

Bush Stone-curlew (*Burhinus grallarius*)

Also known as: Bush Thick-knee, Weeloo, Willaroo, and Angelbird.

How can you help Bush Stone-curlews?

- Confine pets to your property at all times, except when on a leash or at a designated off-leash area.
- Report any fox dens to Tweed Shire Council.
- Look out for Bush Stone-curlews when in local parks and gardens. If you see them, please respect their need for space and give them a very wide berth.
- Teach children about Bush Stone-curlews, and ask that they do not approach them if they see them.
- Keep an eye and ear out for the Bush Stone-curlew and report any nest sites to Tweed Shire Council.
- Participate in programs in your suburb to protect Bush Stone-curlews when they are nesting or raising chicks.

What is being done in Tweed Shire to help Bush Stone-curlews?

In Tweed Shire, community members and Council staff are working together to protect nesting Bush Stone-curlews and to assist them to raise their chicks through to adulthood. The following actions are being implemented.

- Fox control on public land through the identification and fumigation of den sites during the Bush Stone-curlew breeding season.
- Protection of nest sites through signage and, where necessary, fencing to exclude disturbance from people and pets.
- Programs to encourage responsible pet ownership.
- Habitat restoration programs are placed on private and public land.
- Where applicable, conditions on developments and events to protect Bush Stone-curlews and their habitat.

Please call (02) 6670 2400 to report Bush Stone-curlew sightings, in particular nesting pairs or pair with young.



Juvenile Bush Stone-curlew

If you see an injured Bush Stone-curlew please call Tweed Valley Wildlife Carers on their 24 hour Hotline - (02) 6672 4789.

In the Tweed, community members and Tweed Shire Council staff are working together to protect the Bush Stone-curlews.



Adult Bush Stone-curlew. Image Kathy Wilk

In NSW, the Bush Stone-curlew is listed as an Endangered species under serious risk of extinction. It is estimated that only 1000 breeding pairs remain in NSW and that numbers are declining. Coordinated efforts are required to ensure the survival of this wonderful species.

Bush Stone-curlew are known from only a small number of mainly coastal locations

Calls

Bush Stone-curlew are heard more often than they are seen because they tend to remain still for long periods and they have excellent camouflage. Sometimes their calls are the only indication of their presence.

At night, Bush Stone-curlew make wailing calls, often when two birds meet at the boundaries of their territories.

Males make gurgling sounds to warn females of an approaching observer. When Bush Stone-curlew are at their nest or with their chicks, they may raise their wings wide and high and hiss loudly in what is known as a threat posture.

Behaviour

Most Bush Stone-curlew pairs stay together in the same territory throughout their life. When not breeding, however, they tend to wander locally. Bush Stone-curlew feed and are active at night (nocturnal). During the day they rest and blend in with the ground by squatting on their feet, head out and legs stretched forward under the body. If disturbed, rather than fly off they prefer to crouch or stalk away stealthily and then freeze. This behaviour makes them vulnerable to predators



This project has been assisted by the New South Wales Government through its Environment Trust



Bush Stone-curlew (*Burhinus grallarius*)



Breeding pair, Kingscliff. Image Scott Green

Social organisation and behaviour

Found singly, in pairs, families (1 - 3 young), or in small flocks. They are usually shy but can become quite tame around human habitation. Adult birds are monogamous, pairing for the year and often for life.

Breeding

In Tweed Shire, Bush Stone-curlews breed from July to January. If you see a Bush-stone Curlew crouching on the ground for an extended period during this time of year it is most likely sitting on eggs.

The eggs are laid in a shallow scrape in the ground with little preparation – they may just scrape the leaf litter away, or even lay on bare rocks or gravel. They prefer to nest in an open area with high visibility for predator awareness. In many cases the same nesting sites are re-used in successive years but nests may be abandoned if surrounding grass becomes too tall or disturbance is too severe.

The eggs are mottled grey-brown, the size of hen eggs, and are incubated by both parents, with the off-duty bird usually standing guard nearby. Incubation takes 22-28 days. Parents can hear chirps through the eggshells and they make soft clucking noises to the chicks.

Known nesting sites in Tweed Shire are in public recreation areas, caravan parks, car parks and private yards. Nesting birds, their eggs and chicks are especially vulnerable to predation by foxes, cats and dogs.

Offspring

Newly hatched chicks are covered with thick pale grey down and are boldly marked with dark brown to black stripes. Bush Stone-curlew chicks can walk almost as soon as they hatch. Parents move the chicks away from the nest immediately after hatching but tend to remain within 200 metres of the nest for several weeks

Two clutches of chicks in a season is common for Bush Stone-curlews. In some cases four clutches of eggs may be produced in the same season; this is usually after the loss of eggs or very young chicks.

Habitat requirements

Bush Stone-curlews prefer 'untidy' landscapes covered in fallen timber and debris as this provides the best habitat for nesting, camouflage and foraging.

In urban areas Bush Stone-curlews utilise open grassy recreational areas and school grounds if there are adjacent or on-site treed or woodland areas. They can also be found around houses and appear to be quite at home in some urban backyards.

Defence

When disturbed they crouch down and freeze (often in odd positions) rather than fly away. This works well against predators that hunt using motion such as eagles, but not for predators that use scent to hunt such as foxes, wild dogs and cats.



Bush Stone-Curlew chick. Image Kathy Wilk

- **Did you know? Bush Stone-curlews can live more than 20 years.**



Adult bird

Threats

Due to the widespread population decline in NSW, Bush Stone-curlews are now listed as an Endangered Species under the Threatened Species Conservation Act 1995. The NSW Office of Environment and Heritage lists threats to this species as:

- predation by foxes and cats,
- trampling of eggs by cattle,
- clearance of woodland habitat for agricultural and residential development,
- modification and destruction of ground habitat through removal of litter and fallen timber, introduction of exotic pasture grasses, grazing and frequent fires, and
- disturbance in the vicinity of nest sites.

Additional causes of mortality have been recorded in Tweed Shire. These are:

- Attack by off-leash domestic dogs and cats.
- Road-kills of both adult and young curlews. This can happen when birds run onto the road under streetlights to pick up insects.
- Young chicks being too small to scale roadside guttering, and falling down stormwater inlets or being run over.

- **Did you know? The characteristic camouflage behaviour of the curlew is to flatten itself against the ground with neck outstretched and eye partially closed, remaining motionless in the hope of evading detection. This strategy is so effective that many people mistake the birds for a piece of fallen timber.**

Distribution in Tweed Shire

Whilst Bush Stone-curlews would have once been common throughout Tweed Shire, they are now absent from many areas. There are very few recent records from the western section of the Shire, or from the more densely developed coastal areas (e.g Banora Point and the majority of Tweed Heads).

Bush Stone-curlews are much loved residents of some of our coastal villages. Public parks and private properties around Fingal Head, Kingscliff, Chinderah, Hastings Point and Pottsville support a number of adult Bush Stone-curlews, however, very few young birds make it to adulthood.

In these areas many nesting birds experience such a high level of disturbance that they abandon the nest. If they do manage to hatch chicks the majority of young birds are subject to threatening processes that prevent them from making it to adulthood.

The successfully breeding populations of Bush Stone-curlews at caravan and holiday parks on the Tweed Coast are worthy of note. Without exception, the management and staff of these parks actively protect and encourage the conservation of these birds. In many areas of Tweed Shire, these parks are the only places where chicks are being successfully raised to adulthood.



Adult bird with chicks. Image: Rob Smith