Communications Coordinator  
Birds Australia  
415 Riversdale Road  
HAWTHORN EAST 3123, Australia  
Tel: (03) 9882 2622, fax: (03) 9882 2677  
Email: <[h.phillipps@birdsaustralia.com.au](mailto:h.phillipps@birdsaustralia.com.au)>  
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**Fax of 1<sup>st</sup> July 2001 from Clive Minton (CDTM) to GBP advising he had ‘...just heard via ABBBS that a yellow-flagged Banded Stilt was seen on 28 April [presumably 2001] at Lake George, in the SE corner of South Australia’.**

**CDTM also writes ‘You were already aware that there were several sightings of yellow-flagged Banded Stilt breeding at Lake Eyre last year [2000] – at least three individuals involved’.**

205  
Banded Flots

Fax to Grant Kearsey 08-9306-1641 1/7/01  
CALM  
Joe just had ~~had~~ via Abbas that a yellow flagged  
Banded Stilt was seen on 28 April at Lake George,  
in the SE. corner of South Australia. You were already  
aware (and <sup>were</sup> ~~were~~) of several sightings of yellow-flagged  
Banded Shilt(s) breeding at Lake Eyre last year - at  
least three individuals involved.

Have there been any more sightings in WA?  
Who has the master list of sightings? We could at  
least write a brief note on these for Stilt?

Please fax this news on to Tim, we really  
must get down to analysing and publishing our 1995  
info.

Bob Willis, Clive 03-4587-4901

**Forum posting (08/10/2000) by Ian May that refers to ‘... some of the Banded Stilts at Lake Eyre North recently were described by Dr Clive Minton in his paper, these birds were apparently tagged at Lake Ballard in WA ...’.**



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## Banding versus No Bands

from [Tony Russell]

[Permanent Link] [Original]

To: Pat and Ian May <[mayalex@one.net.au](mailto:mayalex@one.net.au)>

Subject: Banding versus No Bands

From: Tony Russell <[twitcher@senet.com.au](mailto:twitcher@senet.com.au)>

Date: Sun, 08 Oct 2000 21:23:24 +0930

Well Ian, you've got me stuffed!

But, I did see thousands of Banded Stilts, young and old, at Penrice Saltfields today. Mostly in the pond where the Phalaropes were Jan - April this year. They were all spread out across the pond, not banding together in groups.

Tony.

At 04:52 8/10/00 +0930, you wrote:  
Dear Birders

With all this rubbish going on about banding versus no banding it should be noted that some of the Banded Stilts at Lake Eyre North recently were observed with metal leg bands and yellow flags on their legs. As described by Dr Clive Minton in his paper, these birds were apparently tagged at Lake Ballard in WA which proves there is at least some interaction between West Australian and Eastern Australian populations of Banded Stilts.

SO TO BRING SOME SENSE BACK INTO THE BANDING DISCUSSION, observers who see large numbers of Banded Stilt should attempt to establish the following! How many unbanded, Banded Stilts are unbanded? and how many Banded Stilts without bands are banded? and how many Banded Stilts with bands are unbanded? and how many banded, Banded Stilts are banded? To give them them every opportunity to survive without disturbance, none of the recently bred Lake Eyre Banded Stilts which at present are all unbanded were banded.

However it should be noted that unbanded banded stilts with or without bands may be juveniles (with grey legs) or non breeding younger adults (with pink legs). And the banded Banded Stilts with or without bands could be young adults in breeding plumage or may be older adults that retain their bands.

Regards

Ian May

Banding-Aus is on the Web at  
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**Email (06/10/2000 – or 10/06/2000?) from CDTM to GBP advising that ‘... we’ve had at least 3 different yellow-flagged Banded Stilts breeding at L. Eyre this year’. Requests flagging details that would enable him to put these records ‘... into the system for processing by ABBBS’. GBP has annotated the email hardcopy with the coordinates of (the main?) breeding colony and nearby ‘Camp Island’ on Lake Ballard.**

To: Grant Pearson@WOOD.SID@CALM  
From: "Pat and Clive Minton" <mintons@ozemail.com.au>  
Cc:  
Subject: yellow flagged Stilts  
Attachment:  
Date: 06/10/2000 7:58 AM

(158)

DEar Grant

I'm not sure whether i've told you but we've had at least 3 different yellow flagged banded Stilts breeding at L Eyre this year. I want to put them into the system for processing by ABBBS but I do not have the banding details. Could you tell me please

- A) the range of dates during which the leg flagging took place in 1995
- B) approx coordinates of the part of the lake where most leg flagging took place.
- C) exactly how many BS were flagged
- D) whether the formal field data sheets returns were made to the Banding Office.

29 44 36  
10/ 29 13 colony

29 47 01  
10/ 33 06 camp

Looking forward to hearing from you

Best wishes Clive

**'Report of Recovery to Bander' (dated 14/09/2000) sent by  
ABBBS to CDTM, copied to GBP, reporting the sighting of a live,  
yellow leg-flagged bird (Banded Stilt) by Ros Jessop and Peter  
Collins at Hughes Island, Lake Eyre North, SA, on April 3<sup>rd</sup>, 2000.  
Banding details given as 'Lake Bollard [sic; should be 'Ballard']  
WA' 'on 00/04/1995').**



## AUSTRALIAN BIRD AND BAT BANDING SCHEME

John Gorton Building  
Parkes Place PARKES ACT 2600  
GPO Box 8 CANBERRA ACT 2601  
Telephone (02) 62742407 Fax (02) 62742455

Barry Baker	02.62742402
Belinda Dettmann	02.62742405
Amelia McCulloch	02.62742406
David Dwyer	02.62742407

*barry.baker@ea.gov.au  
belinda.dettmann@ea.gov.au  
amelia.mcculloch@ea.gov.au  
david.drynan@ea.gov.au*

14-SEP-2000

THE AUSTRALASIAN WADER STUDY GROUP  
C/- DR CDT MINTON  
165 DALGETTY ROAD  
BEAUMARIS VIC 3193

## Banded Stilt

## REPORT OF RECOVERY TO BANDER

Dear Clive,

I have received a report of the recovery of a bird that you have banded. I apologise for the delay in getting this report to you. Please check the information given below and, if necessary, make any alterations and return this letter to me. If you do not contact the Banding office it will be assumed that the details given below are correct.

## FINDING DETAILS

**FINDING DETAILS**  
LEG FLAG Yellow was sighted on 03/04/2000  
At : HUGHES ISLAND, LAKE EYRE NORTH SA  
Latitude : 28deg 36min 0sec S ; Longitude : 137deg 5min 0sec E

## Flag sighting

The bird was : COLOUR MARKING SIGHTED IN FIELD (COHORT ONLY).  
And : WAS ALIVE IN THE WILD WITH THE BAND.

The finder is : Ros Jessop and Peter Collins  
RMB 4009  
COWES VIC 3922

## BANDING DETAILS OF THE COHORT OF BIRDS

You placed this band on a(n) : Banded Stilt  
or scientific name : *Cladorhynchus leucocephalus*  
on : 00/04/1995  
at : LEG FLAGS - LAKE BOLLARD WA  
Latitude : 29deg 25min 0sec S; Longitude : 120deg 50min 0sec E

The bird was age code : NESTLING, sex code : UNKNOWN

The exact time between banding and recovery is unknown. The bird had moved a distance of : 1581 km with a bearing of 91 degrees.

Yours sincerely,

H. C. Lulloel

 D. Drynan  
Project Officer



## AUSTRALIAN BIRD AND BAT BANDING SCHEME

John Gorton Building Parkes Place PARKES ACT 2600 GPO Box 8 CANBERRA ACT 2601 Telephone (02) 62742407 Fax (02) 62742455	Barry Baker Belinda Dettmann Amelia McCulloch David Drynan	02.62742402 02.62742405 02.62742406 02.62742407	barry.baker@ea.gov.au belinda.dettmann@ea.gov.au amelia.mcculloch@ea.gov.au david.drynan@ea.gov.au
--	---	--	---

14-SEP-2000

THE AUSTRALASIAN WADER STUDY GROUP  
C/- DR CDT MINTON  
165 DALGETTY ROAD  
BEAUMARIS VIC 3193

*Banded Stilt*

## REPORT OF RECOVERY TO BANDER

Dear Clive,

I have received a report of the recovery of a bird that you have banded. I apologise for the delay in getting this report to you. Please check the information given below and, if necessary, make any alterations and return this letter to me. If you do not contact the Banding office it will be assumed that the details given below are correct.

## FINDING DETAILS

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At : HUGHES ISLAND, LAKE EYRE NORTH SA  
Latitude : 28deg 36min 0sec S ; Longitude : 137deg 5min 0sec E

*Flag sighting*

The bird was : COLOUR MARKING SIGHTED IN FIELD (COHORT ONLY)  
And : WAS ALIVE IN THE WILD WITH THE BAND.

The finder is : Ros Jessop and Peter Collins  
RMB 4009  
COWES VIC 3922

## BANDING DETAILS OF THE COHORT OF BIRDS

You placed this band on a(n) : Banded Stilt  
or scientific name : *Cladorhynchus leucocephalus*  
on : 00/04/1995  
at : LEG FLAGS - LAKE BOLLARD WA  
Latitude : 29deg 25min 0sec S; Longitude : 120deg 50min 0sec E;

The bird was age code : NESTLING, sex code : UNKNOWN

The exact time between banding and recovery is unknown. The bird had moved a distance of : 1581 km with a bearing of 91 degrees.

Yours sincerely

*D. Drynan*  
D. Drynan  
Project Officer

Email (19/04/2000) from GBP to CDTM saying inter alia 'Jim [JL] would like to know what colour combination did you use at Eyre. No doubt we should keep a look out for flags from Eyre?'

To: iSMTP@CALM.COMO.1@Servers [minton@ozemail.com.au], Jim  
Lane@BUSS.SID@CALM

From: Grant Pearson@WOOD.SID@CALM

CC: Alan Clarke@WOOD.SID@CALM

Subject: re: Various

Attachment:

Date: 19/Apr/2000 11:47 AM

clive@3.doc

Hi Clive

A couple of things. Thanks for the impressive report on Lake Eyre. We have exhausted all available funds for air surveys for stilts and unless we can find alternative funds we cannot look any further.

Jim would like to know what colour combination did you use at Eyre. No doubt we should keep a look out for flags from Eyre?

We did not take blood from chicks at Ballard or Marmion. We did collect eggs for DNA work and they went to Murdoch Uni. Despite many attempts we were never able to extract any results from Murdoch. We believe they never got round to testing them. In the end we decided we should wait for another breeding effort in WA and collect more, to send to a different DNA lab.

We will continue to monitor for breeding events. Would it not be possible to take samples from a number of adults from, say Rottnest, and determine if there are differences in the adult population or if there are similarities with the SA birds?

Cheers

Grant

Grant Pearson  
Department of Conservation and Land Management  
WA Wildlife Research Centre  
Wildlife Place  
Woodvale WA 6026  
Tel:(8) 9405 5163, Fax: (8) 9306 1641  
Email: grantp@calm.wa.gov.au  
----- Original Text -----

From: "Pat and Clive Minton" <minton@ozemail.com.au>, on 13/04/2000 1:55 PM:

Dear Grant,

Just got down the pile to your 15th March note.

1. Have not had any enquiries yet refereeing your award application.
2. Robin Phillimore would be most welcome. Get her please to contact me urgently. Two people have dropped out recently and I would welcome replacements.

Best wishes,  
Clive.

**Several emails (16-19/04/2000) between CDTM, GBP and JL. The email of 18/04/2000 from JL to GBP inter alia reads ‘There is a list of yellow tag sightings reported to us in an early 1996 (or thereabouts) issue of WA Bird Notes. There have been a few since but I don’t have time to dig them out just now’.**

To: Jim Lane@BUSS.SID@CALM  
 From: Grant Pearson@WOOD.SID@CALM  
 Cc:  
 Subject: re: fwd: Various  
 Attachment:  
 Date: 19/Apr/2000 11:20 AM

*Bendix Shk*

Jim

**Thanks for the notes. I'll advise Clive.**

I used Kodak professional T400CN black and white film and I left the Hoya uv filter on due to the haze present. The information i got was that it would make little difference but i left it on anyway.

I planned to visit Vasse on the 4th and 5th of May.

Ian Coxsall from Bunbury aero club (97254377) is very good and the new c172 is nice. The cost of flying to Perth from Bunbury maybe the same as driving these days. Otherwise big Pete from Royal Aero Club Jandakot is still alive and flying!

Cheers

Grant

Grant Pearson

Department of Conservation and Land Management

WA Wildlife Research Centre

Wildlife Place

Woodvale WA 6026

Tel:(8) 9405 5163, Fax: (8) 9306 1641

Email: grantp@calm.wa.gov.au

----- Original Text -----

From: Jim Lane@BUSS.SID@CALM, on 18/04/2000 3:07 PM:

Grant

As far as I am aware, no blood samples were taken at Ballard or Marmion in 1995. My recollection is that we decided not to take them, for practical reasons.

We did collect eggs for DNA work and they went to Murdoch Uni. Despite many attempts I was never able to extract any results from Murdoch. I believe they never got round to testing them. In the end I decided we should wait for another breeding effort in WA and collect more, to send to a different DNA lab.

There is a list of yellow tag sightings reported to us in an early 1996 (or thereabouts) issue of WA Bird Notes. There have been a few since but I don't have time to dig them out just now.

Unless you can find money from somewhere, we won't be able to do any more aerial searching for nesting BaSt this financial year. As you know, the \$2,000 of CALM funds that we obtained for this purpose has now been fully spent.

On a different subject, which type of film and filter (if any) did you end up using for the Ramsar extension shots?

When are you thinking of doing your next Vasse-Wonnerup logger download?

Also, which pilot would you now recommend for the gull monitoring (Carnac & Penguin) that Doug Coughran and/or I need to do in mid May (from Jandakot).

Jim

From: Grant Pearson@WOOD.SID@CALM, on 17/Apr/2000 5:37 PM:

Jim

I recall talking about blood samples but not actually taking it. This would have required liquid nitrogen I guess and all sorts of bleeding procedures. Did

Clive take these samples with you or Al or on his own??

Lake King is certainly full and Lake Grace less so.

Do you have a list of recent tag sightings for Clive. My file is with Al.

Pelicans at Peel/Har 17/4

Larger than normal numbers of P but I won't have counts til I look at photos. I

got shots of all ramsar wetlands except preston when we ran out of time. The aircraft had to be back for another booking. Will develop and send to you.

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Grant

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Email: grantp@calm.wa.gov.au

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From: "Pat and Clive Minton" <mintons@ozemail.com.au>, on 16/04/2000 3:49 PM:

To: Grant Pearson@WOOD.SID@CALM

Dear Grant,

I'm sorry your flight did not reveal any breeding Banded Stilts. I'm sure they must be somewhere. Is it possible to reexamine the detailed rainfall records for other possibilities. Could they be further south in the Lake Grace/Lake King area? Or much futher east in that huge long lake full of islands (whose name I can't remember). It would great if you could find them and I hope that you may be able to do one more aerial recce.

You did not mention in your response to my last email whether you would be able to prepare the requested list of all yellow leg flag sightings.

I have still heard nothing from the bulletin about my Eastern Curlew slide. I suggest you talk to the editor [REDACTED]

I spoke to John Stotes at Anna Plains this morning and learned that he is currently surrounded by water with the beach access road invisible under

15.

**Email (18/04/2000) from JL to GBP *inter alia* referring to list of yellow flag sightings reported by JL in WA Bird Notes circa 1996 and that 'There have been a few since ...'.**

To: Grant Pearson@WOOD.SID@CALM  
From: Jim Lane@BUSS.SID@CALM  
Cc:  
Subject: re: fwd: Various  
Attachment: BEYOND.RTF  
Date: 18/Apr/2000 3:07 PM

14

Grant

As far as I am aware, no blood samples were taken at Ballard or Marmion in 1995. My recollection is that we decided not to take them, for practical reasons.

We did collect eggs for DNA work and they went to Murdoch Uni. Despite many attempts I was never able to extract any results from Murdoch. I believe they never got round to testing them. In the end I decided we should wait for another breeding effort in WA and collect more, to send to a different DNA lab.

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13.  
You did not mention in your response to my last email whether you would be able to prepare the requested list of all yellow leg flag sightings.

I have still heard nothing from the bulletin about my Eastern Curlew slide. I suggest you talk to the editor as Andrew Hoy is never going to do anything.

I spoke to John Stokes at Anna Plains this morning and learned that he is currently surrounded by water with the beach access road invisible under half metre deep water. It is touch and go whether we will even be able to get down to the beach in our visit in May. But the marsh and bush birds should be fantastic!

We collected some blood samples from the Banded Stilt chicks at Lake Eyre and these have already been sent to Canada for use by Alan Baker in his classification work. He has agreed also, at his expense, to see whether there are any differences yet developed in DNA characteristics between the south Australian and west Australian Banded Stilt populations. Where are the blood samples which we collected in 1995 at Lake Ballard? Would it be possible to spare 5 of these, please? If so could you send them to Alan Baker or alternatively get them to me for forwarding please?

That's all for now,  
Best wishes,  
Clive.

**Emails from CDTM to GBP (16/04/2000) and GBP to JL (17/04/2000) seeking ‘... the requested list of all yellow leg flag sightings’.**

To: Jim Lane@BUSS.SID@CALM  
From: Grant Pearson@WOOD.SID@CALM  
Originated by: "Pat and Clive Minton" <mintons@ozemail.com.au>  
Cc: Alan Clarke@WOOD.SID@CALM  
Subject: fwd: Various  
Attachment:  
Date: 17/Apr/2000 5:37 PM

16.

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15

Thats all for now,  
Best wishes,  
Clive.

**Email (13/04/2000) from CDTM to GBP and 'Allan' [Alan Clarke] inter alia referring to 'A yellow flag adult Banded Stilt nesting in the Lake Eyre colony. This is the first example of the intermixing of the WA and SA populations'. CDTM also requests GBP prepare '... a consolidated list of all yellow tag sightings'.**

**This email (13/04/2000) also indicates that 'Allan' sent CDTM metal bands and yellow leg flags for potential use at Lake Eyre, but it turned out that they were unable to be used there. CDTM asks whether he should return them to GBP / 'Allan'.**

To: iSMTP@CALM.COMO.1@Servers [mintons@ozemail.com.au], Jim

Lane@BUSS.SID@CALM

From: Grant Pearson@WOOD.SID@CALM

Cc:

Subject: re: Banded Stilts

Attachment:

Date: 13/Apr/2000 3:20 PM

Hi Clive.

Good news about the yellow flag indeed. I flew Ballard, Barlee, Marmion and Gourly last week and found no breeding. Water levels were mostly lower than expected. I'm in the process of a full report for Jim and will copy it to you.

Cheers

Grant

Grant Pearson  
Department of Conservation and Land Management  
WA Wildlife Research Centre  
Wildlife Place  
Woodvale WA 6026  
Tel: (8) 9405 5163, Fax: (8) 9306 1641  
Email: grantp@calm.wa.gov.au

----- Original Text -----

From: "Pat and Clive Minton" <mintons@ozemail.com.au>, on 13/04/2000 1:55 PM:

Dear Grant and Allan,

1. Thankyou allan for getting the metal bands and yellow leg flags so promptly. As it happened we were not able to band any chicks from the last nine thousand nests, only 322 chicks survived the silver gull predation onslaught!

I am pleased that the SA authorities are most receptive to the recommendation for drastic silver gull control in the environs of future Banded Stilt colonies.

2. Great surprise! A yellow flag adult Banded Stilt nesting in the Lake Eyre colony. This is the first example of the intermixing of the WA and SA populations.

Would it be possible for you to prepare please, in the near future, a consolidated list of all yellow flag sightings?

3. Have you managed to carry out an aerial recce yet over the Gulg fields saltlakes?

Best wishes to you both,  
Clive.

P.S. Shall I return the metal bands/yellow leg flags immediately or hold them here until we see what transpires over the next few weeks (eg. a new nesting attempt at Lake Eyre when the Queensland water arrives in early May)?

12  
1995  
to be from our  
+ previous flying  
effort.

details? when?

9/4/00

**Faxes from CDTM to GBP (23/03/1999) and JL to CDTM (25/03/1999) in which references are made to monitoring BaSt numbers at Rottnest Island 'and other known haunts' [in WA], including the Vasse-Wonnerup wetlands at Busselton, following recent rains in the WA interior.**

~~Fax to Grant Pearson CALM~~

File 631 (23/3/99)

08-9306-1641

There is a strong interest here in further Banded Stilt studies & filming, especially of the early stages of the breeding cycle. We would expect that the two recent cyclones may have dumped enough rain in some of the nesting areas for an "event" to occur.

What information do you have? Can you possibly please make some inquiries re rainfall in certain areas? Can someone check whether Banded Stilts have returned & other known flocks in the next few days?

What would you / CALM Roma intentions on Banded Stilts? Any aerial survey possible? Any more on ground studies envisaged?

Looking forward to hearing from you.

Best wishes,

Clive 08-9589-4901

**FAXED**

Clive

Greetings. We are closely monitoring rainfall reports from the Goldfields. So far it does not look promising. For example, in the seven days to 0900 hrs on 24 March there was only 94 mm at Meekatharra and 36 mm at Leonora. We are monitoring the Banded Stilt on the Vasse-Wonnerup system here at Busselton. Will keep you posted. Reports. Jim Kerr 25/3/99

**FAXED**

**DEPARTMENT OF CONSERVATION AND LAND  
MANAGEMENT**

14 QUEEN STREET, BUSSELTON WA 6280

PHONE - (08) 9752 1677 FAX - (08) 9752 1432



**FACSIMILE TRANSMITTAL SHEET**

TO:

Grant Pearson

FROM:

JL

COMPANY:

DATE:

25/3/99

FAX NUMBER:

TOTAL NO. OF PAGES INCLUDING COVER:

(3)

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

RE:

YOUR REFERENCE NUMBER:

NOTES/COMMENTS:

A copy for our info

"Looking forward to hearing from you,  
Best wishes,

Clive 08-9589-4901

**FAXED**

Clive

Greetings. We are closely monitoring rainfall  
reports from the Goldfields. So far it  
does not look promising. For example, in  
the seven days to 0900 hrs on 24 March there  
was only 94 mm at Meekatharra and 36 mm at  
Leonora. We are monitoring the Boree Shit  
on the Vasse-Warrenup system here at Busselton  
Will keep you posted. Reports. Jim Dene  
25/3/99

**Email (04/11/1998) from JL to Clive Napier thanking him and referring to the opportunity that the November 1998 'South Wetlands Monitoring Program' runs (Coorow to Esperance) to be undertaken the following week would provide for JL, GBP and ACI to look for leg-flagged BaSt.**

To: iSMTP@CALM.COM.1@Servers [<cnap@ozemail.com.au>]  
From: Jim Lane@BUSS.SID@CALM  
Cc: Grant Pearson@WOOD.SID@CALM, Alan Clarke@WOOD.SID@CALM  
Subject: re: Banded Stilts  
Attachment: BEYOND.RTF  
Date: 04-Nov-98 6:50 PM

41.

That's great news Clive. Thanks indeed for checking the stilt out and passing on the flag sighting. Lake Ninan is a new location for flag sightings and this is the first bird reported since last summer. It's great to know the leg flags are lasting this long. Grant Pearson, Alan Clarke and I will be doing wetland monitoring runs around the SW (Coorow to Esperance) next week. Your observation will certainly encourage us to carefully check out as many stilt as we can. Thanks again. Best wishes to you and Wendy.

----- Original Text -----

From: "Clive Napier" <cnap@ozemail.com.au>, on 04-Nov-98 5:57 PM:

Dear Jim,

Wendy and I were returning from a Birds on Farms excursion at Dalwallinu last Friday 30th Oct. and stopped at Lake Ninan some 7 kms SW of Wongan Hills for Lunch. A large flock of Banded Stilts were at the water's edge on the Eastern shore near the car park. We watched them for about 35 minutes and moved to within 35metres. We had a good Kowa scope set up. While we watched there was a continuous stream of birds coming from the western side of the Lake and joining the resting flock.

We counted around 1000 birds in the resting flock with about the same just visible still on the water on the far western side. About 5% of the birds showed incomplete breast bands or no band.

One only bird had a bright YELLOW PLASTIC LEG BAND. I certainly did not inspect all birds but kept a sharp eye on them for about half an hour watching for the bands at all times.

Best wishes  
Clive and Wendy.

A

**Email (04/11/1998) from Clive Napier to JL reporting their  
sighting of a yellow leg-flagged BaSt on Lake Ninan, near Wongan  
Hills, WA, on Fri 30<sup>th</sup> October 1998.**

To: <jim1@calm.wa.gov.au>  
From: "Clive Napier" <cnap@ozemail.com.au>  
Cc:  
Subject: Banded Stilts  
Attachment:  
Date: 04/11/1998 05:57

40.

4 Nov 98  
Dear Jim,

Wendy and I were returning from a Birds on Farms excursion at Dalwallinu last Friday 30th Oct. and stopped at Lake Ninan some 7 kms SW of Wongan Hills for Lunch. A large flock of Banded Stilts were at the water's edge on the Eastern shore near the car park. We watched them for about 35 minutes and moved to within 35metres. We had a good Kowa scope set up. While we watched there was a continuous stream of birds coming from the western side of the Lake and joining the resting flock.

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One only bird had a bright YELLOW PLASTIC LEG BAND. I certainly did not inspect all birds but kept a sharp eye on them for about half an hour watching for the bands at all times.

Best wishes  
Clive and Wendy.

**Email (25/09/1998) from ACI to JL** advising he had looked closely at 1000 of 10,000 BaSt at Yarra Yarra Lakes (near Three Springs, WA) during 'last week's depth gauge [routine Sept wetland monitoring] run' but did not see any leg flags. JL replies (25/09/1998) asking ACI for a memo with more details as 'It all adds to the picture'.

To: Alan Clarke@WOOD.SID@CALM  
From: Jim Lane@BUSS.SID@CALM  
Cc:  
Subject: re: Banded Stilts  
Attachment: BEYOND.RTF  
Date: 9/25/98 3:54 PM

38.

**No, don't make another trip. But do please write a short memo to me describing what you saw, where, times, conditions, behaviour etc. It all adds to the picture.**

----- Original Text -----

From: Alan Clarke@WOOD.SID@CALM, on 9/25/98 2:40 PM:

Jim, I have been going through my notes for last weeks depth gauge run were I was reminded about the 10,000 or so Banded Stilts at Yarra Yarra! A good estimate of total numbers was difficult because they were spread thinly over the whole lake with large, tightly packed groups of birds around the shore. Using my scope I was able to look closely at about 1000. I did not see any flags. the remainder were in deep water or too far away. Do you want me to go back next week for a day with a volunteer or two to have a closer look.

AI

**Sighting of yellow leg-flagged Banded Stilt by Mavis Russell at Martin's Tank (Yalgorup National Park, WA) on Mon 6<sup>th</sup> April 1998. This sighting was reported by Mavis to JL on 6<sup>th</sup> & 7<sup>th</sup> April, 1998.**

Banded Shilt — Yellow Leg Flyg  
 Sighting — by Meavis Russell (of 280 fms)  
 Ph (08) 97332195.

Meavis saw one yellow-leg flegged Banded Shilt at Martin's Tank (Yeyongyo Chain) on Monday 6th April 1998 while looking for Hooded Plover. She saw it at 9.15 am.

There were c800 Bait in ~~the~~ whole of lake (Martin's Tank)  
 most were middle  
 This flegged bird was in a party of c 30 Banded Shilt near the edge of the lake and were swimming  
 It was standing in 3-4 inches of water  
 She could easily see the leg fleg and its reflection in water.  
 She didn't see if it had a metal leg band or not. ~~Not seen if its banded~~ band as well.

It was an "Adult" — it had a complete (not blotchy) band across the chest ~~the~~ (viewed sideways.)

Meavis saw it again 5-10 min later after it had flown ahead of her. (still on Martin's Tank).

A

notes taken by Irene during phone conversation with Meavis at 1045 am on Tues 7 April 98. Meavis had left a phone message for me on 6/4/98.

JK.

Banded Shlt - Yellow Leg Flag  
Sighting - by Marvin Russell (of 880 pair)  
Ph (08) 97332195.

Marvin saw one yellow-leg flagged Banded Shlt at Martin's Tank (Tulonya chain) on Monday 6th April 1998 while looking for flooded flower. She saw it at 9.15 am.

There were c800 Bslt in ~~the~~ whole of lake (Martin's) most <sup>were</sup> in middle. This flagged bird was in a party of c 30 Banded Shlt near the edge of the lake and were swimming. It was swimming in 3-4 inches of water. She could easily see the leg flag and its reflection in water. She didn't see if it had a metal leg band as well. ~~Not~~ ~~if it had~~

It was in "Colant" - it had a complete (not blotchy) bend across the chest ~~the~~ (viewed sideways.)

Marvin saw <sup>it</sup> again 5-10 min later after it had flown ahead of her. (still on Martin's Tank).

↑

Notes taken by J here during phone conversation with Marvin at 1045 am on Tues 7 April 98. Marvin had left a phone message for me on 6/4/98.

JK.

Article on page 26 of 'Busselton – Margaret Times' of Thurs March 12<sup>th</sup>, 1998, headed 'Banded stilt [sic] visits tagger' and reporting sighting 'this week' of a yellow leg-flagged BaSt on Vasse-Wonnerup, Busselton, '... the second such bird to visit Busselton from the 500 stilts that were tagged during the field trip in March, 1995'. Check JL's field notes for (a) exact date of second sighting and (b) all details of the first.

# **12 months exposure for your business or service for just \$160\***



## **Your Local 1998/99 Busselton Shire Community Directory**

can give you that exposure to the 17,000 or more residents of the Busselton Shire with this local directory.

Caroline Beamond has all the good news, so welcome her when she calls on you.



# **Banded stilt visits tagger**

BUSSELTON Conservation and Land Management's Principal research scientist Jim Lane was reacquainted with an old friend last week about three years after they first met.

Through binoculars, Mr Lane spied in the Vasse-Wonnerup estuary this week a banded stilt with a distinctive yellow tag on its leg. Placed there three years ago when Mr Lane was on a field trip to Lake Ballard, near Menzies.

The bird had flown about 700 kilometres for the chance encounter with Mr Lane, the second such bird to visit Busselton from the 500 stilts that were tagged during the field trip in March, 1995.

The usually dry salt lake had filled to an enormous size after the remnant of Cyclone Bobby dumped 380mm of rain in the area.

So far, birds have been seen near Port Hedland, Dampier, Thompson Lake in Perth, Peel-Harvey Inlet and Busselton.

Mr Lane recognised the special yellow flag-tag on the visitor to the local wetlands and has been able to add to our knowledge of the handsome wading bird.



Banded stilts

banded stilt and its subsequent movements. The scientists found more than 20,000 banded stilt nests on Lake Ballard.

The stilts have special habitat requirements for breeding. They need recently flooded salt lakes because the young are predominantly fed on brine shrimps.

The opportunity to breed only arises every few years. Only about 20 nesting events have ever been recorded, most of them in WA.

The scientists tagged 500 young chicks to track their movements. As Lake Ballard dried up, the birds dispersed to the coast.

The weather event gave scientists a great chance to study the opportunistic breeding pattern of the handsome wading bird.

**Free concert for youth** **Advocare Seminar**  
THE Lotteries Commission's Gordon Reid

If you'd like to talk to  
Caroline Beamond

**Item on p.6 of WA Bird Notes, No.83, Sept 1997, where ‘The West Australian Wader Study Group’ (WAWSG) refers to leg-flagging of BaSt at Lake Ballard in 1995 and calls for people to report sightings of leg-flagged BaSt. ‘All information will be passed on to CALM who are currently doing the research ...’.**

surveyed once.

The 161 Main Roads verge Twenty-Minute sites have been selected. Many volunteers are now involved in surveying them. More are needed. I would like to hear from anyone who could help with sites on the Great Eastern Highway between Northam and Tammin, on Albany Highway near Arthur River and Tenterden; and also between Dalwallinu and Wubin. Just one site (to be surveyed seasonally) would be helpful.

#### Timing of surveys on the day.

For the purposes of the survey it is best not to be too regular in your habits. If you do a series of sites on the one day, it is suggested that you vary the sequence. The example below could be coincidence being a sample of one but is interesting nevertheless. I surveyed five comparable Main Roads revegetation sites near York on the morning of 8 May:

Time	No of Species	No of Individuals
7.50	7	29
8.35	8	21
9.40	4	19
10.20	5	12
11.25	3	5

#### Acknowledgements

The money situation has improved dramatically. The Gordon Reid Foundation provided funding both to help with the last minute flurry to get the required number of farms registered before the cut-off date, and to continue with the project.

The basic function of the Gordon Reid Foundation for Conservation is to encourage and sustain action by community organisations, to conserve and restore indigenous plants, animals and micro organisms and their natural environments in Western Australia.

Brenda Newbey  
WA Coordinator, Birds on Farms Project

#### PUBLICATIONS REPORT

##### Birding Sites Around Perth

The launch of this publication has now been changed to Tuesday 28 October 1997 at 10:00 am.

Guests will include representatives of State and Local Government departments and company organisations, which have supported the Bird Australia-WA Group in this and other projects.

It will be an opportunity to acknowledge the support of our sponsors in this and other projects and to have displays of our current activities and research projects and to publicise our Birds Australia-WA Group.

ALL MEMBERS ARE WELCOME

To assist the organisers with catering, would you please advise the office on (08) 9383 7749 by 4 October if you are attending.

Allan K Jones  
for Organising Sub-committee

#### THE WEST AUSTRALIAN WADER STUDY GROUP (WAWSG)

The WAWSG aims to raise the profile of wader research in Western Australia and to gain a better understanding of wader movements within our State.

The Group has therefore initiated a number of projects, which will continue over the next few years. These will complement the existing projects already run by our local Birds Australia group and extend the range of choice of birding activities available to members.

You are encouraged to participate in one of the local, national or international wader projects as listed below.

##### 1. The National Wader Counts

The national wader counts are held during February and June of each year. These counts monitor the wader populations at different sites around Australia and assist in predicting population trends and fluctuations. For example, during the summer of 1996 a total of 172 sites were counted over 28 designated areas. The national count results are published once a year in *The Stilt*. You may have seen the local results of our last summer count in the previous issue of *Western Australian Bird Notes*. More sites and participants are keenly sought to make this program even more successful. The representation of our State in the national wader counts is presently relatively small. The next national wader count is planned for the weekend 7/8 February 1998.

##### 2. Banded Stilts

Back in April 1995 tens of thousands of Banded Stilts nested at Lake Ballard, near Menzies. Many were banded and leg-flagged in order to trace their dispersal after the breeding season had finished. The leg-flags are small, made of stiff, yellow plastic and located on the left tibia. The WAWSG continues to monitor Banded Stilts for yellow leg-flags and for that matter any other waders with leg-flags. Please keep a lookout for flagged Banded Stilts. All information will be passed on to CALM who are currently doing the research and hopefully we will be able to gain a better understanding of the movements of Banded Stilts.

Information we are grateful to receive is location, date and total number of Banded Stilts seen, the number with leg-flags, and any other information of possible interest.

##### 3. Special Interest Species

Australia works closely with other countries situated along the East Asian-Australian Flyway in order to protect critical bird habitat and conduct joint migration research. A flyway can best be described as the migratory routes waders follow from their Siberian breeding grounds to their overwintering grounds in Australia. Australia has signed migratory bird agreements with both Japan (JAMBA) and China (CAMBA). At a joint meeting held earlier this year between these countries it was decided to nominate the Eastern Curlew and Grey-tailed Tattler as special interest species. The West Australian Wader Study Group intends to collect as much data as possible in support of these programs and RAOU members are encouraged to participate. In addition the Pacific Golden Plover has been added as a species of special local interest as this plover is showing both a local and national decline in numbers. Information that would greatly assist and extend our knowledge on any of these species is location, date, number, and any other

**Letter (May 1997) from Sue Palmer, Secretary, Busselton  
Naturalists Club Inc., to JL inter alia referring to presentation by  
JL to club members on April 9<sup>th</sup>, 1997, concerning 1995 BaSt  
studies in WA, including leg-flagging program.**



# BUSSELTON NATURALISTS CLUB INC.

48.

5/97

Mr Jim Lane,  
CALM  
Busselton 6280

Dear Jim,

A belated thank you to you for a most wonderful presentation to our Club last month. Your slides were quite superb and we are envious of your work although we suspect these trips come up at short notice and never when it is entirely convenient. I do hope you get some sightings of yellow leg flags on the banded stilts.

On a more personal note, Geoff and I would like to go bird watching with you before we all take off on the Canning Stock Route in July then we could be sure of recording any sightings correctly. Our CSR trip is 5 vehicles and we are all keen bird watchers but not very knowledgeable so we would appreciate some guidelines. We are generally available all week except Wednesdays and Thursdays.

Yours sincerely,

*S. R. Palmer*  
Sue Palmer  
Secretary

on 9/4/97

**Incomplete and complete copies of handwritten memorandum faxed (04/04/1997) from ACI to JL detailing his plans for surveying south-west wetlands for BaSt numbers and leg-flags during the week beginning April 7<sup>th</sup>, 1997. First page headed 'Banded Stilt Census and flag sighting week beginning 7/4/97' and second page headed 'These lakes to be visited begin [sic] of the week 14-18/4/97'. This was to be ACI's 3<sup>RD</sup> extensive ground search of SW WA for leg-flagged Banded Stilt, in April 1997.**

**Look for ACI's report on this trip – or his field notes.**

28

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT  
SCIENCE AND INFORMATION DIVISION  
WILDLIFE RESEARCH CENTRE, WOODVALE  
FAX NO (09) 806 1641 TELEPHONE NO (09) 405 5100

---

DATE: 4/4/97TO: SIM LANEFROM: ALAN CLARKENO OF PAGES: 3

(INCLUDING FACE SHEET)

MESSAGE: A brief description of my movements  
next week. It is not definite  
because I ~~am~~ will be receiving info  
over the weekend.

## DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Form CLM 80A

27.

To: .....

From: .....

19.

Your Ref:

Our Ref:

Enquiries:

Phone:

Subject: Banded Bittern known and flag sighting  
week beginning 7/4/97

Reports from local people have indicated there are only a handful of Banded Bittern ~~at~~ along the south coast between Cullinan Inlet and Mullet lake.

Mullet lake - 10

Torndup est. - 60

Lake Goye - 0

Cullinan Inlet - 20

The lakes are dry or near dry and the inlets very low.

Unless I receive new information on the weekend I will not travel to the Esperance region.

I have reports of large numbers from lakes near Katanning and Wagin. Therefore I will devote most of my time in this area.

There are only 20 Banded Bittern at Wilson Inlet I will move the Albany area to cover Kms.

I plan to visit the lakes north of Norergin, White water lake, Yar, White L, Lake Moos and Yangeering lakes.

E77036/6/60-500Pds-L/8263

(Recycled Australian Paper)

To: .....

From: .....

19

Your Ref:

Our Ref:

Enquiries:

Phone:

Subject: Banded Stilt Census and flag sighting  
week beginning 7/4/97

Reports from local people have indicated there are only a handful of Banded Stilt ~~at~~ along the south coast between Gilham Inlet and Mullet lake.

Mullet lake - 10

Borradup est. - 60

Lake Goye - 0

Gilham Inlet - 20

The lakes are dry or near dry and the inlets very low.

Unless I receive new information on the weekend I will not travel to the Esperance region.

I have reports of large numbers from lakes near Katanning and Wagin. Therefore I will devote most of my time in this area.

There are only 20 Banded Stilt at Wilson Inlet I will visit the Albany area to cover Ks.

I plan to visit the lakes north of Norogin, White water lake, Ibis, White h., Lake Mead and Yengering lake.

63  
DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Form CLM 80A

To: .....

From: .....

19.

Your Ref:

Our Ref:

Enquiries:

Phone:

Subject:

I shall take to be visited begin of the  
week 14-18/4/97

I will visit the lakes between Preston and  
Cilton from reports of 100 birds in total  
at two different lakes. I will include  
McLarty lake as well.

I have no reports from lakes north of  
Perth. I assume most are dry. I will  
visit Gorgga and Wannamah as their  
depths and salinities at this time of year  
could suit Banded Stilt

**An undated (but must be 19/03/1997 or later) tabulation by GBP headed 'Tagged Banded Stilt Observations' with sightings from 31/01/1996 to 17/03/1997 listed and column headings 'Date Reported', 'Reported By', 'Seen By', 'Location', 'Obs date', 'Tot No BAST', '% w/- chest band', 'No yellow Flags', 'Flagged Stilt w/- chest band', 'Comments'. Find field notes of JL's (and GBP's and ACI's – and Andy Chapman's? flagged stilt records and add to this RMCR.**

TICKLED

Banded

SLIT

OBSERVATIONS

(10)

Date Reported	Reported by	seen by	Location	083 Date	Tot No BAIT	% w/ Chest Band	No. Yellow Flags	Flagged stt w/ Ch. Band	Comments
3/1/96	Front Head	Visitor ?	Hareholt hole Poth.	01/1/96 03/1/96	?	50+%	1	No	
28/2/96	G.B.P	G.B.P	Hedland Salt Stilt Pond.	28/2/96	2000	60% 10%	3	Flagged unsure 30% less developed 10% no band.	Righted on pond 10/11 of main ponds
21/3/96									Met McKenzie reports most birds left with Cyclone Kerriq but about 1000 have now returned. - How long does it take to fly from B Hedland to Boddard - Check our depth & return
9/96	Bontu Valley	Yarru Yarru	9/96	5000	1				One followed up
29/1/96	Steve Van denun	reported no BAIT at Dempsie last weekend. Will check again this weekend							
29/1/96		left message with Mark McKenzie							
6/1/97	A Clarke	A Clarke	COOLONGUP PK	6/1	1800	75%	1 Yellow flag+band	90%	1000 seen 5/1/97+ increased to 1800 6/1
9/1/97	A CLARKE	A CLARKE	COOLONGUP	9/1	2400	1 flag	W/ T. TIBIA	100%	L/ T. TIBIA FLAG
21/2/97	S. LANE	S. LANE	AUSTIN BAY	21/2/97	12000	90%	1 bond	100%	RIGHT TIBIA FOR THE BAND
27/2/97	M. SINGOR	→	THOMSONS L.	24/2/97	35	75%	1 flag	90%	flag on left leg.
17/3/97	S. LANE	→	NW DEND O/T VASSIEST.	17/3/97 19/3/97	4000 60	?	1 ring	75%	no ring seen
								100%	flag on left leg ring clearly visible

(D)

## SIGHT OBSERVATIONS

Date reported	Reported by	Location	Tagged	Ringed	SIGHT OBSERVATIONS		
Date reported	Reported by	Location	083	10+ yr BANT	% up chest General	% Yellow Flags	Flagged stamped ch. band
3/1/96	Front Head	Highland Park? 30/196	?	50+%	1	100	0
3/8/96	C. B.P.	Highland Park Still Pond	3/8/96	2000	60%	3	0
						Flagged unrecd 30% flag developed 10% no band.	Highland or pond band of main point
3/13/96	McKenzie	reports most birds left with colors mostly but about 1000 have now returned. - fly from B. Headland to Bellard - check out depth of return					
3/19/96	Steve Van Dusen	1000 birds seen					Blue followed up
3/24/96	Steve Van Dusen	reported no BANT at Dennis last weekend - will check again					
3/21/96	left	Monroe with Matt McKenzie					
3/1/97	A. Clarke	Lookout Park 6/1	160	75%	1	Yellow flag band	1000 birds 3/1/97 + marked b. 6/1
9/1/97	D. Clarke & Clark's Lookout	9/1	2400			flag color: blue band	100% blue flag
21/2/97	5 LANE	AUSTIN BAY	2/2/97/2000	90%	1	blue	90% blue band
27/2/97	M. SINGER	THOMSONS L.	24/2/97	35	75%	1	75% blue band
17/3/97	5. LANE	NEW END O.	17/3/97	400	?	1	no blue band
		WEST COAST	19/3/97	60			100% blue band

**'Observation' on p.3 of WA Bird Notes, No.81, March 1997, of  
20,000 Banded Stilt seen at Lake Dumbleyung on 12/12/1996 by  
'AC' [Alan Clarke] during ACL's 2<sup>ND</sup> extensive ground search of  
SW WA for leg-flagged Banded Stilt, in Dec 1996.**

**White-bellied Sea-Eagle** - 1, 26/11/96, Football Lake and Betts Swamp, Wannamal (Gingin) - BB (unusual in this area)

**Baillon's Crake** - 2, 13/1/97, James Swamp, Forrestdale (Armadale) - DJ \* 1, 22/1/97, Twin Bartram Swamp (Armadale) - MBA \* 1, 2/2/97, Kogolup (Cockburn) - JD

**Marsh Sandpiper** - 1, 9/12/96, Lake Toolibin (Wickepin) - CH, JSP

**Terek Sandpiper** - 3, 7/12/96, Creery wetlands (Murray) - MS

**Long-toed Stint** - 3, 12/1/97, Kogolup Lake (Cockburn) - KL

**Pectoral Sandpiper** - 3, 12/1/97, Kogolup Lake (Cockburn) - KL \* 1, 9/2/97, Herdsman Lake (Stirling) - JB, JuB

**Ruff** - 1, 26/1/97, Lake McLarty (Murray) - TK, JD

**Bush Stone-curlew** - 2, 2/97, Bakers Hill (Northam) - SD

**Pied Oystercatcher** - 1, noticeably larger than other nearby Pied Oystercatchers, and with blotchy demarcation between the black breast and white belly, 30/9/96, Woodman Point (Cockburn) - KL (A bird fitting this description was first seen in July 1992 (JD, TK) and was recorded regularly for 15 mths after which it was no longer seen; that bird will be illustrated in the forthcoming Handbook of WA Birds; the present bird is possibly the same one as that seen in 1992)

**Banded Stilt** - 20 000, 12/12/96, Lake Dumbleyung (Dumbleyung) - AC

**Hooded Plover** - 2, 12/9/96, Skippy Rock (Augusta-Margaret River) - RP \* 1, 8/12/96, Karakin Swamp (Gingin) - RAOU excursion \* 1, 7/12/96, Woodman Point (Cockburn) - KL \* 2, 11/12/96, Lake Kwornicup (Plantagenet) - AC \* 77 (including 18 juveniles), 25/1/97, Wellstead Estuary (Jerramungup) - RAOU excursion

**Arctic Jaeger** - 1, 9/8/96, Point Dalling, Dunsborough (Busselton) - RP

**Pacific Gull** - 1 pair, breeding, 9/11/96, Lancelin Island (Gingin) - ND (first breeding record for this species on Lancelin Island)

**Silver Gull** - 1 all black bird, 16/1/97, Safety Bay (Rockingham) - BG (see photograph elsewhere in this issue)

**Sooty Tern** - 2 in courtship flight, 9/1/96, Lancelin Island (Gingin) - ND (rare south of the Abrolhos)

**Whiskered Tern** - ca. 12, 27/12/96 to 4/1/97, Thomsons Lake (Cockburn) - KL \* 8, 26/1/97, Lake McLarty (Murray) - TK, JD

**White-winged Black Tern** - 12, 26/1/97, Lake McLarty (Murray) - TK, JD

**Common Noddy** - 300+ pairs breeding, 11/96, Lancelin Island (Gingin) - ND (this colony was first reported in 1992 (WABN 61: 2) when only five breeding attempts were recorded)

**Lesser Noddy** - 2 (1 immature, 1 non-breeding adult), 9/11/96, Lancelin Island (Gingin) - ND (rarely seen south of the Abrolhos)

**Barking Owl** - 1, 12/10/96, Point Dalling, Dunsborough (Busselton) - RP

**Hooded Robin** - 3, 1/8/96, corner of Warton and Forrest Roads, Banjup (Cockburn) - DJ \* 1, 17/8/96, Anstey Road bushland, Forrestdale (Armadale) - DJ (unusual in Perth metro. area)

**White-breasted Robin** - 1, 16/11/96, Pipidinny Swamp (Wanneroo) - RAOU excursion per BBa, MCI

**White-winged Triller** - 8, 20/12/96, Anstey Road,

Forrestdale (Armadale) - DJ (high number for near Perth)

**European Goldfinch** - 1, 12/96, Herdsman Lake (Stirling) - LK (presumed aviary escapee)

**ARID ZONE** (including the Pilbara, Gascoyne, interior and Nullarbor)

**Wandering Whistling-Duck** - 2, 17/9/96, McNeill Claypan, near Carnarvon (Carnarvon) - DJ (Few records for the Gascoyne region)

**Black Falcon** - 1 (and possibly others), 9/96, 20 km SW of Sandstone on road to Paynes Find (Sandstone) - MG

**Roseate Tern** - 40-50 000, 13/9/96, Varanus Island (Roebourne) - TK

**Bridled Tern** - thousands, 10/96, Varanus Island (Roebourne) - TK

**swiftlet** species - 1, similar to a White-rumped Swiftlet but with a square tail (several Asian species possible), 28/1/97, Barrow Island (Roebourne) - MBA, KY

## KIMBERLEY

**Wandering Whistling-Duck** - 23, 15/1/97, Taylor's Lagoon (Broome) - BBO

**Snipe, presumed to be Swinhoe's** - 5, 14/1/97, Broome Sewage Works (Broome) - BBO

**Marsh Sandpiper** - 40, 19/11/96, Lake Eda (Broome) - BBO

**Pectoral Sandpiper** - 1, 14/11/96, Broome Sewage Works (Broome) - PCr, BBO (rare in western Kimberley)

**Ruff** - 1, 14/11/96, Broome Sewage Works (Broome) - PCr, BBO

**Pacific Golden Plover** - 30, 16/1/97, Roebuck Bay (Broome) - J. Barkla per BBO

**Oriental Plover** - 400, 10/11/96, Roebuck Bay (Broome) - BBO (during a period of extreme hot weather (40°+))

**Black-fronted Dotterel** - 33, 19/11/96, Taylor's Lagoon (Broome) - BBO

**Oriental Pratincole** - 300, 16/1/97, Roebuck Bay (Broome) - J. Barkla per BBO

**Shining Bronze-Cuckoo** - 1 female caught in mist net and banded, 27/3/96, Quarry Beach between Broome and the Observatory (Broome) - PC, AT *et al.*

**Channel-billed Cuckoo** - 1, 14/1/97, Broome Bird Observatory (Broome) - C. Lester per BBO

**Fork-tailed Swift** - 150, 30/12/96, Argyle Diamonds village (Wyndham-East Kimberley) - FO

**White-fronted Honeyeater** - 5, 13/3/96, Broome port (Broome) - PC, RJ (at extreme northern limit)

**Pied Honeyeater** - 5, 11/11/96, Broome Bird Observatory (Broome) - BBO (at northern limit of distribution)

**Pictorella Mannikin** - 7, 13/3/96, Broome port (Broome) - PC, RJ (rarely recorded this far west)

**Gouldian Finch** - 2 (1 juvenile), 29/11/95, Cape Leveque (Broome) - PC, RJ \* 1, 23/1/96, Cape Leveque (Broome) - PC, RJ

**Barn Swallow** - 50, 12/11/96, Roebuck Bay (Broome) - BBO

## CHRISTMAS ISLAND

**Barn Swallow** - 10, 25/11/96, at the rubbish tip - KC

March 1997.

**Article (Page 1 of 26/02/1997 edition of ‘Great Southern Herald’, Katanning WA) headed ‘Stilts a stunning sight on lake’ inter alia reporting Alan Clarke saw 15-20,000 Banded Stilt on Lake Dumbleyung ‘late December last year [1996]’. Article also says ‘Some of the birds may have been wing tagged ... [incorrect, should have referred to leg-flagging]’. Article also quotes ‘Katanning CALM wildlife officer Tony Zidarich’ ask asking people to report sightings of wing-tagged [should instead have said leg-flagged] BaSt to CALM.. This sighting was during ACI’s 2<sup>ND</sup> extensive ground search.**

Vol. 96, No. 3994  
Wednesday, February 26, 1997  
60c Recommended Price

49 Clive Street, Katanning, W.A. 6317  
Telephone (098) 21 1100

DATE		FILE:	ACTION	NOTE
10	10			
Forecast: Fine, light winds				
Outlook: Fine and warmer				40/27/97
MG				1/1/97
MM				2/1/97
TZ				2/1/97
KW				
T				
E				

## RFDS changes putting lives at risk say staff

By CARYN COATNEY

ROYAL Flying Doctor Service past and present employees claim changes to the RFDS structure are jeopardising country people's lives.

The employees want a government inquiry into the service with one source, who wanted to remain anonymous, saying: "The place is slowly, but surely, being destroyed from within."

"It's being run in a rag-tag manner and service doesn't mean a thing anymore."

Another claimed: "They're sort of wandering around, plugging holes and trying to stop it all running away from them."

But RFDS State chief Bruce Rathbone says the allegations are 'wildly inaccurate' and limited to a tiny minority.

He says the critics oppose his attempts to improve the private, Government-funded service so it can operate successfully on a limited budget in a highly competitive atmosphere.

Since the restructuring of the RFDS WA operations last year, disgruntled staff and Mr Rathbone have been locked in a bitter dispute which has spilled into the Federal Industrial Relations Commission.

For the past six months, critics have claimed the reduced number of pilots at the central RFDS base, in Jandakot, has endangered country people, who depend on the flying doctor for quick evacuations to major hospitals.

Mr Rathbone has agreed that a shortage of pilots in Jandakot, which services the Great Southern and South-West regions, has meant staff from as far away as Meekatharra and Kalgoorlie-Boulder have been called to evacuate patients in Katanning, Wagin, Bunbury and Busselton.

The sources say remote RFDS bases are left without pilots for long periods because staff are evacuating southern WA patients.

They claim Mr Rathbone has treated the Great Southern and South-West regions with disdain by reducing Jandakot from eight operational pilots in June 1995 to five.

But Mr Rathbone said the pilot changes allowed the RFDS to operate more efficiently and did not pose a risk to country people.

Though pilot numbers have dropped in Jandakot, they have increased in remote areas, ensuring all country people are covered equally by the RFDS.

Under the new system the five WA bases, including an expanded one in Meekatharra, have five pilots each.

"I have a great commitment to ensuring the very scarce resources in the RFDS are equitably distributed," Mr Rathbone said.

He said pilots flying long distances to reach patients on the south coast was not a problem.

Planes also were being diverted from Jandakot to Wiluna and from Port Hedland to Kununurra.

The new RFDS system does not separate the State into different boundaries.

"This is a single system," Mr Rathbone said.

"The South-West doesn't own the assets — they are there for everyone in the State."

He said there might be the odd day when there was not enough staff to meet demands.

But this did not justify 'fiddling' with staff numbers.

"People would not believe they were getting value for money," he said.

"We give the people of Western Australia as much



BANDED STILTS: Between 15-20,000 of these birds converged on Lake Dumbleyung last December. (Photo courtesy of CALM)

## Stilts a stunning sight on lake

IT was a sight to behold as 15-20,000 banded stilts converged on Lake Dumbleyung to feast on the lake's invertebrates.

Department of Conservation and Land Management researcher Allan Clarke, from Woodvale, saw the birds when he was passing by the lake late December last year.

CALM officers think the birds may have been passing through and are interested in gaining more information on them, to contribute to the existing body of knowledge.

Some of the birds may have been wing tagged, a process which causes no harm to the birds, but helps in identifying them and finding out more about them, particularly their movement habits.

Katanning CALM wildlife officer Tony Zidarich said if anyone had seen them they should contact CALM.

The adult banded stilt is 36-38 cm tall and is white with a red-brown breast band above a deep brown mid-belly patch.

It has a long fine black bill

and a red eye and in flight it has long coral-pink legs which trail behind.

It makes a yelping call and is often seen in fresh and salt water marshes, and flooded paddocks.

The immature banded stilt has a grey head and nape patch and juveniles have no black nape and their back and wings are brown and feathers edged in buff.

It was not until 1930 that a breeding colony of the banded stilt was recorded, 114 years after the species was described.

Since then there have been few reports of actual or probable breeding documented.

Mr Zidarich said if anyone saw these or other unusual animals to contact him at the Katanning office on 21 1296 so he could work towards informing the wider community, but he needed information quickly.

"Banded stilts, particularly in this amount, represent a part of our heritage, and they should be shared with the larger community," Mr Zidarich said.

## 23 Broomehill blocks to get underground power

THE Shire of Broomehill has voted to partially connect underground power to 23 blocks of land in a scheme which will cost over \$100,000.

Ratepayers will pay an extra \$800 per year over the next ten or 15 years for the service.

Residents the scheme will affect now pay a farm rate on their land ranging from \$250 to \$300 annually.

The work, to be listed in next year's budget and started in the next financial year, will be funded by a bank loan that

By ERIN McGRATH

must be repaid within 15 years.

Western Power will connect lot numbers 400 to 423 on both sides of McGuire Road and the right-hand-side of Albany Highway heading towards Tambellup.

In a recent survey conducted by the council, residents voted 13 to eight in favour of the scheme that will bring them partially underground power by 1998.

Broomehill Shire chief

executive Peter Mason said the council was happy to go ahead with the program after discussing the community response to its survey in the full council meeting.

He said if a majority had elected not to go ahead with the power scheme, then council would not have proceeded.

Mr Mason said the council, under the new Local Government Act, was under no obligation to ask residents to put forward their opinions if the proposal was seen to be in the best interests of the residents of

Broomehill, but added the council understood the matter was serious enough to put the issue to a community vote.

"We know the rate increase is a large one, but considering for some blocks it will cost up to \$20,000 per block for power, we think the extra charge is reasonable for the service provided," Mr Mason said.

"People are finding it hard to establish themselves on these blocks, and the lack of power is preventing them from building homes and therefore impeding the development of the town."

\* More page 2



BANDED STILTS: Between 15-20,000 of these birds converged on Lake Dumbleyung last December. (Photo courtesy of CALM)

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The adult banded stilt is 36-38 cm tall and is white with a red-brown breast band above a deep brown mid-belly patch.

It has a long fine black bill

and a red eye and in flight it has long coral-pink legs which trail behind.

It makes a yelping call and is often seen in fresh and salt water marshes, and flooded paddocks.

The immature banded stilt has a grey head and nape patch and juveniles have no black nape and their back and wings are brown and feathers edged in buff.

It was not until 1930 that a breeding colony of the banded stilt was recorded, 114 years after the species was described.

Since then there have been few reports of actual or probable breeding documented.

Mr Zidarich said if anyone saw these or other unusual animals to contact him at the Katanning office on 21 1296 so he could work towards informing the wider community, but he needed information quickly.

"Banded stilts, particularly in this amount, represent a part of our heritage, and they should be shared with the larger community," Mr Zidarich said.

## 23 Broomehill blocks to get underground power

THE Shire of Broomehill has voted to partially connect underground power to 23 blocks of land in a scheme which will cost over \$100,000.

Ratepayers will pay an extra \$800 per year over the next ten or 15 years for the service.

Residents the scheme will affect now pay a farm rate on

By ERIN McGRATH

must be repaid within 15 years.

Western Power will connect lot numbers 400 to 423 on both sides of McGuire Road and the right-hand-side of Albany Highway heading towards Tambellup.

In a recent survey conducted

executive Peter Mason said the council was happy to go ahead with the program after discussing the community response to its survey in the full council meeting.

He said if a majority had elected not to go ahead with the power scheme, then council would not have proceeded.

Mr Mason said the council,

Broomehill, but added the council understood the matter was serious enough to put the issue to a community vote.

"We know the rate increase is a large one, but considering for some blocks it will cost up to \$20,000 per block for power, we think the extra charge is reasonable for the service provided," Mr Mason said.

"People are finding it hard to

Letter (undated, but must have been written between 24<sup>th</sup> and 27<sup>th</sup> Feb 1997) from Marcus Singor to JL reporting sighting of a yellow leg-flagged (flag on left leg) BaSt (without metal band) on February 24<sup>th</sup>, 1997, at Thomsons Lake (Perth, WA). Also reports BaSt numbers here and at several nearby lakes in Jan-Feb 1997.

Mr Jim Lane  
 Department of Conservation and Land Management (CALM)  
 Queen street  
 BUSSELTON 6280

Dear Jim,

RE: Yellow leg-flagged Banded Stilts.

I am just dropping you a line to let you know about the following observation.

On Monday 24 February 1997 one Banded Stilt was observed with a yellow leg-flag on its left leg at Thomsons Lake.

Other information that might be useful as it relates to the 24/2/97 observation is:

The yellow leg-flagged Banded Stilt was in a group of 35 Banded Stilts feeding on the north side of Thomsons Lake (City of Cockburn) with Black-winged Stilts.

There was no band on its leg. Beak black and legs pink. No facial smudges, face was all white.

Breast band was clearly visible extending down to the central belly. However the breast band was mottled with white scalloping effect giving the breast band a faded orange-brown look instead of the deep chestnut brown which is normally the case. The white mottling was clearly visible and extended down to the belly part. The group of Banded Stilts comprised of several in full plumage several with no band at all and several as the leg-flagged specimen.

Other observations of Banded Stilts that may come in handy are:

21.1.97 Lake Cooongoogup estimated 4000.

2.2.97 Lake Cooongoogup estimated 5000

15.2.97 Lake Cooongoogup 2 ex, Lake reducing in size and Banded Stilts have move on.

15.2.97 Forrestdale Lake 19 ex

15.2.97 Woodman Point 1 ex

24.2.97 Thomsons Lake 35 ex

What does "ex" mean?

I suspect the Banded Stilts were present at Lake Cooongoogup since last week in December 1996. That's when I first noticed a large white flock at the south side which weren't the gulls that also hang around that part. No positive identification was however made in December 1996 as observation was made whilst driving past in the car.

Kind regards  
 Marcus Singor  
 15 Jacqueline drive  
 Thornlie 6108 Tel: 4510216 (work) Tel: 4590689 (Home).

cc Grant Pearson

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

35.

TO: Grant P. + Alan C. URGENT: YES / NO

AT: WRC

Fax No. ....

FROM: Jim L.

DATE: 27/2/97

Your Ref: .....

Local Ref: .....

**FAKED**

*Yehow! Great place ring me  
to discuss today.*

No. of pages inc. this page: 2

Please call us on (097) 521 677 if this message was incomplete or illegible  
was mottled with white scanning effect giving the breast and a rump orange brown look  
instead of the deep chestnut brown which is normally the case. The white mottling was clearly  
visible and extended down to the belly part. The group of Banded Stilts comprised of several  
in full plumage several with no band at all and several as the leg-flagged specimen.

Other observations of Banded Stilts that may come in handy are:

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Kind regards

Marcus Singor

15 Jacqueline drive

Thornlie 6108 Tel: 4510216 (work) Tel: 4590689 (Home).

cc Grant Pearson

**Letter (12/02/1997) from Dr David McConville, RFDS Port Hedland, to GBP returning the telescope GBP had lent him. Some remarks regarding his searches for Banded Stilt at the Port Hedland salt works.**

Banded Shilt filr

(43)

To

Grant Pearson  
Research Centre Manager  
P.O. Box 51  
Wanneroo.

Dr David McConville  
Royal Flying Doctor Service (W.A.)  
P.O. Box 3  
Port Hedland W.A. 6721

12/2/97

Dear Grant,

Enclosed is the telescope you lent to me. Thank you very much.

I used it on two occasions around Christmas but subsequently access to the salt works has been extremely difficult in 2WD because of the rain. I have received my own new spotting telescope.

I intend to get out to the saltworks this weekend if weather permits and will try and keep you informed re Banded Shilts.

Cheers  
Dave McConville

**Notation on hardcopy of ACI's fax (see below) of 07-08/01/1997 to JL. The notation reads 'Note: Returned [to Lake Cooloongup] Thursday 9<sup>th</sup> of January [1997]. 2<sup>nd</sup> flagged Banded Stilt observed by ALAN CLARKE. Flag on right tibia. Ring on left tibia. 90% chest band development'. Check whether any BaSt were knowingly (accidentally or mistakenly) flagged on right (as opposed to left) tibia at Lakes Ballard or Marmion in 1995.**

# DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Form CLM 80B

To: Jim Lane

Your Ref:

Our Ref:

Enquiries: Alan Clarke

Phone:

Subject: Leg flag sighting at Lake Coooolongup

The 5th of January I noticed about 1000 Banded stilt at Lake Coooolongup at 0730hrs on my way to Secret Harbour. I checked them again on my way home at 1330hrs, they were still at the lake.

On Monday morning 6th of January I booked a pool car and travelled to Lake Coooolongup to search with a telescope for flagged birds. When I arrived there appeared to be more birds than the previous day. I counted 1800 Banded Stilt, a third of these bird's chest bands were from 0-50% with one third having between 50% and 90% chest band development. The majority of the birds were roosting in shallow water half way along the eastern shore. A few hundred birds were feeding along the shore with some probing the soft mud out of the water, two hundred birds were feeding out further in water above thier knees. I was able to move on to the lake bed without disturbing the birds scanning the flock for flags as I gradually moved to this point. After one and a half hours of this I decided to put the birds up hopefully spreading them out. This approach worked and a short scan revealed a banded Stilt with a yellow leg flag on its left tibia in good condition and a band on its right tibia. The bird looked in good health with a 90% chest band. As I was scanning through the birds I noticed a flash of light from a small group of birds when they spread out they revealed the flagged bird. The band was very prominent and shiny. I was able to scan the remaining birds repeatedly for other flagged birds. I was able to repeatedly find the flagged bird. Other waterbirds on the lake included:

Black Swans 100  
Australian Shelduck 200  
Pacific Black Duck 300  
Grey Teal 500  
Black-winged Stilt 270  
Greenshank 10  
Red-capped Plovers 6  
Red-necked Stint 12

NOTE

Returned Thursday 9<sup>th</sup> of January.  
2<sup>nd</sup> flagged Banded Stilt observed  
by ALAN CLARKE.  
Flag on right tibia.  
Ring on left tibia.  
90% chest band development.

January 7, 1997

**Fax (07-08/01/1997) from ACl to JL advising of his sighting of a yellow leg-flagged (left tibia) BaSt with a metal band (right tibia) at Lake Cooloongup (near Rockingham, WA) on Mon 6<sup>th</sup> January, 1997. This bird had '... a 90% chest band'.**

**DEPARTMENT OF CONSERVATION AND LAND  
MANAGEMENT**

Form CLM 80R

To: Jim Lane

Your Ref:

Our Ref:

Enquiries: Alan Clarke

Phone:

Subject: Leg flag sighting at Lake Cooongoogup

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Australian Shelduck 200  
Pacific Black Duck 300  
Grey Teal 500  
Black-winged Stilt 270  
Greenshank 10  
Red-capped Plovers 6  
Red-necked Stint 12

January 7, 1997

**Undated (though has some dates on it, most recent being 04/01/1997) tabulation in GBP's handwriting of locations, names, contact details, and some BaSt observations including one 'tag' sighting (21/01/1996 from/at Rottnest Island). This appears to be a tabulation of people (known to / organised by GBP) searching for / monitoring BaSt, especially for leg-flags, in WA.**

**Accompanying is a page of more details of the same and some other people involved (and/or potentially involved?) in looking out for BaSt in WA.**

1000 018 958682

(5)

Port Hedland Selt (Coughlin Selt)	Kathy Sanderson McKenzie	091 401 255	28/3	9/10/95 3/1/95 No Best No Best	10/12/95 10/12/95 No Best No Best	3/1/96 5/3/96
Dampier Selt	Steve Van Lierum & wife Regina	(705) 091 431488 091 853173		None around		200
Rollrost	From Head Mike Flory Green host	372 8771 372 9780 450 3700	fax 372 9775		150 Room 14/12 300 Best	1 Toy 3/1/96
Artham	Mark Tree	Hofstede 098 383060			19/12/95	
Esperance	Aless Tiedemann Bennie Heseler	090 713 733		9/10/95 3/1/95 No Best No Best		
	Phil Bostrom	Cafe Leyronde 84				
	Alan Rose	090 759027 09 759.022				
Esperance	Mike & Ann Buckman	090 713517				
Port Hedland	David McComnille cf AFDS	16 Bar 3 Port Hedland 6721	4497 018 937 879			

Port Hedland. Salt/Wk

Cargill salt. - Sohe salt. 09 401255

Kathy sanderson Fvv off

Mal mckenzie pleats salt panel. (Worontzow)

Collected. Mal.

Dampier Salt Slave Van Isawani his wife  
is Fvv off

Perry De Robeira

Hotbrook

GP & Mike

Bonit Notes. GP to put in

Brian Barrett

John Blythe re Experience group

Mike Weston.

Mrs Bailey H. 2444 7920 Head people

MWA Research Station

**Handwritten, undated, incomplete, draft report by ACI headed 'December 1996 south coast and wheatbelt Banded Stilt leg flag survey'. Reports on the first three days (Mon 9<sup>th</sup> – Wed 11<sup>th</sup> Dec 1996) of this survey of SW wetlands. No leg-flagged stilt were seen during these 3 days. This was to report ACI's 2<sup>ND</sup> extensive ground search, in Dec 1996. Note that fax below (05/12/1996) indicates it was to have been 9<sup>th</sup>-13<sup>th</sup> Dec 1996. Note also the 'Observation' reported March 1997 of ACI seeing 20,000 BaSt at Lake Dumbleyung on 12<sup>th</sup> Dec 1996.**

**Was this report finalised? If not, check ACI's field notes.**

**What does notation 'record, dumbleyung no birds, wed 22/1/97'  
on 3<sup>rd</sup> page refer to?**

To: .....

From: .....

19.....

Your Ref:

Our Ref:

Enquiries:

Phone:

Subject:

December 1996 south coast and western

Banded Slat leg flag recovery

Monday 9<sup>th</sup> travel to Leeton and of Venturing <sup>water</sup> ~~beds~~  
no BOSST. Lake Murr was too full recently  
in no BOSST

Proceeded to experience averaged lakes Wondar and  
Pink. I saw no birds on Pink lake. Lake Wondar  
had 70 RN avocet 500 Shelduck and 30 RNS  
Both lakes were very shallow. Even at full lake

Tuesday visited Station, Mullet and Windalup.  
All had large numbers of Shelduck, swans  
coot and teal but no Bar.

I moved on to lake Gore arriving at 1015 am.  
There was a S/E wind blowing at 25-30 knots.  
The wind had forced the Slat

There were large numbers of Barn Swallows  
from the wind and chop on the S/E shore of  
the lake. I drove around the access track  
to the entrance of the Dalup river. I was  
unable to cross the river by foot because  
of deep mud. I utilised the newly purchased  
and did to transport myself a Jiffy boat with  
binoculars and provisions and tramped across the  
10m of water. I left the boat on the bank  
of the river and walked the remaining 300m.

To: .....

From: .....

19.

Your Ref:

Our Ref:

Enquiries:

Phone:

Subject: .....

I was able to approach the site with no native bush growing through the vegetation growing on the bank. From the position with the sun behind me I was able to scan the flats for big flocks. I had a good view of the majority of the birds, but was unable to sight a big flock. There were approximately 8000 birds with 18 RN water among them. ~~At least~~ half of the site had development of 0-90%. ~~At~~ I noticed a number of birds acting aggressively towards others by jumping with bill and jumping on each other.

I counted 114 hooded plovers on the dry flats just behind the dunes on the west side of the gully. One third of these appeared to be juveniles.

I proceeded to the following lakes all of which were dry. Lubitch, Gidon, Shaster, Ferndale and Culham inlet. Stocks inlet and old field estuary were low with very few waterbirds, there were no Bush accm. Hypatium.

## DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

(46)

Form CLM 80A

To: .....

From: .....

19.

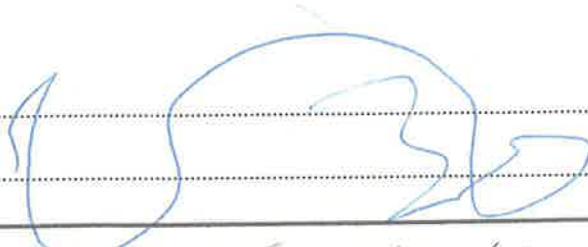
Your Ref:

Our Ref:

Enquiries:

Phone:

Subject: .....



Wednesday Departed Kintyre for Nelson  
Anker. There was no Boat only a few BWS,  
RN water and waterfowl

I moved to lake Kintyre where I saw  
2 hooded plovers, swans teal shelduck, but  
no Barts.

I then ~~also~~ visited Balingup lake. The water was  
very shallow (1-2 cm) There were no Barts.

From Balingup lake I travelled back to  
Granbrook and then on to Katanning visiting a  
number of the lakes along the way. None of the contained  
BARTS they were either too full or dry.  
across Katanning Hotel.

Jan 26/1997  
Opposite Katanning Hotel

record  
deadly just no birds  
wed 26/1/97

105 105 105  
\*  
marijuana

**Fax (21/12/1996) from JL to ACl with some followup  
comments/questions re three numbered responses in ACl's fax of  
20/12/1996 to JL. The first relates to ACl's 2<sup>ND</sup> extensive ground  
search.**

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT  
 SCIENCE AND INFORMATION DIVISION  
 WILDLIFE RESEARCH CENTRE, WOODVALE  
 FAX NO (09) 306 1641 TELEPHONE NO (09) 405 5100

**FAXED**

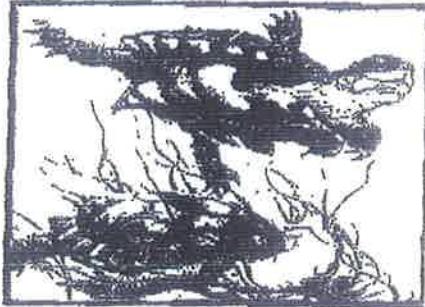
29.

To: ALAN CLARKE

From: JL

Date: 21 DEC 96

(1 page fax)



DATE:

20/12/96

TO:

JIM LANE

FROM:

ALAN CLARKE

NO OF PAGES:

(INCLUDING FACE SHEET)

MESSAGE:

I assume you will be sending me a full report on the trip in the next few weeks

① Good. 8000 Banded Sitis at Lake ~~Big~~ Gore 20,000 at LAKE DUMBLEYUNG ON AN ISLAND IN THE MIDDLE. PAIRS WERE ATTEMPTING TO COPULATE! I AM STILL TRYING TO CONTACT LOCALS TO KEEP AN EYE ON THEM.

② YES, MAY 1990

③ COULD YOU PROVIDE AN ACCOUNT CODE FOR PLANT, MATERIALS, TA AND OT TO KYLIE FOR THE ABOVE WORK.

③

Please advise her to charge to Job L29

It couldn't be 1990. It must have been late 1970's or early 1980's. Please check your (and mail me a photocopy of photos with details)

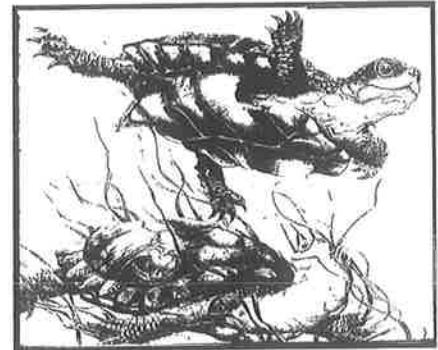
**Fax (20/12/1996) from ACl to JL with three numbered responses to JL's queries in his fax of 20/12/1996 below. Inter alia ACl reports 8000 BaSt at Lake Gore and '20,000 [BaSt] at Lake Dumbleyung on an island in the middle. Pairs were attempting to copulate! I am still trying to contact locals to keep an eye on them'. These sightings were during ACl's 2<sup>ND</sup> extensive ground search.**

**Extract from Lane *et al.* (2013) shows the water levels, salinities and pH values at Lake Dumbleyung in Sep & Nov 1996 and other years before and after.**

52

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT  
SCIENCE AND INFORMATION DIVISION  
WILDLIFE RESEARCH CENTRE, WOODVALE  
FAX NO (09) 306 1641 TELEPHONE NO (09) 405 5100

---



DATE:

20/12/96

TO:

JIM LANE

FROM:

ALAN CLARKE

NO OF PAGES:

1

(INCLUDING FACE SHEET)

MESSAGE:

① Good 8000 Banded turtle at Lake Gore  
20,000 at Lake Dumbleyung on an  
island in the middle. Pairs were attempting  
to copulate! I am still trying to contact  
locals to keep an eye on them.

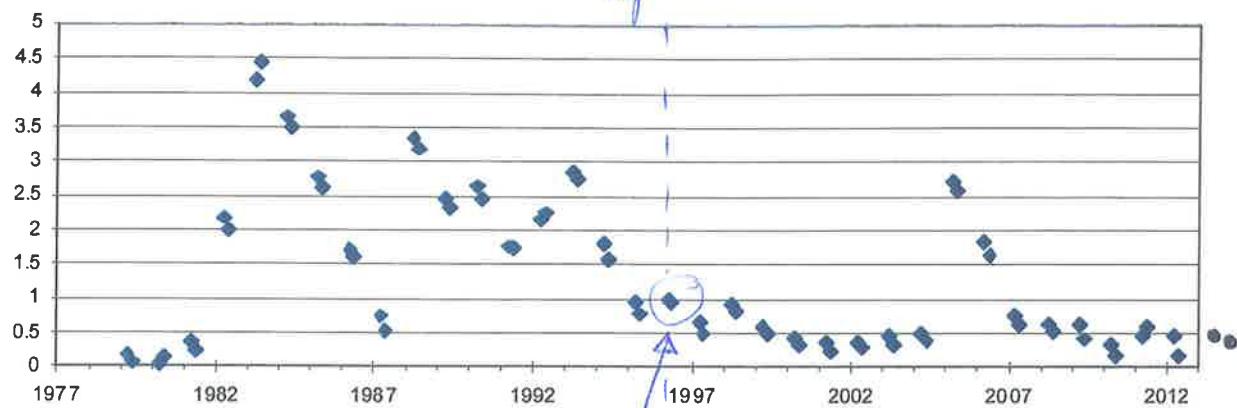
② Yes, May 1990

③ Could you provide an account code for  
plant, materials, TA and OT to Kylie  
for the above work.

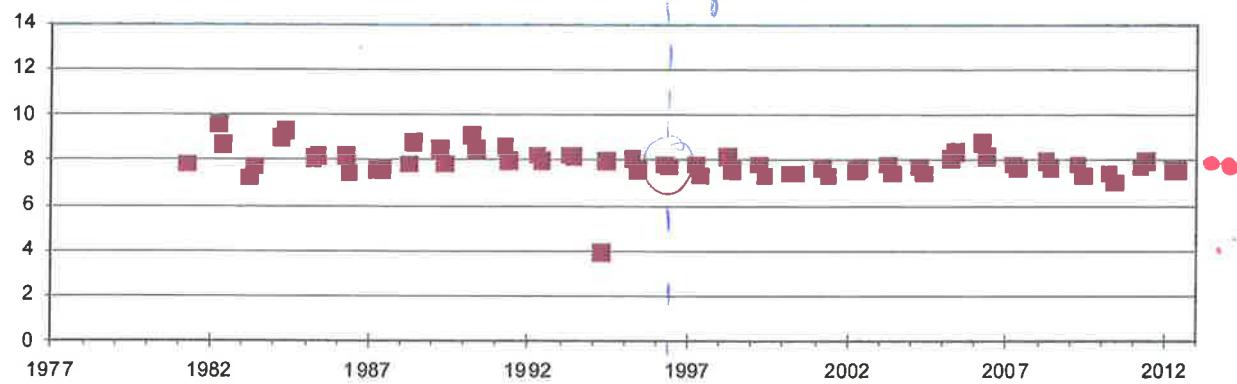
Extract from 1977-2012 SWMP REORT (Lane et al. 2013)

**DUMBLEYUNG <sup>IM</sup>**

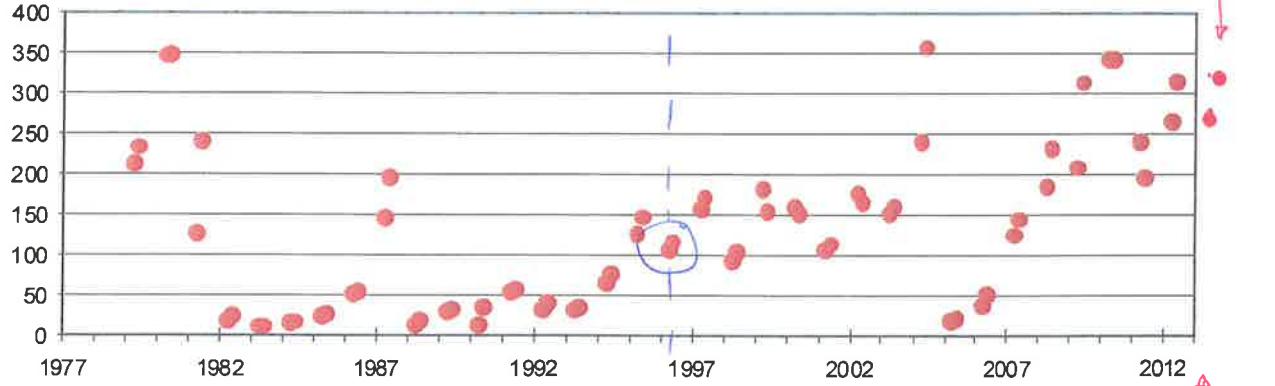
Depth mLD



pH



Salinity (ppt)



**Notes:**

1. <sup>IM</sup> indicates this is one of 25 wetlands Intensively Monitored for additional biological and physico-chemical attributes.
2. Year labels are positioned at 1<sup>st</sup> July each year.
3. Data are from September and November routine monitoring periods only.

Dumbleyung Lake is listed in the 'Directory of Important Wetlands in Australia'.

Dumbleyung is in the Great Southern District (headquartered in Narrogin) of the Wheatbelt DPaW Region.