



BEACH-NESTING BIRDS EDUCATION KIT



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Shorebird Alliance.

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THE BIRDS

TERRITORIAL SPECIES

Territorial species nest in spread out territories rather than in dense colonies. Three territorial beach-nesting species are resident in Tasmania (i.e. do not undertake annual migrations). They are the Hooded Plover, Red-capped Plover and Australian Pied Oystercatcher. All of these species predominantly use distraction and camouflage as protection from predators, in contrast to the defensive techniques frequently used by species such as the Masked Lapwing (previously known as the Spur-winged Plover). A common distraction technique used when a perceived threat (e.g. a person and/or a dog) approaches a nest site is to leave the nest and lead the perceived predator elsewhere. It is this behaviour that makes these species vulnerable to increasing human disturbance. When parent birds leave the eggs and chicks, they are at risk of over-heating, chilling and other threats. When alerted to danger by their parents, chicks will crouch or run to hide in depressions or amongst vegetation or seaweed. Eggs and chicks are very well camouflaged so are easy to accidentally step on.

All three species can lay replacement clutches within the breeding season, following failure or success if conditions and resources allow. Both parents are involved in incubation and chick rearing. Chicks are precocious (feed themselves not long after hatching) however the Australian Pied Oystercatcher also feeds its young until fledging.



HOODED PLOVER, *Thinornis rubricollis*

The Hooded Plover is a medium-sized plover with a short, straight and sturdy bill. It predominantly inhabits sandy ocean beaches on Australia's southern coastline, and inland salt lakes in South West Australia. One to three (very occasionally four) eggs are laid in a shallow nest scrape in sand and/or shell grit. Breeding occurs as dispersed pairs, with territories 0.3–2 km in length. Egg-laying occurs over a couple of days, incubation is 26–31 days and chicks typically fledge within 33–36 days. Hooded Plovers are listed Nationally as Vulnerable and have been declining in Tasmania over the last 40 years.



RED-CAPPED PLOVER, *Charadrius ruficapillus*

The Red-capped Plover is a small plover with a short, fine bill. It is found in a variety of habitats adjacent to aquatic environments across Australia, including coastal beaches and lagoons, and inland wetlands. One to three (very occasionally four) eggs are laid in a shallow nest scrape in sand, shellgrit, mud or stone, which may be lined by other items such as grass, saltbush or twigs. Breeding may occur as dispersed pairs or in loose colonies. Incubation is 30–31 days.



AUSTRALIAN PIED OYSTERCATCHER, *Haematopus longirostris*

The Australian Pied Oystercatcher is a large, robust shorebird with a long, straight, heavy bill. It occurs around the entire Australian coast except where beach environments are replaced by sheer cliffs, preferring sand, shellgrit, mudflat and pebble substrates. One to three eggs are laid. Nest sites are similar to the Hooded Plover but can also include shingle, rock, mudflat and saltmarsh, and may be lined in a similar fashion to Red-capped Plovers. Australian Pied Oystercatchers show high site fidelity. Incubation is 26–29 days, with fledging of chicks at 7–8 weeks of age.

COLONIAL SPECIES

Fairy and Little Terns have suffered dramatic population declines in Tasmania. The two species often nest together in colonies, and only have eight known colony sites in South-East Tasmania. Both species are contrary in their colony site selection year to year and are extremely susceptible to colony abandonment if disturbed. Throughout their range they have also suffered from deliberate destruction of their nests and nest protection measures such as fencing and signage. Little is known of their movements around Australia, with some thinking that they may respond to climatic factors. Both parents are involved in incubation and chick-rearing, one to four eggs are laid and incubation is approximately 30 days for both species. Terns do not have the same tendency as territorial species to replace clutches.



FAIRY TERN, *Sternula nereis ssp. nereis*

The Fairy Tern occurs along the Western Australian and Southern Australian coastlines and appears to be at least partly migratory. Breeding occurs between September and February. Colony sites include beaches, spits, and banks, and feed almost entirely on fish. Fish nurseries can be an important factor at colony sites.



LITTLE TERN, *Sternula albifrons*

The Little Tern is found around the Australian coastline, except in the South-West. It is a migratory species, with 90% of the population thought to overwinter in Asia. Colony sites are similar to the Fairy Tern. Breeding occurs between September and January. The Little Tern has a more varied diet, and feeds on insects, crustaceans and other invertebrates, as well as small fish.

BURROWING SPECIES



LITTLE PENGUIN, *Eudyptula minor*

The world's smallest penguin species, the Little Penguin occurs on southern Australian coastlines. It also occurs in New Zealand. Little Penguins nest in burrows, custom-made nest boxes, and under ledges, buildings and vegetation. Colonies vary in size and burrows are also important during the annual moult. There have been incidents where entire colonies have been killed by a roaming dog in one night. Increasingly, there are reports of Little Penguins being harassed by tourists for photographs, including pulling them out from their burrows.



SHORT-TAILED SHEARWATER, *Ardenna tenuirostris*

Short-tailed Shearwater colonies are often adjacent to or overlap with Little Penguin colonies. Short-tailed Shearwaters form very large flocks and migrate annually from Tasmania to overwinter in the Arctic and North Pacific.

BEACH ETIQUETTE

This education kit includes several activities that are based at the beach, the habitat for beach-nesting birds.

To avoid impacts to nesting birds, it is best to plan excursions during the non-breeding season – between April and August.

There are some general messages that are communicated to beach users and children to help reduce their impact.

They are:

- Walk on the wet sand – nests are above the high tide mark (otherwise they would be washed away) so while disturbance can still occur the chances of crushing eggs is low
- Keep your dog on a leash – even small, leashed dogs disturb nesting birds but much less than unleashed dogs that are threatening and can chase and even kill birds
- Steer clear of nest fencing – nest fencing and signage is often not able to be large enough to prevent disturbance altogether so it is best to not linger near them

USING BINOCULARS

Children love binoculars – there's something magical about them!

A simple tool that can open up the world of birds, children need a decent pair of binoculars that suit their eyes and motor skills.

When choosing binoculars for children, it's worth considering:

- Weight, size, eye spacing and ergonomics of binoculars – the distance between the exit pupils of the eyepiece must accommodate for the smaller faces of children (models with a double hinge can usually be adjusted for this)
- Magnification of lens – x8 is optimum for children (higher magnification makes it harder to stay steady and keep the bird in the field of view)
- Field of view – wide is better but not available in compact models (easier to find the bird)
- Durability – features such as waterproof body and rubber casing
- Avoid toy binoculars if possible, they are often poor quality and do not have sufficient magnification
- High magnification binoculars may not be suitable for children and strain their eyes





BEACH-NESTING BIRDS **THE ACTIVITIES**

CLASSROOM: ACTIVITIES 1—5

EXCURSION: ACTIVITIES 5—8

EVENT: ACTIVITIES 7—12





AWARENESS RAISING SIGNS, POSTERS, POSTCARDS OR BADGES

Getting children involved in designing their own signs, posters, postcards or badges that can be displayed proudly in public, is a great way for them to be empowered in sharing their messages.

Commercial badge makers loan out badge makers and different size dies, and sell badge components. The medium to large size badges are best for displaying the children's illustrations and messages.

Following inquiry into the threats to beach-nesting birds, and what we can do to reduce our impact, children can share messages with their families and communities. Options for display of signs and posters include community noticeboards, art exhibitions and newsletters.

Examples of messages include 'Walk on the wet sand', 'Protect my habitat', and 'Keep your dog on a lead'.

LINKS TO CURRICULUM:

EYLF Outcome 2– Children develop a sense of belonging to groups and communities and an understanding of the reciprocal rights and responsibilities necessary for active community participation

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 5 – Children interact verbally and non-verbally with others for a range of purposes

Year 1 to Year 6 Science – Science as a Human Endeavour – Use and influence of science

Year 3 to Year 5 HASS – Inquiry and skills – Evaluating and reflecting

MATERIALS

- Paper (pre-cut to the correct size if making badges)
- Textas, pencils or paint
- Reference photos of beach-nesting birds
- Badge maker, dies and badge components (optional)





ROLE PLAY/VIDEO

Putting children in the shoes of beach-nesting birds promotes empathy and understanding for their plight. Creating costumes and a storyline requires children to analyse the situation and its components.

Before working on a role play, a visit from a shorebird expert can help explore the lives of beach-nesting birds with the children. A day in the life of a Hooded Plover is a good starting point for the children to work on a storyline. Characters can include different species of bird, people, dogs and other animals, eggs, wind, waves and the sun.

A variation of this activity is for children to create a show or song with the educator using props such as layers of material and toy characters.

MATERIALS

- Materials for costumes
- Video recorder/smart phone

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity

EYLF Outcome 5 – Children express ideas and make meaning using a range of media

Foundation to Year 2 Science – Science Understanding – Biological sciences

Foundation to Year 6 HASS – Knowledge and Understanding – Geography



POTATO PRINTING

Creating paintings of beach-nesting birds using potatoes and limited paint colours is a great way of encouraging children to identify the key features of birds. This hands-on activity is suited to the classroom or an event stall, and creates simple and beautiful paintings.

LINKS TO CURRICULUM

EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

EYLF Outcome 5 – Children interact verbally and non-verbally with others for a range of purposes

EYLF Outcome 5 – Children express ideas and make meaning using a range of media

Foundation to Year 5 Science – Science Understanding – Biological sciences

MATERIALS

- Large washed potatoes – cut to different shapes
- Washable paint in colours depending on bird species chosen
- Paper
- Reference images of birds
- Flat surface/trays for paint
- Various paint brushes and sponges





MARINE DEBRIS BINGO

Linking everyday items in children's lives to impacts on wildlife promotes an understanding of how their actions affect the natural environment, and conversely what they can do to avoid those impacts.

As items are pulled from the bucket, children identify and cross the item off their bingo sheet. There is an opportunity at this point to discuss what impact that type of marine debris has on marine life and shorebirds. The first child or team to cross out a line or the whole sheet is the winner.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children transfer and adapt what they have learnt from one context to another

Year 1 to Year 6 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science Inquiry Skills – Questioning and predicting

Foundation to Year 6 HASS – Knowledge and understanding – Geography

MATERIALS

- Various bingo sheets showing pictures of marine debris items
- Bucket of marine debris – straws, fishing line, bottle top, rope, packing tape, broken toy, food packets, pieces of balloon, polystyrene



PAPIER-MÂCHÉ EGGS

This is an excellent activity for helping children gain an understanding on where shorebirds nest. Creating a nest scrape in a real beach environment for the precious egg they have made brings into context the elements that beach-nesting birds face, and shows how difficult the eggs can be to detect on the sand.

This activity works best as a series of sessions:

1. Visit to class by shorebird expert – talking about where shorebirds live and nest, showing photos of shorebirds and eggs in nest scrapes
2. Create small Papier-mâché eggs using water balloons or crunched aluminium foil as a base, and white tissue paper or white paper as the outer layer (wait to dry)
3. Paint Papier-mâché eggs to replicate real eggs (wait to dry)
4. Excursion to nearby sandy beach with shorebird expert to make shorebird scrapes in the sand for Papier-mâché eggs – discussion about how shorebirds create and decorate scrapes, whether they are above or below the high tide line, and how they can be difficult to spot when camouflaged in the sand

It is worth noting that children should be told not to bury their eggs as they can be very difficult to find again!

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

Foundation to Year 5 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science as a Human Endeavour – Use and influence of science

Foundation to Year 2 HASS – Knowledge and understanding - Geography

Don't forget this activity is for between the months of April to August only, to avoid disturbance to breeding shorebirds.

MATERIALS

- Papier-mâché mixture
- White paper or white tissue paper
- Water balloons or aluminium foil
- Paint in different shades of cream and brown
- Photos of shorebird nest scrapes with eggs





BEACH SCAVENGER HUNT

A beach scavenger hunt is a fun way for children to become familiar with the beach environment and the components of shorebird habitat.

Scavenger hunt lists can include specific things (e.g. shell, rock, stick, animal track), types of things (e.g. something where someone lives, something that is a green, something smooth), or can be more abstract (e.g. something that makes you smile, something that you cannot hold).

This activity can be done with brown paper bags (with a list stapled to the bags) or baskets, or can just be a list that is ticked off. In small groups or individually, children hunt in a designated area for the items. If using brown paper bags or baskets to collect items, children can come together as a group and share what they have found. This is an opportunity for educators to elaborate and expand on how the items might relate to the beach as a habitat for shorebirds. If collected, the treasures can be returned to the beach after show and tell with the rest of the group. For younger children, the list can show both the words as well as a photo of the item. This activity works well with extra parent help to guide younger children.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity

EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

Foundation to Year 2 Science – Science as a human endeavour – Nature and development of science

Foundation to Year 2 HASS – Inquiry and skills – Analysing

Don't forget this activity is for between the months of April to August only, to avoid disturbance to breeding shorebirds.

MATERIALS

- Scavenger hunt list
- Brown paper bags or baskets (optional)



BIRD WATCHING

For fostering a strong sense of place and appreciation, nothing beats getting out and about in the natural environment. Seeing birds up close through binoculars or a spotting scope surprises and delights children.

If possible, a bird expert that can help identify species for the children is useful to have attend your excursion. There are many activities that can be done during a visit to a beach or wetland environment along with bird watching. These include map making, looking for tracks and traces (or a scavenger hunt – see activity 6), learning about other elements of the environment, and making nest scrapes (see activity 5).

Don't forget this activity is for between the months of April to August only, to avoid disturbance to breeding shorebirds.

MATERIALS

- Binoculars and/or spotting scope
- Field guides

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

Foundation to Year 5 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science as a Human Endeavour – Use and influence of science

Foundation to Year 2 HASS – Knowledge and understanding – Geography



BEACH CLEAN UP

Children can make a real contribution to the health of shorebird habitat by participating in a beach clean up. Shorebirds can become entangled in marine debris.

After the clean up, the marine debris and beach litter that has been collected can be audited and discussed as a group before safe disposal.

Older or closely supervised younger children can also assist with sea spurge clean ups. Sea Spurge is a coastal weed that densely covers dunes making them less suitable for nesting. Contact Parks and Wildlife or your local Coastcare group to find out when Sea Spurge clean ups are occurring. Sea Spurge contains a toxic milky substance inside the stem, so needs to be handled carefully to avoid it accidentally getting in eyes.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

Foundation to Year 5 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science as a Human Endeavour – Use and influence of science

Foundation to Year 2 HASS – Knowledge and understanding – Geography

Don't forget this activity is for between the months of April to August only, to avoid disturbance to breeding shorebirds.

MATERIALS

- Rubber or gardening gloves
- Bags for litter
- Safety glasses



SHOREBIRD SCRAPES

Using photos of real nests, this activity allows children to build their own nest scrape and imagine how birds create them. It is a quick hands-on activity particularly suited to an outdoor event stall.

To create the nest scrape, put a generous amount of glue on a paper plate and cover in sand or a combination of sand and shell grit. Pour excess sand and shell grit back into container. Use more glue to attach nest decorations and she oak eggs (beach-nesting birds usually lay between one and three eggs but you may want limit to two if you have a busy event stall). Wait for glue to dry (if at an event, have an area where nests can be collected later if desired).

This activity works best when attended by an educator that can talk to the children about beach-nesting birds and their scrapes, how they are created and decorated, and where they are on the beach.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

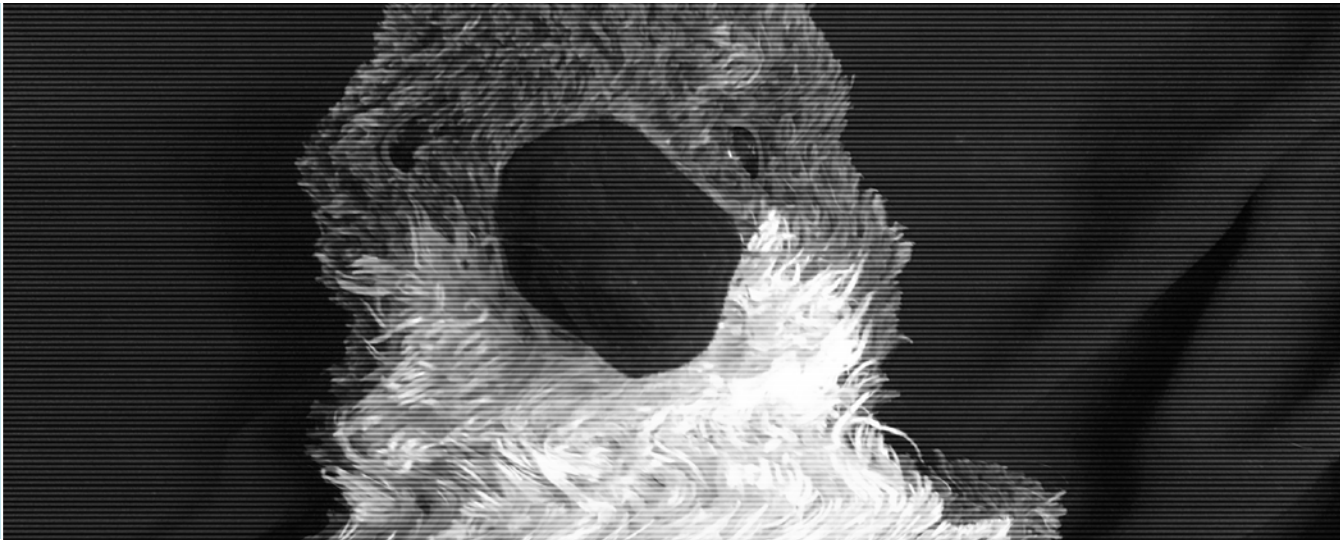
EYLF Outcome 4 – Children resource their own learning through connecting with people, place, technologies and natural and processed materials

Foundation to Year 5 Science – Science Understanding – Biological sciences

Don't forget permission should be obtained from the land manager before collecting sand and other items from the beach. Sheoak nuts can be collected from the ground under a large sheoak tree.

MATERIALS

- Plain paper plates
- Sand
- Shell grit
- Small pieces of dry seaweed, shell and drift wood
- Sheoak nuts (to be the eggs)
- Large bottles of multipurpose craft glue that dries clear
- Reference photos of nests



PENGUIN BURROW CAM

This is a fun activity for festival stalls in regional communities. Children and adults alike enjoy trying out a burrow camera and getting a taste for ecological survey work.

With the toy penguin inside the artificial penguin burrow, festival attendants can look inside and find the toy penguin with the burrow camera. Burrow cameras can be more difficult to operate than one might think, so pose a fun challenge.

BirdLife Tasmania, the Derwent Estuary Program or some Local Governments may be able to assist in loaning out an artificial penguin burrow and burrow camera. It is advisable to have a small section of clear plastic tubing over the end the camera to protect it from scratches, and to bring spare batteries for the torch component of the camera.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity

EYLF Outcome 4 – Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesizing, researching and investigating

Year 1 to Year 6 Science – Science as a Human Endeavour – Use and influence of science

MATERIALS

- Artificial penguin burrow
- Toy penguin
- Burrow camera
- Penguin interpretative material (e.g. Derwent Estuary Program penguin cards)

SHOREBIRD FEEDING

Using different utensils to pick up various prey items allows children to gain an understanding of adaptation and natural selection, specialist feeding and ecosystems.

This activity can be a simple experiment with discussion with the educator on what works and what doesn't, or can be adapted into a competition or relay race, with the aim for teams to pick up as many prey items as they can using beaks and no hands.

The children's book, *The Best Beak in Boonaroo Bay* (see Resources section) is a good accompaniment to this activity.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesizing, researching and investigating

EYLF Outcome 4 – Children transfer and adapt what they have learnt from one context to another

Year 1 to Year 6 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science Inquiry Skills – Questioning and predicting

MATERIALS

- Prey items – spaghetti, beads/ buttons, rubber bands, shells
- Beaks – chopsticks, bulldog clips, spoons, tiny clothes pegs
- Trays of sand and water (optional)
- Reference photos and diagrams of shorebird beaks



SPOT THE HOODED PLOVER

Disturbance to nesting Hooded Plovers is often underestimated by beachgoers simply because they do not detect the presence of them at all. This activity demonstrates how hard it can be to find them even when they are not moving and you know they are there.

This activity works as a point of interest at an event stall or with a group of children, but could also be used as the basis of a competition – using tacks, with the closest one the winner.

An alternative way of doing this activity is to print out pictures of Hooded Plovers, attach them to ice-cream sticks and place them in the sand at the beach. At a distance of 20m, they can be hard to spot. Hooded Plovers can be disturbed by people and dogs from 200m away – it is impossible for the human eye to see them from this distance.

LINKS TO CURRICULUM

EYLF Outcome 2 – Children become socially responsible and show respect for the environment

EYLF Outcome 4 – Children transfer and adapt what they have learnt from one context to another

EYLF Outcome 5 – Children interact verbally and non-verbally with others for a range of purposes

Year 1 to Year 6 Science – Science Understanding – Biological sciences

Year 1 to Year 6 Science – Science Inquiry Skills – Questioning and predicting

Foundation to Year 6 HASS – Knowledge and understanding – Geography

MATERIALS

- Enlarged photo of beach with a difficult to spot nesting Hooded Plover
- Tacks (optional)

RESOURCES

The Tasmanian Museum and Art Gallery have a specimen loan program for educators. Their collection includes a Little Penguin and Australian Pied Oystercatcher.

tmag.tas.gov.au/learning_and_discovery/learning_resources/Loan_service

The Wing Thing – Beach-nesting Birds and *The Wing Thing – Shorebirds* are downloadable activity booklets for children produced by BirdLife Australia.

www.birdlife.org.au/documents/BNB-WingThing-beach.pdf

www.birdlife.org.au/documents/SB-Wing-Thing.pdf
There are three sets of beach-nesting birds Tiger Track stamps that can be found at events in Southern Tasmania.

tigertrack.com.au
An Introduction to Beach-nesting Birds video from BirdLife Australia.

[youtube/ID9KJ4kps78](https://youtube.com/watch?v=ID9KJ4kps78)
A video reading of *The Best Beak in Boonaroo Bay* by Narelle Oliver.

www.youtube.com/watch?v=Lup5LJXkPAQ
An electronic copy of *Our Life The Beach: a book about beach-nesting birds* by Gay de Mather and Lara Tilbrook.

www.birdlife.org.au/documents/BNB-OurLifeTheBeach.pdf

BOOKS ABOUT MIGRATORY SHOREBIRDS

Baker, J. (2016). *Circle*. Walker Books. London.
Children's book featuring collage illustrations that follows the annual migration of Bar-tailed Godwits between Alaska and Australia/New Zealand. This book includes reference to human disturbance and threats in artwork and story.

Willis, N. C. (2006). *Red Knot: A Shorebird's Incredible Journey*. Birdsong Books. Delaware.
Children's book following the annual migration of Red Knots between Canada and Chile, includes reference to human disturbance and threats in artwork and story, and shows process of catching and putting on leg flags.

OTHER RELATED BOOKS

Auman, H. (2014). *Garbage Guts*. Dog Ear Publishing. Indianapolis.
Children's book following Aria the Albatross on her quest to find out why all her marine friends are entangled or have swallowed plastic. Each marine animal featured has a short song, with the last song asking children what can they do. This book includes reference to beach and water clean ups.

Balla, T. (2014). *Rivertime*. Allen & Unwin. Crows Nest.
Cartoon style children's book set at the Glenelg River with bird-watching, adventure and nature-appreciation themes.

Blathwayt, B. (2016). *Bear's Adventure*. BC Books. Edinburgh.
First published in 1988, this story follows the journey of a teddy bear left at the beach. Bear is washed under water, caught by a fishing net, carried by a seagull and eventually ends up home again. This book features marine life, many shorebirds, and a seabird colony.

Duncan, D. (2017). *South*. Abrams Books. New York.
This children's book is about a fisherman that finds an injured tern on his boat. The fisherman cares for the tern before changing course to return the bird to an island with a breeding colony of terns.

Harvey, R. (2016). *On the river*. Allen and Unwin. Sydney.
This book follows the Murray River from it's beginning to where it reaches the sea, exploring the health of the Murray River mouth and human impacts.

Oliver, N. (1993). *The best beak in Boonaroo Bay*. Lothian, Port Melbourne.
This beautifully illustrated book shows how different Australian bird beaks are good for different things.

Thiele, C. & Gouldthorpe, P. (2001). *Pannikin and Pinta*. Lothian Books. Sydney.
This children's book is about a pelican family that breed at Lake Eyre. Themes include environmental boom and bust, fishing entanglement, and tracking birds with leg bands.

REFERENCE BOOKS

Chandler, R. (2017). *Shorebirds in Action: An Introduction to Waders and their Behaviour*. Whittles Publishing. Caithness.

Geering, A. *et al.* (2007). *Shorebirds of Australia*. CSIRO Publishing. Collingwood.

Hollands, D. & Minton, C. (2012). *Waders: The Shorebirds of Australia*. Bloomings Books. Melbourne.

Menkhurst, P. *et al.* (2017). *The Australia Bird Guide*. CSIRO Publishing. Clayton South.

Stepnell, K. (2017). *Little Penguins: Exploring the Life of the World's Smallest Penguin*. New Holland Publishers Pty Ltd. London.

SUGGESTED SHOREBIRD KIT (FOR SCIENCE EDUCATORS)

- Replica shorebird eggs and scrape – Hooded Plover, Pied Oystercatcher
 - Wooden lifesize silhouette birds with table and sand posts – Hooded Plover, Pied Oystercatcher, Eastern Curlew, Masked Lapwing
 - Shorebird migration poster
 - Oystercatcher soft toy that makes call
 - Knitted penguin jumper and articles on the Iron Baron oil spill
 - Hooded Plover felt mask
 - Natural coloured paints and small paint brushes (to paint rocks as camouflaged eggs)
 - Parks and Wildlife 'Requested Access Sensitive Bird Breeding Area' corflute sign
 - NRM South Education Kit (this document)
 - NRM South 'Ethical Nature Photography in Tasmania' booklet
 - BirdLife Australia 'Dogs & Leashes, Birds & Beaches' brochure
 - Connie's Collectables – Fairy Tern, Red-capped Plover, Hooded Plover, Pied Oystercatcher, Little Tern Chick and Egg
 - 'I'm a wet sand walker and I don't chase chicks' dog leashes
- A4 laminated images:
- Hooded Plover scrape with eggs
 - Hooded Plover scrape with hatching chicks
 - Hooded Plover sitting on eggs – bird hard to find
 - Beach covered in tyre tracks
 - Eastern Curlew head showing curved bill
 - Beach-washed entangled seabird
 - Illustration showing different shorebird bills and prey
 - WWF Australian Shorebirds Identification Sheet x 3
 - Masked Lapwing showing spurs
 - 'Make your own shorebird scrape' activity sign for events

