

**Hastings Birdwatchers.
Survey.
Charles Sturt University Port Macquarie Campus.
December 15th.**



Map of Campus showing conservation area surveyed.

Background.

Between June and September 2020 Hastings Birdwatchers conducted 30 bird identification surveys at the Port Macquarie CSU Campus. The Campus adjoins the nationally recognised key biodiversity hot spot of Lake Innes Nature Reserve. This, in turn, provides great opportunity to attract a wide variety of Australian birds into the campus and particularly into the planted areas surrounding the student accommodation.

In early 2019 Hastings Birdwatchers became aware that continuing expansion of the University was inevitably resulting in the removal of some of the native vegetation remaining on campus grounds and, in particular, represented a potential threat to some Forest Red Gum and Swamp Mahogany which are key food trees for a number of native fauna species. In 2018 and 2019 the critically endangered Swift Parrot had been recorded in good numbers feeding on the blossom and lerps in these trees.

The purpose of the 30 surveys was twofold. The first involved ongoing surveying for the migrating Swift Parrots. The second arose from the fact that we were aware that, at the time, Kym Witney-Soanes, the coordinator of biodiversity activities across all CSU campuses, was “building a body of biodiversity evidence, particularly on threatened flora and fauna, across our university footprint”

The 30 surveys would create a solid baseline record of avian biodiversity on the Port Macquarie campus.

On the positive side the university campus includes a 2.5ha conservation off-set area on its south-eastern boundary. In addition, the built environment of the campus has been thoughtfully planted.

In agreement with the University, Hastings Birdwatchers also had conducted a vegetation survey which covered both the built environment and the conservation area. The aim was to recommend suitable bird attracting plantings, including areas that may have been unintentionally disturbed by on-site construction works.

One important recommendation that our club made was to attract more small birds onto campus, which required the identification of locations where understory re-plantings could be made without compromising any campus asset protection zones. The understory re-plantings were essential to protect the small birds from feral predators as well as from the established families of kookaburras and butcher birds.

In early 2022 seven members of our club participated in the replanting of one such cleared area.

The club, at the invitation of the University, and in order to observe any shift in bird numbers over time, offered to try to maintain one or two surveys per season, subject to the availability of experienced members. Unfortunately, Covid disrupted the best of intentions, so it was rewarding to finally be in a position to recommence the surveys.

Bird Count. 15th December 2022.

Six experienced club members surveyed two separate areas of campus between 7am and 9.15 am. Conditions were clear and windless, although a cool 12° at 7am.

ZONE1

The first area surveyed was the wooded conservation block at the southern end to the campus, located between the carpark servicing the new building and the boundary of the rubbish disposal site.

Zone 1.



Wooded Conservation Block. Photo supplied by Terry McCarthy.

In the 2years and 2months since the club conducted its last survey in this block, the vegetation has thickened and grown enormously. The planted Casuarina, Swamp Mahogany and Callistemon, on the northern section of the block surrounding the soak, have at least doubled in size. Equally pleasing is that the understory has definitely thickened, including some very dense masses of low vine, ideal for the protection and nesting of small birds.

The second area surveyed was the low vegetation, partly cleared, regrowth site located between the treed conservation block and Saint Columba Anglican School to its south, some of which is an extension of the conservation zone. This latter area is primarily wet heathland/sedgeland.

It, in turn, has two differing topographies and habitats which we have artificially split into Zones 2 and 3.

ZONE 2

The lower eastern side of **Zone 2**, bordering the council land, is regenerating naturally with paperbarks (three species of melaleuca), bottlebrush (Callistemon), tea-tree (leptospermum), Swamp Oak (*Casuarina glauca*) and reeds. There is also some plantings of Swamp Mahogany.

Zone 2



Photo Terry Mc Carthy

ZONE 3.

The upper western section is regenerating with smaller grasses, sedges, reeds and herbs.

Zone 3.



Photo Terry McCarthy

The club was keen to include both Zones 2 and 3 in the current survey as access to them had been limited during the construction of the new building and its carpark. Since mid-2020 the regeneration within both these zones has been impressive, but more so in Zone 2.

The club also included in this survey the narrow buffer zone between the university and the school, as it too has shown substantial growth and thickening since our 2020 surveys.

RESULTS.

Forty five species were recorded (Attachment 1). This represented a much higher number than any of the club's previous single surveys (the previous highest being 27). In part this is attributable to the extended survey time and the time of year. None of our previous recorded surveys were in summer. However the sightings of the Golden Headed Cisticola, the Buff-banded Rail, and the Pheasant Coucal in Zones 2 and 3, are almost certainly linked to the extent of regrowth in these Zones.

One of the most pleasing findings was the identification of 8 species not previously sighted in any of the 2020 surveys. They included the Golden-headed Cisticola, Buff-banded Rail, Pheasant Coucal, White-cheeked Honeyeater, Leaden Flycatcher (female), White-throated Gerygone, Channel-billed Cuckoo and the White-bellied Cuckoo Shrike (dark morph).

PHOTOS OF NEW SIGHTINGS



Golden -headed Cisticola

Photo Ian Kerr.



Buff-Banded Rail

Photo Ian Kerr.



Pheasant Coucal.
Photo. Birdlife.



Pheasant Coucal in Flight.
Photo. Chris Nixon



White-cheeked Honeyeater
Photo. Wikipedia.



Leaden Flycatcher (Female).
Photo. Chris Nixon.



White-throated Gerygone.
Photo Ian Kerr.



Channel-billed Cuckoo.

Photo Chris Nixon.



White-bellied Cuckoo-shrike.

Photo Ian Kerr.

When these new sightings are added to the 78 species identified during the 2020 surveys it raises the number of bird species sighted on campus since June 2020 to 86. There is reason for confidence that this will grow following night surveys and additional summer surveys. Club members are also noticing a higher number of unusual sightings in the mid north-coast region, possibly attributable to inland floods and other effects from climate change. Another pleasing finding was the sighting of 5 Sacred Kingfishers. The wooded conservation block contains a high number of Termitaria (the tree nest of a colony of termites) in which Kingfishers nest. Many of the termitaria were peppered with holes. It appears likely that this area may be a chosen breeding site for the Kingfishers.



Sacred Kingfisher. Photo. Ian Kerr

Other Sightings.

Apart from bird sightings, one very large koala was sighted at the mid southern boundary of the wooded conservation area (Zone1). Unlike other Koala sightings that the club has made previously in Zone 1, this sighting was made not in a eucalypt, but high in a *Melaleuca quinquenervia*. Apologies for the quality of the photograph, it was very high up and well hidden.



Photo Ian Kerr

A variety of species of dragonfly, damselfly and butterfly were also sighted in Zone 1, near and around the soak. Three Western Grey Kangaroos were seen in Zone 2.

Unfortunately deer footprints were also very clear in Zone 1 and a broad leaf paspalum has expanded its coverage, probably due to the three years of above average rainfall.

Acknowledgements.

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Thanks to Ted Giblin, Jenny Lester, Terry McCarthy, Les Mitchell and Ian Kerr from Hastings Birdwatchers for participating in the Survey and to Terry, Ian and Chris Nixon for photos.

Ken Monson.

Hastings Birdwatchers' CSU Survey Co-ordinator.

Attachment 1

Identification Record CSU Campus 15/12/2022.

Species	Number of Birds
Black Swan	5
Spotted Dove	1
Crested Pigeon	3
Bar-shouldered Dove	1
Pheasant Coucal	1
Pacific Koel	1
Channel-billed Cuckoo	2
Buff-banded Rail	1
Australasian Darter	1
Laughing Kookaburra	2
Sacred Kingfisher	5
Galah	5
Little Corella	2
Australian King-Parrot	4
Eastern Rosella	1
Scaly-breasted Lorikeet	10
Rainbow Lorikeet (Estimate)	30
Superb Fairywren	4
Lewin's Honeyeater	1
Yellow-faced Honeyeater	2
Noisy Miner	4
White-cheeked Honeyeater	1
Spotted Pardalote	1
White-browed Scrubwren	1
Brown Thornbill	2
Yellow Thornbill	2
White-throated Gerygone	1
Brown Gerygone	1
Black-faced Cuckooshrike	2
White-bellied Cuckooshrike	2
Rufous Whistler	2
Olive-backed Oriole	1
Australasian Figbird	4
Grey Butcherbird	3
Pied Butcherbird	2
Australian Magpie (Black-backed)	2
Willie Wagtail	1
Grey Fantail	2

Magpie-lark		3
Leaden Flycatcher		2
Torresian Crow		1
Eastern Yellow Robin		2
Golden-headed Cisticola		2
Welcome Swallow		2
Red-browed Finch		4
TOTAL SPECIES	45	
.	TOTAL BIRDS.	132