

# LANDSCOPE EXPEDITIONS

Western Australian Department of Conservation and Land Management,  
Locked Bag 29, Bentley Delivery Centre, WA 6983  
*in association with*  
UWA Extension, The University of Western Australia, 35 Stirling Hwy, Crawley, WA 6009

**Montebellos Magic – Sailing the Pilbara Coast 2000.**  
**LANDSCOPE Expeditions. Report No. 40**

### FROM THE EXPEDITION LEADERS

On behalf of CALM and UWA Extension we would like to thank all members for the tremendous support, enthusiasm and good humour in making this expedition the success it was. This was the first *LANDSCOPE* Expedition to the Montebellos and other islands of the Pilbara coast. The information gathered will supplement data gathered by other CALM research staff on the biological understanding of these islands. Special thanks to Chris Muller and Stephen van Leeuwen from CALM's Pilbara office for logistical support. The skipper of the *Flying Fish V*, George Greaves and his mother-and-daughter crew Jackie and Kelly Crofts are also thanked for their excellent hospitality on board the research vessel. We trust that the expedition members benefited from this marine experience. We look forward to your company on future *LANDSCOPE* Expeditions.

**Kevin Kenneally, Kevin Coate, Daphne Edinger and Keith Morris**



Members of the Montebellos Magic – Sailing the Pilbara Coast *LANDSCOPE* Expedition 2000

PAM09078

## PARTICIPANTS' DIARY

**Saturday October 21** Today, all the participants met up at Barnacle Bob's Restaurant in Dampier. Most had been on the 2.05 pm flight from Perth to Karratha but some had made their way in their new vehicles. Many of us have travelled on previous LANDSCOPE trips so it was a reunion of sorts.

We watched the blood orange sunset before being joined by Chris and Yvonne Muller and Steve van Leeuwen and Regina Flugge from the CALM office. The crew from the *Flying Fish V* eventually was able to join us. They had been having a trying time with the wind.

After dinner we had introductions and instructions on what was to take place re embarkation. We left the restaurant and walked down to the jetty and the CALM vehicles brought the luggage down. We then shuttled the luggage down the gangplank on board the *Flying Fish V*.

Once on board, we had a safety talk amid the chaos of luggage and people – then allocation of kitchen roster and accommodation arrangements. By about 11.00 pm, everyone seemed to have sorted out their beds and the lights went out!!

**Zoologist's report on mammal monitoring** Picked up 32 Shark Bay mice *Pseudomys fieldi* from the captive breeding colony at Perth Zoo for the flight to Karratha / Dampier. As part of the recovery plan for this threatened native rodent, they were to be released onto North West Island in the Montebello Group. Departed Perth Airport at 1400 h and arrived at Karratha at 1600 h. Met by Steve van Leeuwen and taken to Barnacle Bob's restaurant in Dampier. Met up with the 15 LANDSCOPE volunteers and boat crew. Boarded the *Flying Fish V* charter vessel at 2200 h – our home for the next seven days.

**Sunday October 22** I think everyone heard the anchor being raised at about 5.00 am!! People appeared in dribs and drabs on deck to watch as we cruised out of Dampier Harbour. The general consensus was – nobody slept! It was either generator hum and harbour lights or the very warm conditions in the cabins.

We all seemed to be coping very well. We had a hearty breakfast and seemed bright-eyed and bushy-tailed until we had cleared Enderby Island. Then we hit the rough water and we seemed to lose participants rapidly. The on-deck bunks filled up quickly and not necessarily with their correct persons – some people were seen feeding the fish. About half-way to the Montebellos, most bunks down below deck were occupied, all bunks on deck were also full, chairs had sleeping occupants and occasionally, due to rough conditions, occupants were ejected from chairs and were seen buried under tables.

We finally arrived at the islands at around lunchtime. We were all famished and ate a hearty lunch. By 1.30 pm we were boarding the tenders and heading for North West Island. We had a very interesting walk over parts of the island – came across two old rocket launchers in the dunes. Keith Morris (KM) said they had been fired into the smoke cloud to monitor the movements of the fallout from the

nuclear blasts. Up to 10 000 people had been stationed here at that time at Maui and Coco Beach camps. Some very interesting botanical collections were made, including *Scaevola spinescens*, a yellow daisy (*Launaea sarmentosa*), some members of the pea family, *Frankenia*, *Ipomoea*, *Corchorus* and beach capparids. There were many turtle tracks on the beach and evidence of *Varanus gouldii* raiding the nests and feeding on the eggs.

Keith Morris released 32 Shark Bay mice, bringing the total number released since 1999 to 88. They have all been fitted with a personal identification transponder (PIT) and were earmarked before release. By the evidence of the numerous tracks, the colonies are doing well.

Because of the wind direction, we had a very damp trip back to the *Flying Fish V*. The deck was soon festooned with wet clothes on the washing lines. Drinks on the deck with a setting sun. Show and tell recounted the day's events – good bird sightings including an osprey swooping down and catching a fish right in front of the boat. Also the sighting of a pod of Indo-Pacific humpback dolphins. An excellent day.

**Zoologist's report** Departed Hampton Harbour, Dampier at 0500 h. Steamed through the Dampier Archipelago via Mermaid Passage and the wreck of the DB20. Arrived at the Montebellos at 1145 h after a fairly rough passage. Anchored in the lagoon off the east end of North West Island. Went ashore and inspected the proposed Shark Bay mouse release site that had previously been identified by CALM's Andrew Burbidge in July. This was on the south side of North West Island near Leopard Hill. It is a limestone cliff with boulders and topped with sand and beach spinifex *Spinifex longifolius*, and there were abundant mouse tracks present. Shark Bay mice were originally released at a site approximately 1 km to the west of this site, on a sandplain of *Spinifex longifolius*. This is the preferred habitat of this species on Bernier Island, the only natural population left in the wild. However, when the original 26 mice were released at this site in June 1999, a high proportion were predated by the Bungarra *Varanus gouldii*, which is abundant on North West Island. The rocky site provides additional cover for the mice making goanna predation more difficult, but still providing access to the nearby *Spinifex longifolius* plants. Another release of 29 mice was undertaken at the Leopard Hill site in August 2000.

North West Island had been identified as a suitable translocation site for Shark Bay mice as it had considerable areas of beach spinifex and was large enough to support a viable population. The black rat, *Rattus rattus*, which had been introduced to the Montebellos in the 1890s by the pearling industry, had been successfully eradicated from the island in 1998.

After the release site had been selected, an inspection further west by the expeditioners found mouse tracks throughout the eastern third of the island. The mice (12 male, 20 female) were taken ashore at 1700 h, earclipped (# 2 position) and released at two locations among the limestone boulders at the base of the cliff. All had survived the flight to Karratha and trip to the Montebellos and appeared to be in good health. Many photographs were

taken! This brings the total number of Shark Bay mice released on North West Island to 88.

**Monday October 23** A beautiful morning with a gentle breeze – promise of a warm day. It was quite a leisurely start with the people camped down below filtering up after 6.00 am to find all the deck people halfway through breakfast.

We set sail for Brandy Bay about 7.00 am. Two or three whales were sighted outside the reef. We passed down the west side of Trimouille Island, passing the bomb site on the island and also where the HMS *Plym* exploded. In the distance we could also see the bombsite in Burgundy Bay on Alpha Island.

We anchored in Brandy Bay having passed Champagne Bay. The "birdos" were in the dinghies first so they could see any brown quail before they were frightened off. We were rewarded with a beach thick-knee (beach stone curlew) waiting for us on the beach and an osprey perched on a post just next to the CALM hut about 30–40 m away up the hill. The different groups walked over to Sherry Bay where many waders were seen – grey-tailed tattler, ruddy turnstone, bar-tailed godwits, red-capped plovers, greenshanks .....

We climbed to the top of the hill where the control centre for the detonation of all three atomic bombs was situated with its adjacent tower. Unfortunately the Special Air Service (SAS) had used the site for demolition practice in the '80s. All that remains is a rusting roofless shell. There are lovely views from up there and the photographers made the most of the windows to frame their photos.

We broke into groups again with the "birdos" going with Kevin Coate (KC) to Claret Bay. (It is a wonderful area for alcoholics as there is also Whisky Bay, Stout Bay, Rum Cove, etc.) The "birdos" found a beautiful unnamed creek flowing into the bay with many quite large fish, crabs and a small stingray. They had previously seen a large ray in the bay while collecting seaweed. Unfortunately, we did not find a collared kingfisher. When the "birdos" got back to the beach, we found three swimmers luxuriating in the clear blue sea.

When we were all on board, we travelled up Cider Bay to see the pearl farm. While we were all studying the pearl farm, a few observant passengers saw a turtle swimming around the boat. We went back down Cider Bay and lunched while returning to our anchorage at North-West Island. After leaving the dinghies anchored, we travelled around to the north-east side of North West Island and trawled for shark mackerel. Frank and Ken caught the first two, accompanied by much excitement and photo calls. This was followed by a catch by Bill Busby and "the one that got away" by Barry.

We returned to our moorings, delayed a couple of times by more whale sightings. Once at our mooring area, Kellie was dropped into a dinghy to pull up the anchor and bring the dinghies around so the "trappers" and a select birdo group of KC + 2 could go out. We waited and we waited and we waited but no Kellie. We went around to the front and she was pulling and pulling and pulling to no avail. The problem was George had dropped the anchor from

the big boat on top of the small anchor and poor Kellie was trying to pull both up!

A party of six set 25 traps along the rock platform and 25 in the grass above. Kevin Coate plus two observers returned from Gardenia Island, with some interesting sightings, including a spotted harrier. Two golden plovers were seen on Hermite Island and they have not been recorded here before and a singing honeyeater which has also not been recorded here.

After dinner, there was some excitement as a squid was seen out the back, so Bill reeled in Ken's line and the rod was bending over and he reeled frantically until it was discovered that the end of the line was connected to the rod not even in the water!!!

**Show and Tell** – Suzy showed the sea lice (female) and orange eggs that were found in Claret Bay. Apparently these sea lice live in fish and it is thought the sea lice would have been left in a fish eating the rubbish that had floated in there. Suzy also collected a sand starfish. Andrew Speirs showed a huge mud crab claw collected in the creek that flowed into Claret Bay. He also observed mud crabs mating. KM showed a 1955 beer bottle that he had found. Daphne Edinger collected four little "sea lice", really sea crustaceans from the oysters she was about to eat. She also had a heart urchin and a fish skeleton with huge dorsal spines. KC showed a dead crested tern or little crested tern – "a fairly common bird", he said. Suzy Speirs collected an *Acanthocarpus* sp. KK said that he was surprised at the amount of plants still in flower. A nice algal collection was made by Joe Raudino.

Another very interesting day.

**Zoologist's report** Moved down Stevenson's Passage to visit the CALM hut at Hurricane Hill and the old command post at the south end of Hermite Island. Two humpback whales seen off Pansy Island and two Indo-Pacific humpback dolphins seen in the lagoon. A report, from people on the house boat, of a black cat crossing a sand dune between the CALM hut and Claret Bay in early October. A cat eradication program had been undertaken on Hermite Island in 1999. Visits by CALM staff since then have failed to detect cats and no cat tracks were seen during this visit. One set of black rat tracks were seen near the CALM hut. A further attempt at rat eradication on Hermite Island is planned by CALM in 2001. Moved back to the anchorage at North West Island via the Morgan Pearls operations off Campbell Island. Set out 50 Elliott traps (two lines of 25 traps) at the Shark Bay mouse release site. One line ran along the limestone platform at the base of the cliff, the other ran along the top of the cliff.

**Tuesday October 24** A very early call in the dark started the day for KM and seven volunteers who set off at first light to check the 50 traps set the night before. The sea was relatively calm with only a slight breeze.

At the "site" mice and goanna tracks were noted and the first trap was inspected with some excited anticipation. At least something was in the trap! – an eventual result of eight "new" mice, i.e. those released the day before and four "old" released. Head and foot measurements were

taken and the "old" mice weighed the heaviest, a male weighing in at 63 g. All the traps were closed and bait removed in readiness for resetting early pm. On the sand dune above the beach, the clarity of the sea showed the form of a small shark, a huge stingray and later, two turtles. On approaching the *Flying Fish V*, a breakfast aroma pervaded – bacon and eggs eagerly devoured.

After breakfast we had a 10–15 minute boat ride to the north-west point of Trimouille Island to view the site of the explosion of the second atomic bomb at Gladstone Point, marked by an obelisk with explosion details and appropriate warning of contamination, including the need to spend only a short time in the area. KM noted tracks of the hare wallaby – not expected in the northern area of the island as they had originally been released in the south. It was hoped one would be flushed out of the undergrowth as the "birdos" led the way and the rest followed to explore part of the island – not to be!

The group came upon and rounded the lagoon with its rich turquoise colouring glistening in the early sun. A vivid orange sea snake was found in an adjoining pool and further along a mud crab avoided the photographer by hiding under a stone. A driftwood perch favoured by a sea eagle whose feathers littered the ground. A variety of birds including four bronze-cuckoos. An area of knee root mangroves. In abundant grasses were littered about various types of rusted machinery – a legacy of what had occurred. A sandy area near the entrance to the lagoon was an appropriate "pick up" by the "run abouts" to the *Flying Fish V*.

A *Varanus gouldii* had been sighted by Roz and Sallie who had stayed around Gladstone Point. In the collection of flora from the area, there was nothing new but the flowering material had improved. A short trip down the west side of the island to Merin Beach where a variety of activities in bird watching, flora collection, snorkelling and swimming were enjoyed. On returning to the *Flying Fish V* a buffet lunch was enthusiastically devoured.

After a brief break the afternoon program commenced with a relaxing sail (joined alongside by a group of dolphins) to Alpha Island – the scene of the third atomic explosion at Burgundy Bay in 1956. The area proved more rocky with hilly terrain – small structural remains near the beach were suggestive of a one-time jetty – and a rusted rail track rose to the hilltop bunker, the latter was razed to the ground. The group rambled at leisure around the surrounding hills, taking in a panoramic view of multi-sized islands standing in a brilliant blue ocean, innumerable pearl rafts evident in between.

A return to the *Flying Fish V* prior to a group of bird enthusiasts leaving with KC for Primrose Island and Keith with his helpers to reset the traps. A small band remained on the boat with friendly chat and banter and one, who shall remain nameless, decided on a spot of fishing with somebody else's rod – no fish caught – just an arched rod from an unknown stranglehold on the lure. One had to leave a large boat for a smaller one (without life jacket!). Great hilarity ensued and just in the nick of time, the lure came free.

Pre-dinner drinks and nibbles and numerous jokes created a bright atmosphere for all, during which "Show and Tell" – sometimes show and throw – was followed by the bird recordings for the day. Included in Show and Tell: Keith – bottle 1955 found on Cocoa Beach; five marla droppings; kestrel (emaciated) – shown and thrown; two types of goannas sighted on Alpha Island (not previously recorded). Andrew – slazenger turtle egg – thrown. KC – wedgetail shearwater head; remains of queenie fish found in osprey's nest; bird sightings as officially recorded.

Much hilarity and story telling etc., resulted in a very jolly evening.

**Zoologist's report** Up at 0500 h to check traps on North West Island. Twelve Shark Bay mice were trapped – four from the previous two releases and eight from the recent release. These were weighed, measured and released.

Landed at the west end of Trimouille Island near the 1956 atomic bomb explosion site. This is marked with a concrete plinth and warning signs about extended visits and radiation. Several mala *Lagorchestes hirsutus* tracks were seen amongst the sedges at this site. As part of the recovery plan for this critically endangered mainland subspecies, mala were released at Cocoa beach, approximately 3.5 km south-east of this site, in 1998. Moved to Louis William Lagoon and photographed regenerating mangroves – burnt by atomic explosions. Proceeded to Main Beach and landed. Three mala flushed from *Spinifex longifolius* 50 m from the beach, and another two flushed from amongst *Heterodendron oleifolium* shrubs behind Cocoa Beach.

Moved to Alpha Island after lunch, the site of another atomic explosion in 1956. Black rats had been eradicated from this island in 1998. Six bottle-nosed dolphins seen in the lagoon. Collected a spiny-tailed goanna *Varanus acanthurus* skeleton and skin from among rocks. This species had not previously been recorded from Alpha Island. Returned to anchorage off North West Island, rebaited and reset Elliott traps.

**Wednesday October 25** The early crew went to North West Island with KM to check and remove the 50 Elliott traps. They recorded trapping seven Shark Bay mice – six "new" ones (introduced on Sunday) and one "old" one, introduced last year. The mice seem to be doing quite well. They also trapped *Ctenopus saxatilis*, a small skink.

After breakfast the anchor was pulled and we set sail for Barrow Island. It was about 7.30 am. Christmas came early for KK (at about 8.30 am, in fact) when he caught a large shark mackerel – the largest one of the trip so far. The hooks were caught in its flank, making it difficult to reel in.

KC also had an early Christmas present with the sighting of about 3000 roseate terns on a small island. They were packed closely, giving the impression that the island was covered in snow. A yellow-bellied sea snake was seen soon after this. At about 9.15 am, a single brown booby was sighted crossing the bow of *Flying Fish V*. KK's explanation of the identification of this bird varies a little from that in the field guides.

We arrived at Barrow Island at about 11.15 am, after a relatively smooth passage. There was a gentle breeze which kept the conditions very pleasant. We had an early lunch and rested until about 3.00 pm, as Keith considered that it would be too hot to venture onto the island in the middle of the day, due to the radiated heat from the rocky ground. An osprey nest was seen on a small island near our landing place. Ospreys and a sea eagle were seen roosting on poles near the landing point. Two white-phase reef egrets were seen nearby – these are more common in the Kimberley than the Pilbara.

At about 3.00 pm, the group went ashore and separated into three small parties, except for Roz and Sallie who wandered slowly around the beach and creek near the landing point, observing birds, mammals and intertidal reef inhabitants.

The "birdos" headed inland and over the dunes. Their sightings are listed in the official report. Overall, the sightings were a bit disappointing, although they did see quite a few euros and about eight hare wallabies. The euros are a subspecies, smaller than mainland euros.

The "reef walkers" (3) walked along the reef at low tide, collecting seaweeds, starfish and sea cucumbers (trepan/beche de mer) as well as a large (3 cm) live cowrie shell. There were also quite a few bottles ("stubbies") on the reef. They also saw quite a number of small shovel-nosed stingrays and a small shark.

The "trappers" set 10 cage traps and 30 Elliott traps, starting on the coastal dunes. The line ran through a mangrove-lined creek over a sandy ridge and onto the spinifex plateau – a wide range of habitats. There were many tracks throughout the area – euros, bandicoots, possums, Barrow Island mice, boodies and the occasional "birdo". A track from a rather large snake was also seen.

The "birdos" were the last group to leave the island (at about 5.30 pm) and noted a golden bandicoot already caught in a cage trap.

For dinner we had (among other things) the shark mackerel which KK had caught earlier in the day. A delightful close to an enjoyable and interesting day.

**Zoologist's report** Up at 0500 h to check and lift Elliott traps on North West Island. Seven Shark Bay mice trapped – six from the recent release and one from previous releases.

Departed North West Island for Barrow Island via Varanus Island (oil base) at 0730 h. Arrived at the Landing, Barrow Island 1030 h. Some difficulty finding a suitable anchorage. Landed and set 10 cage traps and 30 Elliott traps along the creek to the north of the Landing. Several euro *Macropus robustus isabellinus* seen by expeditioners during the afternoon. A few spectacled hare-wallabies *Lagorchestes conspicillatus* flushed from beneath *Triodia* tussocks.

**Thursday October 26** With a long trip between Barrow Island and Boodie Island to look forward to, the decision was made for a 5.00 am wake-up call. The trip ashore, after a hurried breakfast, was worthwhile, with a 45% success rate from the set traps – 18 out of 40 having caught as follows: golden bandicoots; brushtail possums (northern

form); Barrow Island mouse; marsupial mouse; burrowing bettong or boodie; as well as a sighting of a spectacled hare wallaby.

Keith Morris (CALM) was noticeably quietly jubilant! The "catch" was weighed, measured and much photographed before being released. The marsupial mouse was a rare catch and samples of fur and an ear tag were taken for DNA testing.

The morning was cloudy but the trip down the west coast of Barrow held much of interest. The coppery bronze sheen on the water's surface was thought to be floating pollen and samples were duly collected. It stretched on the water for some distance in long streaks.

A pod of about 50 dolphins was sighted, said to be Oceanic dolphins according to the Captain George. Also spotted were green turtles, one Wilson's storm petrel, crested and fairy terns and on one island, at least 3000 roosting roseate terns and an estimated 10 000 roseates in flight. The island appeared white as we approached, so closely were the terns gathered.

As we approached Boodie Island, after a moderately rough trip, Barry and Joe caught two large trevally which were proudly held to be photographed. At least we knew what would be on the menu for dinner!

All went ashore late afternoon and split into several groups. The "birdos" had a great time. In a grove of bush *Cordia subcordata* were nesting, white-breasted woodswallows – some chicks in the nest, zebra finches and bar-shouldered doves. Due to great rains, there appeared to be a diversity of food for a rich variety of birds and a total of 31 varieties were noted. Among these were reef egret, brahminy kite, black-shouldered kite, nankeen kestrel, white-bellied sea-eagle and among the waders, bar-tailed godwit, whimbrel, common greenshank, grey-tailed tattler, ruddy turnstone, sanderling, red-necked stint, pied and sooty oyster catchers, beach stone curlew, red-capped lesser and greater sand plovers and caspian terns.

The trappers set 10 cage and 10 Elliott traps to be collected the next morning. Several volunteers had a swim in the warm clear water; others walked along the sand to see the wading birds.

**Show and Tell** – we compared skulls of euro and boodies – rock samples and many shells were shown and KM had the spiny tail of a *Varanus acanthurus* to be sent to the WA Museum.

Another beautiful sunset, a most exciting and successful day and a great feast of golden trevally – what more could you ask for?

**Zoologist's report** Up at 0500 h to check and lift traps. A total of 18 mammals were trapped in the 40 traps set (45% trap success). These included 12 golden bandicoots *Isodon auratus barrowensis*, three brushtail possums *Trichosurus vulpecula arnhemensis*, one small dasyurid *Pseudantechinus* sp. (species unsure at this stage), one boodie *Bettongia lesueur* and one Barrow Island mouse *Pseudomys nanus ferculinus*. Departed Barrow Island 1000 h for Boodie Island via the west coast of Barrow Island. Several humpback whales seen plus some

unidentified dolphins. Overflown by Customs aircraft. Arrived at Boodie Island at 1315 h. Needed to anchor several hundred metres offshore because of water depth and coral bommies.

Boodie Island was named after the boodie, or burrowing bettong *Bettongia lesueur* which occurred on the island. In 1985 a black rat eradication program unfortunately also eradicated the boodie. In 1993, boodies were reintroduced to the island from Barrow Island and this trip provided an opportunity to monitor the boodie abundance.

Landed on the north beach of Boodie Island and set 10 cage traps and 10 Elliott traps along the beach near the limestone headland. Abundant boodie tracks were seen throughout the island and three skulls collected. Several soaks had been dug out to a depth of 20–25 cm by boodies in the valley between the limestone portion of the island in the south-east and the large sand dune. These contained brackish water. A *Varanus acanthurus* skeleton and skin collected – previously not recorded for the island.

**Friday October 27** Boodie Island to Serrurier Island. Early am, but not as early as yesterday, the boatload of trappers embarked for the island. Those aboard luxuriated in the pleasures of the cruise ship.

Soon the troops returned with the good news of having trapped eight boodies overnight. These were of all genders, ages and stages of child-rearing. A score of 8 out of 10 was an excellent result.

A long cruise south-west passed Airlie Island and the oil wells Saladin A and Saladin B close to Thevenard Island. During this time the prurient among us were highly delighted by the sight of two turtles engaging in sumo sex. This is a form of suspended animation in the turtle gender war. On this occasion their conjugals were refereed by two terns mounted on the mounting beasts.

After lunch another pleasant watching and sleeping trip to Serrurier Island. All landed here with small groups heading in different directions. Others snorkelled, walked, bird-watched and picked the local vegetation.

Return to the ship was followed by the standard ablutions, beer, bikkies, small and large talk and preparations for the serious business of dinner and demolition of the last bottles of Koonunga Hill Red provided by Bill Busby.

**Show and Tell** was a glorious opportunity for the birdos to tell of two wondrous incidents. First, was the sighting of a raft of red-necked phalaropes – in a large number which is exceptional and was an absolute highlight for the avian inclined amongst us. Later, on the island, a few lucky ones saw an osprey vociferously laying claim to a fish which was entaloned. The osprey was circled by black-tipped reef sharks, one of which seized on the fish to the dismay of the osprey which argued briefly and then relinquished its catch. Other examples of the beachcomber's trade were the display of the shell of a painted cray, soft coral fans and dead curled black chiton with spiny mantle (*Acanthopleura spinosa*). Kevin Coate found an osprey's nest in which were the remains of 14 flute fish bones, the heads of these were displayed with pride!

Serrurier Island is the breeding site of large numbers of wedge-tailed shearwaters whose burrows are a feature of the island and make it dangerous for unprepared walkers. The island is used as a monitoring site by Apache Oil to compare its effects on shearwaters with the other islands where they have installations.

Later in the evening, a motley crew reviewed Carol Richard's art portfolio with much acclaim – really wonderful illustrations of aspects of our trip.

The night finished with the usual high jinks as we prepared for our last sleep aboard. Tomorrow Muiron Island and Exmouth.

**Zoologist's report** Up at 0530 h to check and lift traps on Boodie Island. Eight boodies were trapped, weighed and measured (80% trap success) – four females (one with a pouch young) and four males. There was no sign of black rats. One skink *Ctenotus saxatilis* trapped in the Elliotts.

Departed Boodie Island 0830 h for Serrurier Island via Airlie and Thevenard Island. Arrived at Serrurier Island at 1545 h and anchored on the east side. Set out 50 Elliott traps (two lines of 25 traps) to monitor the Pilbara short-tailed mouse *Leggadina lakedownensis* population. These were introduced to the island in 1996 from Thevenard Island, after a single cat resident on the island had been eradicated. At that time it was thought that the short-tailed mouse on Thevenard Island may have been a distinct species, because it is nearly twice as large as other short-tailed mice. House mice had been introduced to Thevenard Island in the mid 1980s and an oil base constructed. CALM was concerned that the native mice may go extinct on Thevenard Island so established another population for security. Fortunately this has not occurred and it has subsequently been found that the native mouse on Thevenard island is genetically the same as those on the Pilbara mainland. However, it is still beneficial to have another population of this island mammal.

This was the first opportunity to monitor the Serrurier Island population since cyclone Vance passed over the island and subsequently destroyed much of Exmouth in 1999. Mouse tracks and burrows were abundant throughout the island.

**Saturday October 28** Saturday dawned with a cloudless sky and light winds. A leisurely 6.30 am trip to shore for all except Daphne evolved into the familiar birdo and trapping groups. An impressive 32 of Keith's 50 traps had short-tailed mice (*Leggadina lakedownensis*) and two others had skinks. Almost all bare sand on the Island was pock-marked with mouse foot prints and we presume that mouse is a significant part of the diet for many of the five raptor species seen by us on Serrurier Island. Much of the island is covered with wedge-tailed shearwater burrows. The ground not infrequently collapses under foot even when the walker tries to avoid treading near burrows. The party returned to *Flying Fish V* for a cooked breakfast. We then sailed to nearby Flat Island for a swim and quick bird survey. Again, extensive shearwater burrows were noted. No quadruped tracks were seen.

After lunch we started the 60 km trip to Exmouth in what was now a somewhat choppy sea – enough to wet those on the upper deck quite regularly.

We finally berthed with expert manoeuvring from our skipper George, into a small space behind *Top Gun* at Exmouth Harbour around 5.30 pm. Luggage unloaded, we piled into taxis for the trip into town to book into the Potshot Resort to freshen up for our farewell dinner at 7.00 pm. This was enjoyed by all with much hilarity and good cheer. A fitting conclusion to another very successful LANDSCOPE Expedition (to be repeated next year).

**Zoologist's report** Up at 0515 h to check and lift traps on Serrurier Island. Thirty-two short-tailed mice were trapped (64% trap success). In addition, one *Ctenotus saxatilis* and two *Sphenomorphus isolepis* skinks were trapped. It was clear that the mice had survived the cyclone which flooded about 25% of the island, judging by the strand line around the island.

Departed Serrurier Island for Flat Island. After a quick inspection for birds, particularly nesting seabirds, departed for Exmouth. Arrived at the Exmouth marina 1645 h. Pot Shot Resort overnight.

**Sunday October 29** **Zoologist's report** Departed Exmouth (Learmonth) on Skywest flight 1900 h, arrived Perth 2145 h.

#### PLANT NOTES

A total of 107 plant collections were made from the nine islands visited during the expedition. The terrestrial specimens have now been labelled, identified, databased and added to CALM's Western Australian Herbarium. The algal collections have been processed but await specialist identification. The land plants will be matched against those listed in the 1955 paper "Notes on the natural history of the Monte Bello Islands" authored by Frank Hill. This material is held in the Royal Botanic Gardens at Kew, England and is not represented in the State Herbarium. This expedition allowed us the opportunity to collect representative plant material from the Montebellos and other Pilbara islands to fill these gaps. Over time this will allow us to gain a better understanding of the species composition and vegetation of these islands.

The majority of species collected are common to the Pilbara coast but on Serrurier and Thevenard Islands there is an unusual form of *Acacia ligulata* which Bruce Maslin (CALM's specialist in the group) believes may be of hybrid origin. Living collection of *Sarcostemma*, an unusual form of *Carpobrotus* (pigface) and a yellow-flowered species of *Portulaca* were given to Kings Park Botanic Garden for cultivation.

#### MONTEBELLOS & OTHER PILBARA ISLANDS: PLANT SPECIES LIST AND SIGHT RECORDS

##### North West Island – Montebellos

Acacia bivenosa	Mimosaceae
Acacia coriacea	Mimosaceae
Capparis spinosa	Capparaceae
Corchorus walcottii	Tiliaceae
Flaveria australasica	Asteraceae
Frankenia ambita	Frankeniaceae
Ipomoea pes-caprae	Convolvulaceae
Launaea sarmentosa	Asteraceae
Padina sp. (alga)	Phaeophyta
Pluchea sp. B Kimb. Flora	Asteraceae
Pterocaulon sphaeranthoides	Asteraceae
Ptilotus exaltatus	Amaranthaceae
Rhagodia preissii subsp. obovata	Chenopodiaceae
Scaevola spinescens	Goodeniaceae
Sclerolaena uniflora	Chenopodiaceae
Swainsona calcicola	Papilionaceae

##### North West Island – Sight Records

Acacia bivenosa	Mimosaceae
Acacia coriacea	Mimosaceae
Corchorus walcottii	Tiliaceae
Flaveria australasica	Asteraceae
Frankenia ambita	Frankeniaceae
Ipomoea pes-caprae	Convolvulaceae
Pterocaulon sphaeranthoides	Asteraceae
Ptilotus exaltatus	Amaranthaceae
Scaevola spinescens	Goodeniaceae
Spinifex longifolius	Poaceae
Sporobolus virginicus	Poaceae
Triodia sp.	Poaceae

##### Hermite Island – Montebellos

Abutilon indicum	Malvaceae
Abutilon cunninghamii	Malvaceae
Acacia ampliceps	Mimosaceae
Acanthocarpus verticillatus	Dasygongonaceae
Aerva javanica	Amaranthaceae
Atriplex isatidea	Chenopodiaceae
Boerhavia sp.	Nyctaginaceae
Canavalia rosea	Papilionaceae
Capparis spinosa	Capparaceae
Codium sp. (alga)	Chlorophyta
Commicarpus australis	Nyctaginaceae
Lawrenzia viridigrisea	Malvaceae
Myoporum acuminatum	Myoporaceae
Olearia damperi subsp. dampieri	Asteraceae
Panicum decompositum	Poaceae
Phyllanthus fuernrohrii	Euphorbiaceae
Pluchea sp. B Kimb. Flora	Asteraceae
Pterocaulon sphaeranthoides	Asteraceae
Ptilotus villosiflorus	Amaranthaceae
Rhynchosia minima	Papilionaceae
Sargassum sp.	Phaeophyta
Scaevola crassifolia	Goodeniaceae

Scaevola globulifera  
 Sesuvium portulacastrum  
 Streptoglossa decurrens  
 Tephrosia remotiflora  
 Trichodesma zeylanicum  
 Ulva lactuca (alga)

**Hermite Island – Sight Records**

Abutilon cunninghamii  
 Acacia coriacea  
 Acacia translucens  
 Aerva javanica  
 Avicennia marina  
 Canavalia rosea  
 Cenchrus ciliaris  
 Cenchrus ciliaris  
 Commicarpus australis  
 Frankenia ambita  
 Gomphrena sp.  
 Lawrenca viridigrisea  
 Myoporum acuminatum  
 Olearia dampieri  
 Panicum decompositum  
 Pluchea sp. B Kimb. Flora  
 Pterocaulon sphaeranthoides  
 Ptilotus exaltatus  
 Rhizophora stylosa  
 Rhynchosia minima  
 Salsola tragus  
 Sarcostemma viminale subsp. australe  
 Scaevola crassifolia  
 Scaevola spinescens  
 Sesuvium portulacastrum  
 Spinifex longifolius  
 Trichodesma zeylanicum

**Gardenia Island – Montebellos**

Euphorbia myrtoidea  
 Frankenia ambita  
 Lawrenca viridigrisea  
 Muellerolimon salicorniaceum  
 Rhagodia preissii subsp. obovata  
 Threlkeldia diffusa

**Gardenia Island – Sight Records**

Abutilon sp.  
 Aerva javanica  
 Atriplex isatidea  
 Avicennia marina  
 Canavalia maritima  
 Capparis spinosa  
 Cenchrus ciliaris  
 Cleome viscosa  
 Commicarpus australis  
 Flaveria australasica  
 Frankenia ambita  
 Lawrenca viridigrisea

Goodeniaceae  
 Aizoaceae  
 Asteraceae  
 Papilionaceae  
 Boraginaceae  
 Chlorophyta

Malvaceae  
 Mimosaceae  
 Mimosaceae  
 Amaranthaceae  
 Avicenniaceae  
 Papilionaceae  
 Poaceae  
 Poaceae  
 Nyctaginaceae  
 Frankeniaceae  
 Amaranthaceae  
 Malvaceae  
 Myoporaceae  
 Asteraceae  
 Poaceae  
 Asteraceae  
 Asteraceae  
 Amaranthaceae  
 Rhizophoraceae  
 Papilionaceae  
 Chenopodiaceae  
 Asclepiadaceae  
 Goodeniaceae  
 Goodeniaceae  
 Aizoaceae  
 Poaceae  
 Boraginaceae

Muellerolimon salicorniaceum  
 Myoporum acuminatum  
 Rhizophora stylosa  
 Salsola tragus  
 Scaevola globulifera  
 Scaevola spinescens  
 Spinifex longifolius  
 Sporobolus virginicus

**Trimouille Island – Montebellos**

Acacia translucens  
 Acanthocarpus verticillatus  
 Briguiera exaristata  
 Cynanchum floribundum  
 Euphorbia tannensis subsp. eremophila  
 Evolvulus alsinoides  
 Halophila decipiens  
 Halophila ovalis  
 Halosarcia indica subsp. leiostachya  
 Phyllanthus fuernrohrii  
 Rhagodia preissii subsp. obovata  
 Sclerolaena uniflora  
 Turbinaria sp.

**Trimouille Island – Sight Records**

Acacia coriacea  
 Acacia translucens  
 Commicarpus australis  
 Frankenia ambita  
 Salsola tragus

**Alpha Island – Montebellos**

Euphorbia myrtoidea  
 Sorghum plumosum

**Alpha Island – Sight Records**

Cenchrus ciliaris

**Barrow Island – Algal Collections**

Caulerpa sp.  
 Codium sp.  
 Halimeda sp.  
 Padina sp.

**Boodie Island**

Abutilon amplum  
 Adriana tomentosa  
 Alectryon oleifolius subsp. oleifolius  
 Capparis lasiantha  
 Cleome viscosa  
 Cordia subcordata  
 Corynotheca flexuosissima  
 Enneapogon ? pallidus

Plumbaginaceae  
 Myoporaceae  
 Rhizophoraceae  
 Chenopodiaceae  
 Goodeniaceae  
 Poaceae  
 Poaceae

Mimosaceae  
 Dasypogonaceae  
 Rhizophoraceae  
 Asclepiadaceae  
 Euphorbiaceae  
 Convolvulaceae  
 Hydrocharitaceae  
 Hydrocharitaceae  
 Chenopodiaceae  
 Euphorbiaceae  
 Chenopodiaceae  
 Chenopodiaceae  
 Phaeophyta

Mimosaceae  
 Mimosaceae  
 Nyctaginaceae  
 Frankeniaceae  
 Chenopodiaceae

Euphorbiaceae  
 Poaceae

Poaceae

Chlorophyta  
 Chlorophyta  
 Chlorophyta  
 Phaeophyta

Malvaceae  
 Euphorbiaceae  
 Sapindaceae  
 Capparaceae  
 Capparaceae  
 Boraginaceae  
 Anthericaceae  
 Poaceae

Enneapogon lindleyanus  
 Enneapogon purpurascens  
 Eulalia aurea  
 Ficus virens  
 Pluchea rubelliflora  
 Solanum ?cleistogamum  
 Sorghum plumosum  
 Swainsona kingii

**Boodie Island – Sight Records**

Atriplex isatidea  
 Cenchrus ciliaris  
 Cleome viscosa  
 Corynotheca flexuosissima  
 Cynanchum floribundum  
 Euphorbia australis  
 Ficus platypoda  
 Frankenia ambita  
 Pluchea sp.  
 Scaevola spinescens  
 Spinifex longifolius

**Serrurier Island Nature Reserve**

?Enteromorpha sp. (alga)  
 Acacia ligulata  
 Angianthus cunninghamii  
 Corynotheca flexuosissima  
 Ptilotus villosiflorus  
 Senecio lautus subsp.  
 Sida sp.  
 Tribulus occidentalis

**Serrurier Island – Sight Records**

Acacia bivenosa  
 Acacia coriacea  
 Atriplex isatidea  
 Canavalia rosea  
 Carpobrotus sp.  
 Commicarpus australis  
 Corynotheca flexuosissima  
 Euphorbia boothphona  
 Flaveria australasica  
 Lawrenca viridigrisea  
 Portulaca affin. pilosa  
 Ptilotus exaltatus  
 Rhagodia preissii subsp. obovata  
 Sarcostemma viminale subsp. australe  
 Scaevola crassifolia  
 Sida sp.  
 Spinifex longifolius

**Flat Island**

Boerhavia ?coccinea  
 Commicarpus australis

Poaceae  
 Poaceae  
 Poaceae  
 Moraceae  
 Asteraceae  
 Solanaceae  
 Poaceae  
 Papilionaceae

Chenopodiaceae  
 Poaceae  
 Capparaceae  
 Anthericaceae  
 Asclepiadaceae  
 Euphorbiaceae  
 Moraceae  
 Frankeniaceae  
 Asteraceae  
 Goodeniaceae  
 Poaceae

Chlorophyta  
 Mimosaceae  
 Asteraceae  
 Anthericaceae  
 Amaranthaceae  
 Asteraceae  
 Malvaceae  
 Zygophyllaceae

Mimosaceae  
 Mimosaceae  
 Chenopodiaceae  
 Papilionaceae  
 Aizoaceae  
 Nyctaginaceae  
 Anthericaceae  
 Euphorbiaceae  
 Asteraceae  
 Malvaceae  
 Portulacaceae  
 Amaranth  
 Chenopodiaceae  
 Asclepiadaceae  
 Goodenia  
 Malvaceae  
 Poaceae

Nyctaginaceae  
 Nyctaginaceae

Portulaca ?oleracea  
 Zygophyllum billardiieri

**Flat Island – Sight Records**

Acacia bivenosa  
 Acacia ligulata  
 Angianthus cunninghamii  
 Boerhavia  
 Carpobrotus sp.  
 Cenchrus ciliaris  
 Commicarpus australis  
 Flaveria australasica  
 Gomphrena  
 Portulaca ?pilosa  
 Rhagodia preissii subsp. obovata  
 Salsola tragus  
 Senecio lautus  
 Sporobolus virginicus  
 Tribulus occidentalis

Kevin Kenneally and Daphne Edinger

**FLY SPECIMENS**

Fly specimens collected from the flowers of *Angianthus cunninghamii* (Asteraceae) from Serrurier Island Nature Reserve have been determined by Dr David K. Yeates, Australian National Insect Collection, CSIRO Entomology, Canberra as *Metallea* sp. (Diptera: Calliphoridae: Rhiniinae).

David says: "There seems to be very little known about the biology of this genus in particular, and the family has quite diverse habits. Calliphorids can be parasites, necrophages, or associated with dung, carrion and myiasis\*."

"Some Rhiniinae have been collected in association with termites nests, but they could be scavengers in those nests."

"The adults are commonly collected at flowers where they feed on nectar and pollen."

The genus is widely distributed in Australia and the Orient.

\*A definition of myiasis (from Gullan, P.J. & Cranston, P.S. (2000), *The Insects: An Outline of Entomology*, 2nd edn, Blackwell Science, Oxford) is "a disease or injury caused by feeding of larval flies on live flesh, of humans or other animals". The sheep blowfly, *Lucilia cuprina* is a calliphorid that feeds this way. Thanks to Kim Pullen (ANIC, CSIRO) for providing this informative definition!

## BIRD NOTES AND OTHER NATURAL HISTORY OBSERVATIONS

A bird survey was carried out over the entire trip and data gathered will assist CALM in the long-term management of the area. Observations have been passed onto the WA Museum and Frank O'Connor has sent atlas recordings to Birds Australia. An account of the red-necked phalarope sightings has been published in *Western Australian Bird Notes* and the *Bird Observer*. I would like to thank all those who participated in the trip and assisted with the gathering of bird data.

Although 70 bird species have been recorded on the Montebello Islands, many are vagrants or passage migrants. On this *LANDSCOPE* Expedition, which included the Montebellos and other islands along the Pilbara coast, we recorded 52 species.

Some failed to notice the abundance of bird life during the voyage from Karratha to the Montebello Islands, because priorities in coping with sea sickness were more to the fore. However, apart from a few hours on the last day, this was the only rough weather encountered, and we were able to take full advantage of the calm conditions to record many interesting sea birds. Soon after leaving Karratha we passed the wreck of the *DB.20*, a cable-laying ship, wrecked during cyclone Awesome in April 1989 – and it was from there we began our first bird recordings.

Throughout most of the expedition roseate tern, white-winged black tern and bridled tern were common, especially where attracted to schools of bait fish rounded up by long-finned tuna or frigate mackerel (*Auxis thazard*). It was not only the sea birds that were indicators of the richness of the marine life for we enjoyed frequent sightings of dolphin (84), turtle (20+), sea-snake (approx 25) as well as hump-backed whale (14).

### Gardenia Island

Wedge-tailed shearwater were breeding on Gardenia Island over an area of about two hectares (estimated by CALM to contain about 300 burrows). On our visit many of these were in use. We noticed monitor lizard tracks leading into several of the burrows.

### Trimouille Island

At William Louis Lagoon on Trimouille Island waders and other birdlife such as bar-shouldered dove in the regenerating mangroves kept us interested, particularly four immature horsefield's bronze cuckoo. Later we were to come across immature horsefield's bronze cuckoo on other islands and speculated as to whether or not they were breeding and parasitizing on yellow white-eye common in the region. On the west side of Trimouille Island we found a cache of cooking gear, which included a frying pan, kettle, cutting board, etc., hidden in containers and buried near old 200 litre drums. It would be interesting to know who put it there.

### Barrow Island

On Barrow Island we walked several kilometres inland from where we came ashore near the loading facilities, in

an unsuccessful bid to find the 'black and white' form of the white-winged fairy-wren. This form was first seen in 1818 and named by French zoologists after landing on Barrow Island and only occurs there and on Dirk Hartog Island. Everyone was able to easily observe the spinifex bird which are sometimes difficult to see, but on Barrow Island were reasonably plentiful. The area was notable for mammals. On our walk we startled a number of rufous hare wallaby and euro (which are smaller than their mainland counterpart).

### Boodie Island

We had very good bird sightings on Boodie Island – mainly waders. Active burrows of wedge-tailed shearwater were found in several unusual situations – rocky areas on top of cliffs and in gullies.

### Flat Island

Numerous brown quail eggs were found lying exposed and bleached by the sun on Serrurier and Flat Islands. Flat Island is a major breeding island for wedge-tailed shearwater. With the exception of an area along the eastern side, shearwater burrows are found over most of the island and a rough estimate of about 12 000 to 15 000 burrows was made, not all of them in use. A number of dead adult bridled tern and remains of eggshell under bushes showed evidence of breeding. The dried out remains of unfledged silver gull chicks indicated they also bred on the island. Streaked shearwater remains were found, and on return to Perth deposited with the Western Australian Museum. These birds are a reasonably common visitor to the northwest, and breed on offshore islands of Japan and Korea. While anchored off Flat Island we observed a spotted harrier island-hopping from Serrurier Island to Flat Island, at a low altitude of about 15 metres above the sea.

There were no tracks of monitor lizards on Flat Island and the absence of this reptile would most likely be an inducement to seabirds to use it for breeding. Apart from the birds an interesting array of sea shells was found washed up on the beach. The dried out remains of a newly hatched hawksbill turtle was picked up in the middle of the island.

**Roseate Terns** were plentiful everywhere, especially between the Montebellos and Lowendale group of islands where we saw many flocks of between 200–400 attracted to schools of small fish. This reinforced CALM's assertion that these islands contain more roseate tern colonies than anywhere else on the Western Australian coast. At one stage our skipper tried taking us through a maze of reef to a small island south-west of Flag Island, to investigate the breeding status of at least 3000 roseate tern roosting there and many flocks (of 20–100 birds) flying to it. Unfortunately, due to a dropping tide we didn't quite make it.

**Silver Gulls** While sailing close to Varanus Island there was a flock of 300 silver gull feeding on a school of bait fish. It was unusual not to see other bird species in the flock, because of the variety of sea birds in the area.



Expeditioners at the cairn marking the atomic testing site on Trimouille Island. Photo – Kevin Kenneally



David Row, Andrew Speirs and Ken Spurge examining an osprey nest on Primrose Island. Photo – Kevin Coate



Keith Morris and expeditioners checking cage traps on Barrow Island. Photo – Kevin Coate



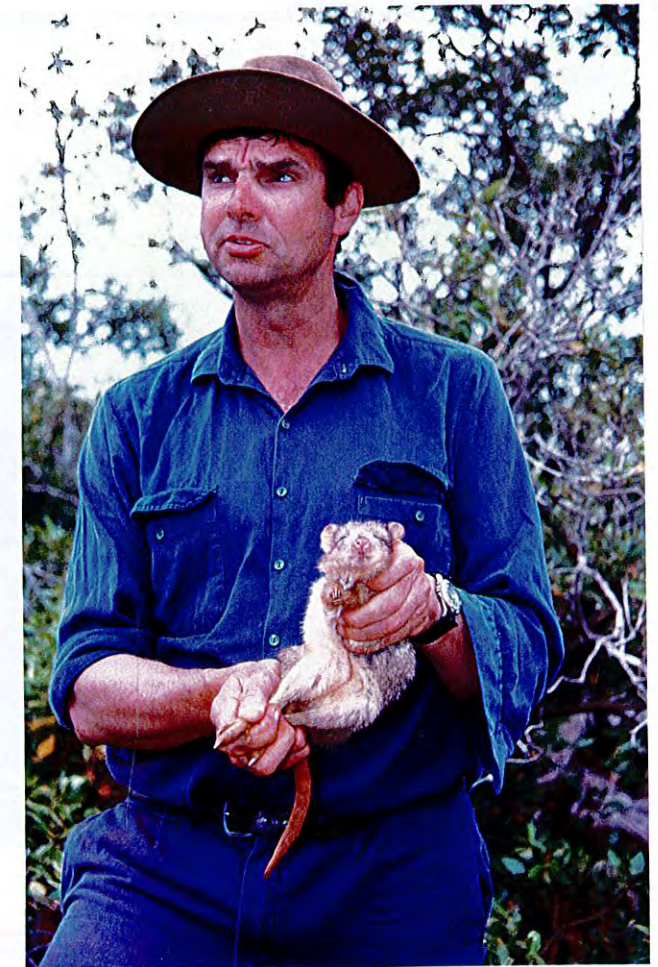
Releasing a boodie from a cage trap on Barrow Island. Photo – Kevin Coate



Expeditioners on Alpha Island, Montebellos. Photo – Kevin Coate



Kevin Kenneally and Daphne Edinger with seaweed (algae) samples collected from the west side of Barrow Island. Dr John Huisman of Murdoch University is identifying the specimens. Photo – Kevin Coate



Keith Morris holding a boodie trapped on Barrow Island. Photo – Kevin Coate



Beach Morning Glory (*Ipomoea pes-caprae*), a common dune plant on the islands visited. Photo – Kevin Kenneally



Slicks of unidentified “bio-organic” matter were common between Thevenard and Barrow Island. Samples collected are being studied by Professor John Kuo, Centre for Microscopy and Microanalysis at the University of Western Australia. Photo – Kevin Coate

**White-breasted Woodswallows** were present in small numbers on most islands and we obtained useful breeding records. Some nests contained eggs and small young, and we found a cluster of four newly fledged young that had just vacated their nest. As we walked on Gardenia Island several birds swooped in close in an endeavour to catch disturbed grasshoppers. Two disused zebra finch nests on Boodie Island had been utilised by woodswallows as a base on which to build their nests.

**Red-necked Phalarope** The highlight of the trip for the keen birdwatchers was when a small group of birds, too distant to identify, was spotted resting on the water between Boodie and Airlie Islands (at S21°09'40" E115°13'04") on 27/10/2000, and our skipper obligingly changed course for closer observation. It soon became apparent that it was a flock of 33 red-necked phalarope. We approached to within about twenty metres before they flew a short distance. The birds did not seem unduly alarmed as we approached a second time. A short time later another flock (of between 70–100) were spotted flying and landing on the water some distance away. As far as I am aware these sightings represent the highest number of red-necked phalarope recorded at one time in Western Australia.

These birds breed in the northern hemisphere and spend much of their non-breeding time at sea along the South American coast, northern Africa and areas south of Lombok, Timor, the Moluccas, as well as in the Arafura Sea. In Western Australia they are regularly recorded in small numbers at Port Hedland saltworks and other coastal salt works. An occasional bird turns up at Rottnest Island, and they have been recorded at the Eyre Bird Observatory. Little is known of their distribution, numbers, or what influences their occurrence off the Pilbara coast. Not surprisingly, there have been few reports from birdwatchers as this coast is an area seldom visited. While operating fishing trips out of Dampier, our skipper informed me, it was not uncommon to see flocks of red-necked phalarope around schools of long finned tuna that were rounding up small bait fish. The birds would usually retreat out of the way if the tuna became too frenzied in their attacks.

During their non breeding season red-necked phalarope have been recorded congregating around ocean slicks and upwellings that produce a high biomass of food organisms in other parts of the world. On our *LANDSCOPE* Expedition the seas were generally calm with just a slight swell. Over the whole area from the Montebellos to Exmouth (especially south from Barrow Island) there were extensive slicks of floating organic matter, and according to fishermen, common in the area at this time of year. These slicks could well be associated with the Leeuwin current, which comes down the entire west coast from the north of Australia. With further research it could explain the incidence of red-necked phalarope sightings as far south as Rottnest Island. The sightings of these birds in their non-breeding season may indicate a more intense distribution along the Western Australian coast, or indicate a change of distribution due to variations in the world's weather pattern. I'm sure there will be more birdwatchers on the flying bridge of next year's expedition hoping for further sightings.

**Osprey** Smooth flute-mouth fish appeared to be the favoured food of an osprey, the nest of which we visited on Serrurier Island, which contained the remains of 14 of these strange looking fish. An osprey nest on Primrose Island contained many remains of queen fish, estimated to have weighed about 300 g. It seemed likely that the osprey were feasting on fish rejected by commercial fishermen trawling in the area, particularly as flute-mouth fish are bottom feeders.

Shortly after watching two beach stone-curlew on Serrurier Island we spotted an osprey sitting on the edge of the partly exposed reef with a large fish hanging into the water. Several black-tipped shark were noticed moving toward the catch. At their approach the osprey attempted to take to the air with the fish, but it was too heavy and soon after take off, with wings flailing, it sank into the water. Immediately the sharks moved in. The osprey just managed to release its hold on the fish and become airborne, as the sea was thrashed by the sharks' feeding frenzy.

Kevin Coate



**KARRATHA to MONTEBELLO ISLANDS – 22.10.2000**

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	100+
Hutton's Shearwater - <i>Puffinus huttoni</i>	4
Wilson's Storm Petrel - <i>Oceanites oceanicus</i>	5
Brown Booby - <i>Sula leucogaster</i>	1
Pied Cormorant - <i>Phalacrocorax varius</i>	40 perched on the wreck of the DB.20
Osprey - <i>Pandion haliaetus</i>	1 perched on the wreck of the DB.20
Brahminy Kite - <i>Haliastur indus</i>	1 flying near the wreck of the DB.20
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	1
Silver Gull - <i>Larus novaehollandiae</i>	100
Caspian Tern - <i>Sterna caspia</i>	1
Crested Tern - <i>Sterna bergii</i>	40 in ones and twos
Roseate Tern - <i>Sterna dougallii</i>	400 in flocks above schools of feeding fish
Fairy Tern - <i>Sterna nereis</i>	6 near the Monte Bello Islands
Bridled Tern - <i>Sterna anaethetus</i>	2500 (approx) in flocks up to 200–300
White-winged Black Tern - <i>Sterna leucoptera</i>	1000+ in small flocks over most of the area
Fairy Martin - <i>Hirundo ariel</i>	6 flying around the wreck of the DB.20

**NORTH WEST ISLAND – 22.10.2000**

(Time ashore: 3½ hours)

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	3 (remains of dead birds)
Brown Booby - <i>Sula leucogaster</i>	1 (remains of dead bird)
Pied Cormorant - <i>Phalacrocorax varius</i>	8 resting on beach
Eastern Reef Egret - <i>Ardea sacra</i>	4 dark morph + 1 white morph
Osprey - <i>Pandion haliaetus</i>	4
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	1
Ruddy Turnstone - <i>Arenaria interpres</i>	9
Sanderling - <i>Calidris alba</i>	3
Pied Oystercatcher - <i>Haematopus longirostris</i>	3
Sooty Oystercatcher - <i>Haematopus fuliginosus</i>	2
Silver Gull - <i>Larus novaehollandiae</i>	50 (approx) + 5 dead birds
Lesser Crested Tern - <i>Sterna bengalensis</i>	1 dried-out dead chick
Bridled Tern - <i>Sterna anaethetus</i>	3 dead
Welcome Swallow - <i>Hirundo neoxena</i>	Reasonably common

**Miscellaneous**

Indo-Pacific Humpbacked Dolphin	5 playing around the boat while at anchor
Gould's Monitor ( <i>Varanus gouldii</i> )	Predating on turtle nests and ghost crabs

**HERMITE ISLAND – 23.10.2000**

Brown Quail - <i>Coturnix ypsilophora</i>	6 flushed from grass over the island
Pied Cormorant - <i>Phalacrocorax varius</i>	4 + 1 (recently dead bird)
Eastern Reef Egret - <i>Ardea sacra</i>	3
Osprey - <i>Pandion haliaetus</i>	3
Nankeen Kestrel - <i>Falco cenchroides</i>	1
Bar-tailed Godwit - <i>Limosa lapponica</i>	50 (approx)
Common Greenshank - <i>Tringa nebularia</i>	3
Grey-tailed Tattler - <i>Tringa brevipes</i>	100 (common around the island)
Ruddy Turnstone - <i>Arenaria interpres</i>	20
Red-necked Stint - <i>Calidris ruficollis</i>	30
Beach Stone-curlew - <i>Esacus neglectus</i>	1 at the landing below the CALM Study Centre
Pied Oystercatcher - <i>Haematopus longirostris</i>	7
Sooty Oystercatcher - <i>Haematopus fuliginosus</i>	2
Pacific Golden Plover - <i>Pluvialis fulva</i>	2
Grey Plover - <i>Pluvialis squatarola</i>	1
Red-capped Plover - <i>Charadrius ruficapillus</i>	26
Lesser Sand Plover - <i>Charadrius mongolus</i>	10

Silver Gull - <i>Larus novaehollandiae</i>	20
Caspian Tern - <i>Sterna caspia</i>	15
Lesser Crested Tern - <i>Sterna bengalensis</i>	20 resting on the edge of the lagoon
Crested Tern - <i>Sterna bergii</i>	3
Fairy Tern - <i>Sterna nereis</i>	30
Bar-shouldered Dove - <i>Geopelia humeralis</i>	20
Horsfield's Bronze Cuckoo - <i>Chrysococcyx basalis</i>	1
Brown Honeyeater - <i>Lichmera indistincta</i>	10 (vocal in mangrove area near Claret Bay)
Singing Honeyeater - <i>Meliphaga virescens</i>	1 (not previously recorded on island – Claret Bay – 20°29'41" S, 115°31'31"E)
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	4
Zebra Finch - <i>Taeniopygia guttata</i>	4 close to mangroves at Claret Bay
Welcome Swallow - <i>Hirundo neoxena</i>	10 flying low over vegetation
Yellow White-eye - <i>Zosterops luteus</i>	Common – particularly around mangroves

**Miscellaneous**

Gilberts Dragon ( <i>Gemmalophora gilberti</i> )	Several recorded
--	------------------

**GARDENIA ISLAND (20°23'09"S, 115°31'46"E) – 23.10.2000**

Brown Quail - <i>Coturnix ypsilophora</i>	7
Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	Breeding. Active burrows over about 2 acres.
Pied Cormorant - <i>Phalacrocorax varius</i>	1
Eastern Reef Egret - <i>Ardea sacra</i>	3
Osprey - <i>Pandion haliaetus</i>	1
Spotted Harrier - <i>Circus assimilis</i>	1
Bar-tailed Godwit - <i>Limosa lapponica</i>	1
Grey-tailed Tattler - <i>Tringa brevipes</i>	1
Ruddy Turnstone - <i>Arenaria interpres</i>	7
Pied Oystercatcher - <i>Haematopus longirostris</i>	1
Caspian Tern - <i>Sterna caspia</i>	2
Crested Tern - <i>Sterna bergii</i>	1
Bar-shouldered Dove - <i>Geopelia humeralis</i>	10
Sacred Kingfisher - <i>Todiramphus sanctus</i>	1
Brown Honeyeater - <i>Lichmera indistincta</i>	1
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	15
Richard's Pipit - <i>Anthus novaeseelandiae</i>	5
Yellow White-eye - <i>Zosterops luteus</i>	20

**Miscellaneous**

Gould's Monitor ( <i>Varanus gouldii</i> )	Tracks into Wedge-tailed Shearwater burrows
--	---

**TRIMOUILLE ISLAND (2 landings - 20°22'57"S, 115°32'44"E & 20°24'06"S, 115°34'15"E) – 24.10.2000**

Brown Quail - <i>Coturnix ypsilophora</i>	3
Pied Cormorant - <i>Phalacrocorax varius</i>	4
Eastern Reef Egret - <i>Ardea sacra</i>	2
Osprey - <i>Pandion haliaetus</i>	3
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	1
Nankeen Kestrel - <i>Falco cenchroides</i>	4
Bar-tailed Godwit - <i>Limosa lapponica</i>	1
Common Greenshank - <i>Tringa nebularia</i>	1
Grey-tailed Tattler - <i>Tringa brevipes</i>	4
Ruddy Turnstone - <i>Arenaria interpres</i>	10
Sanderling - <i>Calidris alba</i>	6
Red-necked Stint - <i>Calidris ruficollis</i>	30
Pied Oystercatcher - <i>Haematopus longirostris</i>	2
Sooty Oystercatcher - <i>Haematopus fuliginosus</i>	3
Red-capped Plover - <i>Charadrius ruficapillus</i>	15
Lesser Sand Plover - <i>Charadrius mongolus</i>	3

Greater Sand Plover - <i>Charadrius leschenaultii</i>	3
Silver Gull - <i>Larus novaehollandiae</i>	6
Crested Tern - <i>Sterna bergii</i>	2
Fairy Tern - <i>Sterna nereis</i>	10
Bar-shouldered Dove - <i>Geopelia humeralis</i>	20
Horsfield's Bronze Cuckoo - <i>Chrysococcyx basalis</i>	4 (all immature)
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	1
Richard's Pipit - <i>Anthus novaeseelandiae</i>	11
Welcome Swallow - <i>Hirundo neoxena</i>	25
Yellow White-eye - <i>Zosterops luteus</i>	30

**Miscellaneous**

Mala or Rufous Hare Wallaby	5
Humpback Whales	2 seen from cliffs on western side
Monitor Lizard	1

**ALPHA ISLAND** (Burgundy Bay 20°24'15"S, 115° 32'09"E) – 24.10.2000  
(Time ashore: 1 hour 20 minutes)

Brown Quail - <i>Coturnix ypsilophora</i>	2
Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	1 dead bird of the White-bellied form
Eastern Reef Egret - <i>Ardea sacra</i>	2
Osprey - <i>Pandion haliaetus</i>	1
Nankeen Kestrel- <i>Falco cenchroides</i>	1 dead bird
Common Sandpiper - <i>Tringa hypoleucos</i>	1
Ruddy Turnstone - <i>Arenaria interpres</i>	1
Pied Oystercatcher - <i>Haematopus longirostris</i>	1
Crested Tern - <i>Sterna bergii</i>	2
Richard's Pipit - <i>Anthus novaeseelandiae</i>	1

**PRIMROSE ISLAND** (20°22'24"S, 115°31'14"E) – 24.10.2000  
(Time Ashore: 1 hour)

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	1 dead bird
Pied Cormorant - <i>Phalacrocorax varius</i>	2
Eastern Reef Egret - <i>Ardea sacra</i>	2
Osprey - <i>Pandion haliaetus</i>	3 (nest stack on beach at landing site with a large number of Queen Fish remains around it, mostly estimated to weigh about 300 g)
Common Sandpiper - <i>Tringa hypoleucos</i>	1
Ruddy Turnstone - <i>Arenaria interpres</i>	4
Pied Oystercatcher - <i>Haematopus longirostris</i>	2
Silver Gull - <i>Larus novaehollandiae</i>	10
Crested Tern - <i>Sterna bergii</i>	2
Bar-shouldered Dove - <i>Geopelia humeralis</i>	6
Sacred Kingfisher - <i>Todiramphus sanctus</i>	1
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	2
Welcome Swallow - <i>Hirundo neoxena</i>	4
Yellow White-eye - <i>Zosterops luteus</i>	12

**Miscellaneous**

Gould's Monitor ( <i>Varanus gouldii</i> )	1
Green-backed Turtle	4 close to landing site

**AT SEA BETWEEN THE MONTEBELLO AND LOWENDALE ISLANDS** – 25.10.2000

Brown Booby - <i>Sula leucogaster</i>	2
Eastern Reef Egret - <i>Ardea sacra</i>	1
Osprey - <i>Pandion haliaetus</i>	2
Silver Gull - <i>Larus novaehollandiae</i>	600

Caspian Tern - <i>Sterna caspia</i>	1
Roseate Tern - <i>Sterna dougallii</i>	10 000 (3000 resting on islet next to Flag Is.) Very common in small flocks up to 200 feeding on bait fish, rounded up by Long-finned Tuna (Frigate Mackerel)
Fairy Tern - <i>Sterna nereis</i>	2
Sooty Tern - <i>Sterna fuscata</i>	20
Common Noddy - <i>Anous stolidus</i>	9

**BARROW ISLAND** – 25.10.2000

Pied Cormorant - <i>Phalacrocorax varius</i>	200
Eastern Reef Egret - <i>Ardea sacra</i>	2 dark morph + 2 white morph
Osprey - <i>Pandion haliaetus</i>	4
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	3
Spotted Harrier - <i>Circus assimilis</i>	1
Nankeen Kestrel- <i>Falco cenchroides</i>	3
Bar-tailed Godwit - <i>Limosa lapponica</i>	1
Common Greenshank - <i>Tringa nebularia</i>	1
Grey-tailed Tattler - <i>Tringa brevipes</i>	2
Ruddy Turnstone - <i>Arenaria interpres</i>	3
Pied Oystercatcher - <i>Haematopus longirostris</i>	2
Sooty Oystercatcher - <i>Haematopus fuliginosus</i>	2
Red-capped Plover - <i>Charadrius ruficapillus</i>	3
Silver Gull - <i>Larus novaehollandiae</i>	20
Crested Tern - <i>Sterna bergii</i>	4
Singing Honeyeater - <i>Meliphaga virescens</i>	9
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	10 (Breeding – 1 nest in <i>Ficus platypoda</i> )
Welcome Swallow - <i>Hirundo neoxena</i>	1
Spinifex-bird - <i>Eremiornis carteri</i>	15

**AT SEA WEST SIDE OF BARROW ISLAND TO BOODIE ISLAND** – 26.10.2000

Roseate Tern - <i>Sterna dougallii</i>	3,000 (approx) in flocks of up to 300
Fairy Tern - <i>Sterna nereis</i>	20
Bridled Tern - <i>Sterna anaethetus</i>	200

**Miscellaneous**

Dolphin	50–60
Green Turtle	5
Extensive slicks	

**BOODIE ISLAND** (S20°57'43" E115°19'52") – 26.10.2000

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	Breeding. Small numbers active in burrows on cliff tops and in valley
Pied Cormorant - <i>Phalacrocorax varius</i>	30
Eastern Reef Egret - <i>Ardea sacra</i>	4
Black-shouldered Kite - <i>Elanus caeruleus</i>	1
Brahminy Kite - <i>Haliastur indus</i>	1
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	2
Nankeen Kestrel- <i>Falco cenchroides</i>	3 (1 juvenile)
Bar-tailed Godwit - <i>Limosa lapponica</i>	4
Whimbrel - <i>Numenius phaeopus</i>	1
Common Sandpiper - <i>Tringa hypoleucos</i>	2
Common Greenshank - <i>Tringa nebularia</i>	3
Grey-tailed Tattler - <i>Tringa brevipes</i>	8
Ruddy Turnstone - <i>Arenaria interpres</i>	20
Sanderling - <i>Calidris alba</i>	9

Red-necked Stint - <i>Calidris ruficollis</i>	10
Beach Stone-curlew - <i>Esacus neglectus</i>	2
Pied Oystercatcher - <i>Haematopus longirostris</i>	3
Sooty Oystercatcher - <i>Haematopus fuliginosus</i>	2
Red-capped Plover - <i>Charadrius ruficapillus</i>	6
Lesser Sand Plover - <i>Charadrius mongolus</i>	2
Greater Sand Plover - <i>Charadrius leschenaultii</i>	4
Silver Gull - <i>Larus novaehollandiae</i>	25
Caspian Tern - <i>Sterna caspia</i>	4
Crested Tern - <i>Sterna bergii</i>	4
Fairy Tern - <i>Sterna nereis</i>	10
Bar-shouldered Dove - <i>Geopelia humeralis</i>	20
Singing Honeyeater - <i>Meliphaga virescens</i>	3
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	6 (Breeding - 2 nests with small young. 6 dis-used nests all in a thicket of <i>Cordia subcordata</i> )
Richard's Pipit - <i>Anthus novaeseelandiae</i>	3
Zebra Finch - <i>Taeniopygia guttata</i>	8 (Breeding - 2 dis-used nests used as a base for White-breasted Woodswallow nests.)
Welcome Swallow - <i>Hirundo neoxena</i>	5
Spinifex-bird - <i>Eremiornis carteri</i>	1

<b>Miscellaneous</b>	
Varanus acanthurus	1 dead

**AT SEA BETWEEN BOODIE AND AIRLIE ISLANDS - 27.10.2000**  
(Distance: 56 km. Time: 8.30 am - 11.30 am)

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	2
Wilson's Storm Petrel - <i>Oceanites oceanicus</i>	24 (a cluster of 7 sitting on the ocean)
Brown Booby - <i>Sula leucogaster</i>	1
Pied Cormorant - <i>Phalacrocorax varius</i>	140 roosting on shore of Pascoe Is
Red-necked Phalarope - <i>Phalaropus lobatus</i>	133 (21°09'40"S, 115°13'04"E) A flock of 33 observed resting on the ocean A flock of 70-100 landed on water some distance from the boat
Silver Gull - <i>Larus novaehollandiae</i>	11
Crested Tern - <i>Sterna bergii</i>	100
Fairy Tern - <i>Sterna nereis</i>	8
Bridled Tern - <i>Sterna anaethetus</i>	241 (mainly in two's and small flocks up to 28)
White-winged Black Tern - <i>Sterna leucoptera</i>	23 (2 flocks - 17 & 6)

<b>Miscellaneous</b>	
Extensive slicks over the whole area	
Indo Pacific Humpbacked Dolphin	3
Unidentified Dolphin	6
Sea Snake (large yellow)	11
Turtle	3 (3 Bridle Tern resting on back of sleeping Turtle)

**AT SEA BETWEEN AIRLIE AND THEVENARD ISLANDS - 27.10.2000**  
(Distance: 24 km. Time: 11.30 am - 1.30 pm)

Brown Booby - <i>Sula leucogaster</i>	2
Silver Gull - <i>Larus novaehollandiae</i>	100 (65 roosting Saladin A Well off shore from Thevenard Island)
Crested Tern - <i>Sterna bergii</i>	3
Roseate Tern - <i>Sterna dougallii</i>	2
Bridled Tern - <i>Sterna anaethetus</i>	36 (in ones and twos - small flocks up to five)
White-winged Black Tern - <i>Sterna leucoptera</i>	180 (in 5 flocks up to 88)

<b>Miscellaneous</b>	
Turtle	1

**AT SEA BETWEEN THEVENARD AND SERRURIER ISLANDS - 27.10.2000**  
(Distance: 40 km. Time: 1.45 pm - 3.45 pm)

Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	2
Pied Cormorant - <i>Phalacrocorax varius</i>	76 (16 single birds - 60 on Table Island)
Eastern Reef Heron - <i>Ardea sacra</i>	1
Osprey - <i>Pandion haliaetus</i>	1 near Tortoise Island
Silver Gull - <i>Larus novaehollandiae</i>	2
Crested Tern - <i>Sterna bergii</i>	14
Roseate Tern - <i>Sterna dougallii</i>	200 close to Table Island
Bridled Tern - <i>Sterna anaethetus</i>	36 (mainly in ones and twos)
White-winged Black Tern - <i>Sterna leucoptera</i>	557 (in small flocks up to 160 - more common closer to Serurrier Island)

<b>Miscellaneous</b>	
Green Turtle	2 (2 Bridle Tern resting on back of one Turtle)

**SERRURIER ISLANDS (21°37'19"S, 114°41'27"E) - 27.10.2000**

Brown Quail - <i>Coturnix ypsilophora</i>	Breeding: old eggs scattered over the island
Wedge-tailed Shearwater - <i>Puffinus pacificus</i>	Breeding. Extensive burrows (many in use)
Pied Cormorant - <i>Phalacrocorax varius</i>	11
Eastern Reef Egret - <i>Ardea sacra</i>	2
Osprey - <i>Pandion haliaetus</i>	6 (3 dis-used nests - 1 contained 14 heads of smooth flute-mouth fish)
Black-shouldered Kite - <i>Elanus caeruleus</i>	2
White-bellied Sea-Eagle - <i>Haliaeetus leucogaster</i>	2 (1 immature)
Spotted Harrier - <i>Circus assimilis</i>	1
Nankeen Kestrel - <i>Falco cenchroides</i>	2
Whimbrel - <i>Numenius phaeopus</i>	1
Grey-tailed Tattler - <i>Tringa brevipes</i>	1
Ruddy Turnstone - <i>Arenaria interpres</i>	20
Sanderling - <i>Calidris alba</i>	11
Beach Stone-curlew - <i>Esacus neglectus</i>	2
Lesser Sand Plover - <i>Charadrius mongolus</i>	1
Greater Sand Plover - <i>Charadrius leschenaultii</i>	3
Silver Gull - <i>Larus novaehollandiae</i>	25 (Breeding: Several dried out remains of partly fledged chicks on southern end)
Caspian Tern - <i>Sterna caspia</i>	5
Crested Tern - <i>Sterna bergii</i>	8
Roseate Tern - <i>Sterna dougallii</i>	3
White-winged Black Tern - <i>Sterna leucoptera</i>	100
Bar-shouldered Dove - <i>Geopelia humeralis</i>	8
Horsfield's Bronze Cuckoo - <i>Chrysococcyx basalis</i>	2 (1 young bird un-coloured)
Crimson Chat - <i>Ephianura tricolor</i>	1 (possibly vagrant)
White-breasted Woodswallow - <i>Artamus leucorhynchus</i>	8 adults; Breeding. 1 nest 2.5 m above ground in <i>Acacia coriacea</i> thicket with 3 young; 1 dis- used nest in <i>Acacia coriacea</i> and 4 young freshly out of nest
Richard's Pipit - <i>Anthus novaeseelandiae</i>	4
Yellow White-eye - <i>Zosterops luteus</i>	20

**FLAT ISLAND (21°36'12"S, 114°37'27"E) - 28.10.2000**  
(Time spent on Island: 10.40 am - 12 pm)

Brown Quail - <i>Coturnix ypsilophora</i>	8 (Breeding: numerous old eggs over the island)
---	---

Streaked Shearwater - *Calonectris leucomelas*  
 Wedge-tailed Shearwater - *Puffinus pacificus*

Pied Cormorant - *Phalacrocorax varius*  
 Eastern Reef Egret - *Ardea sacra*  
 Osprey - *Pandion haliaetus*  
 White-bellied Sea-Eagle - *Haliaeetus leucogaster*  
 Spotted Harrier - *Circus assimilis*  
 Nankeen Kestrel - *Falco cenchroides*  
 Grey-tailed Tattler - *Tringa brevipes*  
 Ruddy Turnstone - *Arenaria interpres*  
 Sanderling - *Calidris alba*  
 Beach Stone-curlew - *Esacus neglectus*  
 Pied Oystercatcher - *Haematopus longirostris*  
 Lesser Sand Plover - *Charadrius mongolus*  
 Silver Gull - *Larus novaehollandiae*  
 Crested Tern - *Sterna bergii*  
 Roseate Tern - *Sterna dougallii*  
 Bridled Tern - *Sterna anaethetus*

Bar-shouldered Dove - *Geopelia humeralis*  
 White-breasted Woodswallow - *Artamus leucorhynchus*

Yellow White-eye - *Zosterops luteus*

Remains of 1 dead bird  
 Breeding. 12 000–15 000 burrows (approx) – A major breeding ground with some dead birds  
 1  
 1  
 2  
 2  
 1 island-hopping from Serrurier Island  
 1  
 9  
 34  
 3  
 1  
 2  
 1  
 6 (Breeding: dried out remains of chicks)  
 1  
 3  
 1 (Breeding: dead birds and remains of egg shell under bushes)  
 1  
 2 (Breeding: nest about 2 m from ground with 3 eggs in *Acacia coriacea*.)  
 20

**Miscellaneous**  
 Hawksbill Turtle

Dried out remains of newly hatched turtle in centre of island

**AT SEA BETWEEN FLAT ISLAND AND EXMOUTH – 28.10.2000**

Wedge-tailed Shearwater - *Puffinus pacificus* 14  
 Wilson's Storm Petrel - *Oceanites oceanicus* 2  
 Pied Cormorant - *Phalacrocorax varius* 1  
 Silver Gull - *Larus novaehollandiae* 6  
 Crested Tern - *Sterna bergii* 13  
 Bridled Tern - *Sterna anaethetus* 5  
 White-winged Black Tern - *Sterna leucoptera* 7

**Miscellaneous**  
 Green-backed Turtle 1  
 Unidentified Dolphin 3  
 Hump-backed Whale 3

**MONTEBELLOS AND BOODIE ISLANDS**

**Ant Collection** (identified by Dr Alan N. Anderson, CSIRO, Darwin)

*Iridomyrmex* sp. A (*rufoniger* sp.)  
 Small, black ants, from limestone rocks by beach. Common and numerous. North West Island (20° 22' 04.5"S, 115° 31' 59.4" E). 22.10.2000.

*Polyrhachis ammoneoides*  
 Large ants, dark red abdomen, on *Ipomoea pes-caprae* (beach morning glory) on beach sand dunes. North West Island (as above).

*Iridomyrmex* sp. A  
 Small black ant from CALM hut on Hermite Island (20° 29' S, 115° 32' E). 23.10.2000.

*Iridomyrmex* sp. A  
 Small black ants on commemorative plinth on Trimouille Island (20° 24' S, 115° 34' E). 24.10.2000.

*Melophorus bagoti*  
 Large red ant at top of island on rock. Trimouille Island (as above).

*Opisthopsis rufoniger*  
 Frenetically active ant on top of limestone rock. Alpha Island (20° 24' S, 115° 32' E). 24.10.2000.

*Iridomyrmex sanguineus*  
 Large ant, with red body and black abdomen, on rocks. Boodie Island, south of Barrow Island (20° 57' 43" S, 115° 19' 52" E). 27.10.2000.

**VOLUNTEER PROFILES**

**William Busby** (Bill) has been on LANDSCOPE Expeditions along the coast before. He is seeking knowledge and adventure with the usual good company in this interesting area.



**Barry Mendelawitz** has been on two previous LANDSCOPE Expeditions plus visiting the Kimberley coast with the Kimberley Society. On a previous application form he described himself as a "father of four sons and a blue healer". Not only is he another repeat expeditioner but this time he was not the only gynaecologist.



**Susan Clarkson** (Sue) has also been also been on several LANDSCOPE Expeditions and is happy to return for more. Sue has travelled quite extensively to follow her interests in wildlife, scuba diving and photography. She expects a unique experience and to see and learn about offshore islands that are not normally accessible for the average person.



**Frank O'Connor** wishes to survey the birds at this time of the year as migration is to be expected. He will be submitting the surveys to the Birds Australia Atlas II project. He has previously participated in wader banding expeditions to the North West. Frank is interested in natural history generally, particularly birds, but mammals and reptiles as well. Frank has worked at the Argyle Diamond Mine since 1988. His interests are birding, bridge and travel and he is a member of several natural history oriented clubs and societies.

**Rosalind Denny** (Roz) has also been with us several times before as the trips further her interest in, and knowledge of, ornithology and natural history.



**Joe Raudino** has undertaken two LANDSCOPE trips – to the Mitchell Plateau and to the Great Victoria Desert. Joe lives in Denmark where he built Karma Chalets a few years ago.

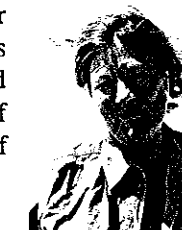


**Sallie Green** is another keen naturalist who has been on previous expeditions. Sallie has been remote camping and has taken part in excursions in Australia and Africa and an expeditionary cruise to Antarctica in 1993. Her major interest will be in the bird life on the islands.

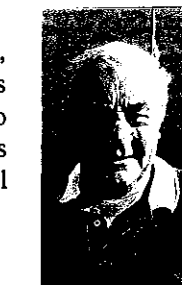


**Caroline Richards** – this trip is Carol's birthday present from her family so it is really rather special for her. She says her favourite holidays are camping with Coates Wildlife Tours.

**Elizabeth Hanrahan** (Beth) is another LANDSCOPE regular – her interests on these trips are birdwatching and photography and she had plenty of opportunities to indulge in both of these.



**David Row**, another past participant, David and his wife were last members of the LANDSCOPE Expedition to Buccaneer Archipelago. David's special interest is in the ornithological side of our expeditions.



**Eileen Row** David's wife Eileen has enjoyed previous projects, particularly island hopping by boat and gaining knowledge from experts. Eileen is a registered nurse. She is keen on golf and working in her garden, which is designed to attract birds.



**Ken Spurge** has been a commercial apiarist and has taken bees from Kununurra to Norseman. He also has been a Director of Wescobee Ltd for 25 years but is now semi-retired. He has farmed in the Jurien and Waroona areas for many years.



**Andrew Speirs** likes the people, the places and the opportunity to learn that is offered by *LANDSCOPE* Expeditions. With his wife Suzy he has been on earlier expeditions and found them interesting and rewarding. Andrew and Suzy hail from Hawthorn in Victoria where Andrew is a gynaecologist; they make almost annual visits to Western Australia to be



involved in our various trips.

**Kathleen Verrier** has been on several *LANDSCOPE* Expeditions which she describes as the "ultimate eco-tour". She was a small child living in Roebourne when the second atomic bomb was detonated in 1956. She describes the expeditions as a great way to see the State, to participate in useful research, meet interesting people and have a great time. Kathleen works as a



veterinarian south of Perth.

**Suzy Speirs** a landscape designer, has been able to expand her interest in and knowledge of native vegetation and its adaptations to the Australian environment while on earlier expeditions.



**Crew of research vessel *Flying Fish V***



George Greaves



Jackie Crofts



Kelly Crofts

**Expedition leaders**



Kevin Kenneally



Kevin Coate



Daphne Edinger



Keith Morris

This report is to be cited as Kenneally, K., Coate, K., Edinger, D. & Morris K. (2000). "Montebellos Magic – Sailing the Pilbara Coast 2000". *LANDSCOPE* Expeditions. Report No. 40, CALM, Perth, Western Australia. Copyright 2000 *LANDSCOPE* Expeditions, Science Publications Unit, Department of Conservation & Land Management (CALM), Locked Bag 29, Bentley Delivery Centre, Western Australia 6983. Extracts may be reproduced with the permission of *LANDSCOPE* Expeditions. ISSN 1444-8742