

# Sydney Olympic Park

## New Tidal Gate swings open as Sydney Olympic Park celebrates World Wetlands Day 2008

The installation of a simple gate has given new life to a dying wetland at Sydney Olympic Park. Since the 1990s, bird numbers and species diversity within the 10-hectare Waterbird Refuge that was originally created in the 1950s had progressively declined, and algal blooms and associated sulphurous odours had become common. Scientific studies were conducted into the wetland's hydrology, water quality, bird populations, benthic fauna, and algae growth. Lack of tidal exchange and water level control were identified as the major underlying cause.

A new tidal gate was installed to provide a flexible means of enabling tidal exchange and managing wetland hydrology. The works were completed in January 2007, with the gate officially opened by Andrew Ferris, Executive Manager Parklands & Environment, and Bob Junor, Chairman of the Sydney Metropolitan Catchment Management Authority (SMCMA) on Friday 1 February as part of World Wetlands Day celebrations at Sydney Olympic Park, an event that was co-hosted by SOPA. World Wetlands Day is an annual international celebration that marks the signing of the International Convention on Wetlands in 1971. This international treaty provides for the conservation and wise use of wetlands, and Australia was one of the first signatories.

The gate is solar-powered, fully-automated, and allows daily exchange of tides between the Waterbird Refuge and the Parramatta River estuary. The tidal gate enables a more natural hydrological regime to operate within the Waterbird Refuge. Water flow settings can be adjusted seasonally to account for tidal cycles and habitat needs. The 2007-08 spring/summer is the first migratory bird season since tidal exchange was restored, with Wetland health and biodiversity also improving since daily tidal exchange was restored.

Sydney Olympic Park contains over 100 hectares of freshwater and saltwater wetlands. These provide important habitats for native birds, frogs, fish, bats, insects and plants. "The Waterbird Refuge at Bicentennial Park is one of the Park's best-known wetlands," said Kerry Darcovich, Manager Environment & Ecology, Sydney Olympic Park Authority. "Since spring, migratory and local bird species have flocked to the newly restored habitat. Over 800 birds have been recorded on some days. Especially significant are sightings of over 250 migratory birds from the northern hemisphere feeding within the wetland – including the Bar-tailed Godwit and Sharp-tailed Sandpiper."



**Bar-tailed Godwit**

**Sharp-tailed Sandpiper**