

Jim Lane's Field Notebooks Index Contd.

(Revised Index of 11/5/2014)

<u>PDF Name</u>	<u>Book Label</u>	<u>Approx. Span of Dates</u>
JL_(1970-84)_17A	1980-81	(01-12-80 / 15-11-81)
JL_(1970-84)_18	1982-83	(13-03-82 / 18-03-83)
JL_(1970-84)_19	1984	(15-03-84 / 16-03-84)
JL_(1970-84)_20	1984	(20-09-84 / 10-10-84)
JL_(1992 on)_1	1	(03-11-92 / 03-08-93)
JL_(1992 on)_2	2	(04-08-93 / 18-09-93)
JL_(1992 on)_3	3	(18-09-93 / 26-10-93)
JL_(1992 on)_4	4	(27-10-93 / Dec-93)
JL_(1992 on)_5	5	(14-12-93 / 22-12-93)
JL_(1992 on)_6	6	(23-12-93 / 06-01-94)
JL_(1992 on)_7	7	(18-01-94 / 18-03-94)
JL_(1992 on)_8	8	(21-05-94 / 08-07-94)
JL_(1992 on)_9	9	⁰⁸ (03-07-94 / 02-09-94)
JL_(1992 on)_10	10	(02-09-94 / 17-11-94)
JL_(1992 on)_11	11	(22-11-94 / 9-03-95)
JL_(1992 on)_12	12	Jan '95 + (15-03-95 / 01-04-95)
JL_(1992 on)_13	13	(02-04-95 / 07-04-95)
JL_(1992 on)_14	14	(07-04-95 / 29-04-95)

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<u>PDF Name</u>	<u>Book Label</u>	<u>Approx. Span of Dates</u>
JL_(1992 on)_15	15	(29-04-95 / 17-05-95)
JL_(1992 on)_16	16	(18-05-95 / 18-12-95)
JL_(1992 on)_16A	16A	(08-11-95 / 11-11-95)
JL_(1992 on)_17	17	(21-12-95 / 19-06-96)
JL_(1992 on)_18	18	(19-06-96 / 03-08-96)
JL_(1992 on)_19	19	(23-09-96 / Mar 97)
JL_(1992 on)_20	20	(Mar 97 / Apr 97)
JL_(1992 on)_21	21	(16-04-97 / 12-06-97)
JL_(1992 on)_22	22	(12-06-97 / Oct 97)
JL_(1992 on)_23	23	(Oct 97 / Dec 97)
JL_(1992 on)_24	24	(Dec 97 / Jan 98)
JL_(1992 on)_25	25	(10-01-98 / 22-01-98)
JL_(1992 on)_26	26	(22-01-98 / 13-02-98)

TO BE CONTINUED

Jim Lane's Field Notebooks Index

(Revised Index of 11/5/2014)

<u>PDF Name</u>	<u>Book Label</u>	<u>Approx. Span of Dates</u>
JL_(1969-70)_1	'1969-70'	(Nov 70 / Jan 70)
JL_(1970-84)_1	1970-71	(6-12-70 / 17-2-71)
JL_(1970-84)_2	1971	(08-03-71 / 21/01/72)
JL_(1970-84)_3	1972/73	(24-01-72 / 15-02-73)
JL_(1970-84)_4	1973	(05-03-73 / 15-11-73)
JL_(1970-84)_5	1973-74	(12-04-73 / 11-06-74)
JL_(1970-84)_6	1973-74	(03-12-73 / 28-03-74)
JL_(1970-84)_7	1974-76	(03-05-74 / 24-10-75)
JL_(1970-84)_8	1974	(26-05-74 / 18-11-74)
JL_(1970-84)_9	1974-76	(28-08-74 / 02-10-76)
JL_(1970-84)_10	1974-76	(21-12-74 / 25-01-75)
JL_(1970-84)_11	1976	(25-10-76 / 27-11-76)
JL_(1970-84)_12	1977-78	(16-10-77 / 21-03-78)
JL_(1970-84)_13	1977-78	(24-10-77 / 19-04-78)
JL_(1970-84)_14	Oct 78-Apr 79	(06-10-78 / 14-04-79)
JL_(1970-84)_15	1979 (Apr-Sep)	(16-04-79 / 19-09-79)
JL_(1970-84)_16	1979-80	(26-09-79 / 23-05-80)
JL_(1970-84)_17	1980	(14-05-80 / 07-11-80)

Nº 11



NOTE BOOK

No. 561

J. Laie
CALM

22/11/94 → 9/3/95

Notes

Thurs 22/11/94

Henry River

(trip with Neil Gibson + Mike Lyons)
to establish vegn transects

St

40

22/11/94
+
1/12/94

Thrup

3.5 K

1231

↓

1233

↓

1.4

↓

0.6

3.3 K

1237

↓

1239

0.2

↓

2.0

0.6

↓

0.6

3.0 K

1244

↓

1256

0.2

↓

1.0

0.6

↓

0.6

2.8

1250

↓

1253

0.2

↓

2.4

0.6

↓

0.6

Notes

Thurs 22/11/94

Henry River

(Trip with Neil Gibson + Mike Lyons)
to establish veg transects

Sta	Time	Depth	Sal	Temp
4.0K	1147	0.2	0.6	
	↓	↓	↓	
	1149	1.0	0.6	
3.5K	1231	0.2	0.6	
	↓	↓	↓	
	1233	1.4	0.6	
3.3K	1237	0.2	0.6	
	↓	↓	↓	
	1239	2.0	0.6	
3.0K	1244	0.2	0.6	
	↓	↓	↓	
	1256	1.0	0.6	
2.8	1250	0.2	0.6	
	↓	↓	↓	
	1253	2.4	0.6	

January 1995				
30	2	9	16	23
31	3	10	17	24
	4	11	18	25
	5	12	19	26
	6	13	20	27
	7	14	21	28
1	8	15	22	29

February 1995				
M	6	13	20	27
T	7	14	21	28
W	1	8	15	22
T	2	9	16	23
F	3	10	17	24
S	4	11	18	25
S	5	12	19	26

March 1995				
M	6	13	20	27
T	7	14	21	28
W	1	8	15	22
T	2	9	16	23
F	3	10	17	24
S	4	11	18	25
S	5	12	19	26

Dec-Jan

WEEK 52

363/002 Thursday 29

(2)

A R-H
T

364/001 Friday 30

New Year's Eve

365/000

Saturday 31

New Year's Day

001/364

Sunday 1

W. L. ... the Ben Nets Club.
me give ... falls.
on Susan + V.W. water level
magnet.

3

Station	Time	Depth (m)	Sal (ppt)	Temp
2.3K	1258	0.2	0.6	—
	↓	↓	↓	—
	1301	1.8	0.6	—
		0.6	0.6	—
		↓	↓	—
2.1K	1316	2.6	0.6	—
		2.7	3.2	—
		0.2	—	—
2.0K	1322	1.0	0.6	—
1.8	✓ 1331	0.2	0.6	—
	↓	1.4	0.6	—
	↓	1.6	0.7	—
	↓	1.8	0.8	—
	↓	2.0	1.6	—
	1328	2.2	5.5	—
1.5K	2.29	0.2	0.6	—
	↓	↓	↓	—
	2.30	0.8	0.6	—
1.0K	1440	0.1	0.7	—
	↓	0.2	0.9	—
	↓	0.4	1.6	—
	1444	0.5	—	—

Notes

22

11

194

(34)

Out

approx 400 m (ie 0.4 k) at 1510 hrs
 There was 1 pr Gyrd with 1+ small
 Class I duckling on River. Had under

(Corydoras) (Cassidy)

Stn	Time	Depth	Sal	Temp
0.5 k	1523	0.1	1.3	
		0.2	1.3	
		0.4	1.8	
0.5 k	1526	0.6	23.0 v	
0.0 k	1551	0.1	2.4	
		0.2	2.4	
		0.4	2.5	
	1555	0.5	5.5 vv	

Island PE

Large red

— 0.20 m AHD at 1640 hrs

⑤ Start of

Notes

1/12/94

0927 hrs — — 0.08 mAHV

Isobath gauge read →

Stn	Time	Depth	Sal	Temp
0	1026	0.2	33.3	24.1
		0.4	33.4	"
		0.6	"	"
		0.8	33.5	"
1	1033		33.9	24.2
2	1045	0.2	34.4	24.3
		0.4	34.5	24.3
		0.6		
		0.5	34.6	24.5
3	1050	0.2	32.9	24.4
		0.4	"	"
		0.6	33.0	"
		0.8	32.9	24.7
		1.0	34.4	25.0
	1054	1.2	34.7	25.0
4	1058	0.2	32.4	24.1
		0.4	"	"
		0.6	"	"
		0.8	"	24.3
		1.0	33.4	25.3
		1.2	33.9	25.3
	1101	1.3	"	"
5	1105	0.2	32.5	24.5
		0.4	"	"
		0.6	"	"
		0.8	"	"
		1.0	"	"

⑥ Notes

1/12/94 Grid

Station	Time	Date	Sal	Temp
6	1111	0.2	32.4	24.6
		0.4 0.7	↓	↓
		0.9	32.4	24.6
7	1116	0.2	29.4	24.3
		0.4	29.4	24.3
		0.6	29.6	24.5
0.0 km	1125	0.2	2.4	24.9
		0.4	3.0 ✓	25.4
		0.6	21.5	26.4
		0.7 0.7	23.5	26.4
0.5 km	1136	0.2	1.9	25.4
		0.4	2.1	25.6
		0.6	21.0	26.4
		0.8	27.0	26.0
		0.9	28.5	25.8
1.0 km	1153	0.2	1.7	25.5
		0.4	1.9 ✓	25.7
		0.6	17.3 ✓	26.5
		0.7	21.6 ✓	26.7
1.5 km		0.2 0.2	1.4	25.6
		0.4	"	"
		0.6	4.8 ✓	26.3
		0.8	24.1 24.1	27.3
	1205	0.9	24.6	27.3
1.8 1.8 km	1210	0.2	1.0	25.5
(hole at)		0.4	"	"
		0.6	1.3 ✓	26.1
		0.8	23.5	27.5
		1.0	24.2	27.6
		1.2	24.9	27.4
		1.4	25.9	26.7
		1.6	27.1	24.7
		1.8	27.9	23.4
		2.0 2.0	28.4	23.1

(7)

Th - 1/12/94 Contd.

Sta	Time	Dry	Sal	Temp
2.0 Km	1218	0.2	0.9	25.6
	}	0.4	"	25.7
		0.6	1.5 v	25.8
		0.8	21.7	27.3
	↓	0.9	23.6	27.3
		1220		
2.1 Km (hole at)	1223	0.2	0.8	25.7
	}	0.4	"	"
		0.6	1.0	25.9
		0.8	20.8	27.3
		1.0	22.5	27.5
		1.2	23.2	27.5
		1.4	23.5	27.4
		1.6	23.6	27.2
		1.8	24.2	26.9
		2.0	27.1	26.0
		2.2	27.8	22.9
		2.4	"	"
		2.6	28.0	22.9
		1228		
		2.8	"	22.7
2.3 Km (hole at)	1232	0.2	0.7	25.8
	}	0.4	"	"
		0.6	"	"
		0.8	19.5	26.9
		1.0	21.3	27.0
		1.2	21.6	27.0
		1.4	22.0	"
		1.6	22.1	"
		1.8	22.3	"
		2.0	22.4	26.8
		2.2		

Go to Telephone Pages (of Diary) for rest of data for 1/12/94

⑨ 1/12/94 Contd.

Telephone Numbers

ie	Address	Facsimile	Telephone
200 m	south of Island Pt	3.03	pm
\$			

Sta	Time	Depth	Sal	Temp
1504	0.2	33.0	26.7	
	0.4	33.1	26.7	

At 1515 hrs the Island Pt gauge read — 0.01 m AHD.

Notes

- ① Saw small numbers (< 20) Fairy Terns resting & feeding on the Island Pt point & further south in estuary — this is the first time I recall seeing them since beginning of project in April '94.
- ② Some ducks on Henry River but not many — tens (definitely < 100).
- ③ Saw small Tiger Drake swimming from E $\rightarrow$ W across river somewhere around 0.5 — 1.0 km west.
- ④ Henry River flow was steady but very slight.
- ⑤ Didn't do D.O. measurements or take water samples.

Boundary Island 4.20 pm $\rightarrow$ 4.50 pm. Pelicans appear to have started nesting again. Approx 100 in group, 70 standing and 20-30 sitting. Almost all had brightly coloured eyes & pouches. Some water flicking. Group was further south than previous nesting.

Notes

Days of Leave that I worked

Wed	24/11/93	}	Bsn	1
Th	25/11/		Bsn	2

Mon	6/12	pm only -	need paper for CEPA meeting	2 1/2
Tues	7/12	-	CEPA am	3 1/2
		-	Bushby pm	
	8/12	-	Bsn	4 1/2
	9/12	am only -	Return from Bsn.	5

Mon	13/12	-	Corp Exec + WAWA	6	
Tues	14/12	-	}	7	
Wed	15/12	-		Bsn	8
Th	16/12	-		Bsn	9

Wed	22/12	-	}	Bsn	10
Th	23/12	-		Bsn	11
Fri	24/12	am	am at Woodroffe	11 1/2	

(11)

See Notes section at back for earlier 1/12/94 data.

Telephone Numbers

1/12/94 cont'd

Name	Address	Facsimile	Telephone
Str	Time	Dy	Sel
2.54	1241	0.2	0.6
		0.4	"
		0.6	"
		0.8	"
		1.0	"
		1.1	0.6
2.84	1259	0.2	0.6
		0.4	"
		0.6	"
		0.8	"
		1.0	"
		1.1	0.6
3.0	1303	0.2	0.6
		0.4	"
		0.6	"
		0.8	"
		1.0	"
		1.1	0.6
approx 3.24		1 P.B.D. with 2 tiny Class I double loops	
3.3	1309	0.2	0.6
		0.4	"
		0.6	"
		0.8	"
		1.0	"
		1.1	0.6
	1310	0.2	0.6
		0.4	"
		0.6	"
		0.8	"
		1.0	"
		1.1	0.6
River height	= 1.070 from top of square post down to water surface at 1322 hrs.		

12

J. Lane!

09 4055139 (w)

Start Thurs 15/12/94 14

in F350 with Grant Pearson

Left Colchester at 7.45 am

Picked up Yodobai Dissolved O_2 meter from ^{Uni.} Marstock

Island Pt gauge read — 0.14 m AHD
at 1000 hr

Water sample taken in 8 cm
of water 100 m (paced) north
of island (Heron Pt Ford)
at 1035 hrs was 37.4 ppt
(Station 1) ↗
(measured after calibration test - see over)

Flock of 1500 Br Skitt all feeding
in shallows on north side of island
allowed me to approach with
14 m! (paced) before taking off
and resettling a little further away.

15/12/94 Contd

Harvey Estuary

Tested Hemmon against 35.3 ppt
standard - it was spot on.

Sta	Time	Depth	Sal (ppt)	Temp (°C)
1	1035	8 cm	37.4	—
2	1058	0.10 m	36.9	26.0
2	1058	0.15 m	36.9	26.0
3	1103	0.1	36.9	24.5
		0.2	"	24.6
		0.4	"	"
		0.6	"	"
		0.8	"	"
		1.0	"	"
4	1112	0.1	36.8	24.9
		0.2	"	"
		0.4	"	24.8

15/12/94 Contd

Harvey Estuary (16)

Stn	Time	Depth	Sal	Temp
4	1114	0.6	36.8	24.8
		0.8	36.8	24.6
		1.0	36.9	24.6
		1.2	"	"
5	1118	0.1	34.6 34.6	25.5
		0.2	"	"
		0.4	"	25.3
		0.6	35.2	24.9
		0.8	35.4	24.7
		1.0	35.8	"
6	1126	0.1	35.0	26.0
		0.2	35.0	"
		0.4	35.1	"
		0.5	35.1	26.0
		0.5	35.1	26.0
7	1131	0.1	34.8	25.6
		0.2	34.2 v	"

(17) 15/12/94 cont

Harvey Estuary

Sta	Time	Depth	Sal	Temp
7	1133	0.4	34.8	25.6

APel - 30
Shel - 150
GyTL - hundreds
Gauk - ~~10~~
GrEgret - 2
S. Gl - 50
PaBD - 50
Bis Stilt - 5
Casp Tern - 2
W Fulmar - 2

Tally (rough) of birds at end of delta
(great majority roosting)

15/12/94 contd

Harvey River

(18)

Stn	Time	Depth	Sal	Temp
0.0 km	1148	0.1	4.3	28.8
}	1150	0.2	4.3	28.2
		0.25	4.3	28.2
		0.25	4.3	28.2
0.5 km	1156	0.1	3.2	28.5
}	}	0.2	3.2	28.4
		0.4	3.4	28.0
		0.6	30.5	25.4

Stn.	Time	Depth	myle	%	Temp (Do)	Temp (H)
0.0 km	1203	0.1	9.0	111.3	24.9	28.5
		0.2	9.02	110.5	24.9	28.5
		0.4	8.98	110.5	24.8	27.0
		0.6	8.50		23.0	

itemon temp ^{needle} suddenly went to
far right of gauge and stayed
there — useless.

(it was apparently due to overheating
in sun as it later cooled
and functioned)

(A) 15/12/94 Contd

Harvey River

Sta	Time	Depth	Sal	Temp
Coast	—	1 metre		
Sec I	—	1		
Whitby Lake	—	4		
P.O.D.	—	c 100		
Cytle	—	c 20		
LPC	—	few		

} along first 2 km of river (v. rough)

There weren't large numbers of
waterbirds on the river

15/12/94 Contd

Harvey River

(20)

Stn	Time	Depth	Sal	Temp		
1.0K	1222	0.1	2.1			
		0.2	2.1			
		0.4	2.1			
		0.5	2.1			
1.5K	1230	0.1	1.7			
K		0.2	1.7			
		0.4	1.8			
		0.6	18.0 v			
		0.8	28.7			
		1.0	30.4			
				D.O. (D.O.) % mgl Temp		
1.8K	1239	0.1	1.4	102.2		
hole		0.1	1.4	111.3	9.13	24.9
		0.2	1.5	111.9	9.2	24.8
		0.4	1.7	111.8	9.3	24.2
		0.6	19.0	88.7	6.83	23.4
		0.8	25.9	79.6	5.83	22.7
		1.0	28.1	40.2	3.25	22.4

(21) 15/12/94 Contd

Harvey River

Stn	Time	Depth	Sal	Temp °C	Temp °C	Temp °C
1.8	1250	1.2	29.4	30.5	2.18	22.3
K				5.5		
note		1.4	29.8	22.5	0.39	22.1
contd.						
?	1254	1.6	30.1	2.5	0.20	21.7
		1.8				
2.0	1257	0.1	1.2	113.6	9.14	24.2
K		0.2	1.2	111.5	9.19	24.8
		0.4	1.9	109.4	9.20	23.9
		0.6	20.0 v	93.8	7.12	23.7
	1306	0.8	21.6	84.6	6.22	22.7
2.1	1309	0.1	1.0	114.3	9.4	24.9
K		0.2	1.3	115.0	9.5	24.7
note		0.4	1.4	115.2	9.5	24.6
		0.6	20.0 v	108.5	8.0	23.9
		0.8	24.0	58.1	4.8	22.6
		1.0	26.4	36.5	2.8	22.4
		1.2	27.3	7.0	0.65	22.1
		1.4	27.6	3.8	0.25	22.1

Le. Horia
advertising is

heard on W bank

15/12/94 Contd

Harvey River

(22)

D.O. D.O.

(D.O.)
(meter)

Stn	Time	Depth	Sal	‰	mg/l	°C
2.116	1323	1.6	27.7	2.6	0.21	21.9
hole		1.8	27.8	1.6	0.08	21.5
contd.		2.0	27.8	0.3	0.02	21.3
		2.2	27.8	0.0	0.0	21.0
	1323	2.4	27.8	"	"	20.5
2.3	1327	0.1	0.7			
K		0.2	0.8	115.5	9.5	24.6
hole		0.4	1.0	116.2	9.7	24.4
		0.6	12.0			
		0.8	24.5	54.7	3.9	22.6
		1.0	26.3			
		1.2	27.1	11.0	0.9	22.2
		1.4	27.2			
		1.6	27.4	4.3	0.3	21.8
		1.7	27.4			

15/12/94 Contd

Herring Cove

(23)

D.O. D.O. (D.O. meter)

Stn	Time	Depth	Sal	%	m/l	PC
2.5	1345	0.1	0.6	—	—	—
4		0.2	0.6	110.9	9.30	24.4
		0.4	0.7	112.2	9.30	24.0
		0.6	0.7	112.7	9.35	24.0
		0.8	0.7	112.1	9.44	23.8
		1.0	0.8	109.5	9.29	23.7
		1.1	15.5	60.0	6.3	23.2
2.84	?	0.1	0.7	—	—	—
hole		0.2	0.7	104.8	8.8	23.9
		0.4	0.7	105.1	8.8	23.7
		0.6	0.7	105.3	8.8	23.7
		0.8	0.7	104.6	8.8	23.6
		1.0	0.7	104.5	8.8	23.6
		1.2	0.7	104.5	8.8	23.6
		1.4	0.7	104.4	8.8	23.5

15/12/94 Contd

Henry River

D.O. D.O.

(24)
D.O.
meter

Stn	Time	Depth	Sal	%	mg/l	°C
2.8K		1.6	0.7	103.9	8.77	23.5
hole		1.8	0.7	103.8	8.78	23.4
control		2.0	0.7	103.7	8.78	23.4
		2.2	0.7	103.5	8.77	23.4
1406		2.4	0.7	103.5	8.77	23.3
3.0K	1407	2.6				
K	1410	0.1	0.7			
		0.2	0.7	104.5	8.72	24.1
		0.4	0.7			
		0.6	0.7	102.0	8.71	23.2
3.3K	1418	0.1	0.7			
hole		0.2	0.7	106.4	8.86	24.3
		0.4	0.7			
		0.6	0.7	98.0	8.60	23.0
		0.8	0.7			
		1.0	0.7	93.0	8.07	

15/12/94 Contd

Harvey River

D.O meter

(25)

Stn	Time	Depth	Sal	%	mg/l	°C
3.3k		1.2	0.7			
hole		1.4	0.7	91.0	7.95	22.0
contd		1.6				
		1.8	0.7	91.0	7.85	21.9
	1423	1.9	0.7	89.5	7.80	21.8

3.5k	1425	0.1	0.7			
		0.2	0.7	109.2	9.1	24.1
		0.4	0.7			
		0.6	0.7	104.4	9.1	23.2
		0.8	0.7			
	1430	1.0	0.7	97.0	8.3	22.4
		1.				

c 6 Mard and 2 Skel
at 4.0 k

(Mard commonly at this spot)

15/12/94 Contd

Harvey River + Estuary

D.O. D.O. meter

D.O. 26

Stn Time Depth Sal ‰ ng/l °C

4.0 1437 0.1 0.7

0.2 0.7 130.1 10.6 25.3

0.4 0.7

0.6 0.7 130.0 10.7 24.8

0.8 0.7

1.0 0.7 129.6 10.73 24.7

15/12/94

200 m S of Isled Pt

3.30 pm 0.1 34.6 31.7!

0.2 " "

15/12/94 Contd

Harvey River + Estuary

S.O. D.O. (D.O. meter)

Sta	Time	Depth	Sal	%	mg/l	°C
4.0	1437	0.1	0.7			
		0.2	0.7	130.1	10.6	25.3
		0.4	0.7			
		0.6	0.7	130.0	10.7	24.8
		0.8	0.7			
		1.0	0.7	129.6	10.73	24.7

Lower level 1.21 m below top
of spume section post at 2.46 pm.

Salinity here was 0.7 ppt.
Took water sample for analysis.

200 m S of Island Pt

°C (D.O. meter)

3.30 pm	0.1	34.6	31.7!
	0.2	"	"

(27) 15/12/94 Contd

Henry River
+ Estuary

Solution of 35.3 ppt

read 35.9 ppt at 1534 hrs.

Note that temperature gauge had malfunctioned
due to heat.

→ 0.17 m AHD at 1540 hrs.

Salinity gauge reading

4.10 hrs - 5.30 hrs. (15 mins!)

Richard Goshen

Ben Walker

Nick Reijnen

We went to view
the bank on the channel
west side of the channel

More Notes re Henry River on

Cygnets - 1 large feathered cygnet
on its own on the river near
station 2.0 km.

algae in river - 50 c piece sized
"balls" of filamentous algae were floating
down the length of the river. ~~from~~
(river origin)

15/12/94 Contd

Harvey River contd. (28)

birds in river! surprised we
didn't see more. There
were at least 5 ^(maybe 10) ~~elephants~~
~~between~~ between 0.0 km and 4.0 km.

river flow: It was flowing out ^{slowly}
appeared to be flowing at a slightly
higher rate than on the
previous survey.

Watsonia: All ~~leaves~~ leaves
and flowers dead now - it
happens very suddenly.

Eucalyptus: All the young
flood gums in the lower section
of the river (0.0 - 1.5 km or so)
are looking healthy / vigorous.

Harvey Estuary

(29)

Th 29/12/94

Left Colchester at 7.30 am in F380.

Took Val + ^{-logue} friend with me.

John Pt gauge read

— 0.19 m AHD at 0920 hrs.

Tested Harmon gauge against "35.3 ppt"
standard — it read 35.25 ppt
— adjusted it to 35.3 ppt.

Stn	Time	(m) Depth	(ppt) Sal	(°C) Temp
			Temp	Sal
2	1021 1021	0.2	37.9	22.6
3	1022	0.4	37.7	22.6
3	1028	0.2	38.3	22.8
4	}	0.4	"	"
		0.6	"	22.7
		0.8	"	"

29/12/94 contd

Harvey Estuary

30

Stn	Time	Depth	Sal	Temp
2	}	1.0	38.3	22.7
		1.2	"	22.8
3	↓			
4	1034	0.2	38.1	22.4
	}	0.4	"	22.3
		0.6	"	"
		0.8	38.5	22.0
		1.0	"	"
		1.1	"	"
5	}	0.2	37.7	22.8
		0.4	37.8	22.4
		0.6	37.7	22.2
		0.8	37.9	22.4
	1045	1.0	38.0	22.4
6	1049	0.2	37.4	23.1
	}	0.4	37.3	23.0
		0.6	37.2	22.9
	1051			

(3) 29/12/94 Contd

Harvey Estuary

Sta	Time	Depth	Sal	Temp
7	1058	0.2	35.6	24.1
8	1058 1100	0.4	37.0 ^v	23.9

Rough count of birds at delta

Pelicans — 41

Skullduck — c 200

Black Duck — c 150

Grey Duck c 1500 (→ 2000?)

Green Egret — 12

Drake — ~~10~~ 3

Bird Stilt — tens

Silver Gull — tens

Greenshank — 1 heard.

live crabs in water at delta.

29/12/94 Contd

Harvey River (32)

Sta	Time	Depth	Sal	Temp
0.0 K	1123	0.1	1.3	26.3
↓	↓	0.2	1.4	25.5
↓	↓	0.4	6.7 v	24.2
↓	1126	0.42	10.5 v	24.8

Cattle on west bank at 0.3 km

0.5 K	1133	0.1	1.0	27.9
↓	↓	0.2	1.0	27.9
↓	↓	0.4	1.7	24.2
↓	↓	0.6	11.9 v	26.0
↓	1137	0.7	14.5 v	26.0
1.0 K	1143	0.1	1.0	27.5
↓	↓	0.2	1.0	26.9
↓	↓	0.4	1.6	24.7
↓	↓	0.5	2.2	24.6

33

29/12/94 Contd

Harvey River

Stn	Time	Depth	Sal	Temp
1.5	1153	0.1	0.8	27.2
K		0.2	"	26.6
		0.4	1.2	25.1
		0.6	3.2 v	25.0
		0.8	7.3	25.3
		0.9	14.9	25.9
Hole	1200	0.1	0.8	27.3
st		0.2	0.8	27.6
1.8K		0.4	1.0	25.0
		0.6	1.2	24.9
		0.8	10.2 v	25.2
		1.0	16.6	25.8
		1.2	30.3	25.9
		1.4	32.0	25.6
		1.6	32.7	25.2

~~1.8~~

29/12/94 Contd

Harvey River (34)

Stn	Time	Depth	Sal.	Temp
2.0		0.1	0.7	26.8
4		0.2	"	25.8
		0.4	0.9	23.9
		0.6	1.1	23.7
		0.8	3.0 vv	23.6
		1.0	7.0 vv	23.0
Hole at	1215	0.1	0.6	26.4
2.1		0.2	"	25.0
4		0.4	0.9	24.3
		0.6	0.9	24.3
		0.8	7.5 v	23.8
		1.0	14.8 v	24.5
		1.2	28.8	22.6 v
		1.4	31.5	22.7 v
		1.6	32.3	15.7

Hot (35°C) day - temperature
needle shot itself

29/12/94 Contd

Henney River

(35)

Sta	Time	Depth	Sal	Temp
Hole	1253	0.1	0.6	
at		0.2	"	
2.3		0.4	"	
hr		0.6	0.7	
		0.8	1.1	
		1.0	13.5 v	
		1.2	26.0 v	
		1.4	31.0	
		1.6	32.0	
	1256	1.8	"	
2.54	1300	0.1	0.6	
		0.2	"	
		0.4	"	
		0.6	"	
		0.8	"	
		1.0	"	
		1.2	"	

29/12/94 contd

Harvey River (36)

Sta	Time	Depth	Sal	Temp
2.84	1305	0.1	0.6	
hole		0.2		
at				
		2.2	0.6	
	1313	2.4	1.500	
3.04	1315	0.1	0.6	
	1315	1.2	0.6	
3.34	1320	0.1	0.6	
hole				
		2.0	0.6	
		2.1	0.6	
	1321			
lying down		2.2	1.7	

29/12/94 Contd.

Harvey River

(37)

Stn	Time	Depth	Salt	Temp
3.5	1324	0.1	0.6	
}	}	0.2	}	
}	1325	1.3	0.6	
4.0	1331	0.1	0.6	
k	}	}	}	
}	}	0.8	0.6	
Hole	1335	0.1	0.6	
+	}	}	}	
4.3	}	}	}	
k	}	1.9	0.6	
{	down	2.0	0.6	
1337				

From top of ^{spine section} post down to water
bed = 1.23 m at 1340 hrs.

Harvey River

29/12/94 Contd

(+ down stream)

38

At 1.5 km the
Crassostrea obscura becomes
dominant.

200 m S of Island Pt

	Sal	°C
1454 hrs	37.6	29.8
1500 hrs	0.2	37.6
		29.8

Salinity probe measured 35.7 ppt
in the 35.3 ppt standard
at 1500 hrs.

Island Pt gauge read ~ 0.21 m AHD
at 1545 hrs.

29/12/94 Contd. Boundary Island

(3) (39) Drove to new Mandurah traffic bridge then
boated to Boundary Island arriving
at ~~1655~~ hrs 1640 hrs. Walked

counted 182 gulls in
nest area

estimate ~~200~~ 250-350

counted 156

estimate 200

1705 hrs

got close enough to see
some eggs under pelicans.

I estimate that perhaps
50 birds ~~are~~ (very rough)
are on nests.

No sign of chicks

29/12/94

Boundary Islands

(40)

The pelicans have chosen a site in the SSE sector of the island - again quite some distance from the shoreline. Impressed by their selection of site - out of view from navigable channels and far from easy access. Being Xmas - New Year holidays there are loads of people on the estuary (including wading over shallows to east) cockling with ~~boats~~ pots or net.

Viewed birds for approx 30 mins then backed back to vehicle. Back at Collier for around 7pm.

(41)

Saturday 7/1/95

Left home at 0735 hrs with A 2

Island Pt gauge at 0910 hrs.
read — 0.20 in AHS

95 working Shoulder.

Tested Hemm against 35.3 ppt
"standard" — It read 35.6 ppt.

Adjusted Hemm to read 35.3 ppt.

7/1/95 cont'd

Henry River (42)

Station	Time	Depth	Sal	Temp
0.0 km	1044	0.1	1.6	26.6
		0.2	"	25.6
		0.4	1.7	25.0
		0.6	1.7	25.0

depth	mg/L	c/o	Temp
0.1 m	8.0	96	24.7
0.4 m	9.8	110	22.9

0.5 km	1110	0.1	1.2	27.2
		0.2	1.2	26.9
		0.4	1.4	26.0
		0.6	1.7	25.6
		0.7	5.0	25

depth	mg/L	%	Temp
0.1	8.2	99%	25.5
0.7	8.8	103%	23.4

7/1/75 cont'd

Harvey River

(43)

1120 hr — 14' water

20' + 1 ♀ passed us
heading upstream (fast when
not stopped) with "murmur"
droop note in back.

Sta	Time	Depth	Sal	Temp
5-9.0	1128	0.1	1.2	27.9
"		0.2	1.2	27.5
		0.4	1.6	26.4
	1130	0.45	2.0	26.1
	depth	mg/l	‰	‰
	0.1	7.9	98	26.3
	0.45	7.7	90	24.8

7/1/95 contd

Harrow River

(44)

Stn	Time	Depth	Sal	Temp
1.5	1143	0.1	1.1	28.0
K		0.2	1.1	27.5
		0.4	1.5	26.5
		0.6	3.2	26.1
		0.8	13.0	26.3

depth	mg/L	%	%
0.1	7.3	91	26.2
0.8	2.5	34	23.9

hole	1201	0.1	1.0	27.8
at		0.2	1.0	27.3
1.8 K		0.4	1.2	27.0
		0.6	1.5	26.8
		0.8	10.8	26.0
		1.0	24.1	26.5
		1.2	32.7	26.5
		1.4	34.6	26.4

9/1/45 contd.

Harvey River

(45)

Stn	Time	Depth	Sal	Temp
}	}	1.6	35.5	26.0
		1.8	35.8	25.5
		1.85	35.8	25.5
	1208	2.0		
		Depth	mg/l	%
}		0.1	7.0	88
		0.2	7.1	88
		0.4	6.8	81
		0.6	6.4	74
		1.2	0.3	(6)
}		1.0	0.0	1
		0.8	1.2	13
		1.2	0.0	1
1232				
2.0	245	0.1	0.9	27.8
Km		0.2	1.0	27.2
}	}			

7/1/95 contn

Harvey River

46

Stn	Time	Depth	Sal	Temp
2.0 km	}	0.4	1.0	27.1
contn		0.6	1.1	27.0
		0.7 0.7	1.8	26.8

hole	1250	0.1	0.9	27.5
at	}	0.2	"	"
2.1		0.4	"	27.1
Km		0.6	1.0	26.9
		0.8	9.0 v	26.3
		1.0	21.2	26.2
		1.2	33.4	26.5
		1.4	34.1	"
		1.6	34.6	26.3
		1.8	34.9	26.1
		2.0	"	26.0
		2.2	"	25.9

(49) 7/1/95 cont'd

Henry River

Sta	Time	Depth	Sal	Temp
Hole	depth	mg/l	%	°C
123 at	0.1	9.3	113	25.9
2.1 K	0.2	9.4	116	25.5
Cont'd	0.4	9.2	114	24.8
↓	0.6	8.7	109	24.4
↓	1.0	0.2	3	23.9
1305 hr	1-2	0.1	2	24.3

hole

at	1309	0.1	0.7	27.7
2.3 K		0.2	"	27.3
		0.4	"	27.0
		0.6	0.9	"
		0.8	1.2	26.8
		1.0	22.0	26.1
		1.2	33.2	26.4
		1.4	34.1	26.5

7/1/95 contd

Harvey River (48)

Sta	Tm	Depth	Sal	Temp
}	}	1.6	34.4	26.4
		1.8	34.6	26.1
		2.0	34.6	26.0

2.5 K	1319	0.1	0.7	27.6
}	}	0.2	"	27.1
		0.4	"	26.8
		0.6	"	26.5
		0.8	"	"
		1.0	"	"
}	}	1.2	0.7	26.9
		1.4	0.7	"
		1.6	32.6	26.1
		1.65	32.8	"

hole at 2.8K	1336	0.1	0.6	26.6
}	}	0.2	"	26.8
		0.4	"	26.6

(49) 7/1/95 Contd.

Harvey River

Stn	Time	Depth	Sal	Temp
hole at 2.8 km contd		0.6	0.6	26.4
		0.8	"	26.3
		1.0	"	26.3
		1.2	"	"
		1.4	"	"
		1.6	15 vv	"
	↓	1.8	28.6	26.4
	depth	myk	%	°C
	0.1	5.8	72	25.1
	0.2	5.7	72	24.8
	0.4	5.8	71	24.6
	0.6	5.9	71	24.3
	0.8	5.7	70	24.2
	1.0	6.0	66	24.0
1353 h	1.2	5.8	68	23.9

7/1/95 Condit

Honey River (50)

Sta	Time	Depth	Sal	Temp
3.0	1356	0.1	0.6	27.5
K		0.2	"	26.6
		0.4	"	"
		0.6	"	26.2
		0.8	"	26.2
		1.0	"	26.1
		1.2	"	"
	1359	1.3	"	"
3.3	1405	0.1	0.6	28.0
K		0.2	0.6	27.0
Lake		0.4	0.6	26.0
		0.6	"	25.6
		0.8	"	25.5
		1.0	"	"
		1.2	"	25.4
		1.4	"	25.4
		1.6	1.7	

7/1/95 Contd

Hervey Bay

(51)

Station	Time	Depth	Sal	Temp
hole at	↓	1.65	2.0	
3.315	14/16	1.70	2.8	
3.54	14/19	0.1	0.5	27.7
		0.2	"	27.2
		0.4	"	26.3
		0.6	"	26.0
		0.8	"	25.9
		1.0	"	25.8
	↓	1.2	"	25.6
↓	14/23	1.4	"	"

Marronys

3.5 k -

7/1/45 contd

Harvey River (52)

Point at about 2.7 hr was
always good in previous
years.

Used to get murre down
to 1.5 hr. (hasnt tried
further down come not deep
enough to)

Sharked body at 3.3 hr

didn't get any till 3.6 hr.

Murren — 30
Drops nets — 15

Tried at 1.5 hr for gulls 2
weeks ago + got no gulls +
no murre (would usually get 30-400
gulls / night + 3 of murren)

(53)

7/1/95 Contd.

Harvey Linn

Season loses 28 February.

90% of murre caught in day
right ~~for~~ murrey was no good.

Reed holes & clay ledges
to get murre.

5 ft plus.

have their
holes in the
ledge.

Boat 295.9 (white 13 ft)

7/1/95 Contd

Harvey River

(54)

SL	T _{air}	Depth	Sol	T _{mp}
4.04	14.50	0.1	0.5	25.6
		0.2	"	"
		0.4	"	28.0
		0.6	"	27.4
		0.8	"	27.4
		1.0	"	"
		1.2	"	"
		1.4	"	27.0
		1.6	"	26.6
		1.8	"	26.0

7/1/95 Contd

Harvey River

Stn	Time	Depth	Set	Temp
4.3	1500	0.1	0.5	28.7
4	hrs	0.2		
		0.4		
		0.6		
		↓		
	1503	1.8	0.5	28.7

Water level was 1.23 m
below top of stream section
post at 1507 hrs.

1500 - 1530 hrs.

They set traps out at 4.3 → 4.4
and caught 3 + murre (deaf
eye) - Didn't expect many
as site is accessible by vehicle.

7/1/95 Contd

56

and they return it is fished out
before season opens.

1550 hrs.
Followed them downstream to
2.9K. They put ~~up~~ drop nets

7/1/95

1608 hrs.

1625 hrs - start gear. Checked
all 18 drop nets. Caught only
one murren ~~upstream to 2.5K~~
at ~~2.5K~~ 2.5K marker. This murren
was also small (but legal).
1636 hrs.

7/1/95 Conda

56

and they return it is fished out
before season opens.

1530 hrs.
Followed them downstream to
2.9 K. They put ~~up~~ drop nets
between 2.9 K and 2.5 K.

Followed them back as they pulled ^{them} ~~up~~ ^{nets}.

They caught ² ^{macron} ^{at} 2.8 K (10 m
downstream) - and these were
the smallest they had collected
today.

- 1608 hrs.

* - 1625 hrs - start again. Checked
all 18 drop nets. Caught only
one macron ~~upstream~~ ^{at} 2.5 K marker. This macron
was also small (but legal).

- 1636 hrs.

(57)

Hydrogen gas during days out
This time zero mean.

- 1648 hrs.

Island Pt. gauge
read - 0.14 m AHD at
5.33 p.m.

Beverly property.

Mixed Duck — $10 + 10 = 20$

Black Duck — 1

4 Sand Ibis — 1

Kibaya growing over several (8-10)
mounds. Trampled by 3 horses
and 3 cows.

One still producing water
"structure wrecked"

Flow goes into excavated drain

Melaleuca pruriens around mounds.

Eucalyptus camaldulensis planted.

Land has been heavily limed to raise
pH and now Kibaya grows well.

(59)

No frogs heard. (10:25 hr)
Dragonflies over dam.

2nd series of sponges

Water gurgling up through sand
pool is 1m diameter - Was
not (and is not) a mound -
just a spring. - ~~was~~ were originally
6 v. close together - was excavated
& is now one only.

~~Acacia~~ has branches from ~~forest~~
(always there), Mat. pressure
plus self seeded Euc. camaldulensis

Flow rate would probably fall
a bucket (10 litres) in 20-30 sec

60

The Sedge is dominant around this



WRE-100 24CMB

are now "dead".

Not collected from — Peter thinks
comes from heaving baskets on a
neighbour property.

Evidence of past nest
by past fires.

understanding

Sedge is dominant around this spring.

Large bamboo 1 metre down into spring.

The spring water is tea coloured.

^{tiger}
Saw ¹ snake with "big green frog" in mouth couple of weeks ago.

(M. pressure overstory)

Pool area — v. thick brush

Mounds dated up 3 years ago.

Peter believes these mounds are now "dead".

Val collected from — Peter thinks comes from hanging baskets on a neighbour's property.

Evidence of pest removed by pest flies.

Is the understory?

(61) 10/1/95 cont'd

Mosses now v. dry & almost dead

This is the "most natural" (veg.)
area left on the property

No "magnesian" showing on any of
the monads - apparently because
flow rate too low.

"Dweng bertain" on lower side.
This area is 3-4 acres.

The springs are all on a slope
facing east - running N-S.

Henry Estuary

Th 12/1/95

62

Left home ~ F350 at
0750 hrs with Stephen

Island Pt gauge read — 0.18 m
AHD at 0930 hrs.

Island Hummer against "standard"
of 35.3 ppt — it
read 34.9 ppt — adjusted
it to read 35.3 ppt.

Sta	Time	Depth	Sal	Temp
2	1040	0.1	41.4	26.8
↓	↓	0.2	"	"
↓	1042	0.4	"	"
3	1048	0.1	40.7	25.9
↓	↓	0.2	"	25.8
↓	↓	0.4	41.8	25.0

(63) Henry Estuary

12/1/95 Contd

Sta	Time	Depth	Sal	Temp
7	1053	0.6	41.9	24.7
		0.8	42.0	24.6
		1.0	41.9 41.8	24.7
3		1.2	41.9	24.8
4	1058	0.1	40.9	25.8
		0.2	40.9	25.8
4		0.4	41.2	25.7
		0.6	41.9	24.7
		0.8	"	24.6
		1.0	41.8	24.6
		1.2	"	4
5	1106	0.2	40.8	25.6
		0.4	41.1	25.5
		0.6	41.5	25.3
		0.8	41.7	25.4
		1.0	41.7	25.4
	1110			

Henry Estuary + River

12/1/95 cont'd

(64)

Sta	Time	Depth	Sal	Temp
6	1115	0.1	40.5	25.7
↓	↓	0.2	"	"
		0.4	40.6	25.7
		0.5	40.7	25.8
7	1130	0.1	40.3	27.2
↓	↓	0.2	"	27.1
		0.4	"	"
0.0 km	1140	0.1	1.5 3.1	29.5
		0.2	1.7	29.6
	1144	0.4	7.5 v	27.3
0.5 km	1150	0.1	1.0	29.0
		0.2	1.0	29.2
		0.4	1.8 v	27.5

(65)

Harvey River

12/1/85 cont'd

Stn	Time	Depth	Sal	Temp
0.5' K	1155	0.6	26.0	26.5
		0.65	32.4	26.5

1.0' K	1204	0.1	0.9	29.0
		0.2	"	28.8
	1205	0.4	"	28.3

1.5' K	1211	0.1	0.8	29.1
		0.2	0.8	29.0
		0.4	"	28.3
		0.6	"	27.9
		0.8	1.0	26.3

Hole at 1.8 K	0.1	0.7	28.6
	0.2	"	28.8
	0.4	"	28.5
	0.6	0.8	27.5

Henry River

12/1/95

(66)

Sta	Time	Depth	Sal	Temp
Hole at 1.8 K		0.8	1.1	26.9
		1.0	7.0 v	26.1
		1.2	29.0	26.1
		1.4	34.6 33.6	26.0
		1.6	35.0	25.8
		1.8	35.9	25.4
		2.0	35.9	25.1
2.0 K	1252	0.1	0.7	29.2
		0.2	"	29.1
		0.4	"	28.5
		0.6	"	27.9
		0.8	"	27.5
		1.0		
2.1 K hole	1257	0.1	0.7	29.0
		0.2	"	"
		0.4	"	28.5
		0.6	"	28.4
		0.8	"	27.5

(67)

Herring River

12/1/95 Contd

Station	Time	Depth	Salinity	Temp
hole at		1.0	0.7	27.4
2.1 k		1.2	19.0 vv	26.5
Contd.		1.4	33.5	33.5 26.3
		1.6	34.6	26.0
		1.8	34.8	26.0
		2.0	35.0	25.9
		2.2	35.0	25.5
	1302	2.4	35.0	25.3

hole at	1306	0.1	0.6	29.1
2.3 k		0.2	"	"
		0.4	"	28.9
		0.6	"	28.6
		0.8	"	28.5
		1.0	"	27.8
		1.2	21.0 vv	26.6
		1.4	33.9	26.1

Harvey River

12/1/95 (68) m/hr

Station	Time	Depth	Sal	Temp
}	1309	1.6	34.2	25.8
		1.7	"	"
2.5	1313	0.1	0.6	29.2
K	}	0.2	"	"
}		0.4	"	29.0
		0.6	"	28.7
		0.8	"	28.9
		1.0	"	28.9
		1.2	"	28.8
		1.4	"	"
↓	↓	1.6	"	28.6
hole	1320	0.1	0.6	29.0
at	}	0.2	"	"
2.8		0.4	"	28.7
K		0.6	"	28.4
}		0.8	"	28.2
		1.0	"	28.0
↓	↓			

(69) Henry River

12/1/95 contd

Str	Time	Depth	Sal	Temp
Hole at 2.8 K contd		1.2	0.6	27.9
		1.4	"	27.7
		1.6	"	"
		1.8	"	27.6
		2.0	30.3	26.5
	1325	2.2	30.9	26.5

3.0	1330	0.1	0.6	28.5
K		0.2	"	28.4
		0.4	"	28.0
		0.6	"	27.7
		0.8	"	28.0
		0.8	"	27.8
	1332	1.0	"	27.6

~~1.2~~

Itanay River

12/1/95 ⁷⁰ cont'd

Sta	Time	Depth	Sal	Temp
3.3	1336	0.1	0.6	29.5
↳		0.2	0.6	28 vv
hole		0.4	"	27.3
		0.6	"	26.5
		0.8	"	26.4
		1.0	"	26.3
		1.2	"	26.2
		1.4	"	"
		1.6	"	"
		1.8	"	"
	1339	2.0	"	"

3.5k

1342	0.1	0.6	29.0
	0.2	"	28.6
	0.4	"	27.4
	0.6	"	26.6
	0.8	"	26.2

(71)

Herring River

12/1/95 Cont'd

Stn	Time	Depth	Sal	Temp
355		1.0	0.6	26.6
Cont'd		1.2	"	26.1

4.0	1349	0.1	0.6	28.9
hms	hms	0.2	"	28.7
}	}	0.4	"	28.2
}	}	0.6	"	27.7
}	}	0.8	"	27.6
↓	1351	1.0	"	27.5

4.3W	1355	0.1	0.6	29.0
hole	hms	0.2	"	29.0
}	}	0.4	"	29.0
}	}	0.6	"	29.0
}	}	0.8	"	29.0
}	}	1.0	"	"
↓	↓	1.2	"	"

Harvey River

12/1/95 ⁷² Cont'd

Sta	Time	Depth
4.3K	7	1.4
note	6	
Cont'd	1358	1.6
	hrs	

12/1/95

... can't
all be right.

Water level is 1.240 m
below top of square section
post at 1402 hrs.

200 m
south
of
Island Pt

1429
~~1429~~

0.2

41.3

31.5

Checked gaug 35.3 ppt, standard
at 1434 hr - it needs 35.3!

Harvey River

12/1/95 ⁷² Cont'd

Stn	Time	Depth	Sal	Temp
4.3K	7	1.4	0.6	29.0
note	0			
Cont'd	1358	1.6	0.6	29.0
	hrs			

↑
29.0! cont
all be right.

Water level is 1.240 m
below top of square section
post at 1402 hrs.

200 m

swim
of
Island Pt

1429

~~1429~~

0.2

41.3

31.5

Checked against 35.3 ppt, "standard"
at 1434 hrs - it reads 35.3!

(73)

John Pt gage near
— 0.20 m at 1455 hrs.

River — 1 massive Wb Sw Egl
2 Whiskly Wde
1 Swamp Wren
hundreds of ducks (P. BD & G. O. L.)
LBC, Lpc, Darter.
1 Swan, 4 tens Shelduck.

Delta

1 Caspian Tern.
c 3,000 G. O. L. on West side
21 Pelican
hundreds Skel, hundreds P. BD.
hundreds Sige, 50
Bis Stilt, 40 R. St., 10 Cusp.

4.30pm 238 counted
estimate 250.

Two 24/1/95

Left Woodville approx 1215pm
and drove to Deschenault Inlet. Locked

gate prevented inspection of ~~mangal~~ mangal on
Deschenault Peninsula. Drove to Koorumbene

Bay and viewed Anglessea Island from
road. Drove to north side of Koorumbene

Bay mangrove/saltmarsh community. Tramped
around this area.

(75)

25/1/95

~~1415~~ has (approx)

Visited area of "Passage 1" + "Passage 2"

(Community Type 16 = "Highly
saline seasonal wetlands")

Reservation Status - "poorly reserved"

Conservation Status - "valuable"

Species list -

No Decked Bene Floor

Found 10 + seven nest mounds
some of which had eggshells
remains indicating success
last season.

Area down to west shore
by cutback of (1 fly valve) into

76

down heading to ocean.

Someone had put sandbags in
bottom of culvert.

Saw possible Penguin ^(?) Falcon
(this site is near Radio Tower).

and probable Masked Heron.

Race was completely dry.

~~Finished 1505 hrs.~~

Bulwer's Petrel invasion across
sandy beach flats from North
side.

Finished 1505 hrs.

Some + walked in to "IRON 01" and

"IRON 02" near Jiridong Traction Rd.

Wetland (in water) area over

ironstone w. H. subshrub Croft (dry)

(77)

sunny than it. Very scenic
(sign in good condition with
tell trees)

Thurs 26 / 1 / 95

Sorted out screen for V & birds
in Bsa in AM.

Lunch in Tussock

Drove to Hervey Tarnsite. Took
photos of structures splitting Hervey
River flow from Hervey Diversion
flow.

Went to Greeng Wotlands. Was
able to drive over entire
settlement area so it was bone
dry. Many cabbies with
vehicles along the channel foreshore.

Western channel leading into Greeng Lagoon

Little Egret - 4

Great Egret - 2

Sacred Ibis - 4

Grey Pheasant - 4 + 4

Shelduck - 5

Silver Pheasant - 2

Pied Shrike - 1

Lagoon (1730hrs)



(79)

Western end of

Lagoon (1730 hr)

Sacred Ibis - 2

Wt Heron - 1+1

Bw Stilt - 24

Banded Shd - 3

Grey Teal - 66

~~Grey~~ Green Egret - 2

Little Egret - 4

Black Duck - 1+1

Shelduck - 1

Pelican - 1

Main Body of Lagoon

Stilt ~~Stilt~~ - 800

90% Banded
10% Bw-winged

(counted in 10s + 20s)

Ducks - 1200

mainly Grey Teal + Shelducks
(90%) (10%)

Swans - 8

Yb Spoonbill - 1

Great Egret - 1

Green heron - 1 seen

Grey Heron - heard

Migratory waders - (large → small)
- c 600 all

feeding ~~on~~ near S shore
of lagoon

13+ of these ⁴ are large (Coots
or Whimbrel sized)

Water over entire area of lagoon.

Many large patches of weed (algae etc)
exposed at surface. The ^{waterbirds} waterbirds
are scattered right over the lagoon.

(81)

1 Wt Chat and 1 ^{hatched} Pigeon seen
in dry saltmarsh

1 Red-e Blower ^{seen} at edge of Lagoon

Termin at ~~18~~ 1805 hrs.

14 / 2 / 82
83

Warrup Swamp

Depth gauge read 0.48 m
at 1805 hrs

1 PABD bird

Red Wattlebird

Water sample taken

Warrup Nature Reserve

approx 1835 hrs

Some water - seen

5+ YB Sparrowbill

5+ WRTN.

83

14/2/95

Lake Uvung

1900h

2+Yb Sparrows

1 Purple Horn

3+ Wfth.

Depth gauge read 0.67m

Water surface level

Wed 15/2/95

84

Toddler Garry
1115 hrs

Pelican 2

Swans - 105

Muskrat Duck 3

P. B. D. 2

LPC 2

Hi. P. B. D. - 20

Sam. G. 2

Red W. 2

G. C. G. 10 + 4

Coot

W. F. 16

Great Egret 1

Mallard 1

Greenback - 14

Counted 424
chicks and eggs
60% water
P. B. D.
5% meat

2 Tortoise
in
shell

(83)

Only 2-3 m. gauge
plate existing.

Depth was ≈ 2 m.

Estimate corner 1.75 m.

Finish 1245 hrs.

Stent

Wed 8/3/85

80

Left home at 7 am in Cambridge.

Drove to Bsn (Vesee floorgate)

to meet GEP and Mike Dampack.

Vesee floorgate gauge reads

— 0.08 m AHD (by eye)

at 1000 hrs.

Two control flap valves checked

open. Boards lower here

and water just dripping in

to estuary over one set of

boards. Therefore all water

will flow into estuary whenever

tide is above — 0.08 m AHD

with all present setup

(87)

8/3/95 Contd.

Womans floodgate gorge
with spill — 0.25 to
— 0.30 m AHD — 2 brack
missing from gateway to from E
end — water gushing into
ashen despite all flap
valves being closed.

+ E.
Rosa Barnett

3 Bengala Co. Dsr

018 93, 338

(097) 52 3682

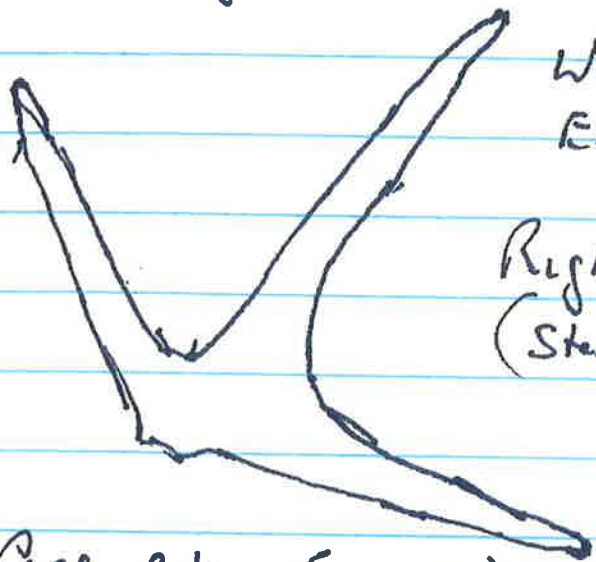
88

Black-winged Stilt

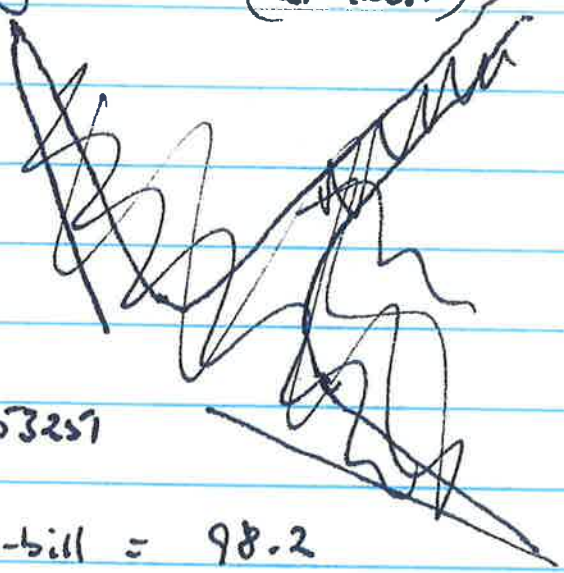
8/3/95

Wonnemong
Estuary.

Right foot
(Standing)



Age 2+ (at least)



Banded

170 - 53251

Head-bill = 98.2

Wing = 235

Weight = 158 g

90

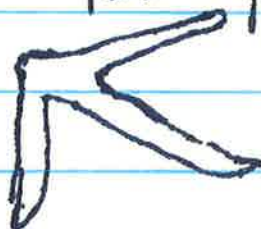
Red-necked Stunt

Right foot.



Left ~~R~~ foot of dead

Red capped plover.



Harvey Estuary

9/3/95 (92)

Mark Lund

4005644

Edith Lane

Doug Conaghan

re Silver Smith

Isle R gauge read

— 0.20 m AHD at 0950 hrs.

Stn	Time	Depth	Sal	Temp
2	1037	0.1	< 42	21.5
28	1045	0.2	}	}
		0.3	↓	↓

One blue mussel crab seen under boat at Station 2

surface water
seep taken

(93) Hervey Estuary

9/3/95 Contd

Stn	Time	Depth	Sal	Temp
3	1051	0.1	>42	20.9
		0.2		20.8
		0.4		20.8
		0.6		"
		0.8		"
	1053	1.0	>42	21.0
4	1058	0.1	>42	20.7
		0.2		"
		0.4		"
		0.6		20.6
		0.8		"
		1.0	>42	"
5	1106	0.1	>42	20.2
		0.2		20.2
		0.8		20.3
	1108	1.0	>42	20.3

Water
Surface Sample
After 15

Harry & Henry

9/3/85 (94) water

Sta	Time	Depth	Sal	Temp.
6	1114	0.1	>42	21.0
↓	1115	↓	↓	
		0.6	>42	21.0
7	1120	0.1	>42	21.1
↓		↓	↓	↓
		0.5	>42	21.1
7.5	1125	0.1	>42	22.1
↓		↓	↓	↓
		0.4	>42	22.1

Water sample taken

Cong Teal - c 2000

Shel - 200

Swan - 150 near + on delta - more in both bays

Pelican - 55 resting on sandspit

Yb Spermill - 11 + 60 = 70

PASD - 350

(95) Harvey River
LBC - 1

9/3/95
contd.

S. GL - 4

Darter - 2

Blue Skitt - 8

Croaker - 1 only

Crook - 20

Cape Tern - 2

Shoveler - 1 ♀ + 2 ♂

✓ Good estimate of total numbers of
all species on + around delta

Sta	Time	Depth	Sal	Temp
	1152	0.1	3.0	23.5
0.0		0.2	3.5 v	23.4
15m		0.4	31.0 vv	<u>27.8</u>
water sample taken at 0.1 m				

Surface of water covered with pieces
of floating algal mat ~~from~~.

River flowing out v. slowly.

Henry River

9/3/95 under

96

Sta	Time	Depth	Sal	Temp
0.5 K	1208	0.1	1.8	24.6
}	}	0.2	1.8	23.9
		0.4	23 vv	26.1 v
		0.6	41.4	26.5
1.0 K	1220	0.1	1.7	24.5
}	}	0.2	1.7	24.4
		0.3	3.4 v	24.1
		0.4	17.0	25.2

2 Connet Eggert, 1 WFLH.

1.5 ₄	1225	0.1	1.3	24.4
}	}	0.2	"	"
		0.3	1.5	24.0
		0.4	10 vv	"
		0.6	26.2	25.5
		0.8	33.3	26.0

(97) Herney River

D. O.

9/3/95
Contd

Sta	Time	Depth	Sec	Temp	%	W/L	Temp
1.8	1240	0.1	1.2	24.5	115.6	9.6	24.5
K							
hole		0.2	1.2	24.0			
		0.4	7 vv	23.8			
		0.6	27.9	25.5	89.2	6.6	24.3
		0.8	29.7	25.6 25.6	82.8	6.0	25.3
		1.0	31.2	25.6	82.0	5.6	25.6
		1.2	35.0	25.4			
	1250	1.4	38.5	25.5	80.1	4.0	25.4
2.0	1255	0.1	1.2	24.6			
K							
		0.2	"	"			
		0.3	"	"			
		0.4	6 vv	23.9			
		0.6	28.1	25.4			
	1258	0.8	31.0	25.5			
2.1	1302	0.1	1.2	24.6			
K							
hole		0.2	"	"	119	9.8	24.7
		0.3	"	24.2			

Harvey River

9/3/95

(98)

Stn	Time	Depth	Sal	Temp	%	mg/l	Temp
2.1		0.4	5 v	23.9			
K		0.6	28.2	25.0	96.6	7.0	23.9
cmH		0.8	30.2	25.1			
		1.0	33.2	25.1			
		1.2	40.1 40.1	24.9	34.0	2.1	24.9
		1.4	41.2	25.0			
		1.6	41.6	25.0			
		1.8	>42	25.2	8.3	0.6	24.9
		2.0	>42	25.3			
		2.2	"	"			
	1313	2.4	"	25.5			
2.34	1318	0.1	1.0	24.7			
hole		0.2	"	24.5			
		0.3	"	24.4			
		0.4	1.5 v	24.0			
		0.6	28.0	24.9			
		0.8	29.6	25.0			

(99)

Harry River

9/3/95 Contd

Sta	Time	Depth	Sal	T _g
2.3		1.0	33.2	24.7
K		1.2	38.9	24.8
hole		1.4	41.3	25.0
contd		1.6	41.0	25.1
	1322	1.8	41.4	25.5
25	1325	0.1	0.7	24.5
K		0.2	"	24.3
		0.3	"	24.2
		0.4	0.7	24.0
		0.6	4.0	23.1
		0.8	22.0	24.3
		1.0	25.0	24.1
		1.2	26.2	24.5
		1.4	34.0	24.7
		1.6	41.4	25.2
		1.8	41.7	25.2

Harvey River

9/3/95 100 control

Sta	Time	Depth	Sal	Temp	%	py/c	Temp
2.8K	1337	0.1	0.6	24.6			
hole		0.2	"	24.5	115	9.6	25.0
		0.3	"	24.3			
		0.4	"	23.9	115	9.7	24.2
		0.6	0.6	23.2	115		23.4
		0.8	"	"			
		1.0	"	23.1			
		1.2	"	23.0			
		1.4	22.0	23.5			
		1.6	38.0	23.9	6.0	0.4	23.8
		1.8	38.5	24.3			
		2.0	38.7	24.3			
		2.2	38.8	"			
		2.4	"	"			
		2.6	"	"			
		2.8	"	"	3.9	0.22	R ₁

(101)

Harney River

9/3/85 Contine

Sta	Time	Depth	Sed	Temp	%	mg/l	Temp
3.0	1352	0.1	0.6	25.1			
K		0.2	"	"			
		0.3	"	24.9			
		0.4	"	24.6			
		0.6	"	23.8			
		0.8	"	23.4			
	1356	1.0	"	23.0			
3.34	1401	0.1	0.6	24.5			
hole		0.2	"	25.0			
		0.4	"	23.3			
		0.6	"	22.6			
		0.8	0.6	22.5			
		1.0	"	"	101.2	8.9	22.3
		1.2	14.00	23.5			
		1.4	35.2	24.5	6.0	0.4	24.3
		1.6	36.4	25.2			
	1408	1.8	37.7	26.3			

Harvey River

9/3/95 102 cont'd

Sta	Time	Depth	Sec	Temp	%	ry/L	Temp
3.5	1411	0.1	0.6	24.5			
K		0.2	"	24.3			
		0.4	"	22.9			
		0.6	"	22.7			
		0.8	"	22.5			
		1.0	"	22.4			
		1.2	0.6	"			
	1414	1.4	27.5	23.2			
4.0	1420	0.1	0.5	23.9			
K		0.2	"	23.6			
		0.4	"	23.0			
		0.6	"	22.7			
	1421	0.8	"	22.6			

~~Water~~ Water Rat swimming on surface of water + diving at 4.2 K.

(103)

Harvey River

9/3/85 Contd

Sta	Tide	Depth	Sec	Temp
4.3	1438	0.1	0.6	24.2
"		0.2	"	"
		0.4	"	"
		0.6	"	24.0
		0.8	"	"
		1.0	"	23.6
		1.2	"	23.5
		1.4	"	22.9
		1.6	"	23.2
		1.8	"	22.5
		2.0	"	22.2
		2.2	"	22.0
		2.3	"	21.8
		2.4	2.4	
		2.5	2.3	21.7
1449	2.4	12.7	21.8	

Harvey River

9/3/95 ¹⁰⁴ untd

Stn	Time	Dppt	Sal	Temp	%	mg/l	Temp
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1451 hrs Water level is 1.184m
below top of square section
post

4.4	1453	0.1	0.6				
-----	------	-----	-----	--	--	--	--

K
hole

0.2

127 10.5 24.4

~~0.2~~ ~~0.6~~

1.4

125 10.5 24.0

2.0

124 10.4 23.7

2.6

123 10.4 23.6

2.8 0.6

4.5	1505	0.1	0.6				
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K

0.2

0.9 0.6

(105)

Harvey River + Estuary

9/3/95 Contd

Stn	Time	Depth	Sed	Temp	%	mg/L	T _{mg}
hole	1512	0.1	0.6	—	—	—	—
at		0.2	7	—	127	10.4	24.5
4.8		1.0	7	—	125	10.4	24.0
K	1515	1.6	0.6	—	122	10.3	23.6

flocking gulls seen about at
approx 2.6 km & continues
downstream.

becomes thick at approx 2.4 km.

200 m south of Island P

1456 0.1 >42 25.5

0.2 " "

0.3 >42 "

Water sample taken.

9/3/95

166

Hemlock tested again against 35.3 ppt
Blended — it need 35.2 ppt.

Isobutyl geyse need — 0.04 m AHD
at 1614 h

1650 L.

Coyote —

Blue Shutt

1700 hrs.

9/3/95

In channel at east end of
Lagoon.

BW Shutt — 57 Banded Shutt — 10
WRH — 1 Redd River — 3

SICL 3, Uid (Tud at P200) — 80

8 Uid Mij Waters — 60 (Ganghwa)
(incl 24 Ganghwa)

9/3/95

106

Hemion tested again against 35.3 ppt
Blendent — it need 35.2 ppt.

Island gage read — 0.04 m AHD
at 1614 hrs.

1650 hrs.

Cyrt - 70 , Shch - 5
Bw Shch - 35 , Gent - 1
~~1700 hrs.~~

In channel at east end of
Lagoon.

BW Shch - 57 , Banded Shch - 10
WRH - 1 , Redd Flower - 3

Sil 3 , U.D (Teal w. P.D.D) - 20

3 U. M. J. W. L. - 60 (Gray Plover)
(incl 24 Gray Plover)

107

Grey Plover - 8

Shearwater - 2

1720 hrs.

Grey Teal - 60

Shad - 2

1725 hrs

in western channel

Oral histories of egg
collection.

Covering Betty
(09/7) 55 54 67

Greg & Smie 4-5 pm.