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ADELE ISLAND - Visit August/September 1982

Following the two previous reports on visits to this Island it was necessary for a third and final visit to be carried out. The principal reason for this third visit was to give directions to the crew involved in the dismantling of the rig, to supervise the reconstruction of the drill site and to ensure that all plant, litter, etc. was removed and satisfactorily disposed of and the area left in a clean and tidy state.

Accordingly I left Perth in the morning of 29 August and arrived at Lombadina Mission late that same afternoon. As the accommodation units on the Island had been removed to the beach area and all other facilities had been demolished it was decided to stay at Lombadina in accommodation that had been provided and to commute each day by helicopter to the island.

During the first evening at Lombadina several points were raised and discussed with Mr Jack Lambert acting for "Key Consultants" and the oil company together with Mr Noel Perry, the senior machine operator. As a result of these conversations it was ascertained that:

- (1) All sewage waste and food scraps, etc. had been dumped some considerable distance beyond the outer reef. To support this I found no evidence of rubbish having been buried in the vicinity of the camp nor any sign of fresh flotsam on the high tide margins.
- (2) The damaged and tangled steel mesh had also been taken to sea and dumped overboard beyond the outer reef.

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- (3) Towards the end of the drilling programme most of the mud remaining in the "mud sump" had been pumped back down the drill hole and at the conclusion of drilling the residue in the mud pit (approx. 30 cm) was covered with white sand to a height of approx. 1 m above the surrounding cleared area. Some 10 to 11 days elapsed between the time of filling in the sump and the first day of the restoration programme and general levelling and cleaning up. This gave the sand ample time to settle before being compacted.
- (4) Mr Lambert had intended and arranged to conduct the fumigation work when the transportable units were back on the mainland. I however advised him that this was contrary to the environmental conditions which had been laid down and he agreed that this work would take place on the island.

Hereunder in chronological order is a detailed report on the operations carried out and the information obtained.

August 29

We were advised by Mr Lambert that the large seagoing barge would be arriving off Adele Island in the afternoon of the 4 September. It was anticipated that two trips would be made to the mainland at Cape Leveque and that a third trip with the heavy equipment would go direct to Darwin. He also informed me that the representatives of 'Stewarts Pest Control' would be arriving at Lombadina on or about the 1 September in preparation for the fumigation work to be carried out. It was also confirmed that this fumigation would take place on the island or on board the vessel and

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before any equipment was off-loaded. This matter will be further discussed in due course with the pest control company.

August 30

On arrival at Adele Island the machine operators commenced the rehabilitation work. Several of the transportables were dragged to the beach area and following this all compacted areas were ripped with the tilted dozer blade to comply with environmental conditions.

On completion of this ripping work the machines were used to cart and spread the stockpiles of subsoil and topsoil which had been set aside for this purpose. This work was still in progress when it was time to leave for the mainland so will be continued tomorrow.

The machine operators were requested to go over the areas which had been worked with the machines in reverse and dragging the blade and bucket to assist in levelling the soil out.

The remaining four transportables will be moved to the beach area when it is clear of some of the plant at present sitting there. This will be immediately after the barge leaves for the mainland with its first load. When these final units are moved the remaining cleared land will be ripped and topdressed with the heaped overburden.

August 31

Due to dirty fuel filters in the helicopter and the warning

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lights coming on it was necessary for the aircraft to return to Broome for service.

As a result of this the day was spent at the Lombadina settlement.

September 1

Helicopter still undergoing service - all day at Lombadina with run to Cape Leveque.

September 2

Helicopter did not arrive at Lombadina until 1500 hrs. All day at settlement.

Two representatives of 'Stewarts Pest Control' arrived in aircraft and will commence preparation for fumigation on island tomorrow.

September 3

Two flights were made to the island carrying the machine operators and the two men from Stewarts Pest Control. The operators continued with the levelling of the drill site and the spreading of the stockpiles topsoil.

The pest control men commenced their work programme by sealing all windows and doors with a heavy adhesive tape and also closing up any vents in the various transportables, seatainers, etc. Following this procedure they then placed measured quantities of methol bromide with 2% cloripicrim into each of the sealed units. These sealed buildings were then to be left 24 hours before being tested.

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During the afternoon the licensed fishing vessel LFDY 1 arrived from Derby skippered by Merv O'Byrne. This boat was under charter to Brunswick Oil to assist where required in their final removal from the island.

Notification has now been received from the captain of the barge to the effect that his vessel will not now be arriving at Adele Island until Sunday 5 September. He also advises that he is hopeful of removing all equipment from the island in two moves, the first to Cape Leveque and the second load to Darwin. There is some doubt amongst the representatives of Brunswick Oil that the vessel will be able to shift all gear in two loads, but this will be calculated when loading is underway.

September 4

On arrival at the Island with the two representatives from Stewarts Pest control they firstly opened and ventilated all sealed units. Following this they used different methods to measure the quantity of gases remaining in the units. Happy with their results the units were re-sealed to be aired for a short period tomorrow.

No other work was done on the island. A certificate has been received to verify the work carried out.

September 5

Once on the island I immediately opened all the units to allow them to air for approx. 30 minutes. After this they were sealed ready for loading onto the barge which had arrived during the night and was now close to the

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vegetation line. The machine operator with the use of the dozer built a low ramp up to the vessel to assist the machines in loading the equipment onto the barge.

Loading was nearly complete when I left the island for Lombadina and it was the captain's intention to leave the island for the mainland at around midnight.

September 6

As pilot was on day off there were no flights to island. The barge "Fourcroy" landed and commenced unloading operations. I was present for the duration of the unloading and saw no evidence of rats (Rattus exulans) amongst the equipment. The barge intends to return to Adele Island this evening and commence the final loading of the gear and plant first thing tomorrow.

September 7

Due to the amount of equipment still on the island it has been found necessary for a second trip to be made to Cape Leveque. A quick trip was made to the island whilst the barge was loaded to enable it to leave the island at around 1300 hours for the mainland. The ship will return to the island at around 1200 hours tomorrow to pick up the final load for shipment direct to Darwin. Unloading of the barge will commence this evening at approx. 2200 hours at Cape Leveque.

September 8

On arrival at island today at around 1100 hrs work

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commenced immediately on loading the final plant and equipment. Due to the excessive weight of some items, eg. Rig truck, Diesel Fuel Tank, etc. progress was very slow. Between moving the various items the bulldozer was used to rip the access tracks and to topdress and spread the last of heaped overburden. With the tide already starting to recede the dozer attempted to push the barge into deeper water. Unfortunately, this was not effective and the vessel was forced to miss the tide being stranded on the sandbank.

At the time of leaving the island at 1515 hrs all machinery and plant was aboard the barge, all ground had been covered and the low dune area rebuilt. The last of the rubbish was aboard the vessel with the captain having no alternative but to wait for the next high tide at around 0100 hrs on the 9 September.



P.J. FULLER
Technical Officer

September 9, 1982.

GENERAL COMMENTS AND SUMMARY

Although not a published report I would like to express on the departmental file my appreciation to Mr Jack Lambert and Mr Noel Perry. These representatives extended me every assistance possible and at all times followed my instructions or saw that they were carried out in accordance with my wishes.

As I was working daily from the mainland I was unable to spend much time at the south end of the island among the various seabird breeding colonies. I was mainly restricted to the area in the vicinity of the drill and camp site. During several of these visits our time on the island was limited to two or three hours.

On one occasion I walked around the perimeter of the island and on another diagonally across it on a north-east - south-west axis. During these walks I found no evidence of any interference or disturbance to the island or bird breeding areas by personnel of Brunswick Oil or its contractors. No vehicle tracks were observed except in the immediate vicinity of the drill site.

The beach areas around the island were clean apart from the normal marine flotsam. There was no evidence of rubbish having been buried or deposited. It appears that all recreational drinks were supplied in steel cans as there was no sign of either glass or aluminium containers.

The work carried out by the machine operators was done to my complete satisfaction. All subsoil, topsoil and the dead vegetation (Spinifex longifolius) was carted and spread over the entire cleared drill site area. The low frontal sand dune on the east side of the drill site was reconstructed to follow the same contour as the untouched

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dune area adjacent to the damaged area. This dune was also recovered with the overburden and vegetation set aside for the purpose.

The soil placed over the mud pit was allowed to settle then compacted and finally mounded to approx. 1 m to help prevent damage by rain water.

All litter had been picked up and, with the final remaining rubbish, dumped at sea beyond the outer reef. I finally left the island at about 1515 hrs on Wed. 8 September 1982. At the time of my departure the barge "Fourcroy" had been fully loaded with the bulldozer going on last. As the vessel missed the tide it was forced to dry out but will leave the island at approx. 0100 hrs on the 9 September 1982.

From the general appearance of the reconstructed drill site I believe that with the coming wet season only some 3 months away there should be little problem with erosion. Hopefully there will be a good germination of seed etc. immediately the first rains fall.

It would, I feel, be a very worthwhile project to monitor or watch the regeneration of this area. The data thus obtained could be of great assistance in any future island rehabilitation work. Future visits to the island by departmental personnel would not be difficult to arrange using the following methods:

- (1) I understand that three times each year on a three-monthly timetable a helicopter under contract to the "Department of Transport" visits the island. It only carries a pilot and mechanic/engineer and would be a single day trip from Broome or Derby.

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- (2) The coastal lighthouse maintenance vessel, I believe, visits the island as required - generally annually.
- (3) Departmental staff attached to the fisheries inspection branch who accompany the naval patrol vessels could perhaps be of assistance.



P.J. FULLER
Technical Officer

September 9, 1982.

FAUNA SURVEY - ADELE ISLAND

As mentioned elsewhere in this report my stays on the island were mainly only of 2 to 3 hours duration. For each visit it being necessary to commute from the mainland by helicopter.

I was able on one occasion to walk the perimeter of the island and on another across the vegetation areas.

Observations were carried out between the 30 August and the 8 September. The following is a detailed account of my findings:

Birds

The island was walked at high tide in order to observe the waders when they were congregated on the narrow beach line rather than being dispersed over the extensive tidal flats. During this walk several groups of waders were noted each containing several thousand birds. As some of these flocks kept in front of me it was impossible to estimate the numbers. I concentrated on the species present with general comments on their abundance.

ANNOTATED LIST

Australian Pelican - common, 120 birds on spits and tidal margins.

Masked Booby - Breeding well advanced with many chicks now able to fly. Occasional bird still sitting on egg or very small chick. Refer to the previous report on this file for nesting areas and estimated numbers.

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Brown Booby - Around the island and particularly on the beach areas were many thousands of sub-adult birds able to fly but appearing to be still dependant on the adults for food.

Intermingled with these and throughout the vegetation areas of the southern section south of the drill site were many downy chicks. Very few birds were incubating eggs whilst a few very small chicks were present with an adult. Breeding generally was well past the peak. Refer to previous report on this file for details of nesting sites and other breeding information.

Pied Cormorant - Common around island mainly on sand spits: A single flock of 250 birds was concentrated at the south end. Refer to the previous report on this file for breeding data.

Lesser Frigatebird - Abundant at all times when flying and feeding over island. The previous report on this file gives details of nesting localities and numbers present.

White-faced Heron - Single bird feeding on exposed tidal flat.

Large Egret - Fourteen counted on spit at south end of the island.

Eastern Reef-Heron - Several hundred of these birds in both the grey and white phase were scattered around the beach areas at high tide. I estimate that there were 280 grey phase and 90 white phase present.

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Nankeen Night Heron - Twenty-eight birds on exposed sand spit at south end of island.

Osprey - Single bird on flight over drill site.

Banded Rail - A bird thought to be this species scampered from the high tide line into the dense spinifex.

Beach Stone Curlew - Two birds on sand spit at the southern end of island.

Pied Oystercatcher - Common with birds mostly in pairs scattered along all beach areas and on the exposed tidal flats.

Grey Plover - Odd birds intermingled with large flocks of other waders.

Eastern Golden Plover - Several with large flocks of waders concentrated along the beaches.

Large Sand Plover - Large flocks with other waders on the beach margins.

Red-capped Dotterel - Scattered small groups along the beach margins.

Pied Stilt - Two birds on beach area at north end of island.

Ruddy Turnstone - Several hundred intermingled with large flocks of other waders.

Eastern Curlew - Two on beach at northern end of island.

Whimbrel - Small flocks of up to 15 birds scattered around island beaches.

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Grey-tailed Tattler - many hundreds in varying size flocks and scattered around beach margins.

Common Sandpiper - Odd birds generally scattered with other waders on beach margins and exposed tidal flats.

Greenshank - Odd birds scattered around island.

Terek Sandpiper - Odd birds intermingled with other waders.

Black-tailed Godwit - Two birds flying with a group of 25 Bar-tailed Godwits.

Bar-tailed Godwits - Scattered small flocks around island and intermingled with other waders.

Great Knot - Many hundreds intermingled with other waders around island.

Sharp-tailed Sandpiper - Approx. 100-150 birds with a flock of mixed waders.

Red-necked Stint - Many hundreds scattered around beaches and on exposed tidal flats.

Curlew Sandpiper - Several small flocks (20-50) intermingled with large groups of other waders on beach margins and exposed tidal flat.

Sanderling - Single flock of 25 to 30 birds on beach margin near large group of mixed waders.

Silver Gull - abundant around beach margins and on exposed tidal flat. From wing colouration breeding had occurred with the young now able to fly.

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Gull-billed Tern - Flocks of 10 and 14 observed resting on the exposed sandspits towards the south end of the island.

Caspian Tern - Several hundred birds resting on the exposed sandspits around the island. Many flying young not yet in full colour were with the adult birds. Refer to previous report on this file for earlier breeding details.

Roseate Tern - A small group of ten intermingled with other terns resting on a sandspit at northern end of island.

Little Tern - Flocks of 40 and 70 on sandspit at northern end of island. An additional 100+ birds not yet in mature plumage and presumed to be of this species were also present.

Crested Tern - One flock of 16 on exposed sandspit.

Lesser Crested Tern - Flock of 45 on exposed sandspit intermingled with preceding species.

Common Noddy - A single flock of 70 birds on exposed tidal flat. A freshly dead bird was found on the beach at southern end of island.

Sacred Kingfisher - Single bird flying low over exposed tidal flat adjacent to beach near drill site.

Tawny Grassbird - Common, throughout vegetated areas mainly in association with spinifex.

In all 42 species of birds were observed on and around the island. No doubt if more time could have been spent observing the huge flocks of migratory waders additional species would be picked up.

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Mammals

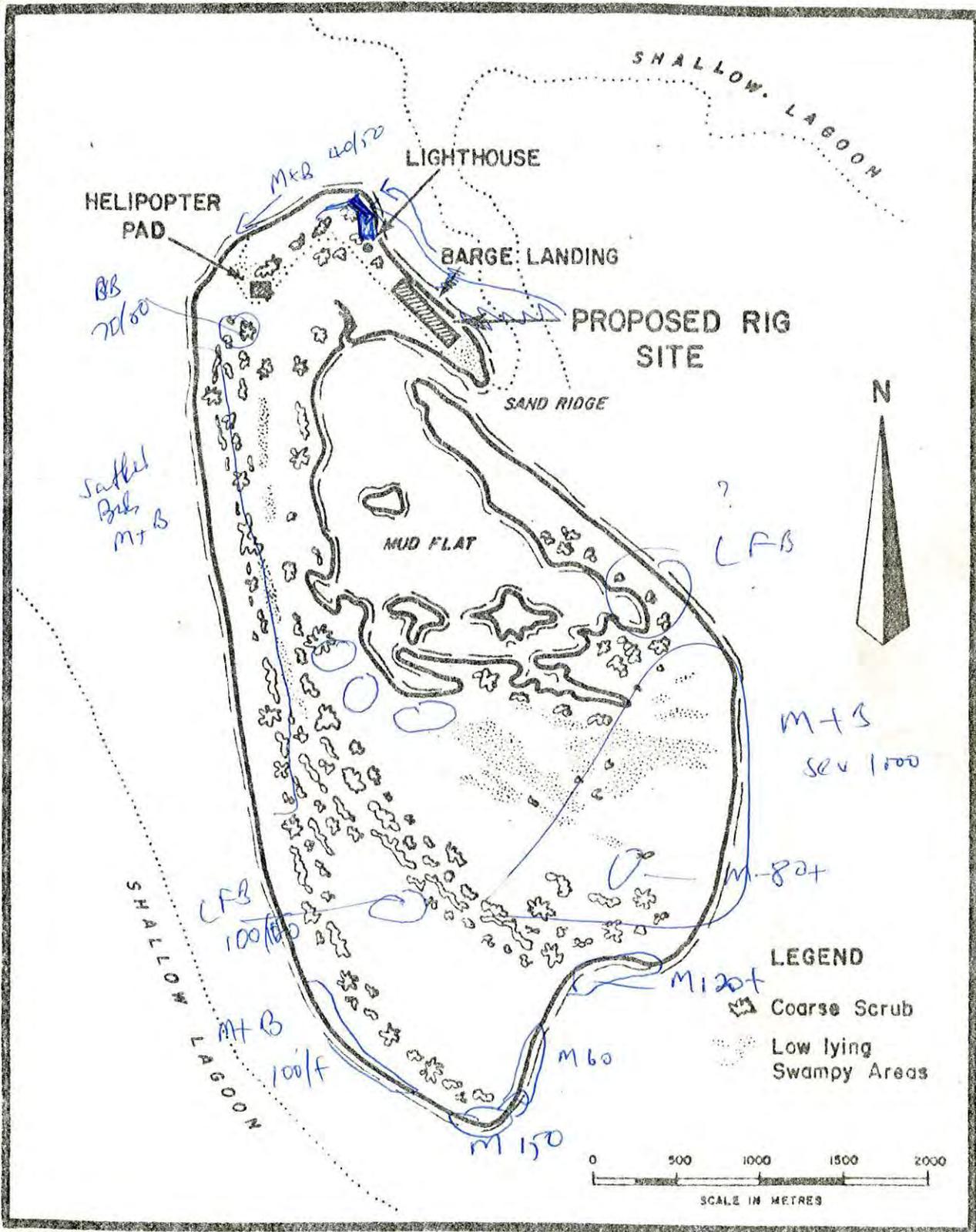
Pacific Rat (Rattus exulans) - This was the only mammal observed on the island and although only the occasional individual was observed during daylight hours from the fresh tracks noted each morning they were very abundant throughout.

Reptiles and Amphibia

Green Turtle (Chelonia mydas) - numerous observations were made around the island and in the shallow water. One freshly dead animal with a carapace length of 40 cm was found on the beach at high water mark. I found no evidence of fresh tracks around the beaches.

Saltwater Crocodile (Crocodilus porosus) - Evidence of a single animal was found on the beach at the southern end of the island. Very fresh tracks were noted leading from where the animal has been basking on the high water mark some 40 m to the water edge. A perfect imprint was left on the moist sand showing tail and belly scale patterns (see Photograph). It measured 2.2 metres.

No other reptiles were seen.



ADELE ISLAND
 SHOWING MAJOR FEATURES
 & PROPOSED RIG SITE
 WESTERN AUSTRALIA