

Jim Lane's Field Notebooks

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TO BE CONTINUED

3510 NOTEBOOK

FAINT

OCT 78 - APR 79

Prints (and other) legs are from
July 2002 search for field notes
to incorporate (as appropriate) in
report on 1976-77 Peel-Herby
waterbird surveys.

R 21/7/02

①

Friday 6 Oct 1988: All day collecting at Buntingford meeting at Woodstock. Collected throughout at Buntingford.

Home to Collier's

Sat 7 Oct: Home to Collier's then back to Collier's. Took 3 plots (allies) of the Collier's area east of Buntingford bridge. First looking for vegetation from the bridge (and going into) and second of the river ~~area~~ 20 m above from the bridge, grassy through thickets. River flowing, had obviously been higher quite recently. Thick mixed. 2 stands (grasses in between) trees

all from the thickets.

Little grasshopper found in the

thickets.

New Holland Honeyeater very vocal in a Melaleuca ~~in~~ edge of river.

Thick plots - further upstream, approx 1 km SE of Buntingford

rd, 6th & 7th plots, ~~just~~ downstream side of old bridge (thicket) which crosses the Collier's road. Bird again approx 3 km east of Buntingford.

approx 70m long, river flowing -

5th photo - looking upstream of this bridge. In the photo the contrast in vegetation. There were streamers even here were

1 large Bull Cormorant

2 pair of Wood Duck with 5 young (full grown feathers, but wings not full length) - Class IIc/III

4 adult Black Duck - 2 gave distraction displays, didn't see

driftlings

2 pair Grey Duck with 8 ducklings (full grown feathers, both wings & feet long) a stream of down on the wings of one.

Class IIc/III

These photos contrasting either side of the bridge together with the breeding data would be most useful for letters on river restoration & effects on wildlife.

While I had also wanted one to see.

Had found one, then passed on.

One White-necked Duck in case of flooded pasture

near Buckingham

Photo 8 & 9 - Streamers & vegetation of a small bridge which crosses the river further east of Buckingham on the other R. road. (river running N to S and on S. side of A.R. road)

2 White-necked Ducks feeding.

Photo 10 - From stream -

1 adult Black Duck with 2 ducklings (Class IIb)

1 " Wood Duck (♂)

On right bank side (down) of road.

(37 km from A.R., i.e. 2 km west of railway x-ing)

Photo 11 - From stream with trees.

1 pair Moorhen about (down)

with 4 young Wood Duck (Class IIb)

most conspicuous. 16 eggs of young Moorhen on ~~stream~~ adult Wood Duck (eggs: 0.17.1)

Photo 12 - on flat meadow.

One adult pair of Moorhen Ducks with down flying young. Note that the adults flew together, leaving the young and the

young birds followed, generally behind and above. Only the adults collected.
 Cuckoo alone one for a few minutes, then left. (Squabs: 0.18.6.)

Red deer (on st. side) speed 0.19.0 - no time.

domination.

Plat 12. William River: looking south from the traffic bridge - north side looks similar. No discernible flow.

Red deer on north side of road (0.26.7)
 - no birds seen on it from the road.

Red deer - rd. side - 1030.3

One adult ♂ Blackbird only

F. d. - rd. side 1030.45

No birds seen from road.

William River crossing 1034.2 line flowing.

Impassable boundary lake (east of Wyn) from 16.15 - 18.05 hrs - see without survey sheet.

Plats 13-14 were of the island

boundary stretching in the lake.

Plats 15-17 were of ridge flatter along the west boundary of the lake.

After completion of surveys drove to Sharncliffe and looked into Hotel.

Went to Sharncliffe Football Club Clubhouse

for 4.15 game 4pm.

Sun, Sun: 5.0pm (9.15hrs to 5.15hrs)

Sun 8.00: Drove at 11am and drove

to Lake Comelings. Sharncliffe hotel

left, but photos & measured salinity from 13.15 hrs to 15.00 hrs approx.

Drove to the Hotel, dinner at restaurant,

then beyond the Hotel, which is north

side of Lake Comelings. 9 km with

back to town, arriving at 0030 hrs.

Mon 9 Dec: Work at 0900 hr.

Delayed for someone (Daggy) to pull me out of the bog. Couldn't do it with him 4x4, had to go back to town for a truck. Paid him \$15.00 cash. (gave 2 hrs of his time).

Done but to Shumilung to pump up tyres & buy drink. Then drove out to the Lithman River. (Mike Dumb-

Wetungy the canoeist) left vehicle and walked along the small stream of the Lithman River from the bridge to the Lithman mill into Shumilung lake. Started at 1200 hr., back at 1600 hr.

Dec rain on pages 26 & 27. Total fell 1435 hr to reach the D. Lake.

Went into the Pearl Lake at 1600 hr, then drove back to the old bog, burning reeds on the Lithman River (complete & strong road). Put foot in water and took pchly measurement along marginal stretch of water (see Wetland Survey Sheet for details). This took from 1720 to 1800 hr.

SUN 8 OCT 78

43 Red-eyed Diver

14 Red-tailed Duck

5 Sharp-shinned Hawk

Feeding in an area of very shallow water & diving most on the Spargelberg Plate, on road from Shumilung to Cornwallis. 1207 hrs.

etc.

Also on ~~the~~ road of track between me & Cornwallis. Also local birds. No birds at all on the side of the lake. 1215 hrs.

Several birds on old road - water level low.

No birds at all.

to Shumilung ranged from 25.8 to 24.7 ppt. on surface, 27.9 to 24.7 at 1.0 m.

Not fewer whose property the birds goes down - Owen.

Started but only vehicle & back to Shumilung for dinner.

Future Trips

Whisk - in a mud.

2 Buckets for scrubby forest

Cook + more 0.1 M HCl + available container

Make sampling bottle for inaccessible lakes.

Charitable sampling material.

- selected sk. - mummie

Robert Link-type: keep put + gear set

Quadrant technique.

Plant press.

Mon 9 Oct 78

Colborne River (see pp 24)

500 h. light vehicle

215 h. 1 pr white Skink

Photo 33 looking downstream.

1245 1 ad ♂ Skink with 3 Class III skink

adult skink

(2 or 3) with 3 Class I skink

and 4 Class II.

3 1 pr Skink with 4 Class III skink

Mon 9 Oct contd

1345 h. c160 Skink at first major bend of

river (a skipper contains shell of

mud, 1 foot system from all

but looking away at cherry board.

(skipper at extra edge line).

Last photo taken looking upstream

from this bend.

4 Gray Tail with 160 Skink.

6 Gray-tailed Snake

1430

1 pr Skink with 5 Class I skink

1435. Reached the mouth of the river - flowing

into the lake which is at a lower level

Approx 5-10 cm of flow left.

1505

1 Black-spotted Skink.

1510

1 Common Frog near the ramp.

1510 left the river bank at this stage

and headed straight for vehicle.

Future Trips

Which - in a nut.

2 Buckets for scrubby forest

Cook + more 0.1 m HCl + available container

Make sampling bottle for inaccessible lakes.

Available sampling material.

- stored sk. Monique

Robert Knick-type: trap pit + open side

Quadrat technique.

Plant press.

Mon 9 Oct 72 - Notes on migration of
Colombian River (see p. 24)

1200h light vehicle

1215h 1 pr with Skelton.

Photo 33 looking downstream.

1245 1 ad ♂ Skelton with 3 Class II birds.

adults (2 or 3) with 3 Class I & 2 birds

and 4 Class II.

3 1 pr Skelton with 4 Class II & 2 birds

Mon 9 Oct contd

1345h. c160 Skelton at first major bend of
river (is steep water contains sketch of
river, 1 ad sparrow from it)

last remaining orange and shiny bird.

(along edge at edge of tree).

Last photo taken looking upstream

from this bend.

4 Gray Tit with 160 Skelton.

6 Gray-tailed Gnatcatcher ←

1420

1 pr Skelton with 5 Class I birds

1435. Reached the mouth of the river - flowing

into the lake which is at a lower level

Again 5-10 cm of flow left.

1505

1 Black-throated Skelton.

1510

1 Crowned Scopsie near the camp.

1510

Left the river bank at this stage

and headed straight for vehicle.

Tues 10 Oct 78 cont'd

Plot 8 - looking upstream along
Caroling River ~~to~~ (first bend) from K.
Kehring - Kojung bridge

Plot 9 - stream.

Plot 10 - upstream along Caroling St. (last
bend) from K.H. bridge.

Plot 11 - downstream

Small stretch of water running above this bend.

Plot 12 (N1350710) Plot looking downstream along
Caroling River (from ~~bridge~~ ^{upstream} upstream of 7535.

Plot 13 - Upstream plots.

Sediment measurements taken on upstream side of
canalway

Time 1055h. Depth at side c. 15cm

Depth of sample - bottom.

Temp 17.4 °C

Salinity 12.6 ppt.

Small canker (possibly, maybe?) abundant
at this point. River flowing gently.

Tues 10 Oct 78 : Left Shadybrook Mill
at approx 0900h. Set off along
the road to Kehring & Kojung.

7 A 7535 - Cambridge River - Keweenaw Shore
Reserve (B.S.)

Byan inspection at:
1125 hrs.

1 Ring-billed Gull and 8 (Class I) shrikes

1 Cat.

1 Long Tail.

1 Gray Kingbird

1 White-faced Thrush - adult. Feeding on
fruit in the willows.

3 G. Tied

3 Wood Thrush

1 Gray Duck nesting at base of Poplar on
small bank of river.

1 Gray Kingbird

1200 hrs - reached western boundary of reserve.

Sketch of Elk River.

Invaded swamp at 1235 hrs.

During the morning I walked from upstream
end of reserve to downstream end, along
the north bank of the river. Checked
closely for waterbirds all the way, all
the way. On the way I shot along
the river. I lost a number of photographs.

(up to Photo 23 incl.). Presumably these
Photos were two of the Great Lakes young
(see above). Presumably many "bottled" young
on the way. No water samples taken.

Tail end used, growth abundant.

The preceding signs for water samples
taken - further upstream from the reserve.
(12.6 ppt at 17.4°C)

Water in reserve section of river was flowing
very gently.

June 6 1930 (Cambridge). Hot land. Took
Lobs: measurement on downstream side of Cambridge

Time	Temp	Sal.	Depth of river	Depth at S.E.
1404	29.3°C	12.0 ppt.	10m	13m.
1406	28.8	12.2 ppt	5m	3m.

At 1413 hrs began survey of section of river adjoining
reserve.

Photo 24 is looking upstream from reserve

Photo 25 is of reserve stretch of water.

Total Birds Seen Here:

- 1 pair Jay Tail with 6 Class II chicks
- 1 " " with 6 Class I chicks
- 1 pair Black-throat with breeding characteristic legs, chicks not sighted.
- 1 lost
- 1 pair Black-throat
- 8 Jay Tail
- 7 Black-throat / Young
- 1 small chick
- 1 small Black-throat

Call on the slight stretch of grass with just destruction of the F&F reserve.

Plots 26 looks down the slope of water.

Plot 27 is of the small irregular "pool" area with the field + Black-throat broods.

FORESTED SURVEY AT "1455" hrs.

1544 hrs: March 19051 "Carbury" Ch. (Clay Tree-bark)

Just water measurement on upstream side of canopy - birds flying

more strongly than Carbury Ch.
 Depth of Placement 24 5.12
 Temp 28.4
 10 cm 15 cm 7.4 ppt 15.21 hrs.

BEED SEEN WHERE: 1526 - 1600 hrs.

1 pair Black-throat with 3 fledgling young

20 Jay Tail.

(13 at least of these were Class II chicks)
 couldn't get close enough to the other 7 to class
 if chicks or adults.)

2 White-faced Terns.

Also recorded a Thrush.
 1 pair Spotted Thrush.

Plot 28

29 - Clay T. Pool from West bank.

30 - 1/2 of the water but just end of the F&F reserve
 31 - is the bank of 19063 - small reserve

32 - looking upstream from the canopy.

33 - looking at canopy with meter + P.V.

Forest at 1600 hrs.

Same onto 124007 Carbury Ch.
 (Borneo hill side). "Jaggeded" watercourse
 from 1655 to 1710 (white day, along

(16)

wind bank). V. venosa, flowering
 Took 2 photos, see Plots 24 of
 the lowest section, Plots 35 of the
 eastern boundary. No birds seen
 along westernmost edge of some fragments
 of shrubs & trees.
 2 Grey Ibis seen in pool on downstream
 side of reserve.

Foot. Water measured at bridge

Depth Pot. Placard	Depth to Side	Just downstream from reserve		
		Temp	Sal.	Time
20 cm	30 cm	21.6 °C	13.7 ppt	1728 hr
4 cm	"	21.4	13.4 ppt	1730

(17)

Wed 11 Nov.

Down to Lake Elyamung.

Water sample.

Sample bucket of water from surface
 at 200 boundary was on west side of
 lake, 2 m from shore (lake $\frac{1}{2}$ full)

Time 1035h Temp: 21.0 °C Sal: 38.52 ppt.

See Campy.

Under side

Time 1105 hrs. Temp - 19.8 °C Sal - 5.4 ppt.

Ag

Open area with Black Swan, Shagbills,
 Swamp Sparrow, Whistling Duck.

Cocoonia Swamp

Time 1140 h.

Temp 22.4 °C Sal = 81.0 ppt

~~1799.2 - 1799.3~~ - 1799.3 - 1799.4
~~1799.4 - 1799.5~~ - 1799.5 - 1799.6

2002 3/15/02

Thus 1206798 - driving from Perugia to Perugia.

~~16.11.1966~~ Mon. 1 pm - 5 Tuck & Chas. I

09076

Beverly Lake - Thru 12058

Take with him :

$$\frac{18.4^\circ\text{C}}{33.8^\circ\text{C}} \text{ of } \Delta$$

West Longk

18.3°C 42.1 ppA

d_{24} 18,1°C 32,35 g/g.

Depth 18.2' to 30.3' ppt.

Water $\angle 30.3^{\circ}\text{C}$ off the side

Chand. 18.1°C 29.5 ppb

DATE	DESCRIPTION	AMOUNT
1/16	8-100	295.00

M. 11/10 19.2°C 28.8 p.p.t.

18.6°C 22.8 m/s

5.0 18.0°C 20.0 11

(20)

21

Centering: 1.49 m.

1 Ad. Thick Tern.
 1 Ad. Tern.
 1 Ad.
 1 White-eyed Vireo. 2 + 2
 1 Gray Tit.
 1 Black Duck
 1 Wood Duck
 1 Snow-birded Tit. 14
 1 White Duck - 1 juvenile.
 1 White-eyed Tern 3
 2 Crested Gulls.
 1 Small Gull. 15 (at least 1 Ad.)
 1 Black Duck 1 ♂ by egg.
 1 Black-legged " 1
 1 Blue-billed Duck - 1 pr.
 1 pr. Thick-brown " 6 Claws I eggs.
 " " " "
 1 Black-b. & Red-b. Vireo.
 1 Ad. Nest (egg) with 4 eggs.
 1 pr. Thick-brown " 6 Claws I eggs.
 " " " " 4 "

Plus
-S-

Smiles

2 L/h.k - nested theme

2.5

See Webster's Dictionary for words of this type.

Ray Gordon 12 Oct 78,

7.0 - 7.30 Nigel Wildlife

Dirts - Paper Money Indian

W. W. Sh. Sh.

Belong

§8. UV-Bi Cell Types.

Bird Letter - 84.

(24)

Mon 16th October 1978

Sediment lecture - anazas + rosas sea of life.

Marine MolluscsMacbrary dome - regular flow
to the east of the line. Ingle
flow from the east of the line.Most of the soluble salt of the
barge is in the palated zone.Brin Sadler (P.D.)75% of total water
of road and rivers is surface

Soluble	Fresh magnet	mg/l		Dissolved Rivers
		0-500	500-1000	
Non Pot	Brack	1000-3000		
	Saline	3000+		4%

Adrian Peck (CSZ100)

(25)

Chlor. Molluscs : Dept of Agric.
Epithelium moreFront BotheringDarker in the eastern forest area can
more water (pH) + lower salinity.
Darker in the eastern area with
more salinity.Prof. Belkin (Hull Sept?)Plot - time taken to float salt.
500-600 mm sand up to 200-300 years
High up salt areas - 20-30 years.Longest east of Bothering line is in
a salt sandstone zone - Bothering.

End 20K Oct 78

North - Green R. 1010 hrs.

Common

Little Blue Cormorant

White Swan

Black Duck

Red Skiff 2

Common Sandpiper

Coast

Little Blue Cormorant 2+6

Pelican 10

Black-bellied Plover

Gray-headed Gull (3)

Gray Gull (red fin)

Fish 2

2 Chas II Black Duck challenges

Pair of Cat and 6 Chas II another Chick

Food/energy 1075' L

Shy Martin

Black-bellied Plover 4+

10.5 min 4 45 + 15 + 2 + 2 + 2

North - road - one all with me
new + long shell 4 segments - prob lost.
v. small chick seen in vicinity

Parkway Bridge

3 Cat? Chicks

Too no letters to make Impetuous crossing

1045 hrs.

Johns Sea Cans, Pelicans

Reds look like E. robin, Cas. + Pel.

Brown not flying obviously. Sight on 6'

Food/energy

Comment? note in E robin on the bank.

84 Blue Duck

1 White Duck

[Elm 50:4]

19 Little Black

18 Little Black

25-30 pairs - several pairs - large young

Wet 128 km. White flying 1 can see by

(30)

Wed 25 Oct 78

1600h c 0715 hr

[51-2] Plate 1 Velby
3 Tarkenton

4-6 - Lb. King
- Tarkenton

[8-9] 7-8 - near Lake (Tois Lake)

9 - Noman

10 - 2nd Noman

11 - Little White

12-13 - Arthur River Flat

14 - Yates

15-16 - Dumblyung

17 - Coburnie flats

18 - Womelbeaup

19-20 - Coburnie flats

21 - unnamed CR and bush

Only expected like would - a good no of Lx
22 bushy Lx

23 Lb. King - all of Lx and K.

24 Just West of Lake Klemmings

25

(31)

(Lake
Coversand)

[26-28] 25-27

[29] 28

R. of Coversand
- Figs Swamp

Pydalling Lake
- 8 x 6.5 m. 11 m. wide

[30-31] 29-30 31 of Coversand

[32] 31 Lb. King

[33] 32 Figs Swamp

[34] 33 Noman

[35] 34 Over the road from Lake

[36] 35 c. 2 miles W. of Lake Tarkenton

Thurs 26 Oct 78

[37] Plate 36 - Noman Lb. King

File 32:

[2-4] Plate 1-3 - Lake Tarkenton

[5-1] 4-5 - 4th and 5th T. figs

6-8 - Lb. King

9 - ~~not at this time~~

(~~not at this time~~)

28

9 Top out of Lake Tarkenton

53

File 53 (53:2)

Plots 1 (53:17) Hanging Swamp Lake.

- 2. " "
- 3. " "
- 4-5 - Lyons' Great Swamp
- 6-8 - Patchfield
- 10 - 17 days long - lumpy sk.
- 11-12 - Bayou Swamp
- 13 - 17 days long - lumpy sk.
- 14-15 - 5 Harmin's ponds
- 16 - 600 sk of Kinnickinnick River Park.

(53:17)

KWOBKUP SWAMP.

11/50 1 11/17/78

Wick River System.

Yellow-bellied Sparrowhawk

Tuck

Coat

Wick - raised 1000

small gale

Plots 17.18 1 low water - 9 eggs

Red winged black

Yellow-bellied Sparrowhawk # 0.25

Red winged black

1 17.18 1 low water - 9 eggs

low water 1st bill.

1 17.18 1 low water - 9 eggs

[53:20-27] 1 23 low water - 9 eggs

Plots 14-21 - 1 23 low water - 9 eggs

1 23 low water - 9 eggs

Plots

Plots 24 - 26 1 23 low water - 9 eggs

Plots 27 - 29 1 23 low water - 9 eggs

Plots 30 - 32 1 23 low water - 9 eggs

Plots 33 - 35 1 23 low water - 9 eggs

Plots 36 - 38 1 23 low water - 9 eggs

Plots 39 - 41 1 23 low water - 9 eggs

Plots 42 - 44 1 23 low water - 9 eggs

Plots 45 - 47 1 23 low water - 9 eggs

Plots 48 - 50 1 23 low water - 9 eggs

✓ Back Duct

✓ Nov 28 - Low & Freshet Peak
(not too tall) here -

✓ One white bird and duck with single (Nov III)
chick

✓ 1 (Nov I) shilling (Blackbird?)

✓ 1 Pair Intermittent + 2 (Nov II) A shillings

✓ Fire Valley shilling for Ross Light
(Guest Thine)

✓ Ingest the (Nov) (all end of lake
have done) : (Nov) the house
Chapter it holds water large then regular
also in the lake and suggest
flats of 5,000 still and
5,000 shilling Peak

✓ Like there is a small freshet
coming in the NE corner of the

✓ introduction of the Williams R. and the
shilling - Williams R. - many freshet
Crosses

✓ 3pm - Low
[1 shilling & 2 shillings] = 6
+ 2 shilling & 2 shillings

✓ Then work of 9.
Chin jump

✓ Pans 29+30
31 -
which are visible from West
" 5 ft out of water
(Lake 2' 6" deep)
Reg. by means of a survey

✓ A number of small compasses at need
seen (Nov) (Nov)

✓ (Nov III) (Nov) is shilling seen

✓ Freshet Peak - (Nov III)
+ 3 shilling (2 shilling with
some need to the lake - one more than
the other)

(38)

Sabine's Gull. taken at NE
 corner of old lake at 1130 hrs
 - using a bucket to
 sample water 20 meters from
 edge.

Temp 21.8°C
 Salinity 0.8 ppt.

From Eastern Vedge (20 meters out
 at 1650 hrs)

Temp 18.8°C
 Salinity 0.7 ppt

1 Little Blue Duck 3 legs taken I
 (also 24.7) Gulls.

(39)

Wind 1 Nov 78 1840 hrs
 Very strong like - ENE corner
 20 meters from

0.3 m deep at 0.4
 Sample by bucket
 Temp 26.0°C
 Salinity 35.3 ppt.

3 Nov

~~31 + 32~~ = 10000 - 10000 = 0
 { 31 + 32 + 112 } = 10000
 above the 10000 line

Three sheets of chlorine (from the end of
 the chlorine road is the point on the
 south of the suspension of suspension
 10000 meters (meters)
 about 2 km to S. (S. 10000) is the same
 of suspension (1610 km). All of
 these were found at the edge of the
 sand/water bank is the chlorine

The seed + seed bank is $\Rightarrow$ v.
 important as habitat. No
 falling of the shoreline as
 shown in the photo should be
 permitted. Following bank is now
 to be preserved - as need
 for improvement of shoreline for
 human use from end of
 brown road to the deep house.
 Action should probably be
 subject to total planning (or
 related as food water?) and
 variety of bird habitats should be
 provided - Water involved
 should F&W be in providing
 advice? - AAC. All this
 info is needed for next B&P
 meeting.

[54:4-5] - [Photo 3+4 taken on this
 shoreline with telephoto lens.

14074407 RESER P 23466 Carrying a line
 at P. 14074407

[54:6] Photo 5 - upstream side of William R. bridge
 showing PWD V structure - broken up
 water) - 4 Gray Duck in the
 area - 3 blue 1 black duck + possible
 brood of Black Duck. One Black Duck
 gave screaming friendly display.
 1 Little Black Cormorant seen.

Along the reserve section of river I saw
 one L.P.C. only + Vegetation of river bank
 is a fairly uniform stand 15-20 m high
 of Mackenzia (trees with big trunks). This
 was heavily in flower. Amongst the
Mackenzia were smaller by that E. radiata
 (smaller type) - the byt ground of the reserve
 is 20-30 m mixed Mackenzia forest,
 with a few radiata (spine) and some
thicket. Ground cover is grasses +
 well grazed. One sheep encountered
 corner of reserve is used as paddock.
 On returning to the bridge the area
 4 Black Duck + 1 White Duck
 seen on the opposite side. Eggs

Photo 13 - old timber fallen over
 Still visible for some way.

Water up to 45 cm deep.

Teaching Lake - 1620 hrs.

Gauge 1.74 m (approx - uneven)

Sediment - bucket of water from S.E. corner
 band

Temp 22.8 °C
 Salinity 14.8 ppt

Bucket of water from pool side of
 band

Temp. 22.4 °C
 Salinity 15.0 ppt

Loc. 23659 (Teaching Lake) (one of the 2 White Lake lakes)

Temp 24.5 °C
 Salinity 7 ppt

Sample taken by bucket 15 m from
 shore at NW corner of lake (where
 forest is near X). Dredge sample also

approx 30 cm.

Boots seen Black & brown
 Timber seen dark

Coat

Gray Tail
 & Shovel.

Photo in old steel bucket - inside

Gray-brown

WHITE WATER LAKE
 North White Lake Lake

Time 1520 hrs

Temp 27.1 °C

Salinity 17.7 °C

Sample taken by bucket 10 m from
 edge (end of road) - 25 m from shore

Depth 30 cm

Boots seen Black, ~~Black~~ & Tan

1 Shovel, 5 m.

Salt River

1640 hrs

Not visited.
 23817 (one of the)
 Quaternary Basin.

✓ 6 Red-capped Larks

✓ 7-7 Feet 53.4

(476)

✓ 2 more pairs of G. Eel displaying

✓ 150 Gray Tule

✓ 15 Bullheads

✓ 2 small fish

✓ 1 Clam III Tule

✓ 1 Adult Tule with 4 others II C. Shadys

✓ 1 B. Bullhead with 3 Clam III Shadys

2 Pelicans

→ Salinity Approx 58 ppt.

Temp surface 27 & 30 °C

Rogers? jenny Nuth

sampled by bucket 5 m from shore at Vough and water 25 cm deep

Lake Mem

1805 hr

Temp 24.2 °C

Salinity 6.2 °C

Depth 1st net 60 cm

2 bucket just

North shore of Lake near tree with

Zygones

(477)

Sun 5 Nov 78

Time of sample 12:15 hr

Nonetting Lake (near fishing)

Bucket sample from Nonetting (last 15 min)

to with bucket to which sample taken in 25 cm

depth of water; 30 meters from

shore edge.

Temp 28.3 °C

Salinity 27.1 ppt

The water of the lake within abundant weed growth (thin stands of trailing, flowering weed - Ruppia? (don't think so))

Chaetetes (Chaetetes?) abundant

(2-3 mm long, brown or gray, head

entirely buried in bubble cage)

Chaetetes also present but this

abundant

(2-3 mm) also present. The star

was present in bucket sample in

abundance.

(48)

Sum 542 New limited -

Pale River Reserve N° 77833.

1600 hrs

c 20-25 Wood Shrike

1 Whitehead Noddy

2-4 Gray Seal

2 Black-fronted Albatross

No signs of waterbirds breeding.

River flowing freely. (No waterbirds visible in the pool area). Int.

(Gambusia?) abundant. River frogs

with Phylloniridia & E. nodis

Very little vegetation on shore

stream - abundant grasses.

Plots 14+15 looking upstream (across) from mouth end of old pool.

1640 hrs - Rainy 6.1 ppt

Temp 26.7 °C

(49)

P. 1000 Lobe Development

6,596 m²

Peter P. 1000 Lobe

Griff Lobe > - P.D.

Sun 12 Nov 78 - Petrel Survey at

Lobe about 1st Peak.

[54:19-22]

Plot 18 - 21 - Lobe Lobe.

22-26 Lobe Ch. King + New Longa.

27-30 Maudslayi Bunting at 1st (1st (N)) & 3rd Lobe - 1st (N) (1st)

31-32 looking south along the shore

35-7 Maudslayi - 5th Lobe.

Plot 55:

Plot 1 - Keweenaw Lobe. (N)

(55:2) 2 - Bidartina (W of 1st Peak)

(55:4) 3 - 1st of the Bidartina Lobe

(55:5) 4 - Tardigrades

(55:6) 5 - Blue Green Sponges

(55:7) 6 - Maudslayi? (W of Bidartina)

(80)

16-11-78

Antbirds Lecture.

Antbirds - Antbirds born virus

"MVE" - was called Antbirds Inc. Virus

"Kungin" also ...

REV about 90 beyond the Yellow line.

Isolated 2000 virus in Kananara region.

Kananara - Kananara.

Isolated virus in Port Hall - Jodhpur.

Kananara Sumps.

WA 1440 Dumblyung 1:350,000

Run 13 NW 5107 - 5112

Run 12 NW 5057 - 5060

1:40,000 Pij 1728.

(51)

Mon 27 Nov 1978

Injection of ticks with plasma

W.C. Kynedy M.H.

"Boy Lark" property; just east of Mudgee.

Chimps? of freshwater lakes

Thinks seen Pink Sk. 15

L.P. common 110

White-necked Kestrel seen.

Ammonites W - 1 Kestrel 1

Not Doves But Noddy-like - 10+

Don? LBC + DC ? earlier to see

Plumbeous 10

Black Duck 5

47 King Head Gulls

Black Duck

King Tail

Red Shrike

Greenback 3

Red neck Duck

Shoreline 1

A-L, Hk Gulls

Best Lake (Start Lake)

Time 1230 hrs Temp 25.8 °C
 Sol. 32.6 ppt.

Egg 51 mm x 36 mm
 in nest & flut up in tree
 - found near Duck.

Wojan Lake 1450 hrs

Temp 27.1
 Sol. 4.3 ppt.
 Duck caught - N side 10 m from edge.

c 20 Grey Tail
 a few Black Duck
 c 20 Pink Eggs - 1st with 3 Class II
 1st with 3 Class I
 c 20 Coots - 1st with 5 eggs.
 a few L PC

1 single day & nest.

Caddy Lake (c 10 km WNW of Lake)
 Joanne Plains property (53)

Thu 28 Nov 78

0815 hrs

Coot.

1 ♂ Blue Duck + 1 + 1 + 2

Plumbe Duck

Red Warbler

L B Cormorant

1 ♂ Pink Duck + 1 + 2

1 Swan

Grey Tail

H. G. G. - 1 displaying

W. H. H. - 1 in display

Black Duck + 2

1 L PC

Long necked Tortoise

2 Crested Grebe.

2 ♀ Pink Duck

Shoveler

3 White Eggs Pink

1 Horned Grebe (Class I)

1 ♀ Blue Duck

(54)

Thurs 28 Nov Cont.

Joanna Plain Property via Cobby.

Time 0920h

Temp 22°C

Salinity 1.07 ppt

Drilled sample 15' water from NW corner of lake.

Joanna Lake Cont.

West Lake South

1030 hrs.

1 White-necked Heron

2 H. L. Grebe

♂ Mask Duck

1 Shoveller

1 White-necked Heron

2 LDC

1 Black Duck

Cost

1 P. Pint. Green Duck with 5 Chicks

1 Ch. L. Grebe

Plates of W. L. ? & W. L. Heron

1 Pint. Green Duck

Joanna Lake

Small Hill

(55)

Thurs 28 Nov. Cont.

Time 1200 hrs

Temp 25.3°C

Salinity 1.08 ppt

Water at least 2 m deep

Turnout - 6-4 km NW of Cobby.

Joanna Lake Cont.



Drum Major

Pygmy - continuous

Alonso (Eleno)

Join continuously - birds 4000

Not rec. continuously due to cost factor.

Pygmy - 1.0 m tree to birds

Pygmy - one 10x jump

not to be used continuously

end product - pink (pink grains in birds)

4% body load for eggs.

Don't forget
how

Payroll & heavy - once per month.

How many per month

Bro. Keith Barst
Phil Helbert

also include them for the week, just
expenses.

Flare lamps - \$102 10,000
- expense of labor

One day per month for 2 in summer.

Overflows - one person changed in side
for labor cost.

Refrigerator - \$330 - 1 person
- buy 2.

Line of bugs: but needed.

Wish had range at skin 290.

\$5,000 - \$10,000 of ASD.
\$2,000 - money skin
(complete)
\$3,000 to run project.

85

Seligs - Pöschmanns

Dec 13 Jan 1978

Ernestine of Swamp between Morris &
David Kenneth property near Duncraig
(referred by John D. McKinnon)

13560

Corey Tech

Edward Clark

Black Duck 14 +

İkbal

61

Secord Snyder

W. F. Kuhn 2

Wm. H. H. H.

by net.

65

L.H. Pitt Commonwealth.

Thank you.

Conf

Must a little ~~small~~ gauge - 2 shells and 2 mags.
one next door?

Black-f. Dipped 2

1. *Sp. 100.*

1. Kiesel.

5 + Red-kneed Doves

2:30 Bk. delivered - long arc of
water within to west ledge.

W. L. L.

Phonetic - Chinese when

Good Luck

Grabe nest with 3 eggs (colony)

(60)

505 13 Jan 73

Yellow Lake Depth Gauge

1.28 meters

1940 cm

Gauge read 1.74 on 4 R. the
 → down by 0.46 m in 26+31+17 days
 = 0.46 m in 70 days
 = 0.007 m per 10 days.

Carbondine Pool (Arthur River) Jan 16 Jan 73

Total 1030 - 1045 years.

55 Little Fish Count 1 + 2
 Black dirt - 1 + 1
 6-10 2 Little 3 Corn
 3 Shrubbery 28, 19
 1 1 W. H. H. (black pebbles on top of ramp)
 1 mixed. Dark (black pebbles on top of ramp)
 1 fine.
 1 Corny sp.

Jan - 9 covered 16 sides of the pool

(61)

Wed 17 Jan 73

Killing Swamp - Korooro

Even Thins!!

Grey Curlew

c5 White-bellied Tit in 1st lake

See-let Horn (C)

2 (Jaws) H. G. (non flying)
 with 1 adult

Lake 593775 just reference. (1: 250, 000)
 large brown dog lake - salt pan.

Lake 598777

Lake 598777. Shallow water tank - v. noisy
 that Salt crust on top of tank. 10 birds
 double large area of water.

Lake 586265 v. low - no birds
 salt lake.

Yellow Lake - dry salt lake.

Fishing Lake - dry as a run's pit
according to nearby people.

18 Jan 79.

Johnson Bay (St. John)
Banks.

~2000 ducks

many Gray Tail - 2 Chicks

1000 also 1 Parula's Nest.

1000s Chestnut Tit

1000s Parula's nest short

1000s Shrike

~100 Black Duck

~20 Black Duck

~100 Parula's golden

Parula's - c. 1000 - 2 glauc

2 Parula's - n. short

2 Cowbird Song

3 Hay - S. L. b. eggs

1000s Parula's - 1 chick

Cost.

14 sp.

Banked Sh. H.
Nelson's Spar
White-f. Chat.

17 sp.

800 gr. Yellow flowered in things
(down to 400 is 2 lines)

thayly foot water ~1000 g. fish.

They have nesting under the water.
Rural water level is below Molluscs.

Water diverted for the first time

This result water level (paved) by 4 ft.

Water is left into the water level.

Now you fight through the summer.

Working

Cost water - the Molluscs

Swamp also water.

Parula's nest in enclosure - today in 6m.

Parula's eggs to nest in Molluscs.

Also also rural Parula's.

They have nest in Molluscs on water.

Wrote to Jan and got him to
send me a photo of you
when - flower (pale blue).

70366

Samples of young *Melospiza* taken
along way.

1. Chorus 6-7 years ago.

2. ~~Wrote down one sentence, played the~~
rest, & ~~included~~ ^{played} ~~pasture~~

3. Chorus when - ~~yellow~~ - ~~day~~ - ~~light~~ -

4. When played again next sentence - put
to close

5. ~~Sebring~~ ^{Sebring} ~~musical~~ ^{musical} ~~character~~ ^{character} of ~~Chorus~~
(~~built~~ & ~~base~~)

6. ~~Wrote~~, wrote again to be
misery - ~~activity~~. To all for
dies, good for school.

7. ~~Wrote~~ ^{Wrote} ~~from~~ ^{from} ~~June~~ - ~~Oct.~~
Tells the ~~how~~ ^{how} ~~along~~ ^{along} it ~~course~~.

8. ~~Wrote~~ ^{Wrote} ~~how~~ ^{how} ~~with~~ ^{with} ~~joy~~ ^{joy} ~~in~~ ⁱⁿ ~~our~~ ^{our} ~~eyes~~
if not ~~enlarged~~

9. ~~Wrote~~ ^{Wrote} ~~would~~ ^{would} ~~prefer~~ ^{prefer} ~~about~~ ^{about} ~~to~~ ^{to} ~~looking~~ ^{looking}.

(66)

(Cloud to clearing 1978-79 season)

Wed 21st Feb. 79

Woolly Turt. Abundant?

Dromas *olivacea*

2 *Dromas* *mergersii*

E. tegitina (Blackbird) - 2.

Archidromas fruit

Quail.

White Heron in Swamp -

Pied B. Pitt

Pl. eye & lake

Dromas *olivacea*

E. Camaldulensis

Mel. (turt. hole?)

D. cyphophylla on grass.

c. 20 W. Heron

2 *Archidromas*

Black Duck flock 3

(67)

Grey Turt. > 20

Interspersed Duck - flock of 20

Belted Stilt - 2

Black-fronted Duck - > 10

Red-bellied Duck - > 10

Common S. grebe - 1

Wood Swallow - 4

Coot - > 10

Hairy-L. Grebe - > 10

Mallard Duck - 1

Swamp Duck - 9

Little Grebe - 2

Black Duck - 2

Swamp to the west of Swamp Lake

Wading water

Swamp of 100 Black Duck
some G-Turt. (< 20) c. 100 Pied S.

Black Duck flock - 100

Swamp - 200

One Merganser with Black Duck.

Little Grebe flock.

(68)

[56:2-4]

Photos 56:1-3 incl.
of central Emb. Lake.

Eastern fence - 5 strands of wire thru
2 of better wire. Wood posts
c 15' apart. No fence back on
east fence. (except for section 100 m.)

[56:5]

Photo 56:4 : Saw 1000 strands
in Mingo Brook c 800 m. section
from better looking fence.

Double fence, long section boundary,
east back in the boundary track, no fence

No fence on road side ~~photo 5~~

(Cattle Fences)

Don't see same as east.

Water sample was taken from western
edge of southward lake. Surface
sample at water edge in 12 m of water

See Section 3.4 pp 4.

(69)

Saw found Eucalyptus designs in the
same area. Block of Chrysomelids collected.

(70)

1 Spring Wells Property 28 FEB 1979

3,000 yard stream - new dig.

Loss 4'6" of water off heavily
sloped dam.

Shore in cove now visible from cove
will not. Eggs in water.
Fish caught north of property.
Note was made of great Southern shags

1. "Leaves" - Holly M. L.
(Under Tree over the "Leaves")

2. "Flowering Will" - Shirley Jefferson.

(71)

~~The~~ ~~Spring~~ ~~Wells~~ ~~Property~~
Ten Spring Wells
- same section

and - 2 to 4 photos over 5000
dam.

Let the page - 0.99 meters

18" reaching along boundary stream.

1555 hrs - End in low flow at "Pines"
(one end of old Mills)

23 (day Feb)

3 (March)

5 (High Grade)

6 (High - Low Flow)

Good collection NK 34,189 (Dorset 1:100,000)

1615 hrs "Swallowing Pool" on the River
 River - approx 500 meters long and
 35 meters wide - appears to be permanent
 the left fringe of Comarostaphylis
 particularly on right side.
 Some E. ruber as well.
 Dark observed

c 140 Gray Teal
 2 Black Duck
 1 White-faced Heron

1:100,000 (Good reference is NK 422138
 (Broken 2333 sheet))

above Peepfong
 slope change 0.96 km at 1655 km
 slope level 1.28 m 1000 Jan
 and 1.74 m 4th Nov (= 0.657 cm/day)
 Since 13th Jan it has dropped 0.32 m in 46 days
 (~~0.657 cm/day~~) (= 0.657 cm/day)

Survey of Wetland Nature Reserve of
 Complex II - J. Lane & G. Pearson.

June 6 March 79 Approx 1030 hrs
 Stopped at permanent pool in Kelsoa River
 on the Whangaparitua Peninsula - Whangaparitua
 822778 (NZBator 1:100,000)

Bird seen were 1 White-faced Heron
 c 15 Black Duck
 c 5 Gray Teal
 c 5 Merganser Duck
 c 10 Little Red Cormorant.

Chart collected one little sample of water (13.9
 pH) took 2 photos - 56:8 & 9.
 Merganser & E. ruber feeding the birds.
 Duck (gray) appears to water along both banks.
 Great Lyrebird numerous along stream.

1100 hrs - 1130 hrs. Stopped at A 725386
 on the Chillingworth Road (Map ref 980778 &
 Mangrove 1:100,000). Walked to
 western edge of lake and out onto
 shore. That - bottomed lake
 with approx 5-10 cm of water over most
 of its area. No visible life in water
 or mud. Surface of mud bottom
 covered with c 2 cm of grey silty silt.

(72)

1615 hr "Swallowing Pool" on the lower
 River - approx 500 meters long and
 35 meters wide - appears to be permanent
 the rocky fringes of *Conocarpus* dense,
 probably on south side.
 Some E. nests as well.
 Bird observed

c 1400 Grey Teal
 & Black Duck

1 White-faced Heron

1:100,000 Great River is NK 422138
 (Doubtless 2333 sheet)

above (Necking)

approx 0.96 km at 1655 hr.
 large head 1.28 m 3rd Jan
 and 1.74 m 4th Nov
 Since 15th Jan it has dropped 0.28 m in 46 days
 (~~0.28 m~~) (≈ 0.006 cm/day)

Reverse of (73)

Complex II

<10 double Red Composites.
 Great collected one little sample of water (13.9 pH)

G. lost 2 photos - 56:8 + 9

Melrose & E. nests among the banks.

Black (slugs) appear to make long tall banks

Great found numerous sphagnum cells.

1100 hrs - 1130 hrs. Slipped at A 25386
 on the Chillingworth Road (slip by 980770 ±,
 Many Poles 1100,000). Walked to
 western edge of lake and out onto
 alluvium. Flat-bottomed lake

will appear 5-10 cm of water off one bank
 of its own. No small life in water
 or mud. Surface of mud bottom
 covered with a 2 cm of greyish silt.

九七

[56: 11-13]

All goodly method and some pluck
wondered at her. Sam, Peter

Handwritten signature

See Notes

~~56-10-12 mil~~

No books

tracks of ordinary Blackbird seen - clearly

engaged in the old. When I was

Leban (in bottle) salinity was $\frac{316}{\text{ppt}}$

(see below) advertisement 5 pages further on

57

Lake Powell

-27-

答

2003

121

Kelly

149

21

25

(76)

Aerial Survey of Lakelse River
Completing 11

Tues 6 MAR 479

Approx 1310 hrs → 1630 hrs

Lake Louell ← Photo Vetter Nos.

-27

Mill Brook

-121

Kelowna River

-109

T7B

-93

Plains View

-110

-90

Upstream

-123

Mollusk Bay Pt

-108

North Lake

-29

Pelham River

-28

MacKenzie Lake

-106

-104

(77)

Reservoir and some other wetlands of
Approx 1310 hrs → 1630 hrs

-56: 4-18 incl.

Photo ? → 23 incl

[Film 56]

Photo 23 - end of film

[Film 56]

← 142 - on the way to T7B

[Film 57]

Photo

"

← Photo 12 (dam on road)

"

lake Corning 96023

← Photo 21

"

→ Photo 24 ? ... → 24

← 9814 . Photo 25-26

"

[Swamp to June Day]

Up to Pelham River

Photo 33-34 - Quachays Lake

Photo 38 - Toots Lake

→ Photo 4-6 incl.

[Film 58]

Shady Lake

South Whistling (926688)

"

Kelowna (Kelowna) . Kelowna River to Quachays Lake

Film 58

142
3 NW of " "

Then 7A25386

and some of Two People Bay area
(mostly for Angus vegetation)

Summary: Took off from Albany airport
with Grant, and pilot John
Bell in Cessna 182. ^{and}
approx 1300 hrs. Near a
approx 1,000 ft along plateau with
Alton of Wetland Nature Reserve
and some other wetlands.

Discovered at the large number of
wetlands still containing appreciable
areas of water.

Complex 11 is certainly a major
of small wetlands. Many are
~~large~~ ephemeral and most of these

have been cleared and appear to be
used for summer pasture.

East of Pilling River, in particular,
many ~~wetlands~~ wetlands (greatly owned
or leased) still have ~~substantive~~

dense stands of timber covering them,
most of which is in healthy condition.
That, if not all, of these had water
in them.

(then 1:100,000)

1:250,000 maps give better representation
of the significance and number of
small wetlands in landscape 33. Looking

they appear more obvious on the 1:250,000

Sketches of the Queensland (then
(Southern edge of Shading Range National Park)
and of 726264 and 725386 appear

to be of quite different character to
those further south. They are large
open salt lakes, not closed

heavily timbered forest (?) or
brushland (?) lakes.

Wed 7th March 79

Moose Lake 0835 hrs

1 Little Red C.

Water is v. v. clear brown - v. little light transparency - also greener than one seen at dusk. Also some birds.

On open lake. Some small patches of Cladium around edges.

3 stages Black Cormorant.

Lake appears to be too deep to be anything other than "open".

Up the channel. 1 SC crow of lake

1 Swallow

1 Kingfisher (Small?)

4 Little Red Cormorant.

1+1 Black Cormorant.

Left foot and walked south-west to first swamp (at NE end of clearing and stream).

Swamp has large area of Typha, also some Cladium. Only 3 Black Ducks at one.

Secret Kingfisher seen.

Swamp has been cleared to water edge.

is further than shown on 1973 photograph.

Walked there to west lake west (part shown on west end north side) the large area of open water, also bed of Typha & larger bed of water.

One Pintail but seen in open water. Crows of one Great Canada Goose found at water edge. Chest much as when out by pasture. No other birds seen 0805 hrs.

Water of these two swamps is also v. clear brown and appears to be deep (at least 3' deep) - green water. Back to the boat at 0840 hrs. No measurement taken.

Temp 21.8° Slightly 0.3 ppt at surface & bottom.

Measurement at centre of lake

Surface 21.25° C + 0.3 ppt

1.0 metre 21.2° C + 0.3 ppt.

(under slight pool over 1.0 metre, Piche not used) 2 Black Ducks in this pool.

- 2 Ad. White L.
2 " Red C.
2 Shorter

All in 2nd of 3 Poles which look off
from South end of Plover Lake (go through
narrow fringe of Chama, the best water,
then west).

Middle of 3rd (the narrowest) Pole.

Surface	23.3°	0.4 ppt
1.0 m	21.8°	0.4 ppt

Water just over 1.0 m deep - collected
one probe.

Now 4 Black Shrike.

Centre of Plover Lake between two
branching ribs + opposite Sand Lake

0825 hrs	Surface	22.4	0.4 ppt
	2.0 m	21.8	0.4 ppt.

Light just over 2.0 m.

Just of 5' grass terr. + 1 LDC

In the burned area at the SW corner
of Plover Lake were

2 LDC

1 Very sh. Shrike

1 Short Shrike.

Water deep + short.

1 Moss Hen

By the river at west end - few no count
9". Saw

2 LDC

1 White-L. Hen

1 Ground Squirrel.

On the way that some Plover Lake to
the which we saw a White-L. Hen
on left bank. Reached vehicle at
1030 hrs.

Dehany Lake. (Water from 735386)

$$\frac{x + (9 \times 0.4)}{10} = 32.0$$

$$\Rightarrow x + (3.6) = 320.0$$

$$\Rightarrow x = 316.4 \text{ ppt.}$$

Photos film 58: ? $\rightarrow$ 38 mil - panorama
of Gardner Lake (TDS)

Lake Powell - Panicked boat
into new bridge lake at western end.
1410 hr.

- 1 Cat + numerous
- 2 + 1 Black Duck + 35
- 1 Hk Grebe -

4 Clear II C Blue-billed shrikes

Entered Lake Powell (a long narrow phony
up drain from the lake)

- Black ducks + Grebe swim with the lake
- 2 Black Swans - lake
- 1 Pintail Duck at edge of Chalkman.

Lake Powell Corral:

80 Black Duck corral in SW corner of lake.
another 35 + 18

Cost $\approx 30 + 50 + 50 + 90$

Plant Duck 5

~~Small Duck~~

Gray Duck 2

Pine Duck 2

Swamp Hen 1

Little Grebe 6

5 White-f. Hen

≈ 20 14 h. fish in single flock

Water above Pan Photos Lake. The Pan

width is 0.8 m of water.

Swamp Hen of lake is primarily

Midland Green and Chalkman fange.

Blue-billed Duck - 58 counted

+ rest of ≈ 30

est 100-120 Blue-bills.

2 Siskin

6 Redbreast

68 Shrike

Jeffrey Bridge as field limit of
the Kijikukuk - over the ridge
White had slope approx. 0.3 meters
River plenty over ridge.

Back to school at 1845 hr.

John Edwards - 230

Thurs 8th March '79

Chadwick Lake - boat survey.

5 Mont. Duck + 7 [Est. Total = 40]
5 W. H. H. + 3 + 2 + 1
5 + 9 Gyrfalcon
1 L. P. + 1 (see total 2)

Temp 20.5°C + 2.8 ppt.
1/2 meter deep 20.5°C + 2.8 ppt.

1 Snow Geese

1 Lesser Tern

1 Red-c. Duckbill + 2

2 Greenlet.

4 + 2 Black Terns.
1 White-headed Sea Eagle.

bel: 2.8 ppt 19.6°C surface
2.8 ppt " 25 cm deep

to Black Duck

Seige sample - 3 species.
(mostly "Bony Seige")

There is gravel to boulders, the "Snow Tree",
the Bentail. Some typical pebbles along
western shore.

c 50 m. deep hole - down to 70-100

Depth 1.4 meters. Temp 19.9°C. Sal 2.8 ppt
Surface Temp 19.8°C. Sal 2.8 ppt.

1 Lesser Grebe with 1 large young

4 small myristicine flying by.

Back to school at 0815 hr.

(90)

Agave Lake 0825 hr - 1020 hr

Surface 21.5°C at 0.55 ppt
Bottom 21.4°C at 0.55 ppt (Depth 18 m)

A deep feather sweep with sediment
mostly covered by Chadonia - uniform
shells

Shells seen - 5 + 3 Mint Dots
1 W. H. Horn

2 L.P. Comenets

See Plate.

Imagined Boat Sailing at 1020 hr.

Depth of water in Chadonia area was approx
1.7 to 1.8 m. depth in center of system
water went as far as 2.1 - 2.3 m.

1240 hr That is last note of Agave Lake.
A lake problem - 59: 1-6 m.

Saw 3 Scunglans in the lake from this
position. (W. H. Horn) arrived on flathead Alton
- over water)

(91)

Lake Pleasant View 1345 hr.

Black Swan 2 + 4 + 2

Black Duck - c. 10

Shelly Grabs

Whistling Kite

1 Little Pied C.

1 Scunglans

Surface 0.25 ppt 22.3°C

Bottom (0.8 m) 0.25 ppt 20.5°C

Seeds!!

3 W. H. Horn

1 Mint Dot

4 Cods + 2 + 9

1 Whistling Kite

1 L.P.C. + 1

1 Mint Dot

1 Little Fish (offshore) it was one of same -

appeared to be feeding - numerous grasshoppers in the area.

Wt the dam - 10 LPE + 1 LBC

+ 2 WPH

Plots 59: 7-13 mid - perimeter of lake (and then) from NW corner.

1 Marsh Heron + 1

1 LBC

WPH - 5

Plots 14-16 looking small along western boundary of reserve - opening from west to east

Plots 55: 17 : looking from same position in same direction same ^{to} view of reserve

close to the small lake (swamps) on eastern boundary of reserve (on private property)

They are permanent water - grassy edges large populations here (M. erythrogale?) summer in the swamps. 2 few E. near

at edge. Looking down for water, (along + cattle). ~~They~~ heavily disturbed about. Birds seen were 2 Blackbirds,

gulls 40, Chy Jack 210, 1 WPH, 144 Gulls 5+, 1 Cat, 1 D. Shrike.

This type of survey is totally sufficient

to lake present view and would be good to add to reserve, as

Temp of water 24.1°C, Salinity 0.2 ppt (Surface sample). 1 LPE. Ethen north of ? LPE.

Point

South Lake side 72385 1730 hrs approx (this end of the reserve)

Salinity 0.6 ppt Temp 24.9°C Time 1735 hrs Water sample from small inlet of lake - knee depth water - surface sample.

7 Most what #2

1 Blue Bell - short + 1 possible

4 Small Gulls

2 Small Gulls

1 LPE

2 Swamphen.

1 Marsh Heron

1803 hrs.

TRIP 3 APR 79 0810 hrs

On Palmdale Road, just north of Poplar Hill Junction.
Area of forest pasture on east side of road - approx 1 ha.
Ca. Loc. 6355 (Tr. 150, 000)

- 53 Ducks - 1 Ring-billed Gull - 39
- 7 Black-billed
- 2 Herring
- 5 Ring-billed
- 9 Black Swans
- 2 White-tailed
- 10 Stellingsma
- 2 Moorish

Shallow freshwater pond near the edge of the forest pasture & have seen

Lake Corangays 0830 hrs
2 LRE + 3 (abundant)

- Moorish
- Moorish Duck - 2 seen
- 7 Shov. - mostly this
- 2 W. t. Horn
- 5 Swamp - seen - 1 seen
- 6 Coot
- 3 W. t. Gull

Water depth 0.7 m of water
Surface 20.7°C, 0.3 ppt. 09.5 hrs.
Presence of pollen when from soil side
At 59: 17-23

On the edge swamp. Open water
surrounded by vegetation, the smaller
finner edge further back. In nearby
country 59:53 to 59:55
Black-billed Ticks (M. l. c. 1000?)
Phk 55-59 of 100 in 1000 (100) in 1000.
- east side of Lake Corangays

Fog clouded (at least 2 quies) and
remains of "Yellow" around edge of lake.

Phk 60: 1-5 Presence of swamp area to the
NE of Lake Corangays - taken from ENE side. 1055 hrs.

" N. J. Swamp. - 1200 hrs.

- 1 Moorish
- Little Green-backed
- 1 W. t. - 1000 hrs
- Shov. - 27 counted.
- Ring-billed
- 2 1000 - 1000 hrs
- 1 Shov. - 1000 hrs

2 *Periplaneta*
 1 *Blattella*
 2 *Lepidoptera*
 small *gryllus*
 1 *Blattella*
 1 *Coleoptera*
 1 *Blattella*
 4 *Blattella*

110 *Blattella* counted, +20
 Ratio 60:6-10 inch

Lunch - 1215 - 1300 - Then report with *Blattella*
 726385 - East Lake

2 *Blattella*
 1 *Blattella*
 9 *Blattella*
 1 *Lepidoptera*
 1 *Blattella*
 4 *Blattella*

Final 14700 h.

Temp 25.0°C + 0.7 ppt.
 Surface - 0.3 m. near eye
 Fish 60: 11-15 inch *periplaneta* from West Lake
 Fish 60: 16 [60:13-16]

[60:17-22]
 Fish 60: 16-21 *Blattella* Lake
 from West Lake 14700 h.

1545 h. Report of "Sunday Swamp" (200544)
 One large *Blattella* "Blattella" bird

98

1628 km - 16367

at end of Mollucanulop Creek. Many Stone.

- 38 Heavy Leadstone
- 2 Blue banded shale
- 2 S.F. Horn
- 1 Pink shale.

Brook in at 1635 km.

60:25
[2:61:2+3]

- Under km: 6 HZ Gneiss
- 1 Gneiss C.
- 2+2 P.C. + 4 + 8 + 1
- 3 Gneiss
- 4 Horn. Mott Horn
- Thin Gneiss
- 1 L.P.C.

1 WEH.

- 7 Gneiss
- 3 Schist
- 4 Horn. banded + 1
- 2 Schist
- 6 Horn. banded

99

1712 km - 1712L

23.5°C at 1.7 ppt
22.7 at 1.7 ppt (1.0 miles)

- 2 Black shale
- 1 Common Gneiss

22.2°C at 1.7 ppt 2.0 m
22.8°C at 1.7 ppt.

- [Same at 2.4 m - middle of lake
- [Same at 2.0 m.

Deep L. at 1740 km.

- 1815 km 1 Polaris
- 1 W. Horn
- 1 Pol. Horn + some.
- 4 Gneiss

11 Gneiss
2 Horn. banded

Thin 1905 km

Kath ... 144 Sargentia for Blang.
Herald Smith has from ... Key ...

Yellowing Lobe 1015 L
1 WFLH + 1 + 4
1 M ...

"White Point"
1 Coat - 71 ...
Black ... - 34 ...

Little ... 52 ...
LPC - 8

Savanna 4 +
Shrub 50-60

Blue ... short
1 ... - 4 ... 10-15
1 ... - 4

Little ...
1 ... - 4 ...
2 ...

High ... 2 ...
... 1

Platan ... : 3? -> 7 ...
[61:4-8]

White ... - ... 0.75 ...

Higher ... - 2 ... 0.9 ...
33 ... 25' ...
2 ...

Obtained ...
surface - v. ...
Under the ...
short ...
Frank ... 1050 ...

Mar 26 March 1979.

Left Port at 0520 hrs.

Wandering Tails - 0845 hrs - dry as a bone.

Kahurangi Pinnipeds - south side of town.

70 Grey Tails (prob 80)

30 Shagbills

20 Black Seals

11 Black Shags (prob 20)

3 Black-footed Shags

2 Common Seals

Maui Noddy

1335 hrs.

2 CPC

2 Crest

1 Masked Duck in pool on small out of road.

Trumpet Bird 1300

1 Green Gull

Masked Duck

1 Wf 1 horn + 1

2 CPC

1 Common Seagull

small gulls - 27 (Hag - 1?)

Single hawk, Red eye, Yellow-green chat, Red-backed.

One white + one brown Red-capped Pigeon feeding on Cassiope fruit.

Specimens of Cassiope taken from edge of beach (adj to house). (Hickman's Seaside No 2)

Plots of reserved river from bridge (Fisher 61: 8-9) [61: 9-10]

Water sample from pool

1440 hrs. Temp 24.6°C Sal. 30.3 ppt.

Water. Permanent pool - the river-course.

↑ left at 1450 hrs.

Several Jack-tailed Larks seen - along.

Grubby 14249 Blue Jay 1:250,000 1505 - 16 55 hrs.

Black Duck - at 1520

Black Duck - (Hickman's) - at 1500

Grey Tail - 20-30

Grubby - (Hag - 1?) 2

3 Cont.

Yellow Perch Mysis 30-50
c 20-30 Marsh DuckTossil Toot Perch (or small, in place)
Redstart Bird.

2 LPe

Eucalyptus - flower.

Yellow - appears freshwater. Kind of
the tree. has been cleared from
area. A few Medul. trees presentHerbarium
Kue. was a specimen N° 1

Tues 27 MAR 78

Pathways to highway

38

0930 hrs

Pebbles
Sinking fall.

2440

3-120

Chimney 1 Teal 2 18 275

Black Duck 2 25

White Eggs

King L. Grebe 3 2450 200

Duck 1 3 6 9

W. Grebe 2 3 11

Pied Cormorant 1

Long Teal 22 33

Greenshank 1

Shoveller 1 10-15

1st Silver Jay - been collecting jays from
swamp. 1000s of jays were
over swamp
H. 10-15
Blackbird 10-15

1 Caspian Tern

Start of 10 v small water (thick?)

Start of 300 CEC.

Long Plover 1

W. Grebe - n. Start

2 Red-capped Plover.

12 Long Tern c 100 hatched Tern.

5 Black Duck 17

1 Red-throat.

Red Plover.

Black Tern c 130 449

Black Duck 20 28 c 130

4 30 BC.

1 W. Grebe.

1 W. Grebe See Eggs.

WLA 5 in 3

Start from 1300 to 1430 hrs.

Black Duck 1000s of jays were
over swamp
H. 10-15
Blackbird 10-15

1 W. Grebe

1 W. Grebe

1 Great Crested Grebe

Scrub Eyr. ^{Scrub} ~~White-eyed Vireo~~

1 ~~Woodward~~

1 ~~Black-faced Woodpecker~~

8 ~~to~~ ~~Proserpina~~

2 ~~Red-eyed Vireo~~

WED 28 MAR 79

0815 hr Middle Lake

Dublin Bay (Himantopus)

Red-bellied Vireo

♀ Blue-bellied Vireo + 3 others in 1st shrubby

1 Little Gull

1 ~~Long-billed Gull~~

1 ~~Coast~~

Parus

Cloudy Spring from Middle Lake approx 204 m. 5 m.

Re. ~~proserpina~~ to 8 m.

Franklin

Gray Gnatcatcher

1 ♂ ~~Black Duck~~

1 ♀ ~~Black Duck~~

1 ~~Black Duck~~

1 ~~CP~~

1 ~~White-bellied~~

3 ~~Kemp's~~

~~Eastern Woodpecker~~

~~White-eyed Kingbird~~

1 ~~Scrub~~

c. 5 ~~Red-eyed Vireo~~

1 ~~Long-billed~~

1 ~~W. Gull~~

~~Shrikes - E. scintillans~~

1 ~~Song Sparrow~~

2 ~~Marsh Duck~~

Duck 4 ~~about~~ at 1030 hr.

1 ~~Thrush~~

Song 4 ~~at~~ east of Middle Lake

1 ~~CP~~, ~~Red-bellied~~, ~~White-bellied~~

~~another Kingbird~~

~~White-bellied Kingbird~~

~~Possible~~

A clear freshwater ground lake.
 Papahale trees extend to 8-10 m.
 Cladium sedge covers the swamp.
 Outer fringe of E. occidentalis.

Trans 1155 km -

Swamp on NW side of Trance Bay Rd
 Grid Ref. 189749 Trance Bay 1:250,000
 14.55 km. Speed 032.7

Yellow-bellied Miner - numerous
 Night Heron - 1
 Red-bellied - some
 LPR - 1
 1 Coot - other area (<20)
 Hk Grebe - a few seen.
 Red-vented Duck - " "
 Teal - " "
 Tisil herons. Purple-crowned Lorikeet - numerous.
 Lark - E. occidentalis common.
 Black Duck - 10-20 birds
 One Tiger? snake - photo 61: 10-73
 [61: 11-14]

[61: 15]

Took one pair of swamp - 81:14
 Trance Bay. All the sedge ground is.
 Many E. occidentalis - old trees (not numerous)
 in a 15m with dense stands of swamp
 sedge young E. occidentalis to sedge 5-8 m.
 Also dead standing & mostly bare.
 2nd stand a result of clearing?
 A few Melaleuca trees also scattered here.
 The swamp -
 [61: 16 + 17]
 Photo 81: 15-16 Perimeter of swamp
 at Grid Ref. 189749 Trance Bay.

Trance Bay Swamp 710 km.
 Black Duck 2
 Red-capped Parrot
 Purple-c. Lorikeet
 Yellow-bellied
 1 ♂ 1 ♀ 1 WPH
 189749 Black-bellied Duck !!!

8 x 9 Mast-Birds.

H. birds 3

W. birds - very many

Iron B. (some of them?)

4 large nests in close proximity, approx 15m above ground in E. oval. from

Grasshopper on 12 like?

Prothrips

Scorpions

Montgomery is on open lake with no open clay side, narrow fissures along east and west, and the thick stand of mud and but a small stand one leafhopper

Lysimachia down out in some grass (last in 1965?) Soil of Lysimachia - mixed from nearby swamp. Period 1810 hrs.

END OF DAY.

W. birds 0.2 gpt

THURS 29 MAR 79

Site - Gravelly. 217751 (NE corner of T. junction over Swampy Swamp)

0830

W. birds 15

H. birds - many (150-250)

Black Duck 6 (20)

6 L.P.C. (=20)

30 to 40 Cat - 5 overland

Black 6:17 1st + 2nd + some edge of

30 to 40 Cat [100-150]

1 Black-finned Plover

2 Black Duck [50]

3 Black Duck - 28

1 Pair Skuas

Prothrips in Pigeonhole - edge of

Teal 10 [40]

Shoveler 3

Heckled 2

Red-capped Duck 1

1 Black Heron

W. birds 150-250 in E. oval

6:19 1st + 2nd of Duck + 5 overland + NE corner

6:19 1st + 2nd of Duck + 5 overland + NE corner

Chilled at 1200 hrs. This was a cloud
 like. Heavy cloud of E. acid to 5-10 m.
~~above~~ above above trees also dominant
 to similar height. Refuge of Hydrophoria
 in the acid. Monom., also feeding on
 insects (?) in the Monom.
 1 Hydrophoria feeding on Monom. by
 this 62:1 of Hydrophoria in the wing.
 [62:2]

Lake on South of Hydrophoria Hydrophoria Hydrophoria
 53 Monom. Hydrophoria 1330 L. - 1335 L.
 c15 Hydrophoria

1 Monom. Hydrophoria
 14 H₂ Hydrophoria
 2 Hydrophoria Hydrophoria
 3 Hydrophoria Hydrophoria

Lake Hydrophoria, open, approx 400 x 200 m.
Hydrophoria Hydrophoria Hydrophoria Hydrophoria
Hydrophoria Hydrophoria Hydrophoria Hydrophoria
Hydrophoria Hydrophoria Hydrophoria Hydrophoria

Lake on north side
 of Hydrophoria.
 76203.8 to 204.3
 76204.2 (distance)
 206761
 1350 hrs.

Red Hydrophoria
 White Hydrophoria Hydrophoria
 2 Hydrophoria Hydrophoria - Hydrophoria Hydrophoria
 62:2 - Hydrophoria Hydrophoria Hydrophoria
 (E. acid) [62:3]

2 Hydrophoria Hydrophoria
 Flow of the lake Hydrophoria Hydrophoria - Hydrophoria
Hydrophoria Hydrophoria Hydrophoria Hydrophoria
 1 Hydrophoria Hydrophoria

Pure E. acid Hydrophoria - 6-10 m. - Hydrophoria
 2 Hydrophoria Hydrophoria
Hydrophoria Hydrophoria
Hydrophoria Hydrophoria

Hydrophoria? - Hydrophoria Hydrophoria Hydrophoria
Hydrophoria Hydrophoria Hydrophoria Hydrophoria
 2 Hydrophoria - Hydrophoria Hydrophoria Hydrophoria
Hydrophoria Hydrophoria Hydrophoria Hydrophoria

Final survey at 14:55 hr.

Sheep are then taken for a little however the

gate is still closed - probably because of the

flange rings of the sheep. Gate now in

bad, fence. Bird paper (pennies)

small smaller than other gate so maybe closed

Today:

Saw a Tawny-crowned Warbler on the way back

to the car

On the Maltby area ~~by~~ around the water

perimeter of the lake - very few

Black 12:13 obs - this time

[62:4]

Yellow-bird Swamp

1530 hrs

Way of White Tern

4 Pink-crowned ducks

3 Long Tail

1 Gt

1 H. Gull

Red White bird

White Throat

Yellow-crowned Flycatcher??

1 W-t-horn

White-crowned sp. etc.

P. dentatus 2 sp. etc. (Note)

2 Gt. Tit Night Heron

2 White Duck

W. h. Kinglet

Several Gt (?) nests damaged

Wood Duck heard

1 Phoebe

Final 1645 hrs

lake temp 19.8°C, 0.65 ppt.

Bucket temp 30 cm from S. side

of lake is 20 cm of water

Mallards sighted - 2000 approx to other

lake about today. - Plot Spec No 14

Spent money 220.2 at Turn left into Graham St Rd.

April 192757 - On road west side of
Gardner Road Rd. - Species 228.9 km.

1220 km
flock of *P. deserti*
Common -
Phalaropus
Red-bellied

(Yellow-plumaged *H. c. c.*
which sang *H. c. c.*)

Ground 1740 km. 6-8 m
Another Yellow song - many dry -
few red-bellied pairs of water - a v. few
Phalaropus (some in morning water) another
around water edge. Not engaged with
for shelter etc. before going in
but ground even & average - single
abundant. No water except

Sage - Plant Spec No 15

Note That

All Yellow songbirds seemed to take
note of ~~the~~ were in bloom & not
but many more honey-eaters.
White-bellied numbers generally low.
Phalaropus here all been some species
except for Yellow song - see Spec No 14.

First 30 April 79

Species tally 7230.0

Count by 16755

Challenger

0840 km 1st - Yellow song

8 Cost
2 Mont & Linc

2 Black-throated

2 Grey Tail

White-bellied, Red-bellied (small)

3 Crested Larks; *Phalaropus* together least 2 each.

Notes grouped by *E. rubra* and *Lamprolaima*

Small parties of *Phalaropus* (1, 2 or 3's)

2 Shearwaters

Tree Martin.



Plot-2

Madison.

Chenail

Penyakit

W. H. L. - Lumber Clerk.

Box 2 volume at 0915 hrs.

Sol 21.4 ppt Temp 20.8 °C

Don't See

26 cont.

960 Td

207 Chestnut Trail

4 Mark-Lent.

8/5 H. G. Gabe.

39 Black sheet

with an

1. Exercises

1. *Drumming Pipe*, then, P. C. Looker.

Trout Lake, Wick-L. Clet, Knappton? (Oregon)

to Trans. N.Y. Acad. Sci.

(the wettest system, it called storm) - present
good.

Kuch Rd. Tinseltide 288.5-

299.5

639,736

5705 1020 Lm

de Hagen

Yellow pine H. c. c.

Tenney - awarded \$ 2500

Baron - Kieck

Paul W. H. H. H.

3. Green Tied (last 10-20)

May in the State House
P. C. Lumber.

Cost (a few)

17th Avenue (ext 10)

3. $\mathbb{R}^2$ - (at 5-10)

W. (E. end) - flower. c 8 m stand with

trees to 15-20 m. 1 m. not thick.

Some children of the Sister G.G. type

2-4 m

Sum of fees - 200.00

Water 4 to 0.7 m deep - 1/2 m.

cont. of 1055

John Foster Rogers will

Kojomung Swamp. - 311.4
 Crown Ridge - Kojomung Swamp Rd. 322.3 km

✓ 1130 - 1140 km
 K 1130 - 1140

High Swamp at 629726 3/4 just 328.7 km

Q of 1/2 Jha song - ~~very~~

Don't know what it is, R.C. bird.

Whistle, rather high.

Plat. Tiba. 62:5

[62:6]

[62:7-9]

Plat. 62:6-8 with one of 11 km

to be a Jha song + now nearly

changed - now song shown on 1:250,000

at limit of 628727.

\$1000 - 8

\$100 / day for 2 people.

100m of fence
 my Bob Willis for last.

Like to come in with change.

Like Kumentallen Sat 14 DEC 79

double sample from down in ~~the~~
 east end of lake - 1.1 Sept.

2 Sticks + 3 tiny Tied

Like Day [Plus 62:18+19]

How difficult is it to establish
 evidence as cause of death?

Big. Sept. museum of deer birds and -

Birds gone

Sept. Sept

Kenzie Sept

(126)

SEP 14 APR 79. Cont

Red Lake

— along

Salt crust on shore of lake.

(127)

1793

Thomas
 Sandy Hook
 Long.
 Boxer
 Figure of Eight

Ballo - 0
 Woody - 3
 Sandy Hook - 0
 Long - 0
 Boxer - 1 - on north edge.
 Figure of Eight - 0

144

0.697
 46 / 32.00
 276
 440
 404
 360

~~70.00~~
~~00.~~
 746.00
 6.57