

WILDLIFE AT MOORE RESERVE WETLAND, OATLEY
A record of observations from September 2001 to January 2004
A success story for re-created wetlands
by David Waterhouse

Introduction

When excavations were completed by Kogarah Council for the newly created wetland at Moore Reserve in the spring of 2001, no-one could have predicted precisely how successful it would prove to be in attracting aquatic birds and other fauna.

Creating or re-creating wetlands in Sydney suburbia is in its infancy and not much is known about how long it takes for a small patch of new habitat to be discovered and colonised, or at least visited, by aquatic wildlife. It is interesting, if you are a naturalist, to stand back (literally, with the surrounding fence in place) and observe what fauna discovers the new wetland and when.

Of course, not all wetlands are the same. They vary in extent, depth, shoreline configuration, presence or absence of islands, plant composition, degree of disturbance and so on. Moore Reserve wetland does not cover a large area and cannot be expected to attract large numbers of waterfowl and other fauna. However, it does have variety – there are open pools, mud patches, dense sedge beds and an artificial island. Unlike the wetland at Lime Kiln Bay, there are no extensive reed beds or bulrushes, or any fringing trees of Swamp Casuarina or paperbarks. These may develop later as a few casuarina saplings have been planted.

The water depth and size of the mud patches depend on the amount of rain and run-off into the wetland from surrounding areas. Deeper water tends to attract and benefit different waterbirds and other fauna compared with drier conditions when water levels become very shallow and much mud is exposed. Given the small area and water level fluctuations, the new wetland is likely to be colonised permanently by only a few species, especially if it dries up completely in hot summers. Apart from these basic background factors, there is an absence of any nearby wetland to provide faunistic recruitment. Lime Kiln Creek and wetland between Oatley Park and Mortdale is the nearest likely source for many species. Thus it was difficult to predict with confidence what was likely to turn up at the new Moore Reserve wetland. The interest was what would arrive first and in what order other wildlife would follow.

(Note. No attempt was made to observe any invertebrate fauna which developed over time. The main emphasis was on birds which are the most obvious wildlife, with occasional observations on reptiles, amphibians and dragonflies).

The results

2001

On September 29th, 2001, a few shallow pools had started to form in the newly excavated area designated as re-created wetland. Some aquatic plants had been planted – mostly native sedges and clubrushes. Swimming in the shallow pools and dabbling for food were three **Chestnut Teal**. This was hardly surprising as some of these small ducks are often seen on nearby Oatley Bay, a few hundred metres away. They are quite used to people and are equally at home on fresh as well as salt water. A few days later, a pair of **Wood Ducks** with a half dozen young were present on the pools and around the edges. By mid November, there were over twenty of them, including some half grown goslings. There was also a pair of Chestnut Teal with five ducklings on the water. The muddy edges attracted a pair of **Peewees** and also a couple of **Masked Lapwings** (Spur-winged Plovers).

In late November, some Wood Duck (which have bills like geese designed to crop grass and other plants) were observed swimming amongst a dense growth of Water Plantains (*Alisma plantago-aquatica*) and biting off pieces of their distinctive arrow-shaped leaves. By the second week of December, four **Grey Teal** were noted on the water as well as a flock of nine Wood Duck. Wood Duck and Chestnut Teal are not uncommon along the Georges River and around Oatley, but Grey Teal are virtually unknown locally except as odd visitors to the newly created Lime Kiln wetland. Perhaps they originated from there, flying from the other side of the suburb?

In the first ten weeks of the Moore Reserve wetland, the main aquatic birds benefiting from the new habitat were, then, three species of wild duck.

A visit on the last day in December resulted in the sighting of a small flock of Wood Duck and a single Grey Teal, with no Chestnut Teal at all. Obviously, the ducks were not colonising the new wetland on a permanent basis, but were undoubtedly getting into the habit of using it as a regular feeding ground.

2002

The water level was now falling. A single **White-faced Heron** was feeding in the shallows. On the open stretch of water, comprising the “main pool”, the first **Australasian** (Little) **Grebe** or Dabchick was recorded. By January 3rd the water level had fallen even further but an interesting assemblage of new birds had appeared. A solitary **Black-winged** (Pied) **Stilt** was resting on the muddy fringe close to a small flock of Wood Duck. In addition, three White-faced Herons were present as well as a **Little Black Cormorant**. On the artificial island, a single **Sacred** (White) **Ibis** was loafing but looking rather apprehensive. Surprisingly, this was the only ibis seen to drop in at the wetland despite the fact that large flocks sometimes pass overhead in the mornings and evenings. Occasionally, a single bird may fall from the sky to investigate by circling a few times only to disappear again. Perhaps the habitat is not quite right for them.

A few days later, a **Latham's Snipe** was glimpsed on the mud bank before disappearing into cover. This bird may well have come from the Lime Kiln wetlands which had attracted a few snipe that summer – the first seen in Oatley for many years.

Already, then, in the first three months of its existence, the wetland was drawing in a variety of birds which had discovered it fairly quickly, notwithstanding its being surrounded by a sea of suburbia. As yet the numbers and species of birds fluctuated, but that was only to be expected, at least until the conditions stabilised a little.

On February 17th, three Little Black Cormorants were present on the main pool, as well as a variety of dragonflies and damselflies enjoying the warm conditions. By May 15th, an Australasian Grebe was seen accompanied by a small chick, indicating the first breeding attempt of this species on the new wetland. During the first week of July, a **Clamorous Reed Warbler** was spotted gleaning insects amongst the sedges and from the water surface. This bird must have chosen this wetland's sedge bed as a winter refuge. A few of these warblers do over-winter around Sydney, but the majority leave the district for the warmer climate of northern Australia, usually by March. This particular bird proved to be one of a pair which remained all winter and have probably become permanent residents.

By the end of July, no less than nine Australasian Grebes were present on the open water. In August, the first **Dusky Moorhens** appeared, as well as two pairs of **White-eyed Pochards** (Hardheads). Three Grey Teal and a pair of Wood Duck were also present. By November 9th, a female **Black Duck** with eight small ducklings was present on the main pool. This meant that all five common Sydney duck species had now visited the reserve. A flock of nine Little Black Cormorants (nothing seems to reach double figures!!) was resting on the concrete overflow outlet. A Moorhen chick was spotted on the edge of cover, and on the 12th, a pair of Moorhen was busily engaged in feeding three chicks on water plants pulled up from beneath the water's surface. Several pairs of Reed Warblers were about – made conspicuous by their constant singing. Obviously, being spring, several pairs were about to begin breeding.

On 24th November, a dozen Little Black Cormorants were fishing in unison, as is their habit, along the edge of the sedge beds, probably pursuing the shoals of Mosquito Fish which now appeared to be everywhere in the shallows. By the 30th, only three cormorants remained.

It was obvious that it was impossible to predict what birds would be present on any one day. Bird numbers and species seemed to fluctuate from day to day. Some birds appeared for only a short period while others stayed for several weeks. Even so, it was a rare day when the wetland was completely devoid of waterbirds, and even if the pools seemed deserted, a few birds could be detected in the thick vegetation and would show themselves periodically.

On December 21st, two Australasian Grebes were collecting material to build a floating nest of water weeds on the edge of the pool and just visible a little way in from the wall of

sedges and clubrushes fringing the open water. Reed Warblers were constantly flying up into the air above the vegetation to snatch small white moths which at sunset were flitting above the sedges.

2003

By early January, the grebes had successfully hatched two chicks which were just visible from the path as they rested on their soggy pile of water weed which served as their nest. Two young Reed Warblers, probably recently hatched, were sheltering in cover and being fed by the adults. On one occasion, a small dragonfly was included amongst the food items offered. In early March, a single **Royal Spoonbill** was present for a few hours. The only other birds of this species in Oatley are small numbers often seen in the lower reaches of Lime Kiln Creek and very occasionally visiting the Lime Kiln wetland.

In mid May, two pairs of Masked Lapwings were seen on the wet grass surrounding the wetland and one pair later retired to the island to rest for a while. A female Black Duck with three ducklings was also about, winter nesting being not unusual with this species. Towards the end of May, the first **Purple Swamphen** was noticed peering out of the thick cover and later emerging into the open to feed. Several more established themselves during the year and there now always seems to be a few around – if not in the open, then lurking in cover. Perhaps they are permanent residents by now. Already several broods of young have been produced and some have reached adulthood, or at least adolescence.

A small flock of White-eyed Pochard appeared in the same month and by early August a total of eight was present. They dived a lot and brought to the surface strands of water weed to eat. At Yeramba Lagoon (Georges River National Park) where up to a hundred can occur in winter, they also feed on molluscs which they bring up to the surface to eat. They were never observed doing this at Moore Reserve, which most likely indicates that mussels have not yet colonised the bed of the wetland – a least not the varieties favoured by these ducks. Numbers of Pochard dropped off gradually by September and eventually they all disappeared.

A solitary **Hoary-headed Grebe**, close relative to the Australasian Grebe but more associated with inland waters in the summer time, arrived at the beginning of winter and could be seen every day for weeks, sometimes mixing with the Australasian Grebes. At the end of July, two were present. Both disappeared soon after. As they were rapidly assuming breeding plumage, they most likely headed off to their inland breeding haunts. “Hoary-heads” are seldom seen anywhere in Sydney, although in some winters a flock may be present on Homebush Bay and a few other nearby inlets of the Parramatta River.

By spring, the number of Australasian Grebes had also dropped from a high of nine in the early part of the year to just one. As if to compensate for this, in September a pair of Chestnut Teal appeared with six ducklings. In that month, too, the first eel was spotted swimming lazily in the shallows. It measured less than a metre but could have already been a threat to ducklings and moorhen chicks and may account for the mysterious disappearance of some young. Perhaps feral cats and foxes are responsible also for the

loss of some young birds, particularly after dark, but no predation has been actually recorded as yet.

The first record of a **Long-necked Tortoise** was in late September of this year when a single specimen was observed climbing up the concrete slope of the island. Two were seen early in the following month and four in the second week of October. They also appeared in Lime Kiln Creek some time before. As they are very wary, it is not likely that they are pets that have been released. Some people regard any urban wetland as an appropriate place to dump their unwanted pet ducks, fish and tortoises, so the possibility of the release of pet tortoises is always present. For a few days a large white duck was seen in a small pool amongst the sedges, but a few days later it had gone – possibly a victim of one of the local foxes which prowl the area at dusk. As yet, there have been no widespread releases of pets in this wetland.

It was early October, too, that the tiny **Baillon's (Marsh) Crake** was recorded for the first time, although one had been seen on several occasions at Lime Kiln wetlands. Possibly this was one of the same birds. It was remarkable how something would appear for the first time at the earlier created Lime Kiln wetland and subsequently show up at Moore Reserve weeks or months later. Only a few species have now been recorded at Lime Kiln but not at Moore Reserve – these include the Pacific (White-necked) Heron, Coot, Large Black Cormorant and Great Egret.

Until October 2003, the **Little Marshbird** (or Little Grassbird) was also one of those recorded at Lime Kiln but not here, but one was heard calling at Moore Reserve for the first time on the 10th. By late October, a pair was seen chasing each other over the sedge tops before plunging into cover. At most times of the year they are very secretive and seldom seen. Only their distinctive tri-syllabic call notes betray their presence, so they are easily missed. By late December, a pair of these marshbirds was seen to be constantly conveying food items to a thick sedge clump close to open water. This betrayed the nest location, so the birds had settled down to breed. Breeding has not been recorded so far at Lime Kiln. Just before Christmas, a single Royal Spoonbill appeared again to feed in a shallow patch, and early in the New Year this was joined by two others, one of which had a well-developed crest indicating it was coming into breeding condition.

A variety of frogs can sometimes be heard calling in the wetland, but they are largely invisible. Mostly, the **Eastern Froglet**, a common Sydney frog, dominates, but other species may also be heard, including on one occasion what appeared to be the **Bleating Tree Frog**, a species not common in Sydney. Surveying the frog fauna would be a time-consuming task, but it may prove to be as interesting as the bird fauna.

At the time of writing (January 2004), the water level is dropping in the wetland as one hot rainless day follows another. Lime Kiln's wetland has also almost dried up, but a pair of Buff-banded Rails, new birds to Oatley, had appeared on the edge of the residual pools by the second week in January. Perhaps they and other surprises will be added to the growing list of observations at Moore Reserve in 2004.