

The Snipe Project

By Lori Gould, ACT Woodlands and Wetlands Trust

A joint Japanese–Australian project is monitoring the migration to Australia of Latham's Snipe (*Gallinago hardwickii*), a bird species listed in international conservation agreements and conventions.

From wetlands in Japan across the Pacific to south-east Australia, Latham's snipe is a classic example of why we must conserve our wetland habitats. This migratory shorebird is listed under the *Environment Protection and Biodiversity Conservation Act 1999* and the [Japan-Australia Migratory Bird Agreement](#).

Latham's snipe breed in the Japanese spring then fly 9000 kilometres along the East Asian–Australasian Flyway, some as far as Tasmania. But little else is known about this pretty shorebird, which may be threatened by loss of its wetland habitat. Where do they go in Australia? Do they return to the same wetlands each year? How do fires or flooding in one area impact their movement? The answers will help governments and conservation groups manage and protect the species, which currently appears to be declining.

Thanks to an international collaboration, the world is now watching the Latham's snipe's mysterious journey. Four research and environment groups that were individually monitoring the birds—the Wild Bird Society of Japan, the Woodlands and Wetlands Trust in Canberra, South Beach Wetlands and Landcare Group in Port Fairy and Federation University Australia in Ballarat—are now sharing information, research methods and awareness raising. The project is part funded by the Australia Japan Foundation.

The Snipe Project uses a combination of animal tracking technology, field observations and systematic surveys to determine habitat preferences and movement patterns. Community involvement encourages ownership and protection of the local environment the bird relies on.



Google Earth image of Latham's Snipe movements from Japan to Australia (Google Earth)

The South Beach Wetlands and Landcare Group fitted 20 birds with geolocators in October 2015. In exciting news, the first bird was recaptured in October 2016 only 600 metres from where it left—after a return journey to Hokkaido that included a 7000 kilometre single flight.

The Wild Bird Society of Japan (WBSJ) fitted five birds with satellite trackers near Hokkaido in July 2016. The ACT Woodlands and Wetlands Trust fitted satellite trackers to another four birds in early 2017, with the ACT Government providing \$25,000 for three of the trackers. Researchers and the public can follow their journey via the [WBSJ Facebook page](#).

In early December, snipe experts from Victoria and Jerrabomberra wetland volunteers, including Young Rangers, caught, weighed, measured and tagged another six birds and took blood samples for genetic research.

The ACT Woodlands and Wetlands Trust undertakes surveys at Jerrabomberra Wetlands and other key sites across the ACT—including the remote Ginini Flats Ramsar Wetlands Complex in Namadgi National Park—in partnership with the Canberra Ornithologists Group, Friends of Jerrabomberra Wetlands, ACT Government, University of Canberra and Australian Bird and Bat Banding Scheme (ACT). Sightings are logged into a web-based platform, with the general community also encouraged to log sightings.

Threats to Latham's snipe habitat in one country have implications for species management in the other. Loss of habitat is the major threat, with documented declines in population in Japan linked to ongoing loss of wetlands. In Australia, many wetlands and other critical habitats occur on private land that is infrequently managed for conservation purposes, posing a significant management challenge. The threat is even greater in urban areas, where there are competing interests for residential and industrial development.

Conserving Latham's snipe in multi-use landscapes means identifying critical areas that support birds during different stages of their life cycle and understanding the key characteristics that define these areas. The Snipe Project is part of that journey.

More information about Latham's snipe and the Snipe Project:

For more information about Latham's snipe and the Snipe Project, visit <https://jerrabomberrawetlands.org.au/2016/12/01/first-latham-snipes-caught-at-jerrabomberra-wetlands/>
<https://lathamssnipeproject.wordpress.com>
www.swift.net.au/cb_pages/lathams_snipe_project.php



Latham's Snipe (Geoffrey Dabb)

Successful regeneration of coastal saltmarsh in Sydney Olympic Park

Dr Swapan Paul, Sydney Olympic Park Authority

Coastal Saltmarsh has been declared an Endangered Ecological Community in NSW under the *Threatened Species Conservation Act 1995* and a Threatened Ecological Community under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. These threatened vegetation communities make important contributions to fisheries, biodiversity conservation, carbon sequestration and land protection.

It has been widely claimed that over 70 per cent of coastal saltmarsh had been lost from Homebush Bay between 1930 and 1980. Losses have also been reported elsewhere along the Parramatta River. The coastal saltmarsh community at Sydney Olympic Park on the Parramatta River catchment presently covers approximately 25 hectares—the largest coverage on the river system. This has been due to the increases of nearly 31 per cent since 2002 and nearly 40 per cent since 1998.

The increases in the total area have been attributed to a number of initiatives, which include creation of new areas and rehabilitation of degraded areas; measures for protection from human-induced damages such as litter control; staged and careful control of weeds such as spiny rush (*Juncus acutus*); and selective and authorised control of seedlings of grey mangrove (*Avicennia marina*) settling on saltmarsh areas. Many of the tools and techniques that have been trialled and applied in conserving coastal saltmarsh in the Park have been well regarded as either pioneering or at the very least, simple and effective. As a testimony, the Park was recognised as a ‘demonstration site’ for saltmarsh conservation by the former NSW Department of Environment and Climate Change.



Poor condition of coastal saltmarsh on Haslams Flats prior to implementing a pioneering technique of regeneration
(Sydney Olympic Park Authority)

A scientific assessment conducted in 2014 rated the overall condition as good, however, noted that terrestrial weeds may be invading some pockets owing to their increasing losses in salinity and restricted tidal inundations. Yet other pockets have been showing signs of landward migration due to increasing levels of tidal inundations. It is a matter of utmost interest to the Park to learn the ways these two phenomena will ultimately influence coastal saltmarsh in the Park. More about the Park's coastal saltmarsh as well as management of wetlands may be learnt from the WET eBook, *Workbook for managing urban wetlands in Australia* (www.sopa.nsw.gov.au/resource_centre/wet_ebook_workbook_for_managing_urban_wetlands_in_australia).

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After regeneration (Sydney Olympic Park Authority)

Protecting valuable swamp oak wetlands

Louise Armstrong, Department of Environment and Energy

Coastal wetlands and forests provide an important buffer between the land and sea. They can vary from tidal salt marshes and mangroves, to estuarine systems to freshwater wetlands and include the associated riparian and floodplain vegetation communities. Land clearance, soil erosion, nutrient export and other impacts from human activity and sometimes natural phenomena, such as flooding and storms, threaten many of our fragile coastal and marine ecosystems.

The coastal swamp oak (*Casuarina glauca*) forest is a highly variable coastal wetland ecosystem that plays an important role in the life of many inhabitants of Australia's eastern seaboard. From Gladstone in Queensland southwards into the South East Corner of New South Wales, coastal swamp oak forest is typically found where groundwater is saline or brackish, such as in low lying creeks and rivers, dune swales, lake margins and estuarine fringes. Coastal development and other processes are threatening this ecological community and it has been nominated for listing under the Commonwealth's national environmental law, the *Environment Protection and Biodiversity Conservation Act 1999*.

Defining what constitutes the ecological community is part of the listing assessment process. Recently, staff from the Department of Environment and Energy organised a workshop for expert scientists and natural resource managers to consider how best to describe the attributes of coastal swamp oak forest. The dominant canopy species, *Casuarina glauca*, tolerates brackish and sub-saline groundwater and inundation. Salt tolerant rushes and grasses, such as *Baumea juncea* (bare twig rush) and *Cynodon dactylon* (sand couch) cover the ground in areas closest to the coast. In more freshwater locations, lilies and ferns such *Blechnum indicum* (swamp water fern), *Dianella caerulea* (blue flax lily),



Coastal swamp oak forest wetland area along Hogbin Drive, Coffs Harbour Airport (Louise Armstrong)



Staff from Australian Government, NSW and Queensland Governments and Louise Gilfedder from the TSSC discuss aspects of the CSOF (Louise Armstrong)

Gahnia clarkei (saw / sword sedge) are more likely, along with creeping ground covers such as *Commelina cyanea* and *Viola banksii* (wild violets). In such areas the tree diversity increases with the inclusion of *Acmena smithii* (lilly pilly), *Alphitonia excelsa* (red ash) and *Melaleuca* spp. (paperbarks) with *Parsonsia straminea* (common silkpod) climbing into the canopy. Sometimes *Eucalyptus* spp. can be seen emerging from the canopy. Apart from its role within the landscape, habitat is

provided for a large range of other plants such as epiphytic plants and wetland fauna, including treefrogs and waterbirds, such as bitterns, snipe and curlews which love the protection that the trees and dense understory and/or leaf litter provide.

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