

Shorebirds 2024 Newsletter 1

Introduction to shorebirds

This year our Shorebirds Competition links to the National Science Week theme for schools: **Species Survival**. This newsletter for teachers provides some background information to help you and your students to connect with this important topic. Our [website](#) has additional free resources for teachers and students, and you can email questions anytime at competition@ansto.gov.au



What is a shorebird?

Shorebirds are a diverse group which make up 10% of bird species in Australia. As the name implies, shorebirds are commonly found by the shore, where they feed, rest and breed. Shorebirds are seen on our coastal beaches, wetlands, and mudflats, but are also found inland. You have probably seen a shorebird but didn't notice it. They are the little brown birds that run around on the sand or mud as the tide goes out!

There are over 50 species of shorebirds in Australia. Families include plovers, sandpipers, curlews, godwits, snipes, oystercatchers and others. This [ID booklet](#) published by BirdLife Australia shows where they are found and how you can identify them.

Most (37) of our shorebird species are migratory. They arrive on our shores each Spring after breeding in the Arctic and spend up to eight months in Australia. Each Autumn they fly back to the Arctic - an amazing journey of over 10, 000 km! Other shorebirds (17) are resident species, which live in Australia all year round and raise their chicks on our shores.

Why learn about shorebirds?

Shorebird numbers have been rapidly declining in Australia over the past few decades. For example, populations of our largest shorebird, the Eastern Curlew, have dropped by more than 80% over the past 30 years. Several shorebirds are now listed as threatened at either Federal or State level. Shorebirds are also **fighting for survival** on a global scale and are considered to be the most endangered group of birds. They could become extinct in the future and helping the birds starts with raising awareness of them.

Shorebirds are important members of wetland ecosystems. The presence of large numbers of shorebirds is considered to indicate a healthy and productive ecosystem.

When is a bird by the shore not a shorebird?

Identifying shorebirds can be a little confusing because not all birds seen by our shores are shorebirds! However, if you see a bird swimming, you can safely conclude that it is not a shorebird. **Shorebirds can't swim and will drown if they land on water.** They will happily wade in water, and are often called **waders**, but will never go in deeper water than they can stand in.

Any bird by the shoreline with webbed feet, is also not a shorebird. Having webbed feet is a useful adaptation for swimming, something shorebirds never do!

By the coast gulls and terns can be mistaken for shorebirds, however, both these birds swim and are classified as seabirds. Similarly, students can mistake ducks and pelicans for shorebirds, but both these birds love to swim and are waterbirds, rather than shorebirds. The ID booklet above will confirm when a bird is a shorebird.

Shorebird adaptations

Many shorebirds have long legs proportional to their size, useful for wading in water. They often have long toes, helpful for balancing on long legs, and for walking on soft sand and mud. Many shorebirds have long pointy wings, helpful for flying long distances. Migratory shorebirds usually have mottled brown plumage, which helps them to blend in with the sand or mudflat. However, some of our resident shorebirds have brightly coloured legs or plumage.

Shorebirds feed on invertebrates: insects, molluscs, marine worms, shrimps, small crabs and other crustaceans. Many shorebirds have long bills (beaks) which they use to probe the sand or mud searching for burrowing crustaceans or worms along the intertidal area. Other shorebirds with shorter bills find their food on the surface and may flip over shells or stones to find prey underneath. Because shorebirds species have bills of different shapes and sizes, they find food in different ways and at different depths in the sediment. This means they can feed together, happily sharing the shoreline!

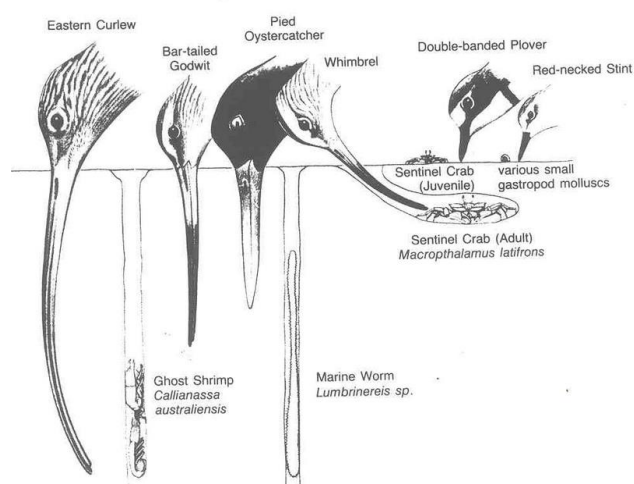


Image credit: Dann, P. (1987) The feeding behaviour and ecology of shorebirds. Ch 3 in "Shorebirds in Australia", B. A. Lane (ed).

Threats to shorebirds

Shorebirds live by our coasts and waterways where many humans would like to live! One of the biggest threats to shorebirds in Australia is development, which can result in a reduction or destruction of habitat. Additionally, the Yellow Sea, which borders China and Korea and is an important stop-over site for migratory shorebirds on their way to the Arctic, has been impacted greatly by development in recent years.

Numbers of shorebirds on Australian shores are highest during our Summer months, coinciding with the peak use of coastal and wetland areas for recreational use. Walking too close to shorebirds or dogs off-leash can cause the birds to take flight. This affects the ability of migratory shorebirds to rest and fatten up sufficiently in preparation for their long annual journey.

Resident shorebirds lay their eggs directly on the sand in shallow depressions called 'scrapes'. The eggs are well camouflaged and can be easily trampled on by people and dogs. The nests are impossible to spot from SUV vehicles driving on beaches and have been run over on Australian shores. Feral animals, such as foxes and cats, will also hunt shorebirds.

Pollution is also a threat to shorebirds. Entanglement in plastics and fishing line occurs, and pollution in the sand or mud can be directly ingested by the birds. Run off from chemical pollutants, such as pesticides, affects shorebird habitats and kills shorebird prey, affecting the survival of the birds.

Finally, climate change affects the timing of seasons and can affect the ability of migratory birds to find sufficient food in the Arctic while they are breeding there. Sea level rise also reduces the intertidal areas that shorebirds rely on for food. The threats to shorebirds are many!

Check out our free teacher lessons and resources

Our [website](#) has lots of free resources to assist you and your students. At the bottom of the website there are expandable headings where you will find **free teacher lessons and units of work, linked to the Australian curriculum for science, geography and English.**

Information sheets for students on [shorebirds](#) and [wetlands](#), a student [workbook](#) and recording of our shorebirds information session are also available.

The next newsletter will focus on the postcard activity for our Shorebirds Competition and provide helpful tips to assist your student's participation!

Contact us

Don't hesitate to call us on (02) 9717 3090 or email competition@ansto.gov.au if you have any questions.



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