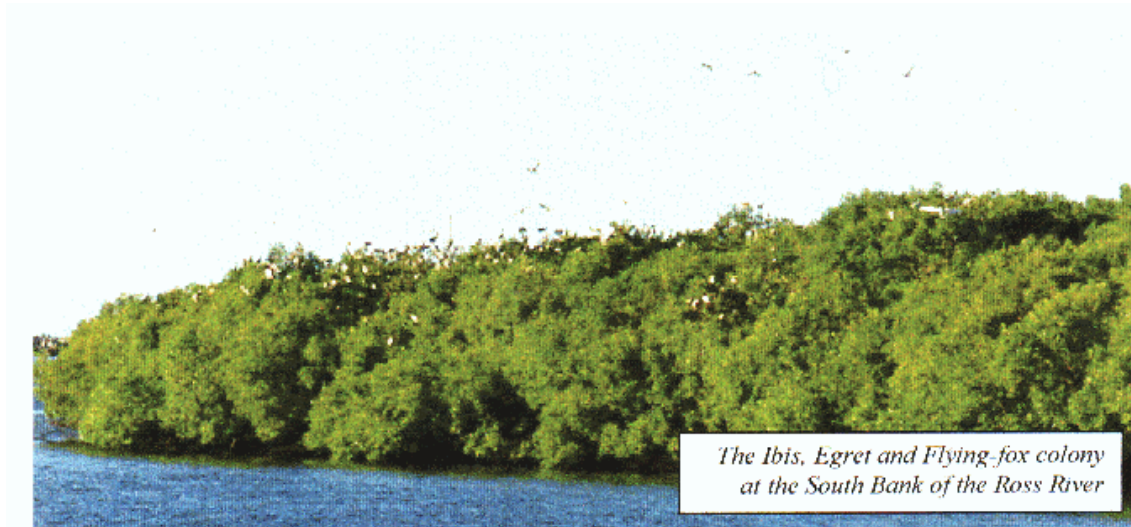


BIRD GROUP

The Bird Group has been one of the most active and successful subgroups since the inception of RIVER. This has been due to a core of dedicated volunteers and many occasional helpers throughout the years.



*The Ibis, Egret and Flying-fox colony
at the South Bank of the Ross River*

The Bird Group has focused on a major and unique environmental showcase of the Townsville area: the Ibis and Egret breeding colony on the south bank of the Ross River. The plight of this area was the driving force for this action as there was no data on the species that use and rely on this particular part of the river. A history of coexistence and dependence of this important section can now be established.

On the South Bank1 a large roosting and breeding bird colony can be found within the mangroves. The colony itself covers approximately 45 hectares and is effectively a small island bounded by Stuart Creek, Gordon Creek and the Ross River. The colony is dominated by a tall mixed-species mangrove forest, backed by saltcouch flats and saltmarshes. Several species breed within the colony at various times throughout the year. The Australian White Ibis (*Threskiornis aethiopica*) and Straw-necked Ibis (*Threskiornis spinicollis*) are present throughout the year as are small numbers of Great Egret (*Ardea a/ba*), Intermediate Egret (*Ardea intermedia*) and Little Egret (*Ardea garzetta*). During summer, increasing numbers of Cattle Egret (*Ardea ibis*) visit the site to breed.

Flying-foxes co-inhabit the colony, in the form of a time-share: as the last birds return to roost, thousands of Black Flying-fox (*Pteropus alecto*) are heading towards their nocturnal feeding grounds. A seasonal Visitor is the Little Red Flying-fox (*Pteropus scapulatus*), a very nomadic species. Together these two species can add up to tens of thousands of Flying-foxes in the Ross Colony.

Aims of the Bird Group:

- To record patterns of arrival times over two hours for Straw-necked Ibis & Australian White Ibis and register all other bird species in the area surrounding the Ross Colony.
- To examine seasonal changes in the number of ibis using the Ross Colony.
- To examine long term fluctuations in the numbers of each species visiting the colony.

Weekly counts of Australian and Straw-necked Ibis at Ross Colony

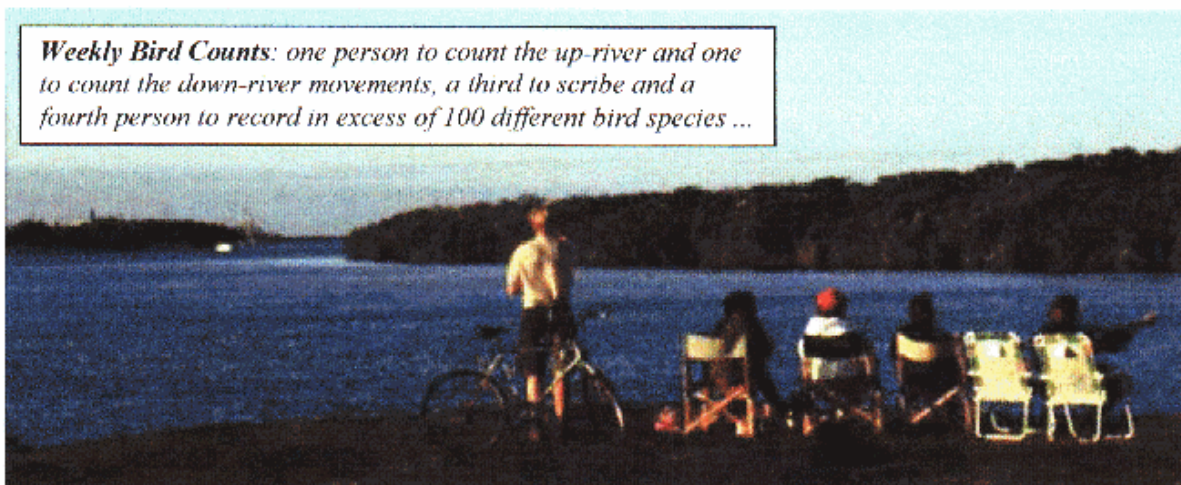
The counts of the Australian White Ibis and Straw-necked Ibis entering the colony are conducted from the north bank of the Ross River. They have been one of the most consistent monitoring activities of the RIVER Group since its beginning, with counts conducted weekly over 1997, 1998 and 1999.

The monitoring site is directly opposite the Ross Colony. The volunteers are seated by the river's edge in a gap in the mangroves in a vacant crown block at the end of Pascoe St, Railway Estate. The site offers good visibility up and down the river, to the major sources of birds entering the colony: city gardens and the Townsville landfill site. Trips have been made to the rear of the colony to ascertain whether or not significant groups of birds would use this flight path into their roosting spot. These surveys led to one conclusion:

only marginal numbers of birds enter from directly behind the mangroves. Furthermore, the majority of birds seen entering the colony from the south-east were those from the landfill site, and were also visible from Pascoe Street.

Casual observations pointed out that the birds arrived at the colony to roost just before dusk. As such, counts were initially conducted from 5pm to 7pm. By early April 1997, it became apparent that the birds adjusted their arrival times to coincide with sunset. Preliminary data showed that the birds virtually stopped returning to the colony about 20 minutes after official sunset.

From April 1997 onwards, the start and finish times for each survey period are calculated using the official sunset time, time zero - the count starts 90 minutes before and concludes 30 minutes after time zero. Australian White and Straw-necked Ibis and Cattle Egret counts are conducted weekly, every Thursday afternoon.



For this exercise a minimum of three persons is required: one person to count the up-river and one to count the down-river movements, and a third to scribe. A fourth person is required to record in excess of 100 different bird species that utilise this part of the Ross River either as a habitat or as a corridor. During the summer months, a fifth person is necessary to count and scribe the hundreds of Cattle Egrets that arrive to nest in the colony. Counts are made in five-minute intervals to compare arrival patterns and increase accuracy.

A record is also taken of wind speed (on a scale from 0 - 7), cloud cover (%) and tidal information, and any other relevant information that may be affecting the colony (eg. fires, unusual behaviour and/or sightings).

The time the Black Flying-fox take off for their nightly foraging trip is also recorded (as is the direction of the main stream of the bats) and a light meter reading taken (when possible). Also the arrival and departure dates of the nomadic Little Red Flying-fox is noted. No accurate counts of the number of flying-foxes has yet been achieved, however casual estimates indicate at least ten thousand.

Observations

The Ross flying-fox and ibis colony covers 45 hectares of mangrove forest dominated by Red (*Rhizophorastylusa*), Yellow (*Cenopsaustra/is*) and Grey Mangroves (*Avicennia madna*). The colony is used not only for roosting, but also for breeding for all species who inhabit it. This fact alone is a rare phenomenon. At peak breeding times, the White Ibis have been recorded in their thousands, and the Black Flying-fox and Little Red Flying-fox numbers can both climb into the tens of thousands. An unforgettable sight in the late afternoon is to see the ibis and egrets flocking back to their roosts, and the flying-foxes streaming off for the "night shift".

Figures BG-01 and BG-02 show the change in numbers of Ibis and Egrets at the colony site over the three years that the Bird Group has been monitoring the colony.

While the Ibis and Flying-foxes are the dominant residents at the colony, a large range of other birds have been seen utilising its rich biota. Egrets are also semi-permanent residents of the colony. The Great, Intermediate and Little Egrets are frequently seen feeding and roosting in breeding time (Fig. BG-03), and in summer, Cattle Egrets arrive in increasing numbers (thousands) (Fig. BG-02) to expand the colony to a visual bonanza.

An impressive number of other species (101) have been sighted in the immediate area, either searching for food, crossing between stands of mangroves, or passing overhead to other destinations ~able BG-04). Sightings of White-bellied Sea Eagles, many species of Kites, Hawks and Falcons demonstrate the area is an important source of food for these raptors. Even Dingoes have been seen at low tide, scavenging along the muddy shoreline for a meal.

During May 1999, for the first time in three years of weekly observations, the colony began to experience an unusual occurrence: both the Black Flying-foxes and Ibis species left the colony. A number of theories have been put forward as to their departure. One suggestion was that the nests could have been infested with mites. Another is that the area could have been abandoned to let it regenerate. The Bird Group decided to monitor two other sites periodically, sites known as roosting spots for small numbers of White Australian Ibis. One of these sites is adjacent to the DPI grounds bordering the river in the suburb of Oonoonba, and the other in the Wetlands of the Pony Club in Rosslea. Total Ibis numbers at these sites however did not add up to the numbers observed at the Ross Colony (during the same period last year).

Ibis are still seen flying into the South Bank colony. They often circle the area and then fly off, or if they do land they only stay for a short time and are gone by the end of count. Monitoring of the colony from the Castle Hill Carpark has noted that those ibis landing at the colony are favouring the trees further back from the river's edge. Even the Flying-

Fig BG-02: Fluctuations in the seasonal numbers of Australian White Ibis, Straw-necked Ibis and Cattle Egrets at the Ross Colony.
(Weekly counts over 2.5 years in a 120 minute interval around sunset)

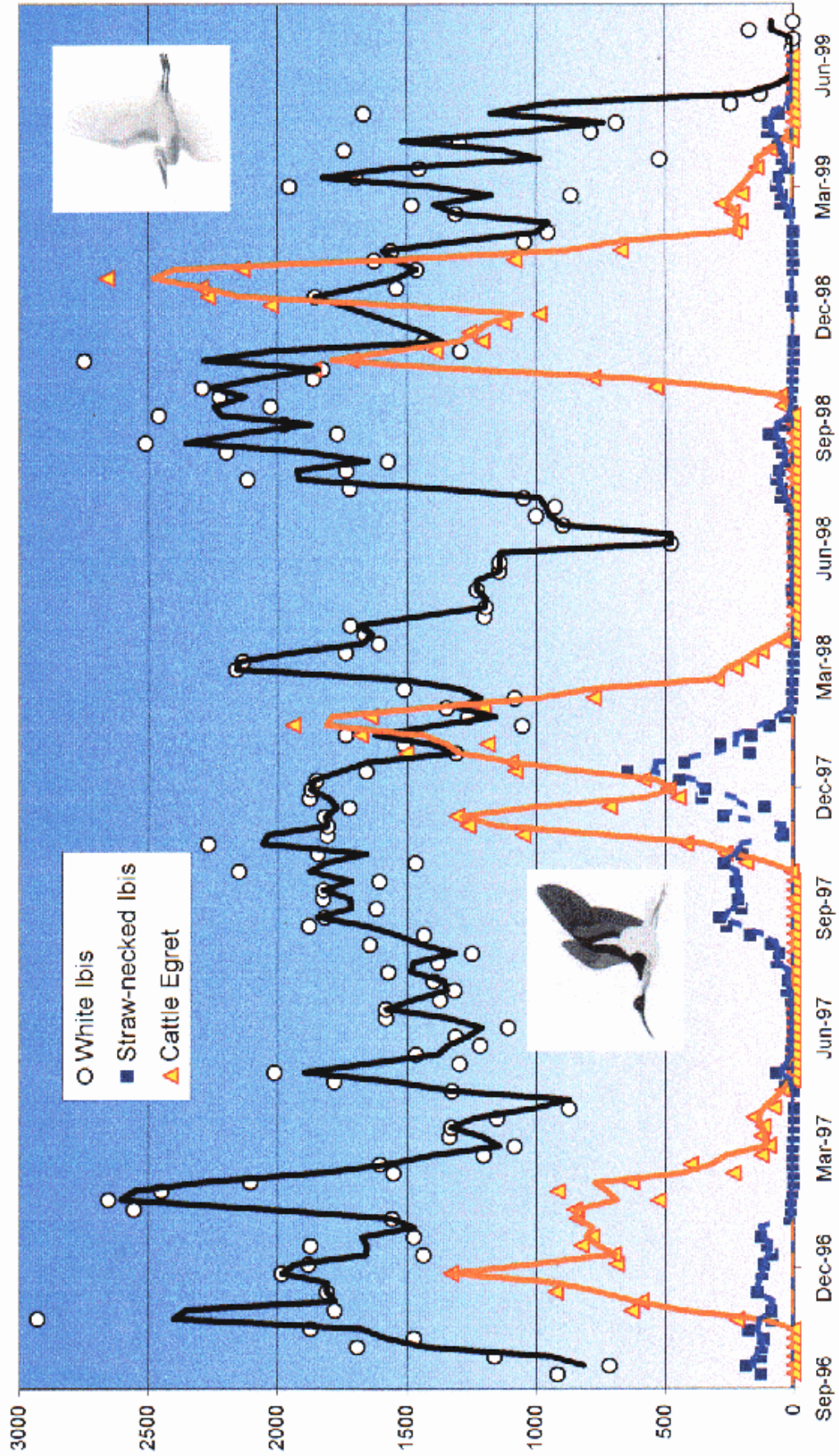


Fig BG-01: Yearly fluctuations in the number of **Australian White Ibis** returning to roost at the **Ross Colony** (in a 120 minute interval around sunset)

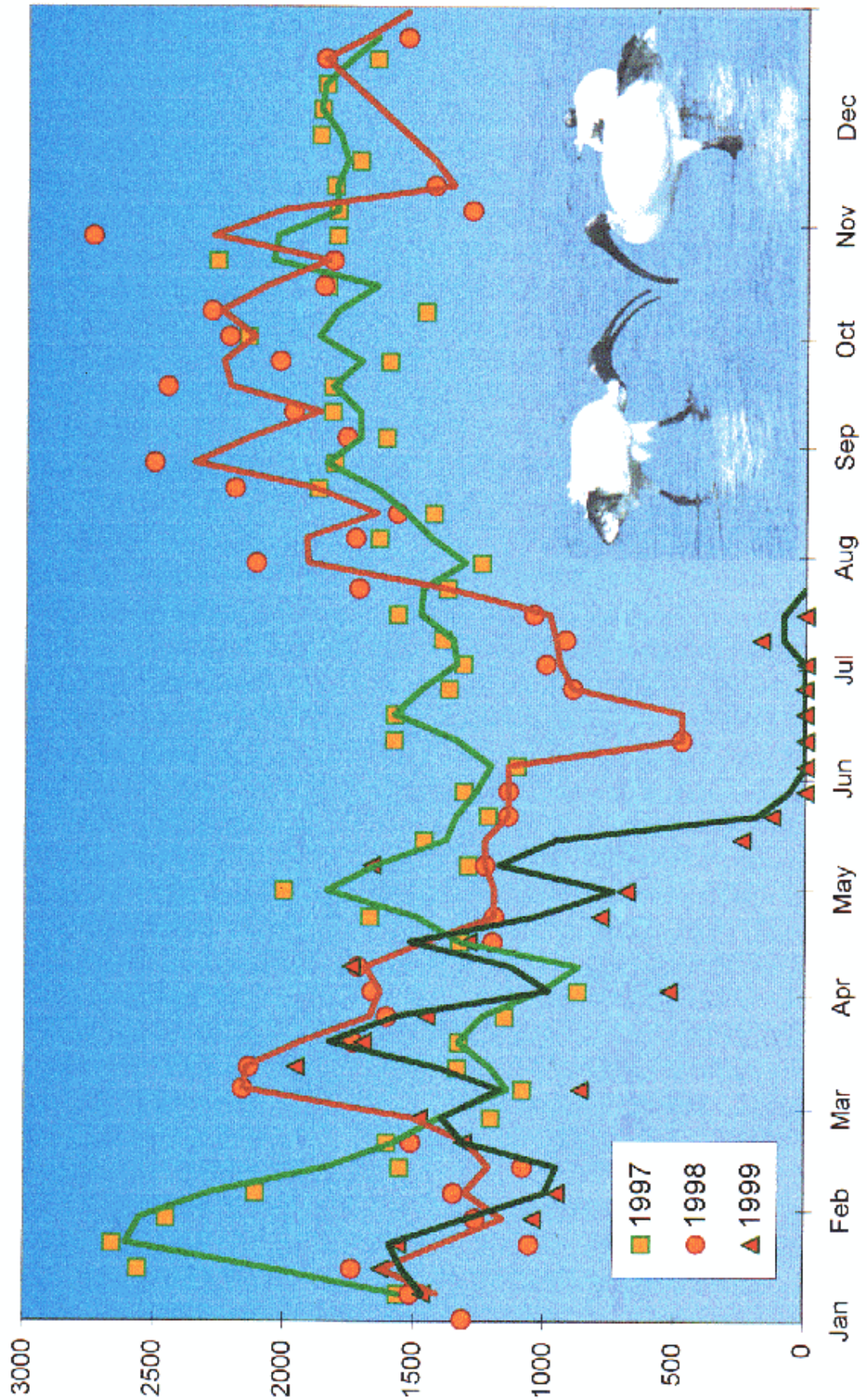


Table BG-03

Fig BG-03: Visiting Patterns of three Egret species at the Ross Colony
(Apr 97 - Jun 99)

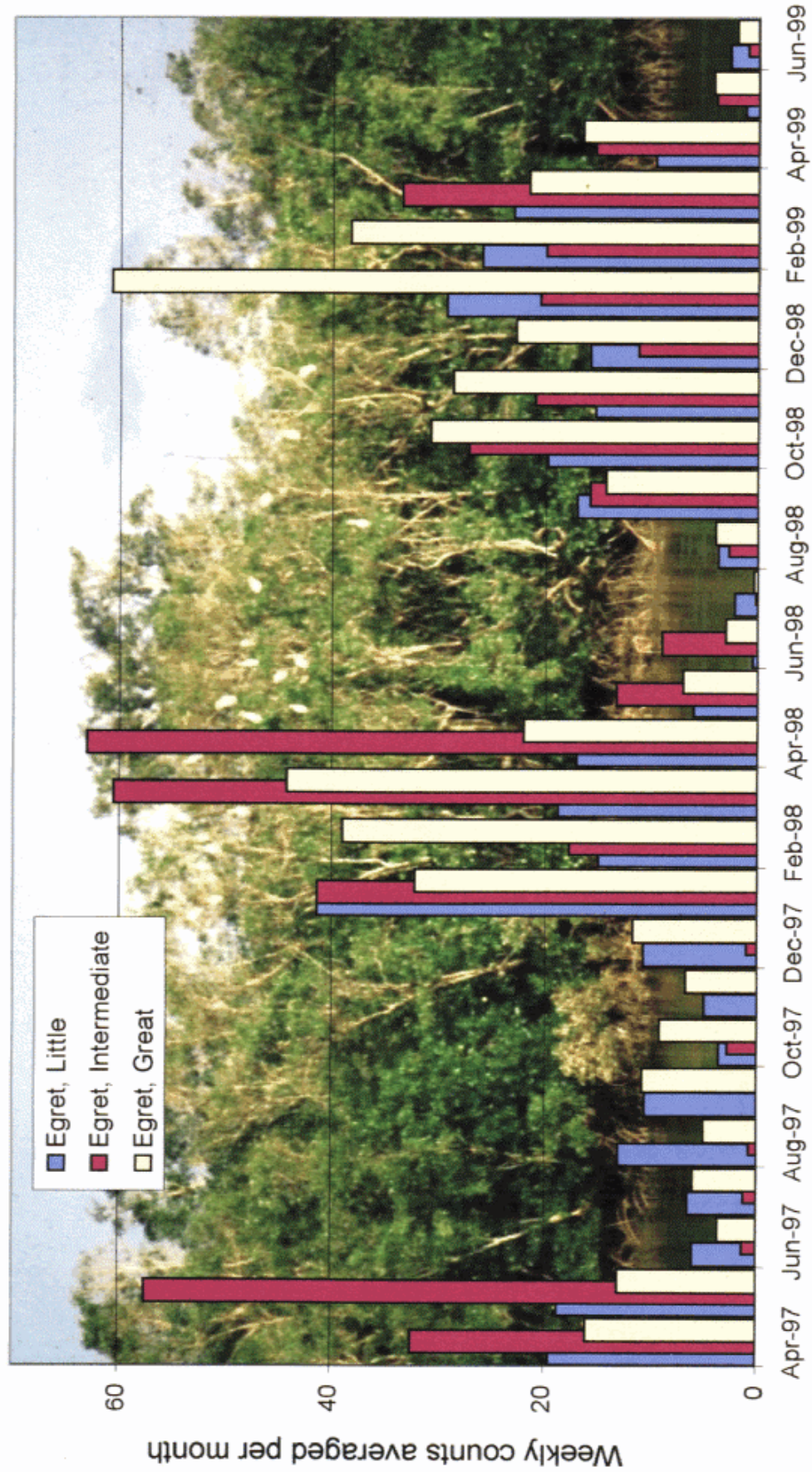


Table BG-04

Table BG-04: **Other Bird Species (101) sighted in the immediate area of the Ross Colony** during the weekly Ibis and Cattle Egret counts (104 counts)

Bird species	sightings	total	Bird species	sightings	total
Magpie-lark, Australian	102	2195	Sunbird, Yellow-bellied	11	11
Egret, Great	101	1386	Brush-turkey, Australian	10	12
Whimbrel	98	1805	Goshawk, Brown	9	9
Kite, Whistling	98	336	Willy Wagtail	9	9
Kite, Black	96	223	Finch sp.	8	243
Lorikeet, Rainbow	94	2236	Heron, White-faced	8	10
Egret, Little	94	1788	Shrike-thrush, Little	8	9
Swallow, Welcome	93	2468	Honeyeater, Blue-faced	7	10
Crow, Torresian	93	421	Kingfisher, Sacred	7	9
Gerygone, Mangrove	84	126	Pipit, Richard's	7	9
Tern, Caspian	82	730	Kestrel, Australian	7	7
Egret, Intermediate	80	1793	Osprey	7	7
Bee-eater, Rainbow	75	829	Ibis, Glossy	6	26
Gull, Silver	71	304	Duck, Pacific Black	6	13
Spoonbill, Royal	70	253	Kite, Black-shouldered	6	9
Curlew, Eastern	67	164	Imperial-pigeon, Pied	6	7
Woodswallow, White-breasted	66	401	Heron, (Rufous) Night	5	6
Drongo, Spangled	64	265	Heron, Pied	4	6
Lapwing, Masked	64	209	Koel	4	4
Kite, Brahminy	63	75	Martin, Fairy	3	218
Heron, Mangrove	60	94	Whistling-duck, Plumed	3	48
Dove, Peaceful	59	267	Lorikeet, Scaly-breasted	3	37
Sea-eagle, White-breasted	58	88	Mynah, Indian	3	19
Friarbird, Helmeted	52	198	Bush Thick-knee	3	6
Cormorant, Little Pied	51	102	Eagle, Wedgetailed	3	5
Pelican, Australian	47	122	Figbird	3	5
Honeyeater, Brown	45	88	Quail, Brown	3	4
Tern, Gull-billed	39	294	Cockatoo, Sulphur-crested	3	3
Dove, Bar-shouldered	37	45	Cuckoo, Channel-billed	3	3
Sandpiper, Common	34	52	Brolga	2	7
Cuckoo-shrike, Black-faced	33	59	Friarbird, Silver-crowned	2	6
Darter, Australian	31	57	Friarbird, Little	2	4
Corella, Little	30	125	Cisticola, Golden-headed	2	2
Cormorant, Little Black	29	77	Falcon, Peregrine	2	2
Tern, Crested	26	41	Sparrowhawk, Collared	2	2
Mistletoebird	26	31	Swifts, Forktailed	1	100
Black-cockatoo, Red-tailed	23	118	Martin, Tree	1	20
Goshawk, Grey	23	71	Dollarbird	1	8
Harrier, Marsh	23	34	Raven, Australian	1	3
Bowerbird, Great	21	35	Tattlers, Grey-tailed	1	3
Coucal, Pheasant	19	23	Galah	1	2
Hobby, Australian	19	22	Cormorant, Black	1	1
Cormorant, Pied	17	21	Egret, Reef	1	1
Mannikin, Nutmeg	15	217	Falcon, Brown	1	1
Magpie, Australian	15	29	Flycatcher, Leaden	1	1
Pigeon, Feral	12	239	Godwit, Bar-tailed	1	1
Butcherbird, Black	12	12	Honeyeater, Dusky	1	1
Goose, Magpie	11	60	Shrike-thrush, Grey	1	1
Bushlark, Singing	11	13	Stork, Black-necked	1	1
Cormorant, Great	11	13	Triller, Varied	1	1

foxes have not returned to the mangroves lining the river bank. Last year, these trees were full of flying-foxes, ibis and egrets. The flying-foxes are now occupying the mangroves on the down-river side of Stuart Creek and trees at the back of the colony.

Due to previous lack of monitoring at the Pony Club site, it isn't possible to conclude if this area has had any influence over the Ross Colony numbers, but nests in the roosting trees indicate the colony at Pony Club may have been established prior to May 1999. Observations over the last few months show a reduction in the number of ibis at the Pony Club compared to earlier May/June counts, though birds have been seen with nesting material. Zero ibis have been sighted at DPI for over the last month (October '99).

Currently, the Bird Group has three other projects running:

South Bank Woodland and Wader Surveys

In 1998, the Bird Group has begun monthly survey walks through the South Bank Savanna" area, a proposed rehabilitation area at the Ross River mouth. Grassland and woodland species are targeted on the walk to the beach. Once at the beach, a quantitative survey of wader species and other coastal dwellers is made. A minimum of 3 people are required to carry out this monthly activity. The data is supplied to the Environment Protection Agency for use in the Coastal Bird Atlas Project.

In the past, bird surveys have also been conducted at Bushland Beach, and at the Ross Island Barracks (Department of Defence's 10 Terminal Regiment Maritime Training School), on a regular basis (Table BG-06). These data sets were shared with the Townsville Regional Bird Observers Club, who ran a Coastcare funded Shore & Seabird survey in the Townsville/Thuringowa Coastal Plains.



Ross-Colony Interpretive Sessions

"Full Moon Bird & Bat Spectacles" are held every full moon at the National Park Boatramp, opposite the down-river end of the Ross colony. These immersive events include a talk on the fauna & flora of the area with displays of Ibis and Flying-foxes (courtesy of the Museum of Tropical Queensland) as well as some mangrove tree species that form the basis of the colony habitat.

The attendance of these interpretive sessions is steadily increasing, with an average around 30 and a maximum of 70 interested spectators of the impressive "night shift":

hundreds of Ibis and Egrets returning to roost and thousands of Flying-foxes leaving the colony to gather fruit foods.

Market Displays

Recently, the Group has started a monthly information display at the Sunday Cotters' Market in Flinders Mall, Townsville's CBD. These displays are planned every Sunday before a *'Full Moon Bird & Bat Spectacle'* in order to generate interest within the general public to come and observe the Ross colony which is known to be unique to Australia.

Current Bird Group Members

- Marion Gaemers
- ChnsJakku
- Glenda ~effenes
- David Reid
- Jo Wieneke

Past Members

- Mary Coppin
- Veronica Corstorphine
- Ray lack
- Tanya Korn
- locelyn Preece
- Connie Ramsay
- Karen Richardson
- Kath Stephens

Irregular Visitorsi Helpers

- Marcus Aschatz
- Barbara Done
- Jason Doyle
- Mary-Anne Hecker
- Emma lakku
- David James
- Ben Lee
- Robyn McCullough
- Vardya Moore
- Dr. Ellen Pearse
- Petch
- Bonita Pilling
- Denise Seabright
- Margaret Streamer Graham Ward

Expertise within:

Jo Wieneke, Townsville Representative for Birds Australia - North Queensland; Regional Organiser for the Atlas of Australian Birds and author of a series of books covering local birds and their habitats.

Expert Advisors

- Kirsten Dobbs (Department of Natural Resources)
Margot Warnett (Queensland Parks & Wildlife Service)

Most significant Achievement

- Having fun and learning a lot at the same time.
- Gathering baseline data that enables us to raise public awareness about the colony itself - as well as its beauty and proximity to Townsville's CBD.

In addition, each time we visit the river bank opposite the colony, we take some rubbish home with us; playing a part in keeping the River clean is also important to us.

Highest Personal Achievement

- Greatly improving our ability to identify birds;
- Meeting and working with many interesting and dedicated people, and
- The interaction we get to have with local river users, such as recreational fishers who also enjoy the riverbanks.

Funny stuff

© Marion's birthday this year was a very special occasion. We sipped champagne, ate water crackers and blue Castello cheese, hommus and an array of tasty nibbles whilst we leisurely sat in our deck chairs and watched the sunset (oh, and counted birds as well!)

- © Joc's farewell also involved champagne to her surprise, as Joc had generously brought down a flask of tea to share with the group at her last count.
Still remember the day we spotted an Australian White Ibis swimming in the river -who knew ibis could swim?!?
- © The All Day Ibis Count that was conducted in September 1997.
- © The time the sandflies were so thick that two birds decided they would be safer standing in knee-deep water in the Ross River estuary than if they stayed up on the bank!
- © Our dedication is notorious: during the wet season, we are never sure if we are going to get to finish a count. One time we were so determined to finish the two hours we thought we would all hold a tarp over our heads whilst 40 knot winds blew and penetrating rain fell around us, just in case the weather cleared!

Future Directions

A priority for the Bird Group is the formal recognition of the colony area as an important and valuable part of the Ross River system. With constant monitoring of the species that utilise this area, any important changes that may be detrimental can hopefully be identified sooner rather than later and dealt with swiftly. Equally important is to raise the awareness of the population of the Twin Cities to the fact that they have a unique marvel in their very midst that requires further understanding and some form of protection.

At present it is not known if the ibis will return to the colony. We can only surmise, that hopefully, it is a temporary arrangement for just one breeding season. Townsville residents have been requested via a media release, to forward any information they may have on whether similar fragmentations have occurred before, and whether ibis have been sighted in locations not previously visited. The general public will be advised about the status of the colony over future months via further media releases. The monthly information sessions at the National Park Boatramp and on the Cotters' Market will continue. Weekly monitoring of the Ross Colony and periodic monitoring of the roosting sites at the Pony Club and on DPI Land will be carried on. Monthly trips to the South Bank will also continue to be part of the normal routine and the data gained from all sites will be submitted in the following Monthly Area Search Reports to Birds Australia for their current Atlas Project:

1. South Bank Woodland Bird Species
2. South Bank Wader Bird Species
3. Ross Colony Bird Species
4. Pony Club Rosslea Bird Species

A new initiative to be included in the monitoring of the Ross Colony will be to report on the movements of motor boats and jet-skis passing the colony. It has been noted that these movements can disturb the colony, especially during breeding season.