Shorebird high-tide roost site mapping - for protection and management

Shorebirds are iconic wetlands species and have specific management requirements due to their life cycles and behaviours. This project will work with key partners to map high-tide roost sites for resident and migratory shorebirds on the east coast of Queensland, delivering critical information for their protection and management.

Why is this project needed?

Shorebirds in coastal areas congregate in roost sites above the high tide, where they settle down to rest and sleep when not feeding in the intertidal area. Shorebirds are particularly prone to threats when they are on these roost sites. High-tide roost mapping is a useful tool for managers and policy makers as it identifies where the birds are at these times so that appropriate management and planning activities can occur. This mapping will also educate the public where the birds congregate and assist with awareness of laws prohibiting shorebird disturbance.

Ruddy turnstone roosting at Manly. Photo: Arthur Keates

Why are shorebirds important?

While some species of shorebirds are resident and stay in Australia all year round, migratory shorebirds travel huge distances (some over 13,000 kilometres one way) between the northern hemisphere to breed and the southern hemisphere to feed and rest.

Australia is signatory to multiple international conventions and agreements on the management and protection of migratory shorebirds, including through the management of Ramsar sites and sites under the East Asian Australasian Flyway Partnership, shorebird bilateral agreements, and the Convention on the Conservation of Migratory Species of Wild Animals.

Shorebirds are also protected under both Australian and Queensland legislation and many of the migratory shorebird species are listed as threatened.

Major declines in migratory shorebird populations are largely due to loss of habitat along the flyway and there is a need to protect habitat and remaining populations in Australia.

There is no readily available mapping of high-tide roost sites along most of the Queensland east coast, and this makes protection and management of these key sites difficult.

What is the aim of the project?

The project will use existing and new shorebird data, together with external and in-house expertise to map these high-tide roost habitats and make the data publicly available.

Whimbrel roosting near Golden Beach, Pumicestone Passage. Photo: Peter Driscoll

The project will also contribute to shorebird habitat mapping for the Great Barrier Reef coastline, which is identified as an action under the Reef 2050 Wetland Strategy and will also support marine park zoning planning and management in south-east Queensland (SEQ).

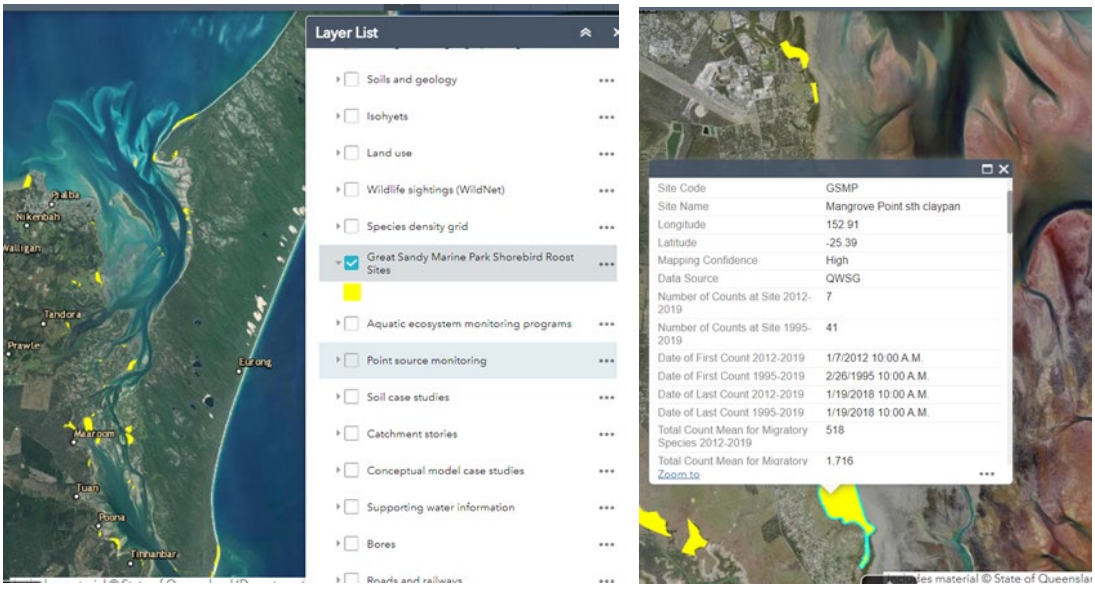

Figure 1: Left: example of shorebird roost mapping on Wetland*Info*. Right: Example of information box available for each roost site with shorebird data for determining significance of each roost site (species and counts).

What will be delivered?

The project aims to deliver:

- a comprehensive, detailed high-tide roost map for shorebirds along the east coast of Queensland, accessible on Wetland*Info* and the Queensland Spatial Catalogue
- data for planners and policy makers at all levels of government, increasing their ability to assess and manage threats and improve protection of priority habitats
- evidence for planning and managing marine and national parks, planning for new protected area, offsets or natural capital projects, assessment for activities or development in coastal areas.

Shorebirds roosting Photo: Gary Cranitch© Queensland Museum

Who is involved?

This project is led by the Department of Environment, Science and Innovation (DESI), in collaboration with the Queensland Wader Study Group, Birdlife Australia, Queensland Parks and Wildlife Services and Partnerships. The project has been informed by previous high-tide roost mapping for the Great Sandy Marine Park that included collaborative efforts with the University of Queensland, as well as shorebird habitat mapping in SEQ led by Healthy Land & Water. Further collaborations are planned with local councils, universities, citizen science and community groups.

The project is delivered under the Queensland Wetlands Program.

For more information

The Queensland Wetlands Program promotes and delivers wetland information to support wetland management in Queensland. For information visit the Wetland*Info* website.

The Queensland Wetlands Program supports projects and activities that result in long-term benefits to the sustainable management, wise use and protection of wetlands in Queensland. The tools developed by the Program help wetlands landholders, managers and decision makers in government and industry. The Queensland Wetlands Program is currently funded by the Queensland Government.

Contact wetlands@des.qld.gov.au
or visit www.wetlandinfo.des.qld.gov.au

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