

# LAKE ILLAWARRA AUTHORITY COMMUNITY NEWSLETTER

February 2005

## FORESHORE HABITATS OF LAKE ILLAWARRA

Lake Illawarra has a foreshore of 38km, providing a range of habitats for animal and plant species. These habitats include sand/mud flats, rocky foreshore outcrops, wetlands, forest/woodlands, shrublands, saltmarshes, reedlands and rushlands.

Unfortunately, large areas of these habitat types have been cleared and replaced by highly modified parklands around the Lake. While these parkland areas provide valuable recreation opportunities for the Illawarra community, the removal of natural habitats has reduced the biodiversity of the region.

In spite of the extensive changes to habitats around the Lake foreshore, Lake Illawarra remains a very important ecological resource and is crucial for many birds, including some rare and international migratory species.



The area around Griffins Bay is an example of the degree of modification to the Lake foreshore, with land reclamation, vegetation clearing and urban development right up to the Lake edge.

## WHAT'S CHANGED SINCE EUROPEAN SETTLEMENT?

Many changes in land use have occurred since Europeans settled in the Illawarra. The major impact on the Lake has been from clearing vegetation, which has affected about two-thirds of the catchment area.

The major impacts to directly affect foreshore habitats have been developments such as Tallawarra Power Station and Berkeley Fishing Boat Harbour, residential sub-divisions, reclamations for the creation of parkland and commercial purposes, boat ramps, caravan parks, sailing clubs, jetties and seawalls.

Only small remnants of the pre-European vegetation communities remain around the Lake foreshore. The three main areas of remnant vegetation are on the sand dunes near the Lake entrance, around the northwestern corner of the Lake and at the Macquarie Rivulet delta.

The most substantial remaining examples of the original foreshore vegetation of the Lake are on Hooka and Gooseberry Islands, in the northwestern part of the Lake.

## FORESHORE HABITATS IN DETAIL

A number of habitats remain around the Lake foreshore:

Regularly inundated sand/mud flats – occurs mostly around the Lake entrance, but with smaller fringing flats around the edge of the Lake and one other larger area at the mouth of the 'tank trap' at Mullet Creek. This is a very important habitat for waders, including rare and migratory species.

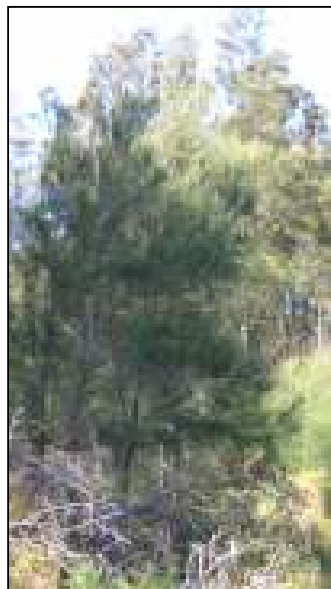


Occasionally inundated sand/mud flats – these are less common than the regularly inundated flats, and occur at various locations around the

Lake. These flats sometimes support saltmarsh vegetation and are important habitats for many bird species.



Rocky foreshore outcrops – usually associated with outcrops of Budgong Sandstone, the largest area of this habitat type is on Windang Island although it also occurs along the northern, southern and western foreshores of the Lake. It is an important habitat for many bird species, including Ruddy Turnstones and Sooty Oystercatchers.



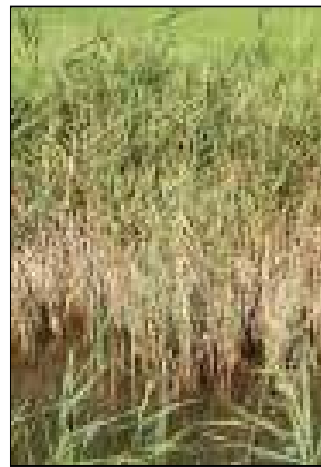
Swamp Oak forest/woodland – grows on waterlogged soils and is dominated by Swamp Oak (*Casuarina glauca*). Remnants of this habitat occur in small stands around the Lake, with the largest stands in the southwest. This habitat is important for resting and roosting birds (particularly those requiring trees).

Paperbark shrubland – very little of this habitat type remains around the Lake. Where it does occur (e.g. the old Tallawarra Power Station site), it provides an important habitat for more cryptic bird species such as rails. It's freshwater wetland features provide conditions suitable for a different suite of animals (e.g. frogs) than can be found in the more common saltwater wetlands around the Lake.

<< Photo: Habitat only occurs on southern side of Duck Creek. Not accessible. >>

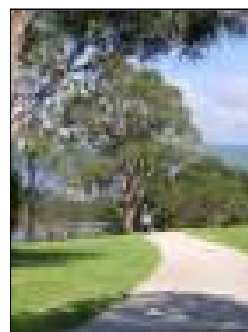
Chenopod saltmarsh – this is an important habitat for wetland bird species, which use it for nesting and foraging. Saltmarsh wetlands occur in small remnants right around the Lake.

Saltmarsh plants common around Lake Illawarra



Phragmites reedland – dominated by *Phragmites australis*, this habitat type supports bird species with very specific requirements such as the Clamorous Reed Warbler (a summer migrant). Reedlands occur around the whole Lake and in creeks feeding into the Lake.

Rushland – dominated by *Juncus kraussii*, this habitat occurs in small patches around much of the Lake foreshore. *Juncus* rushlands provide cover and protection for wetland birds and often contain saltmarsh plants.



Highly modified parklands – where the above habitats have been cleared or land has been reclaimed, highly modified parklands have been created. Whilst highly modified and taking the place of native communities, these areas still provide important

habitat for some species, particularly the more common bird species.