



## Towra Beach Nature Reserve - saving Towra Beach

### Introduction

Towra Point joins the Kurnell Peninsula along the southern and eastern boundary of Botany Bay. The sandstone headland adjacent to Captain Cook's landing place at Kurnell was originally an island. At about the time when sea levels were stabilising, between 9,000 and 6,000 BC, a tombola was formed connecting Kurnell Island to Cronulla mainland. Eventually the Kurnell-Cronulla bay mouth silted up and closed, the Kurnell and Towra Peninsulas were born and Botany Bay took its present shape as a large shallow bay.

Two ancient river systems, Cooks River and Georges River that flowed into the sea beneath the present sand dunes near Wanda, became blocked with accumulating sand as the sea level rose. This gradual silting-up forced the Cooks River and Georges River system to take an easier route to the sea via La Perouse rather than continue to maintain an opening in an ever-growing sand barrier near Wanda.

Towra is now a low-lying promontory only 3m above high water level at its highest point and is surrounded by mangroves and saltmarsh. It is situated 15km from Sydney's GPO. It occupies an area of 440ha and is the last example of a complete estuarine wetland in the Sydney region. It is the remnant of a large complex of fresh and salt water marshes and swamps lost to shifting sands of the Kurnell dunes caused by local forest logging.



*An aerial view taken in 1961 of Towra showing the “Elephant’s trunk” sand spit*

## History

There are traces of several Aboriginal middens on Towra Point dating back thousands of years. The quantity and variety of shellfish around Botany Bay had attracted the Water People, as the local indigenous people were called.

Towra Lagoon is an item of great cultural heritage value as it was mapped by Captain Cook when he was in Botany Bay in April 1770. It once supported numerous fauna species including tortoises but due to the beach erosion and the subsequent saltwater inundation of the once freshwater lagoon, these species have all but disappeared.

Kurnell Peninsula was first logged by the first European landowner, James Connell, in 1835. By 1868 the forests of blackbutt and ironbark were cut down for houses and bridge construction and the remaining vegetation was cleared for grazing. This caused the sand dunes to move at a rate of approximately nine metres a year from 1885 to 1913. By 1923 sand was spilling into Quibray Bay from the large sand dunes of the ocean front of Cronulla Beach.

The mudflats of Towra Point first came under notice as an industry base after an attempt by pioneer Thomas Holt to cultivate oysters on the seabed of Gawley Bay (now Sylvania Waters) failed in 1870. Pioneer oyster farmers experimented successfully around 1870 with rectangular slabs of sandstone, placing them in rows in the intertidal mudflats in Quibray Bay, Woollooware Bay and Towra Point. By 1920 there were 450,000 stone slabs distributed around Towra. The Georges River-Botany Bay oyster industry was born.



*Spit Island off Towra Beach*

There has been conflict with urban development ever since the first manufacturing industry, a clothing mill, was established on the shores of Botany Bay in 1815. The Towra Point wetlands managed to survive because they are located in a secluded part of the Bay. However, in 1966 the Federal Government, looking to expand Kingsford Smith Airport, decided on Towra Point as a potential site for an airstrip. The campaign to oppose the airstrip lasted eighteen months before the Government finally decided against using Towra.

The dredging of the seabed of Botany Bay to service large ships and the runway extensions have completely changed the bottom topography, resulting in a new distribution of wave energy throughout the Bay with consequent regression of beach fronts.

### **International recognition**

In 1974 Japan and Australia signed a bilateral treaty on migratory wading birds. Representations to Federal Government Ministers on the importance of Towra as a habitat for water birds and other features eventually resulted in the Commonwealth of Australia becoming the registered owner of 270ha of land owned by Towra Point Development. Prior to the registration of the transfer of the land, the NSW Government took out an injunction challenging in the High Court the right of the Commonwealth to acquire land at Towra Point. The issue remained unsolved until March 1982 when the land was transferred to the State Government as part of the Commonwealth/State Land Exchange Agreement. It was gazetted Towra Point Nature Reserve (TPNR) on 6 August 1982. After acquisition of additional land, including an addition of 82ha in April 1991, the Nature Reserve comprises an area of 440ha. It was the first nature reserve to be established by the Federal Government in any State.

Towra Point habitat was one of only three sites in NSW accorded special protection under the Convention on Wetlands of International Importance (especially as waterfowl habitat), which is commonly referred to as the RAMSAR Convention.

The waters surrounding Towra Point peninsula were gazetted an aquatic reserve on 24 December 1987 and included Quibray Bay, Weeney Bay, Stinkpot Bay and Woollooware Bay. The site was chosen because it is of special ecological significance.

Four species of seagrass are to be found on the seabed, the two most important being strapweed, *Posidonia australia*, and eelgrass, *Zostera capricorn*. The entire seabed in the Aquatic Reserve was carpeted with sea grasses, but more than one third has been lost due to erosion.

Aquatic reserves are permanent reserves established to protect biodiversity and representative of samples of our marine life and habitats. They can also be established to protect important habitat and nursery areas and protected species, or for research and education.

Aquatic Reserves are generally small in comparison to marine parks and play a significant role in the NSW marine protected area system.

Currently there are 13 aquatic reserves declared under the Fisheries Management Act 1994. Today there are no less than 43 gazetted RAMSAR sites located across Australia, but Towra Point Nature Reserve was the first!





*Towra Lagoon - showing pollution and erosion*



*Towra Lagoon – showing the restoration work carried out by the Friends Group*