



Lake Macquarie  
Landcare

# Case Study

Foreshore Site

## Kooroora Bay Landcare



### Project Partners:

- Lake Macquarie Landcare Resource Centre (Lake Macquarie City Council)

## Background

Kooroora Bay Landcare site lies in the Fennell Bay and Bolton Point suburbs, in the western division of Lake Macquarie.

## Site Information

Kooroora Bay Landcare site consists of two areas:

### The Creek

This area is centred around a tidal creek and part of the shore of Lake Macquarie beside houses at the Fennell Bay/Bolton Point suburban boundary. The plant community is an Estuarine Complex community made up of Grey Mangrove (*Avicennia marina*) and open scrub near the creek, backed by Swamp Oak (*Casuarina glauca*) Forest. There are elements of a remnant rainforest community surviving, with species like Port Jackson Fig (*Ficus rubiginosa*) and Hairy Clerodendron (*Clerodendron tomentosum*) in small numbers.

### The Cliff

This area comprises a vegetated bank and plateau area between the foreshore and houses to the north. The Eucalypt canopy is mature although broken in places

## Lake Macquarie

Lake Macquarie City Council area is located on the NSW east coast. It contains mountains, forests, waterfalls, extensive beaches, and a large coastal estuarine lake with an area of approximately 110 square kilometres, and a catchment area of 605 square kilometres.

These areas support a wide range of habitats and uses, including nature conservation, recreation, residential and commercial development and rural activities. As a result, the natural environment has suffered a high degree of modification and degradation.

## Aboriginal Heritage

Lake Macquarie is rich in Aboriginal cultural heritage dating back tens of thousands of years. The people who lived around Lake Macquarie and Newcastle were known as the Awabakal which means “*the people of the flat surface*” presumably referring to the Lake and its flat surrounds.



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**Above: Site locality (Kooroora Bay Landcare shown in maroon)**

due to view corridors being created. The plant understorey varies from almost complete in some places (still with weeds), to non-existent in other places that are mown non-native grass areas. Over most of the area, garden plantings or garden escapees exist, in some cases keeping out the original vegetation.



**Kooroora Bay Landcare Cliff Site**

## Vegetation

Both areas of Kooroora Bay Landcare site are classified as Lake Macquarie Spotted Gum Forest by Bell and Driscoll's vegetation mapping. On-going surveys by the Landcare Group show that of the 110 plant species identified so far, 43 – approximately 40% - are introduced weeds.

Native plants found at **The Creek** include:

*Allocasuarina littoralis* - Black She-oak

*Allocasuarina verticillata* - Drooping She-Oak

*Archontophoenix cunninghamiana* - Bangalow Palm

*Avicennia marina* - Grey Mangrove

*Casuarina glauca* - Swamp Oak

*Cayratia clematidea* - Slender Grape

*Crinum pedunculatum* - Swamp Lily

*Dichondra repens* - Kidney Weed

*Einadia hastata* - Berry Saltbush

*Elaeocarpus reticulatus* - Blueberry Ash

*Eucalyptus punctata* - Grey Gum

*Ficus rubiginosa* - Port Jackson Fig

*Ficus coronata* - Sandpaper Fig

*Glochidion ferdinandi* - Cheese Tree

*Geranium* species - Native Geranium

*Isolepis nodosa* - Club Rush

*Juncus kraussii* - Sea Rush

*Livistona australis* - Cabbage Tree Palm

*Lomandra longifolia* - Spiny-head Mat-rush

*Myrsine howittiana* - Muttonwood

*Myrsine variabilis* - Brush Muttonwood

*Pittosporum revolutum* - Rough-fruit Pittosporum

*Pomaderris intermedia* - Tree Pomaderris

*Pteridium esculentum* - Bracken Fern

*Sesuvium portulacastrum* - Shore Purslane

*Tetragonia tetragonoides* - Warrigal Greens

*Westringia fruticosa* - Coastal Rosemary



Native plants found at **The Cliff** include:

*Corymbia maculata* – Spotted Gum

*Eucalyptus tereticornis* – Forest Red Gum

*Eucalyptus umbra* – Broad-leaved White Mahogany

*Ficus rubiginosa* – Port Jackson Fig

*Notelaea* species – Mock Olive

*Elaeocarpus obovatus* – Hard Quandong

*Myoporum acuminatum* – Mangrove Boobialla

*Myrsine variabilis* - Brush Muttonwood

*Pittosporum undulatum* – Sweet Pittosporum

*Pittosporum revolutum* – Rough-fruit Pittosporum

*Pultanea vilosa* – Hairy Bush Pea

*Dianella caerulea* – Blue Flax Lily

*Glycine* species – Love Creeper

*Cissus antarctica* – Water Vine

*Smilax australis* – Lawyer Vine



**Port Jackson Fig**

## Common Trees and Shrubs of Kooroora Bay

**Bark**



**Fruit**



**Form**



**Leaves**



*Eucalyptus tereticornis* – Forest Red Gum



*Corymbia maculata* – Spotted Gum



*Eucalyptus punctata* - Grey Gum

**Bark**

**Fruit**

**Form**

**Leaves**



*Eucalyptus umbra* – Broad-leaved White Mahogany



*Casuarina glauca* - Swamp Oak



*Pittosporum undulatum* – Sweet Pittosporum

**Weeds found in one or both areas**

Asparagus Weed (Ground Asparagus Fern)

Bromus Grass

Buffalo Grass

Canna Lily

Cobblers Pegs

Cotoneaster

Crofton Weed

Fishbone Fern

Kikuyu Grass

Lantana

Lambs Tongue

Mickey Mouse Plant

Morning Glory

Monstera

Panic Veldt Grass

Purple Top

Pennywort

Small-leaf Privet

Trad (Wandering Jew)

Umbrella Tree

**Common Weeds of Kooroora Bay**



**Small-leaf Privet**



**Cotoneaster**



**Asparagus Weed**



**Mickey Mouse Plant**



**Cobblers Pegs**



**Crofton Weed**



## Fauna

Kooroora Bay Landcare site provides habitat for a range of native animals and surveys will be undertaken by the Landcare Group to document what is present. Mammals of interest include Brush-tail Possums and Sugar Gliders.

Birds seen at the Landcare site include:

Australian Magpie *Gymnorhina tibicen*

Australian Pelican *Pelecanus conspicillatus*

Australian White Ibis *Threskiornis molucca*

Australian Wood Duck *Chenonetta jubata*

Black Cormorant *Phalacrocorax carbo*

Black-faced Cuckoo-shrike *Coracina novaehollandiae*

Blue-faced Honeyeater *Entomyzon cyanotis*

Common Myna *Acridotheres tristis*

Crested Pigeon *Ocyphaps lophotes*

Dollar Bird *Eurystomus orientalis*

Eastern Rosella *Platycercus eximius*

Eastern Whipbird *Psophodes olivaceus*

Galah *Cacatua roseicapilla*

Grey Butcherbird *Cracticus torquatus*

Koel *Eudynamys scolopacea*

Laughing Kookaburra *Dacelo novaeguineae*

Lewins Rail *Lewinia pectoralis*

Little Corella *Cacatua sanguinea*

Magpie Lark *Grallina cyanoleuca*

Mallard *Anas platyrhynchos*

Noisy Miner *Manorhina melanocephala*

Rainbow Lorikeet *Trichoglossus moluccanus*

Reef Heron *Egretta sacra*

Silver Gull *Larus novaehollandiae*

Spotted Dove *Spilopelia chinensis*

Spur-winged Plover *Vanellus novaehollandiae*

Sulphur-crested Cockatoo *Cacatua galerita*

Tawny Frogmouth *Podargus strigoides*

Welcome Swallow *Hirundo neoxena*

Willie Wagtail *Rhipidura leucophrys*

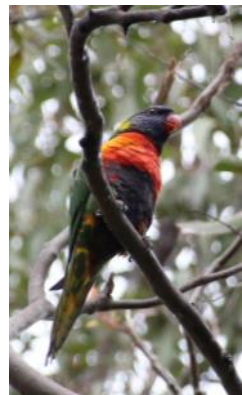


**Sugar Glider**

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([Queensland Museum](#))  
[2010-2012](#)



**Eastern Rosella**



**Rainbow Lorikeet**

## Landcare group

The Kooroora Bay Landcare Group formed in 2002. Work began around the Creek and later expanded to include the Cliff area.

The Group aims to:

- rehabilitate degraded native plant communities
- increase biodiversity of native plants and animals
- increase the site's habitat value for native animals



**Member Gurf Yeo removing Morning Glory**

Massive infestations of Morning Glory vine and Asparagus Weed around the Creek have been successfully removed by members. A mix of native replacement plantings is now stabilising that area. So far, work on the Cliff area has removed a lot of Asparagus Weed.

Now the Group will broaden its focus to include more biodiversity and habitat improvement work.

The Group is increasing its membership and meets regularly on the first and third Monday of each month, usually from 8:30-11:30am. New members and supporters are welcome and are asked to contact Landcare Team Leader Tony on 040 889 1411 for further information.



**Lake Macquarie  
Landcare Green  
Team removing  
Asparagus Weed**



**Landcarers Frances Howley and  
Sue Oakey re-establishing native  
mat-rush plants**

## **Landcare in Lake Macquarie**

Lake Macquarie Landcare is a partnership between Lake Macquarie Landcare Network Incorporated (LMLN inc), thousands of dedicated and committed community volunteers, and the Lake Macquarie City Council (LMCC) which provides project support through the Landcare Resource Centre (LRC).

If you would like to get involved in Landcare in Lake Macquarie or would like more information please contact the LRC on 4921 0392.

## References and Further Information

Australian National Botanic Garden - [www.anbg.com.au](http://www.anbg.com.au)

Bell and Driscoll, 2014, [\*Vegetation mapping of Lake Macquarie LGA: Stages 1 – 5\*](#), available at [www.lakemac.com.au](http://www.lakemac.com.au)

Buchanan, R, 2009, [\*Restoring Natural Areas in Australia\*](#)

LMCC, 2004, *Lake Macquarie Coastal Planting Guide*, available at [www.lakemac.com.au](http://www.lakemac.com.au)

Weeds Australia - [www.weeds.org.au](http://www.weeds.org.au)

The Lake Macquarie Landcare website [www.lakemacquarielandcare.org](http://www.lakemacquarielandcare.org) provides links to newsletters, environmental programs, grants, Landcare, weeds and trees.

If you wish to know more about this and other projects in Lake Macquarie please contact the Landcare Resource Centre.

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*Lake Macquarie Landcare is proudly supported by Lake Macquarie City Council*