

Jim Lane's Field Notebooks Index Contd.

(Revised Index of 31/5/2014)

<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)
JL_(1992 on)_27	27	(14 -02-98 / 21-03-98)
JL_(1992 on)_28	28	(30-03-98 / 20-05-98)
JL_(1992 on)_29	29	(23-05-98 / 28-08-98)
JL_(1992 on)_30	30	(Sep 98 / Dec 98)
JL_(1992 on)_31	31	(24-12-98 / 28-01-99)

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JL_(1992 on)_32	32	(28-01-99 / 29-06-99)
JL_(1992 on)_33	33	(03-07-99 / 25-11-99)
JL_(1992 on)_34	34	(25-11-99 / 10-03-2000)
JL_(1992 on)_35	35	(29-03-00 / 04-09-00)
JL_(1992 on)_36	36	(05-09-00 / 19-01-01)
JL_(1992 on)_37	37	Missing (at 31/5/2014)
JL_(1992 on)_38	38	Missing (at 31/5/2014)
JL_(1992 on)_39	39	Missing (at 31/5/2014)
JL_(1992 on)_40	40	(Dec 02 / Mar 03)
JL_(1992 on)_41	41	(Mar 03 / Apr 03)
JL_(1992 on)_42	42	(May 03 / Oct 03)
JL_(1992 on)_43	43	(Oct 03 / Nov 03)
JL_(1992 on)_44	44	(Nov 03 / Dec 03)
JL_(1992 on)_45	45	(Dec 03 / Jan 04)
JL_(1992 on)_46	46	(Jan 04 / Feb 04)
JL_(1992 on)_47	47	(Feb 04 / Mar 04)

TO BE CONTINUED

Jim Lane's Field Notebooks Index

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<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)

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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	(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	(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)

J. L. L.

No 23



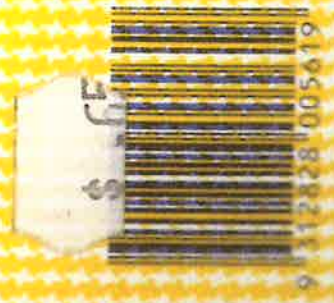
Note Book

96 PAGES

No. 561

Oct 97 - Dec 97

ESSELTE



9 112828 005619

If found please

return this field

notebook to

J. Lane

Dypt C. A. 107.

14 Queen Street

Barnet LA 6280

A2 (08) 97 521 677

Line (08) 97 521 432.

①
Fri 24/10/87

Verse fishing

Phryganea 1 pm

Little Red Cant

Little Red Cant

1 Common Darter

POSD flying past

1 Darter flying past.

First White Doves on

road behind

2 Gt. Blue jays

Phryganea flying nests 0.42 m
2. 1.41 pm. All.

beats in. Water flying out.
one lowest.

Lake Davis Tues 4/4/87
at 1425' h

PtBD. - ~~7~~¹⁰ - one is flying
appears to be an adult in moult.

1th Lake - 1
Anas - 1

Diving geese and ducks in full
of forage. Jay kept 1.5m
regulator

New Dyke jays needs
40405 m
(round to 4041m)

(could hear one Litoria advertisement)

Jay calling
Also Litoria nasuta

Also have long railway >

possibly a bullfinch, passing
~~in~~ on point or veg.
on bank in a row
and of night to the NW
of lake lake.

plt = 9.1 clearance

undergrowth against plt 7 and
plt 10 (jays - 0.5)

when 6 Nov 87 life history
station
Lake ~~1110~~ 1110 h

Dyke jays needs 3.69 m
I found a new point 0.5m
east of here I need to

measure from 1110 level
was 0.32 m below the top
of this point

(4)

Calculated on pit 4.00

Nov 1 08 Mont Dole

Could have the middle part

and to subdivide

The Mont Dole and below

1 m of shale with 4 m of ore.

Calculated on pit 4.00
Nov 5.1
pit sample

Lake Jasper

1140 km

Depth 9.5 m

Depth = 9.5 m

Mean & Maximum flow

1.1 m

Constant after the water

regained to have brown bloom.

pH = 7.6

(5)

Lake Marysburg - 6/1/92

reads 6.18 m

at 1425 km

Recalculated on pit 2.00 in pit 10.00

pH of sample was 8.4

6.180 new sample

posit

Oswegogo Swamp 6/11/92

0.53 m below top of

the pit at 5.20 pm

Moisture substrate (see also)

There were 2+

pH = 8.1

②

on 11.7.00 at 4.00 PM

Aw, σ^2 Mark Duff

Could hear the apple bag.

and *L. rubellensis*

10 The Mont Lake case before

5.1

Wm I'm of course glad to hear of you

Lake Tanager 1140 lbs.

Byth pengr. near

Depth = 9.5 m

Neer, Emma Lee

Table

Consistent like the books —

agreed to have Green bloom.

$p_{14} = 7.6$

5

Leber Marzengans - 6/11/97

reads 6.18 m

at 1435 hrs

Neutralized on pH 7.03 & pH 10.03

pit of sample was 8.4

6 PTD new sample

Good

James Lutherso 48/11/9

0.58 m below top of

Abso-pulver at 5.30 pm.

Planting structures (various)

Black Swan - 2+

$pH = 8.1$

(6)

6/11/97

Bob Hanson Lake

Orange (new) meads

0.96 m at 5:55 pm

pH = 8.7.

Lake Powell

6/11/97

Dry Lake - meads

0.96 m

at 7:30 pm

heard deep booming call

of Anna's Hummingbird

east of me (small

Lake Powell)

(7)

Also heard Lake

adulterine and

L. nivalis

pH of sample was 7.4

Moore page

meads 4:30 m at 10:15 pm

pH = 7.8

Lake Pleasant Vaux 11:30 pm

pH = 6.9

Marsh Hares on ridge

& then on water!

L. adulterine heard

also a golden frog

⑧

Pleasant View depth

= 1.737

- 0.835

0.902

12 0.90 m

(used a "low" level)

Fri 7/11/97

Yellow Springs 1040 m

Along the line level
from the 4.00 - 5.00 m
Gauge plate on the tree.
The water level was

7/11/97 ⑨

Cont'd

4.00 m

- 1.31 m

= 2.69 m

⇒ water level is 2.68 m

The water level was also

45 cm below the bottom

of notch in stump 11 m

mouth of gauge plate.

In Sept 97 (18/9) the water

level was 34 cm below the

bottom of this notch.

⇒ the water level on

Sept 18/9/97 was

$2.69 + (0.45 - 34) = 2.69 + 0.11$

= 2.80 m

(10)

Yellowing Control

Print

I took approx 5 photos
(Nos 13-17 of 200 ASA
film) of the line
level, gauge plate,
rod in string etc.

$pH = 8.3$

Merck's Dye

Gauge needs 0.26m
at 1210 km

$pH = 6.3$

(11)

to brownish 2.55 pm
dyed = 0.21 m
Gauge body packed &
dyed here.
 $pH = 8.6$

Warning 3.57 pm
~~Warning~~
Gauge needs 0.33 m
 $pH = 6.5$

Warning 4.55 pm
dyed = 0.91 m
 $pH = 7.3$

Chennai Red Dusters head.

(12)

Min 5.50 pm

Gauge reads 0.94 m.
pH = 8.95

Bering Lagoon 6.30 pm
reads 2.31 m

~~2.31 m~~ pH = 8.3

Lebe Uncomp Gauge

reads 1.70 m at 7 pm.

pH = ~~8.03~~ 8.6

7/11/97 (13)

contd.

Fouring ramp

Gauge reads 0.49 m
at 8.30 pm

pH = 6.4

Unwind Gauge
9.32 pm

reads ~~2.03~~ 2.03 m
pH = 8.5

Sun 9/11/97

4.55 pm

Bruderer Gauge

reads 0.66 m.

pH = 10.3

(14)

Tested meter against p14 10
standard. It read
p14 9.95 at 27.1°C

Standard was p14 10.00 at 25°C
and p14 9.87 at 30°C
so reading was OK.

Sat 15/11/97

(15)

Bsn to Cap Clement Chart.
Magnetic declination is

$4^{\circ} 25' W (1989)$ increasing
2' annually = $2 \times 8'$
= $16'$ to 1987 $\rightarrow 4^{\circ} 41'$
or 5°

237° is magnetic

Bearing up the channel from p14 10

+ 0.33 mi at 5.47 pm

All boards in. Water level
anchors all boards. V.
slight trouble out post
Magnetic declination is 242° true
level slightly lower on
over side.

237° magnetic = 242° true
(SW = 225° , WSW = 247°)

(16)

Spiridua globosa
Acacia -
D.

(17)

Spiridua globosa
Acacia -
D.

(18)

Agave leucomera to 7 meters.

Agave + sugar cane etc.
Machala along shoreline
~~Agave + sugar cane~~

Machala shown to 5 m.

The last line had been

at edge of channel in a A. leucomera about 6 m high. This is 300 paces at 17 paces there are the dead branches of

probably an A. leucomera, to about 4.5 m

(19)

At 76 paces is the (B) solitary palm (which grows)

At 179 paces reach the

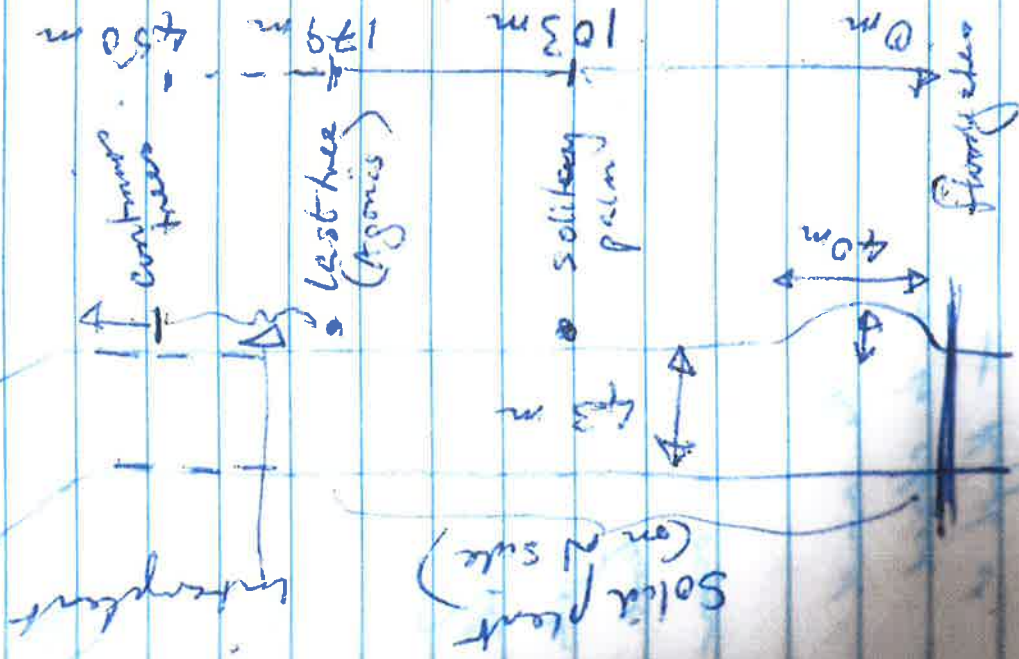
(A) clump etc. There are not even any shrubs between (A) and (B), only low ridges, grasses & other weeds.

The channel up to the first bend is 43 paces wide.

There is an embayment 13 paces deep wide & 40 paces long immediately to West of Mangrove (or N side).

Some useful interplanting
could be done from
180 to 450 m from
the plogzetes.

(Planting could also be done
downstream of the plogzetes)



(22)

Water level Vase

Estuary floodgate is

1228 hrs on Wed 19/11/97

is + 0.29 m.

Light wind from ENE.

All boats in. Water

level below all boats.

Fly over channel. Very

slight (about imperceptible)

flow out then some jets

(leakage) Water level

slightly lower on ocean

side.

QC 1236 hrs the mouth

of Wansong is closed

by sand - though it

high tide there would be

a very long (c 300 m)

(23)

(down to 2m)

near connection to the

sea (extending east

from the mouth of

Wansong Inlet).

Fri 28/11/97

1220 hrs.

Vase along flintgate gorge
reads +0.30 m

All birds in - water level

"below all birds - fly
vetus closed - slight brack
out - small fish trying
to get in
water breeze - fine"

Wings along flintgate gorge
reads +0.10 m at 1225 hrs

All birds in - fly
vetus closed - water
drinking in. Many

Large number of birds on
eastern side of gorge
Also small flock on eastern
side of gorge in
"bushes" probably in.

1-10 pm

Black-winged

Black Swans & egrets

Shelducks

This - stress noted

Silver Gulls

Large Red Cormorants
Coots

Little Pied Cormorant

(26)

Parrots

unidentified black crowns

Whistling birds

Y/B Sparrows

Pacific Black Duck

Mink Duck

Eggs (Gent)

Osprey carrying fish

Greenback

Stops Song Sparrow

(27)

Vessel here (Bussellton)
behind Store Office
cargoes.

Sat 29/11/97

7.15 am.

Pacific Black Duck.

—

Little Black Gull.

Marek Duck.

Amsterdam Duck.

Grey Teal

2 Blue-billed Duck

0830

Collected and used
in 2010 and 2011
- 2011

5/11/95 to

21.5

2011 2012

2012 2013

2013 2014

2014 2015

2015 2016

Vase strong floodgate
large needs
+ 0.28 at

1250 hrs on Fri 5 Dec 97

Water in upstream side of
floodgate has ^{intensity} strong green
color due to the algal

blooms - part I have seen
(green) this spring - summer

Phytoplankton still much blooming

All boats in - Water level

below all boats - Flaps

when closed. Water level

higher on estuary side and

strong water backing out

Small fish visible on downstream
side of gate.

(30)

No fish visible on right side of jetty (but can't see deeper than 5-10 cm due to bloom)

Get GGP to sand near beach about ~

Malibu Creek bird
hike 1:20 pm Fri
5 Dec 97

Gray Tit 5+
Audubon Gulls 7
White Ibis

(31)

Little Black Cuck
Headheads 5
1 pr Black Swan with 5
large shiny eggs
1 WR Pelican
1 Pacific Black Duck
Little Pied Cormorant
1 Pelican (immature)

4 sp. Shelducks

1 W. Sparrow

Coots

1 ♂ Shorebird

Blue-billed Duck 2

1 Great Egret

Silver Gulls

18 y. ♂ Duck

Black-w. Skiff

Finch 2.50 p-

32

Vasse River Set 6/12/97

Just down from
Strelley Shrub Bridge

• Pacific Black Duck

• Emerald Shrike Cuckoo

— 2 chicks

• Mottled Duck

• White Ibis

• Dusky Moorhen

• Swampy

• Grey Teal

• White-faced Heron

9:40 • Little Black Ant

33

Vasse Estuary floodgates
Gauge reads 0.25m AHD

at 0904 hr on

Set 6 Dec 97

Water colour on upstream

side still green as yesterday

Wind light SE

Cent. all more than 20 cm

into water column

Water on downstream side

is clearer

No fish visible

on upstream side

can see at least 1 m deep

(34)

all break in, all plug
 when closed, ~~is~~ very
 slight break out.
 After level below all
 broken.

Many small fish on
 downstream side of jetis
 1 Dante fish on
 upstream side of jetis.

Mouth of Whangy Creek

at 0815 hrs (on 6/12/82)

is well & truly closed

off any solid (conjectured)
 by technique buffer

and has 25m wide
 and up to at least

(35)

c. 0.7m above water level
 in the ~~water~~ Intake.

Vase-boring *Phryganidia* larvae
 records 70, 33m

at 0846m on Sna

7 Dec 97

Water colour, bark & fish

suburban ~~area~~ as yesterday
 on both sides of Phryganidia.

Very slight break out.

except water now green

colour on downstream side so

well - but can still see

day.

36

Not singing at surface
in bay on shoreward side.

Ad. Yellow throats are

1 clear, 1 W. Fly, 1 P. Hawk

Not movement (f.k.) also

small yellowish - brown
surface.



Vener eating Phryganea

4-45 pm range
needs + 0.02 m.
mark + 0.2? w 0.22?

margin of small fish

37

large fish

feeding.

Volume showing yellow-green

stylet flow out.

Vener eating Phryganea
range needs + 0.21 m

0640 hrs on

Tues 9/12/97

38

(except)

Admission sample to activity.

- 11 slightly dark out post

books + files.

- majority of small (1-2 cm)

fish on downstream side of

gate.

DD - No fish activity on surface

- 1 darker fish on downstream side.

- Brown murex on

downstream side. ~~dark~~

- colour of gill ^{shell} pinkish green.

- slight staining on surface

0654 hr - bar

at mouth of Wharfedale

Water still well +

fairly clear. It is

39

25 m wide and about

0.7 m or so high.

Along river and all white

Archa over it. ~~Archa~~

Comparison on isomeric

Vase colour ~~plumbea~~

7.00 hr on Wed 10/12/87

1 POTS with 8 large clear

darkling 10 m upstream of

plumbea. Also 1 LBC.

1 ^{smaller} ~~smaller~~ large ^{red} ~~red~~ ^{comat}

on downstream side.

40

Myriads of small fish (1-2 cm) feeding on detritus
 a lot of *Phragmites* (100
 10 m) schools of
 larger fish schooling near
 the water beyond them.

The small fish are feeding at
 the surface, probably a
 rain shadow effect (in greenhouses).

Algal bloom on upstream side.
 It's just as thick as
 before. Dull olive green.
 More swimming on surface
 than ~~before~~ yesterday.

41

Water level (Vase ending
 gorge) is + 0.21 ± 0.23 m

All birds in, yellow shrike
 etc. Slight trouble out

P200 with ducklings feeding
 mostly in nearby in even
 along bank.

Shrike in just round edge
 - accumulated by bird -

1 Duck feeding upstream of
 the gorge (40m)

Large fish are swimming
 very slowly in great numbers.

(42)

0715 hr - bar st

mouth of Wharfedale - unchanged
from yesterday. Definitely
hasn't been open since
yesterday's injection.

Sea is flat calm.

4

Old people with knowledge

Freddie Whitehead

Canterbury Avenue (74 yrs)

Tom Locke died ~ few
years ago.

I believe to already completed on the

MAN

(43)

beach. Peter was and

He likes her to be
open in Decades because
if it is, grows (x crabs)
enter relationships with each
possible harm with a friend.

MAN

Thurs 11 Dec 97

By Vase eating phages
at 0645 hrs. ^{my 1st} 0645 hrs 24/12/98

3LDC + 1LPC on top

phages. One immature P. 1st Com

also at base of structure
(downstream) - now actually

feeding along the legs when
1, 2, 3, 4 on but downstream

Phaeocystis
Gauge reads +0.21 m
22 0650 am

Algal bloom on yesterday
side similar (same?)
color and intensity to
yesterday (still olive green)
Less swimming of algal
cells on surface than yesterday.
(due to less wind??)

While slight bubble formation
as yesterday (i.e. shore jets)
jets & breaks unchanged.

Still migrants of small (1-2 cm)
fish from at least 5 m
downstream of the jets.

Weather for 4:00 am (has
been hot & humid the
past two days)

No sign of rain, dark
or drying fish.

No large fish activity
evident at surface (and

can't see any beneath -
due to rain. Fish comment
(any) being so active?)

Wind light, from SE.

1 Diver fishing 80 m
upstream of Phaeocystis.

(46)

Section: Bank depth (all wet sand)

optimum scale between gate 7+8 (in shade)

66 cm

maximum at gate 4

65 cm 0707 am.

optimum at gate #11 (from S end).

60 cm

Bank level is changing also at 0712 hr (11/12/97)

When we enter mouth at 0715 hr. Bank has still closed. Tide has been slightly higher but right + than the night

(47)

11/12/97 weather

before (Tide right) - but still needs to rise ~ 5-10 cm to break them.

There is still difference (it still will bury vehicles over it). Water probably in inlet near bar looking good.



1980
near flat area - S.E. bridge is offshore.

Vanessa Eby floodgates &

#3, 40 pm on Thurs 11 Dec 97

(48)

Schools of tightly packed
mullet 200-500

to the school - swimming
at surface 5'-15' m

direction of plankton.

Mullet working fast
under surface. Feeding?

Spilling oxygenated water
from surface? Very

swim slightly then "flashes"
sharply in the water.

Must be several thousand
mullet doing this.

Occasional green (?)

flashing at surface
(flashes of silver sides)?

(49)

Immature live corn: ^(one) ~~(12)~~
is still feeding here.

Therapsid gage reads

approx +0.22 - 0.23 m

Moderate SW wind blowing
along the channel.

Blown on up-estuary side

Ag looks yellow-green.

c. 100

Cubos = school of 5 cm
mullet.

The mullet are more numerous

than on the previous earlier

this water.

48

Schools of lightly packed
mullet - 200-500
to the school - swimming
at surface 5'-15' in
direction of propagation.
Mullet working fast
under surface. Feeding?

Feeding synchronized under
from surface? May
swim steadily then "flashes"
sharply in the water.
Mullet be several thousand
mullet doing this.

Discovered green (?)
flashing at surface
(front of school sides)?

49

Immunized fish come: (me)
is still feeding here?

Hopkins eye needs
approx +0.22 - 0.23 in
plateau SW wind blowing
along the channel.

Brown on upstream side
egg looks yellow-green.
c. 100.

Like a school of 5 cm
mullet.

The mullet are more numerous
than on the upstream side
this week.

(50)

Saechi: Dytids.

Location	Time
Western Gate 4 (from S end)	4.10 pm
between gates 7 & 8 (upstream side)	50 cm
at gate 11 (upstream side)	50 cm
at gate 11 (upstream side)	4.16 pm

were
left in floodgates to 4:30 pm

↑ old men caught these fish
are pilchards.

(51)

Wananga Estuary floodgates
— Jarge reaches 70.05 m
at 4.34 pm.

Algae not blossoming. to

some extent is upstream

of Vane floodgates —

Mallet (pilotage?) battery

surrounding here — but

on upstream side of

floodgates — 1 or 2

schools of 100-200 fish —

(52)

Verses estuary phosphate
on Fri 12 Oct 97 at

0630 hr - Jazye
needs + 0.21 - 0.22 m

Wetter fair - cooler.

Light SE wind.

Thom some color as yesterday
(dull olive green). No

scanning on shedge on
surface - water last few
days.

Still many small fish on
the downstream side of the
jakes in the stream
if water backing out.

(53)

No sign of large fish
activity.

No dead on dry w.

strongly fish.

1 LPC + 2 BC + 1

decker and 1 imm. PC

at the jakes. 1 yoke

in channel 100 m upstream.

Position	Depth	Time
upstream jake (from 4)	54 cm 54 cm	0637
upstream jake 7-8	52 cm	
upstream jake 11	54 cm	0640 hrs

(54)

Womany Inlet - bar
at mouth still closed.

High tide came within 5-10
cm of overflowing at least
night - would then have
had 25 m to reach the
water of the Inlet.

Seas flat (SE breeze to
offshore)

Water pretty in Inlet under
sk.

(55)

Vapor: estuary fluctuations
at 4.10 pm
on Fri 12 Dec 87.

- the first behavior in the
area so yesterday - in
dense stands of many
herbaceous (likely 2-3000) -
persistent or mottled? drilling
around 15:45-15:50

downstream of the gates
apparently fairly "wet"
beneath surface. Still

among strongly.

No sign of sick, dying
or dead or skinned fish of
any type.

(56)

Very strong fluorescence
 (page book) + 0.24 m
 at 4:20 pm (moderate
 strong SW wind blowing)

Neochia Dyeria

Cocoon (Callupitum)	Depth	Time
Set 4	46 cm	
Set 7-8	48 cm	
Set 11	45 cm	4:25 pm

~~The bloom has now~~
~~gone~~

(57)

12/12/97

contd

The bloom has now
 extended to the downbeam
 side of the gale.
 Immediately (0-5 m) from the
 the intensity is only slightly
 less than that on the
 upbeam side (which is
 yellow-green). It
 seems to gradually decrease
 until say 50 m
 downbeam ~~the~~ it is
 not evident (from the
 gales).

(58)

January 1998

lowest tide each day
of month

$$\Sigma = -6.95$$

$$\bar{x} = -0.224$$

highest tide each day
of month

$$\Sigma = +9.66$$

$$\bar{x} = +0.295$$

$$\text{average of lowest + highest} = \frac{-0.224 + 0.295}{2}$$

$$= +0.036 \text{ m AHD}$$

$$\underline{\underline{\bar{x} = +0.04 \text{ m AHD.}}}$$

(59)

February 1998

lowest tide ~~of~~ each day
of month

$$\Sigma = -5.16$$

$$\bar{x} = -0.184 \text{ m AHD}$$

highest tide each day
of month

$$\Sigma = +8.18$$

$$\bar{x} = +0.242$$

average of lowest and highest

$$= \frac{-0.184 + 0.242}{2}$$

$$= +0.054 \text{ m AHD}$$

$$\underline{\underline{\bar{x} = +0.05 \text{ m AHD.}}}$$

(60)

March 1998Lowest tide each day of month

$$\Sigma = -3.35$$

$$\bar{x} = -0.108 \text{ m AHD}$$

highest tide each day of month

$$\Sigma = +3.84$$

$$\bar{x} = +0.317$$

average of highest & lowest

$$\bar{x} = \frac{-0.108 + 0.317}{2}$$

$$= +0.1045$$

$$\underline{\underline{\bar{x} = +0.10 \text{ m AHD}}}$$

(61)

April 1998Lowest tide each day of month

$$\Sigma = -1.27$$

$$\bar{x} = -0.045 \text{ (n=28)}$$

highest tide each day of month

$$\Sigma = +11.85$$

$$\bar{x} = +0.385 \text{ (n=30)}$$

average of lowest & highest

$$\bar{x} = \frac{-0.045 + 0.385}{2}$$

$$= 0.17 \text{ m AHD}$$

$$\underline{\underline{\bar{x} = 0.17 \text{ m AHD}}}$$

May 1998

lowest tide each day of month
 $\Sigma = \cancel{+0.29} + 0.33$
 $\bar{x} = +0.011 \text{ m} \text{ (n=28)}$



Vessel Ketching Set 13/12/97

Dege + 0.20 m
 at 0907 hr

still
 Ben closed (checked
 at 0740 hr)

May 1998 Cont'd

highest tide each day of month
 $\Sigma = 14.94$
 $\bar{x} = 0.482 \text{ (n=31)}$

Average of lowest + highest

$$= \frac{+0.011 + 0.482}{2}$$

$$= 0.2465$$

$$\underline{\underline{= 0.25 \text{ m. Alt.}}}$$

(64)

June 1998

lowest tide each day of month.

$$\Sigma = +0.66 \quad (n=29)$$

$$\bar{X} = +0.023 \quad \text{m AHD}$$

highest tide each day of month

$$\Sigma = 15.33$$

$$\bar{X} = +0.511 \quad (n=30)$$

average of lowest + highest

$$= +0.023 + 0.511$$

=

$$= 0.267$$

$$\underline{\underline{0.27 \text{ m AHD}}}$$

(65)

July 1998

lowest tide each day of month

$$\Sigma = -0.73$$

$$\bar{X} = -0.024 \quad \text{m AHD} \quad (n=31)$$

highest tide each day of month

$$\Sigma = 13.92 \quad (n=31)$$

$$\bar{X} = +0.449$$

average of lowest + highest

$$= -0.024 + 0.449$$

=

$$+ 0.212 \text{ m}$$

$$\underline{\underline{0.21 \text{ m AHD}}}$$

(66)

August 1998

lowest tide each day of month

$$\sum = -2.66$$

$$\bar{x} = -0.085 \text{ m. AHD} (n=31)$$

highest tide each day of month

$$\sum = 10.45$$

$$\bar{x} = 0.337$$

(n=31)

average of lowest + highest

$$= \frac{-0.085 + 0.337}{2}$$

$$= +0.126$$

$$\underline{\underline{=}} + 0.13 \text{ m AHD}$$

(67)

September 1998

lowest tide each day of month

$$\sum = -3.89$$

(n=30)

$$\bar{x} = -0.130$$

highest tide each day of month

$$\sum = 25.1$$

~~18.2~~ + 7.2

$$\bar{x} = +0.248$$

(n=29)

average of lowest + highest

$$= \frac{-0.130 + 0.248}{2}$$

$$= +0.059$$

$$\underline{\underline{=}} + 0.06 \text{ m AHD}$$

(68)

October 1998lowest hole each day of month

$$\sum = -5.11$$

$$\bar{x} = -0.165 \quad (n=31)$$

highest hole each day of month

$$\sum = +6.26$$

$$\bar{x} = +0.224 \quad (n=28)$$

average of lowest + highest

$$= \frac{-0.165 + 0.224}{2}$$

$$= +0.029 \text{ m}$$

$$\bar{x} = +0.03 \text{ m AHD.}$$

(69)

November 1998lowest hole each day of month

$$\sum = -5.34$$

$$\bar{x} = -0.178 \text{ m AHD } (n=30)$$

highest hole each day of month

$$\sum = 7.72$$

$$\bar{x} = +0.266 \text{ m AHD } (n=29)$$

average of lowest + highest

$$= \frac{-0.178 + 0.266}{2}$$

$$= +0.044$$

$$\bar{x} = +0.04 \text{ m AHD.}$$

(20) December 1998

Lowest tide each day of month

$$\Sigma = -6.53$$

$$\bar{X} = \frac{-6.53}{31} \quad (n=31)$$

$$= -0.211$$

highest tide each day of month

$$\Sigma = 9.36$$

$$\bar{X} = +0.319$$

average of lowest + highest

$$= \frac{-0.211 + 0.319}{2}$$

$$= +0.054$$

$$\underline{\underline{= 0.05 \text{ in AHD}}}$$

(71) December 1997

Lowest tide each day of month

$$\Sigma = -6.82 \quad (n=31)$$

$$\bar{X} = -0.220$$

highest tide each day of month

$$\Sigma = +9.31$$

$$\bar{X} = +0.310 \quad (n=31)$$

average of lowest + highest

$$= \frac{-0.220 + 0.310}{2}$$

$$= +0.045$$

$$\underline{\underline{= +0.04 \text{ in AHD}}}$$

(72)

Sunday 14 Dec 97

1 Great Crested, 1 PeBD plus

3 (less 3 in ditches), 1 darter

(15-1) minute Black also in pond

80 in upstream of frogpond

Jesse eating frogpond

Jenny needs + 0.995 in ASD

at 0645 hr

1 Common Snipe + 1 LPC

on the frogpond

Section 2nd ditch

all together

gate 4	56 cm	0648
gate 7-8	53 cm	
gate 11	49 cm	0651

(73)

Water enters in upstream

into some small ditches

Jenny in previous ditches

Water still flowing (ditching)

out and many small

(1-2 cm) fast flowing in

downstream side

Light SE. wind blowing. Fine.

No large pool clearly discernible.

No light seen on surface.

No wind; dry, not a strong

pool.

End at 0654 hr.

(74)

0658 ~~last~~ - back
mouth of Young Eulachin
still closed - did not
overly bright.

Mon 15 Dec 87

Plankton
Vase strings of eggs
heads + 0.17m

Light E and Young
did not show in vase
side still dull blue green
Downstream side now
similar color for at least
15 meters ~~not~~ not good
as interval (dense) ~~not~~
at 2200 ~ 2300

(75)

Water still looking down
and mostly of small
fish visible in first 2 m
downstream, some
larger fish relatively
occasionally at surface 15 m
downstream ("flashes")

No dead, sick, dying
observed fish.
No algal "swarming" on
surface.

1 Diver + 1 camera
Submerged in plankton, 3 LPC

on up down side; also 3 sets
Ventrally no macrofauna
etc. on near surface.

(This has been the case since
I started the study monitoring)

(76)

Needle Dist dyals
(all on upstream side)

Station	Depth	Time
gate 4	59 cm	0652
gate 7-8	56 cm	
gate 11	55 cm	0656 hr

Location at mouth of
 Lagoon Outlet with closed (0700 hr)
 First boat right came
 within about 10 cm of
 overtopping it.

(77)

Small (up to 15 cm)
 were eaten (due to E wind)
 onto the shore at an
 angle.

Some very photogenic
 needs + 0.17 m added
 at 4:06 pm on Nov 12/97

Mostly WWL with blurring.

gate 4	67 cm	4-14 pm
gate 7-8	71 cm	
gate 11	70 cm	4:17 p-

(78)

DLE of "clipped" "hopper"
blow against gates & shore
(has been before - warning
experts from day to day -
not a lot)

Fish (deep, olive-sided - Brown?)
of c. 10 cm length milling
actively in current looking out
between gates 4-5.

Other fish (mullet? goldfish?)
milling 5-15 m downstream as
in previous afternoon, but
less numerous (possibly
3-4 the number observed
at last afternoon visit)

(79)

~~Water~~ Light brown yellowish -
green on upstream side
as before. Algae
green on downstream side.

- Water still slightly frothy with
- No sign of dead or
dying fish.
- No fish clearly visible
on upstream side.
- no slight swimming on surface.

1 LBC feeding in upstream side
1 duck resting.

4-30 pm - bar closed.
Less action on beach but
tide needs to be 20-30 cm

(80)

higher than at present for
 these reasons to flow
 over the ~~side~~ (side)
 might not need Inlet Jc.

16 Dec 97.

Wave energy fingered range
 needs + 0.195 m at

0646 hr. Moderate SW

Wind. Overcast. Very

light clouds of overcast drizzle.

Slight "bubble" out.

Many small fish (1-2 cm)

feeding on seaweed side.

Percent inside of cage

fish ~~80-90~~ in seaweed

10-20 m

(81)

July 4

80 cm

0650 hr

July 7-8

80 cm

July 11

80 cm

0653

Large fish activity immediately

humble surface apparent to

see in this light but system

conspicuous to that of

gathering of seaweed.

1 LBC on upper side =

water

No deer, dry fish.

higher than at present for
 these waves to flow
 over the ~~water~~ (island)
 might not reach Inlet Jc

16 Dec 97

Wave energy from the Jenga
 needs + 0.195 in at
 0646 hr. Moderate SW

Wind - Onshore. Very
 light drops of occasional drizzle.
 Slight 'fizzle' out.

Strong north wind (1-2 m)
 falling in downwind side.
 Recount inside of layer
 from ~~20-25~~ downwind
 10-20 m

July 4	80 cm	0650 hr
July 7-8	80 cm	
July 11	80 cm	0653

Large pond study immediately
 behind surface opposite to
 see in this light but open
 comparable to that of
 yesterday afternoon.

1 LBC on upper side -
 under

No deer, dry pond

(50)

higher than at present for
 lower leaves to flower
 over the whole (white)
 night not much frost yet

16 Dec 97.

Went early morning. Temp
 needs + 0.195 in at
 0646 hrs. Moisture 512

Wind. Overcast. Very

light clouds of overcast sky
 light breeze out.

Temp with frost (1-2 cm)

frost in. Humidity 80%

Baromet. 1014.5 of 1015

frost 10-20 in

(51)

July 4	80 cm	0650 km
July 7-8	80 cm	
July 11	80 cm	0653

Reaper frost early morning
 health appear different to
 see in that light but appear
 impossible to that of
 yesterday of morning.

1 LBC on egg turn side =

No dead, dry frost.

(82)

Colour of bloom on either
side same as yesterday.

Monning Inlet sand
bar. High tide last
night flowed over the bar
and entered the Inlet
approx 80 m wide. This
flow has lowered the height
of the bar, particularly
at the eastern end of
the area of flow. Reduction
in height was not great
at the western end is
now (0.704 km) well below

(83)

lowest point of bar.

No outflow would have

occurred. Inflow

at Inlet has been due

primarily to wind gusting
afternoon (to last night)

being primarily from the
north. SW wind

is now offshore. When

action on beach was in

approx 10 cm high.

... (approx 10 cm high) ...
... (approx 10 cm high) ...
... (approx 10 cm high) ...

(82)

Chow of bloom on water
side here is yesterday.

Moning Tidal wind
bar. High tide last
night flowed over the bar
and entered the inlet
approx 80 m wide. This
flow has lowered the height
of the bar, particularly
at the ~~the~~ eastern end of
the area of flow. Distinction
in height was not great
and the ^{old} water level is
now (0.704 km) well below

(83)

lowest point of bar.
No outflow inside bar
occurred. Inflow ~~was~~
it would have been due
primarily to wind generating
afternoon (to last night)
being primarily from the
north. SW wind
is now offshore. When
return on beach was in
approx 10 m high.

I thought he looked
 right (I was right)
 I went over to the
 ... point of the
 ... at north of ...
 ... place
 just way down where
 ...
 ...
 ... did
 ...
 (see suggested 0655 hrs)
 on Wed 17 Dec 87

Thurs 18 Dec 87

Very early observation
 ...
 ...

Position	Depth	Time
gate 4	71 cm	0652
gate 7-8	78 cm	
gate 11	73 cm	0656 hr

"A" from previous to
 gate 11 was installed
 yesterday (on gate 8)

Page reads + 0.16 m
 Page 0657 hr

(87)

Thurs 18 Dec 97

Veronica flowering
Seedling Bayonet

Position	Height	Time
Gate 4	71cm	0652
Gate 7-8	78cm	
Gate 11	73cm	0656 hr

"A" frame junction to
open flowering area marked
junction (on gate 8)

Gate 11 + 0.16m
Gate 0657 hr

(86)

High tide left
night (Tues night)

Foot overgrown
lowest part of the
area at mouth of Wharfe
Foot overgrown
just way down stream
in side of Wharfe Wharfe
Foot overgrown
not need the inlet

(no inspection 0655 hr)
on Wed 17 Dec 97

(88)

Very light SE wind - Fair

Plays well - just for 5' + m
on down-hill side. Shell
some right down the dip, but
chance they have speckling.

Blown on up-hill side with
chick down from down - green
to be checked (but see
below, slightly).

Shell a very slight mark of
water through joints (leading
downstream).

Descent - flaps of layer

(89)

Just 10-20 m down-hill

- No state drying on shore -
fair
- 6' water accumulation of
chopped vegetation on up-hill
side than previously.
- No state water on up-hill
side (no wind).

3708 hrs - 3000

much of up-hill side and
down-hill. But the best

might just be beyond the
line at the highest point, but

not enough to water in.

flow into down-hill side.

(88)

Very light SE wind. Fair.

Many small fish for 5' + m
on aboumbe side. Still
some algal bloom but definitely
cleared ~~off~~ than yesterday.

Bloom on upoumbe side still
still above green. Don't appear
to be clearing (but see
Secchi depths)

Still a very slight turbidity
water transparency (leading
downstream).

Occasional flaps of lagoon

(89)

Feb 10-20 in downstream

- No tide drying or stress
fast

- Greater accumulation of
clumped algae on upoumbe
side than previously.

- No fish visible on upoumbe
side (2 weeks).

0708 hrs - Ter at

mouth of Womung Inlet still
closed. High tide best

night just overtopped the
bar at its highest point, but

not enough for water to

flow into Womung Inlet

02

77 Dec 19 19

Vine bearing phoradendron
near + 0.15 m on S ac

0652 4

Overcast; very light wind.
Fire.

1 Sweet Eget at age 40 in
system. 3 cdc's in post. H₂

On old railway isomere is 12116

and 1 Common Snipe. Also

7951

1 PC party is under 10-15 m
dominance of jakes

to Mary Smith (1-2-20)

for fucky, near + &

suspect for 1°C or downwind
 (producing "pulling" effect)

↳ "partitioning effect"

5

of the pharynx - larger
fish - flapping in occasionally
15-30 in diameter.

yes (in 2-1) yes every

activity on opposite side of joints
(evidenced by "guttering" on surface)

Some chopped oysters & cream sauce
an excellent sort of jelly similar
to yesterday.

— 1. Regel blown in, system side
deeps child's jacket (October
due to incorrect installation).

days in time in diversities.

" still a play the back of
of water out from the gates -

(90)

For 19 Dec 97

Varie eating planktonic zooplankton
near +0.15 m and at 0.632 m

0.632 m

Overcast; very light wind.
Fine.

1 Great Egret at edge 40 m
inshore. 3 LPEs on post. 13.

On old rocky shoreline is 1 WHP

and 1 Common Snipe. Also

1 S. Gl.

1 PC feeding in water 10-15 m
downstream of jetty.

Many small (1-2 cm)

fish feeding near & at

surface for 10 m downstream
(forming "pattering" effect)

(91)

of the plankton - larger
fish for feeding is occasionally
15-30 m downstream.

Some small (1-2 cm) fish

swim on upstream side of jetty
(evident by "pattering" on surface)

- Some "chopped" appear to accumulate
on upstream side of jetty. Similar
swimming to yesterday.

- 1 Gl. blown to upstream side
deep dull red (dark
due to overcast conditions)

- seen in two on downstream
side.

- still a slight backwash
of water out from the jetty.

(92)

Spencer bridge is
between jacks 4 and 5
(3 ft by 5" is warped)

- no steel running at surface
(except - all over of jacks - bridge)

Beach slopes (all upstream)		Time
Position	Depth	
Jack 4	75 cm	0647 hrs
Jack 7 & 8	77 cm	
Jack 11	78 cm	0657 hrs

No ribs, 3 ft in diam. pipe

(93)

at 0657 hrs on 19/12/97

the weather is ~~clear~~ at

the mouth of Wharfe Est
is closed. High tide

about (a few cm) reaches

top of bar - therefore

practically less than the night
before.

~~Spencer~~

corrosion conditions (3 cm

less) - offshore bridge.

1945 ft on 19/12/97

1 Great Lakes & Pacific

(diving) 0-20 m water

of Wharfe Est 100.

and 11 ft above

(92)

Shoreline between is
between jets 4 and 5
(3 flap 5" is wrapped)

- no shell remaining at surface
(except - old corner of jets - bag)

Beck's depths (all in ft)

Position	Depth	Time
Jet 4	75 cm	0647 hr
Jet 7+8	77 cm	
Jet 11	78 cm	0651 hr

No milk, egg or dead fish

(93)

At 0657 hrs on 19/12/97

the number is ~~estimated~~ at

the north of Wharfedale
is closed. High tide

slant (a few cm) reaches

top of bar - therefore

practically less than the night
before.

~~77~~

Carbon imitations (3 cm

bars) - off the large

1245 pm on Fri 19/12/97

- 1 Great Cormorant feeding

(diving) 0-20 m in water

of gullies. Also 1 LBC.

and 1 Puffin.

(94)

1. W. B. H. and 1 Green Egret
starting on foraging.

large flocks of foraging and
adult Green Egrets in

marshes with herons

Section 4 + 5: (note

of adult just out of water

herons ... Egret pool

~~RT~~ on water

1 P.C. feeding on marshes

side of Lake

1 W. B. H. (adult) flew

by the channel

5.2.4 Seasonal installation of stop-boards (1942 onwards)

Folio 116 of JL vol 1 (July 1985) has Brad Kneebone saying NoI for Port Geographe says the Vasse estuary "summer salinity" is "in the range 2500-6500 ppm (low brackish) in the vicinity of the development area".

Appendix 7, sec 2.4 of the Port Geog ERMP apparently says "during summer the salinity varies between two and 10 parts per thousand" (JL vol 2 f 48).

(24/11/97)

17.3 km — level with head of Deer cluster — now heading NE

20 Red c Plow + 1 + 1

3 G.P.I

8 S. Bl + 7 + 10

2 Red Cunt

3 Darter

(24/11/97)
Vase: Estuary floodgates head
+ 0.28 m at 6-05 pm

all brack in — water level below
all brack — gates closed — water slightly
lower on ocean side — slight bulge out.

18th Nov — Strong NW wind still

19.6 km : level with 2 massive upright posts on beach
with "no vehicle" sign.

10 Red-capped Plow.

20.5 km : level with 2 red posts and beach "exit"

Wonnang floodgates

+ 0.16 m at 5.56 pm (24/11/97) — all boards

in — water level below them — all gates closed — water

higher on ocean side — water trickling into estuary.

Discovered a light stream from under the floodgates well away.

Came onto ^{ocean} beach at E end of Duckwater

Mon 24/11/87.

Red c Plover — 20 + 3 + 1 + 7 + 2 + 10 + 21

Green Knot — 4

Grey Plover — 1 + 1

Large Sand Plover — 2

Silver Gull. — 2 + 1 + 1 + 3

Large Pied C. — 1 + 6 + 1

4.45 pm — waves are breaking on the beach and the water is running over the bar and into Donkey's Inlet. This connection is about 130 m ~~(~~long~~)~~ (estimated) ^{East} of the main entrance (i.e. further west than when I last inspected).

5.27 pm — Left mouth. Situation ^{is} unchanged.

97. Wassie's Esting - Esting View
 Dec 19 12 Dec 97

1-10 pm - 2-30

Pelican - 9 ^{Great} Egrets - 1
 Sheldrake (hundreds) Black Swan - 2
 White Storks - 1 ^{+ 3 eggs.} Snowy Heron - 1
 WF Heron - 12
 Yb Spotted - 1 Bb Pout - 2
 Black Duck (5 ⁺ ^{Chen III} ^{with strong chick} ⁺ 1)
 Little Pied Grebe (low) (fars)
 Little Blue Grebe (fars) ^{with strong chick} ⁺ 1
 Silver Gull - 2 ^{with strong chick} ⁺ 1
 Gull (low) ^{with strong chick} ⁺ 1
 Coot (high hundreds) ^{with strong chick} ⁺ 1
 (heron) - 57 ^{with strong chick} ⁺ 1
 Stilt (low) - 2 ^{with strong chick} ⁺ 1
 Shoveler - 2

21 spp.

To look over but some. others enough for trapping - 1 no standing water