

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

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TO: GRANT PEARSON URGENT  YES  NO

AT: WRC

Fax No. ....

FROM: J.C.

DATE: 7/6/95

Your Ref: .....

Local Ref: .....

*Broned program - place my one  
when have read.*

No. of pages inc. this page: 6

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

REVISED PROGRAM ENCL AMM 1

[Grant: modify program as circumstances dictate. The important thing is to get the main tasks done]

**Thurs 8 June**

Grant Pearson and Alan Clarke drive to Kalgoorlie

**Fri 9 June**

GP and AC1 visit CALM office and pick up Argo keys (from June), wheel for trailer (from Andy Chapman) etc., make radio arrangements and telephone Jeedamya and Lake Marmion station (name?) to advise of plans.

GP, AC1 and AC1 drive (2 vehicles) to Lake Ballard and withdraw all gear from Camp Island to Crossover Lake. Camp there overnight.

[Make notes on evidence of waterbird breeding seen while crossing Crossover Lake; measure this lake's depth and take water samples]

## GRANT: REVISED LIST OF SOME ODDS AND ENDS REQUIRING ATTENTION

- \* Is the leg flag glue at Woodvale (if not, it is on Camp Island)? You should obtain another tube in any case as the first tube probably won't do more than 50-100 flags.
- \* I have mailed Australia Post to you a bag of leg flags, two plastic weighing cones & your pocket radio.
- \* Banding pliers in dissecting box at Woodvale? I think pair also at Ballard (Camp Island or in trailer).
- \* I assume you have a work camera you can take.
- \* If you are buying film the 100 ASA Ektachrome is excellent (remember to have Churchills number them).
- \* You will need to make another wing rule (no less than 25cm). I have the oversized rule from the last trip.
- \* The dial calipers are stuffed. You need to buy or borrow a "pair" of good quality vernier calipers.
- \* You should have received copy of fax from Mark to me concerning his last trip and location of Argo keys etc. Note that ABC tent has gone back to Melbourne.
- \* Andy Chapman has one tyre from trailer in Kal (was flat, now fixed).
- \* 10' punt from Bsn is bungless.

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REVISED PROGRAM LAKES BALLARD & MARMION JUNE 1995

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### Sat 10 June

Boat to Camp Island. Measure water depth, temp, pH & take water samples, do standard invertebrate sweeps near Camp Island

Precisely measure (in order to precisely determine area) the boundaries of the nesting area of 1st breeding island).

Assuming no or very few flightless chicks encountered, return to camp on south side of Crossover Lake, withdraw all gear (except water level recorder & droppers/pickets) from Ballard area, head for Lake Marmion and establish new campsite near its shore.

### Sun 11 June to Tues 13 June

At Lake Marmion.

[Note that ACh needs to be back in Kalgoorlie on Sun night]

- i) Establish depth gauge(s) and on first and last days measure water depth, water temp, pH & take water samples, do standard invertebrate sweeps at a marked location (i.e. same routine as previously at Ballard)
- ii) Locate flightless chicks, collect 5 family parties for oesophagus and proventriculus+gizzard contents analysis (details below).
- iii) Band and flag flightless chicks (details below).
- iv) Attempt to locate Marmion nesting island. If successful:
  - \* measure (or pace) the nesting area so its area ( $m^2$ ) can be determined.
  - \* photograph island and nesting area.
  - \* sample dominant plant species.
  - \* measure diameter & depth of a scattered sample (20-30) of nest scapes.
  - \* in unlikely event hatching chicks being led off island, record number of chicks & adults reaching water in sample (50-100 will suffice) of family parties. Repeat at 1-2 day intervals if not too time consuming (the other work is more important than repeats).

### Wed 14 June

Stockpile Argo and other appropriate gear (one punt?) at Lake Marmion, Station Hstd or Kalgoorlie. Return to Perth with remainder.

### Collecting Methodology:

- \* AC1 in one punt and GP & ACh in other.
- \* choose **solitary** family parties with **single** adults.
- \* ACh shoot the adult, gather chicks and dispatch (ACh technique).
- \* attach waterproof label to each bird and label "Adult (1-5)" and "Chick (1a, 1b etc, 2a, 2b etc to 5a, 5b etc)".
- \* weigh each bird.
- \* record "completeness" of breast band and black belly of adults.
- \* record presence/absence of brood patches (bare skin) on either side of sternum.
- \* dissect out (scissors & tweezers) oesophagus & gizzard (incl proventriculus) of each bird. Store each separately in 70% alc with label (Adult 1, Chick 1a etc **plus date**).
- \* while GP & ACh do the above, AC1 to measure water depth, take water samples, do standard invert sweeps (as on last trip).
- \* keep bodies (take back to camp at end of day and that night **sex and measure gonad size of the adults** and measure bill, head+bill, metatarsus & wing of adults and chicks).
- \* retain bodies of chicks (and preferably of adults also) to give to WA Museum (Ron J. is keen to have even if split up **middle & bloody**).
- \* carefully replace alcohol (except dregs) after 24 hrs or so. Replace again one week later.

### Banding and Flagging Methodology (based on water deep enough to use boats)

- \* when find chicks, have GP, AC1 & ACh in 12' punt towing 10' punt.
- \* have Nally bin with towel (at camp) in bottom to keep chicks dry/clean.
- \* Initially at least, AC1 driver, GP catcher and **bander/flagger**, ACh flagger
- \* **band on right tibia** (i.e. above "knee") and **flag on left tibia** every chick.
- \* note that the bands are difficult to close properly and patience is required.
- \* to apply flags, hold flag open, slip onto tibia, apply glue to both surfaces, hold together for 1 minute (timed).
- \* note that flag surfaces to be glued **must** be clean and dry and **must not** move at all while being held together.
- \* remove any miss-applied bands (special pliers) and flags (separate "wings" with knife)
- \* AC1 & ACh can advise on the most efficient tactics in catching and returning chicks
- \* If you run out of bands (unlikely), continue with flags only.
- \* record band numbers of chicks in same brood (where identifiable) and band numbers used each day.

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If too shallow for boats, note that Mark found Stilt very shy of people on foot but very accepting of Argo.

#### OTHER TASKS

- \* record dates of definite drinking by Stilt for comparison with salinity.
- \* make notes of any predator/scavenger activity you see.
- \* record other waterbirds seen on Lake Ballard.
- \* keep me informed (every day or two) of progress/findings.