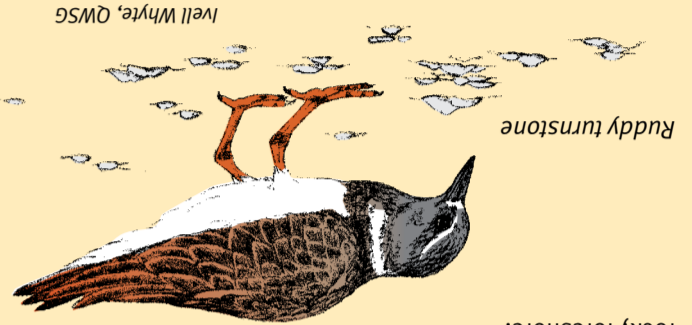


It is very important for the long-term survival of shorebirds that we do not disturb them as they go about their business. This means we must not interrupt them when they are feeding, resting or breeding.



Shorebirds make up about 10 per cent of Australia's species of birds. Most breed in the Northern Hemisphere and about 40 000 shorebirds of about 20 species migrate to Moreton Bay each year. Many shorebirds do not migrate at all and call Moreton Bay home. These resident shorebirds create their families here and share their home with the annual influx of overseas visitors.



Ruddy turnstone

Shorebirds, also known as waders, gather in intertidal areas or on the fringes of freshwater wetlands. They generally have long legs in relation to their body size, no webbing on their feet and they don't swim. The shape and size of their bill gives a clue to their preferred diet and habitat. For example, the long, probing bill of the eastern curlew is ideal for fishing out worms and crustaceans from deep mud whereas the short, stubby bill of the ruddy turnstone can flip aside stones and shells on a rocky foreshore.

## What is a shorebird?

It is an offence to disturb shorebirds in Moreton Bay Marine Park. A person must not cause disturbance to shorebirds or their habitat.

On-the-spot fines of up to \$300 apply.

## What is so special about shorebirds?

There are many special and fascinating things about shorebirds that dazzle and inspire. Being able to fly is something many of us dream of, and to be able to travel thousands of kilometres under your own power is amazing. When a flock of shorebirds takes flight on the next leg of their journey, watch how they circle overhead—some will form a 'V' formation in the sky before heading off like a giant arrow.

Some shorebirds have beautiful or haunting calls. For example, listen for the eerie cry of the bush stone-curlew at night or the signature call of the eastern curlew during its annual summer stopover.

Other special features of shorebirds include their sleek design, specialised bills for feeding and expert hunting skills. Near the end of summer, many species will moult and change into spectacular breeding plumage—announcing their suitability as potential partners.

In Australia, there are Aboriginal storylines associated with shorebirds and, in some cases, there is evidence of their traditional use. For the Aboriginal people of Moreton Bay, the eastern curlew, known as the 'sea curlew'—Gurrell—was a source of food during the summer months. The 'land curlew' (bush stone-curlew), also known as the messenger bird—Bulligan—because of its eerie cries, brought a message from Aboriginal spirits to the people. When an Aboriginal person is about to depart this life, the messenger bird visits his home at night and gives three calls.

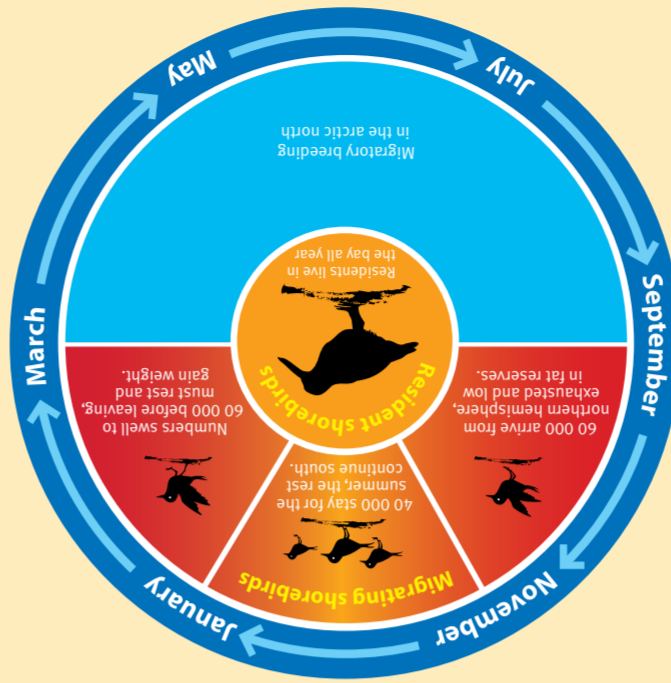


If we lose too much habitat or cause too much disturbance, we will continue to see not only the loss of our local and international shorebirds, but we could also lose a vital link in the flyway.

Unfortunately around the world and within Australia, wetlands are rapidly disappearing and being developed for more human-oriented activities, such as farming, housing, industrial and coastal developments.

## What if the shorebirds just disappear?

- Noise, speed and movement easily disturb shorebirds. Avoid approaching flocks of birds when walking, in cars and on boats, jet skis, aircraft, horses and wind or kite surfers.
- The Queensland Wader Study Group regularly conducts shorebird monitoring in Queensland and welcomes new members. See [www.birdsqueensland.org.au](http://www.birdsqueensland.org.au).



A year in Moreton Bay for shorebirds

Through wind and storm, enduring unbearably hot days and freezing nights, avoiding waiting hunters, shorebirds miraculously navigate along a precious chain of wetlands, including Moreton Bay, to complete their global journey. Migrating shorebirds travel these remarkable distances each year because of their special breeding requirements. Breeding takes place in areas where melting snows signal masses of insects, providing a vital food source for self-feeding chicks. Once breeding is complete and before the onset of the Arctic winter, the adults and newly fledged chicks begin their incredible return journey to the plentiful feeding grounds of the south.



leg flag

Many other areas have unique colour flag combinations. For further details, please go to [www.awsg.org.au](http://www.awsg.org.au) and select 'wader flagging'.

- For a good look at shorebirds, sit quietly at a distance, ideally in a bird hide, and study them through binoculars or a spotting scope.
- You can look out for birds that are tagged with coloured plastic leg 'flags'. Birds banded in:
  - Moreton Bay have a green tag
  - north-western Australia have a yellow tag
  - southern Australia have an orange tag over a yellow tag.

## How to successfully watch shorebirds

By disturbing shorebirds we are reducing their survival prospects. Remember it is an offence to cause disturbance to shorebirds and their habitat in Moreton Bay and hefty on-the-spot penalties apply.



DERM

16 million kilometres almost non-stop and losing 32 kg, twice a year! You would definitely need food and rest after that!

Each year, about 15 per cent of the migrating shorebirds that visit Moreton Bay in the summer stay for the whole year. These include birds that are too young to breed or adults that are not strong enough for the northern journey. Flyways are the name for the invisible highways these birds travel when migrating. How does a migrating shorebird know which way to go? Are there maps in the stars? Patterns on the land? Memories in their genes? Or are they guided by the sun and the moon or the earth's magnetic field? Scientists say it is probably a combination of all of these but it is still unclear exactly how migratory shorebirds find their way.

## Highways in the sky

Like weary travellers on a lengthy journey, shorebirds need rest stops along the way to refuel and have a break. Flyways are like chains with many links. Each link is an important wetland, such as an estuary or bay where the birds can stopover to feed and regain their strength for the next leg of their migration. The message is clear, everything is interconnected—remove enough of these links and species may disappear altogether!

Moreton Bay is an important habitat in the East Asian-Australasian Flyway, which is one of eight flyways in the world. The East Asian-Australasian Shorebird Reserve Network is an international chain of wetlands that have



DERM

Moreton Bay has about 3500 resident shorebirds, representing 10 species. These birds breed in and around Moreton Bay. Some of the most recognisable species include the pied oystercatcher, the bush stone-curlew and the red-capped plover. The beach stone-curlew and the sooty oystercatcher are less common and are of international and national significance because ongoing disturbance has drastically reduced their numbers.



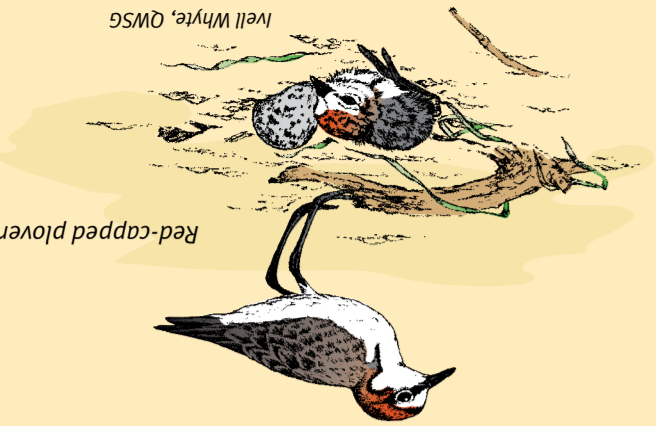
East Asian-Australasian Flyway

## Our resident shorebirds

When it is time for resident shorebirds to breed, they build their simple nests just above the high-tide line of beaches and rocky shorelines. For this reason they are vulnerable to damage from vehicles driving above high tide lines and from people camping on undisturbed foreshores. Each year, many young shorebirds and some adults are killed due to beach traffic.

## Shorebirds' lives are driven by tides

At low tide, regardless of day or night, shorebirds feed constantly—pecking and probing for worms, insects and crustaceans. With their highly variable and specialised bills they feed around intertidal flats, beaches, rocky headlands and along the fringes of freshwater wetlands. As the incoming tide covers these feeding areas, they begin to congregate in large numbers at relatively safe and nearby roost sites. These roost sites provide areas where they can interact, preen, digest their food and rest while waiting for the ebbing tide to again expose their feeding areas. During particularly high spring tides, all the shorebirds of Moreton Bay crowd together on a limited number of higher elevation roost sites. Disturbance during this time is more damaging than usual.



Red-capped plover

Well Whyte, QMSG

## For further information

Visit [www.derm.qld.gov.au](http://www.derm.qld.gov.au) or phone 13 QGOV (13 74 68). GPO Box 2454 Brisbane QLD 4001

You can also participate in shorebird monitoring and conservation by contacting the Queensland Wader Study Group [www.birdsqueensland.org.au](http://www.birdsqueensland.org.au)

For information on natural resource management in south-east Queensland [www.seqcatchments.com.au](http://www.seqcatchments.com.au)

For contact details of local governments and more information on dog control and bird hides [www.lgaq.asn.au/portal/dt](http://www.lgaq.asn.au/portal/dt)

### Disclaimer

While this brochure has been produced with care, readers are advised that neither the Queensland Government nor the Queensland Parks and Wildlife Service accepts liability for any decisions or any actions taken on the basis of the information contained or not contained in this publication.



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DERM

Queensland Parks and Wildlife Service Department of Environment and Resource Management

## Shorebirds in Moreton Bay

Information guide



Help secure the future of Moreton Bay's shorebirds by leaving them undisturbed, preserving their habitat and learning more about them.

Eastern Curlew

# Shorebirds in Moreton Bay



**Curlew sandpiper**  
*Calidris ferruginea*  
Siberia to Australia is a 13 000 km one-way flight for the curlew sandpiper. In its lifetime, it will fly the distance between the earth and moon!

Image courtesy of Clive Minton  
Australasian Wader Studies Group



**Bar-tailed godwit**  
*Limosa lapponica*  
The bar-tailed godwit is a large shorebird and one of our most common migrants. They fly non-stop across the Pacific Ocean from Alaska to Moreton Bay, an incredible 11 000 km flight.

Image courtesy of Clive Minton  
Australasian Wader Studies Group



**Beach stone-curlew**  
*Esacus neglectus*  
These resident shorebirds are now listed as 'vulnerable to extinction' and only about 1000 remain in Queensland.

Image courtesy of Ron Hoff



**Pied oystercatcher**  
*Haematopus longirostris*  
A well-known resident of Moreton Bay. Pairs mate for life and defend their feeding territory all year. Enjoy watching these birds probe for pippies after each wave recedes down the shore.

Image: DERM



**Red-necked stint**  
*Calidris ruficollis*  
This is one of the smallest migratory shorebirds in the world and weighs only 30 g. It flies up to 25 000 km during migration.

Image courtesy of Clive Minton  
Australasian Wader Studies Group



**Great knot**  
*Calidris tenuirostris*  
These shorebirds have been known to fly more than 7000 km without stopping! You will often see great knots flocking with bar-tailed godwits and red knots.

Image courtesy of Clive Minton  
Australasian Wader Studies Group



**Bush stone-curlew**  
*Burhinus grallarius*  
Eerie wailing calls at night are often the only sign that bush curlews are about. They feed at night on the ground and rest during the day.

Image: DERM



**Grey-tailed tattler**  
*Heteroscelus brevipes*  
This bird breeds in the most remote and mountainous parts of Siberia. In Moreton Bay, it often roosts on rocks or mangrove branches.

Image courtesy of Clive Minton  
Australasian Wader Studies Group



**Eastern curlew**  
*Numenius madagascariensis*  
The eastern curlew is the largest shorebird in the world. These birds breed at high altitude in the Amur River Valley in northern China.

Image: DERM

