

# Roost & Nest Trees

## Raptor & Water Birds

### What are Roost and Nest Trees?

Many species of birds roost or build stick nests in trees. For a number of protected or threatened raptor and waterbirds, nests may be a significant structure in both size (over 1.5 metres wide for some species) and construction. These nests comprise a platform of sticks of various sizes lined with leaves. For many waterbirds nests are usually lined with reeds, rushes and grass. In many cases nests are used over a number of breeding seasons.

### Raptors and Water Birds

Raptors are birds of prey distinguished by their hooked bills, distinctively keen eyes and powerful grasping claws. They are more often referred to as hawks or eagles.

Most raptors are very selective in choosing both the type of tree and the location used for roosting or building of nests. For example, the Osprey, a threatened fish-eating raptor, often roosts and builds its large stick nest in a tall, dead or very occasionally live tree, usually in an exposed position close to suitable feeding habitat (rivers, lakes and ocean).



Osprey Nest

Michael Murphy

The Red Goshawk, an endangered raptor of northern NSW, builds a large stick nest up to 1 metre across usually on a horizontal or near horizontal branch at the top of a tall tree usually within a kilometre or often adjacent to permanent water.

**Colonial waterbirds** are birds that are strongly sociable in their behaviour in that they generally forage, roost and nest in flocks. In particular, large breeding colonies may form containing tens or hundreds of birds often with several species nesting together.



John Turbill

Ibises and Herons nesting in a swamp

These species are usually found near water or in swamps and wetlands but may also forage in open paddocks. Roosting and nesting usually occurs within or immediately adjacent to water (wetlands, swamps, dams, rivers or lakes).

Nests for these species usually comprise platforms of sticks together with reeds, rushes and grass. They are often constructed low over water in trees or sometimes mangroves and many nests may be built in close proximity to each other.

### Why are Stick Nests important?

Locating suitable nest trees and building large stick nests is a considerable task for birds during the breeding season. The suitability of the nest location (i.e. exposure to the elements, availability of adjoining foraging habitat and protection from predation) are critical to successive breeding of fledging birds. Additionally, of extreme importance is the protection of adjoining vegetation for nest security, roosting and perching of adult birds and fledglings and collection of nesting materials. In particular, birds are very sensitive during the breeding season to any disturbance within close proximity to the nest tree and may abandon the nest (and eggs or young) if disturbance occurs.



## Nest Type & Breeding Season of Raptor and Colonial Water Birds

Bird Species	Nest Type and General Location	Nesting Period or Season
Osprey (V)	Very large stick nest platform up to 2m across usually in dead tree near to river, lake or ocean	June to October
Square-tailed Kite (V)	Platform of sticks up to 90cm across usually high in fork of tree in forest or woodland	July to December
Red Goshawk (E)	Platform of sticks up to 1.2 m across in fork on horizontal or near horizontal branch high in living or partly dead tree often within 1 km or adjacent to water.	May to October
Pacific Baza	Small platform of sticks up to 40cm across within tree canopy	September to December
Whistling Kite	Bowl of sticks up to 1.5m across in fork of live or dead tree	Variable, usually winter to spring
Brahminy Kite	Platform of sticks up to 60cm across often near coastal rivers and lakes	Late winter to spring
White-bellied Sea-Eagle	Very large pile of sticks up to 1.7m across on cliff in large living or partly dead tree	June to September
Swamp Harrier	Platform of sticks and reeds within tall grass, scrubs or reeds usually near or in swamps	September to December
Grey & Brown Goshawk	Platform of sticks up to 70cm across in fork of living tree	September to December
Wedge-tailed Eagle	Very large platform or pile of sticks up to 1.5m across usually in tall live or dead tree	April to September
Little Eagle	Platform of sticks up to 75cm across in fork of living tree	August to October
Egrets, Herons, Ibises, Spoonbills	Medium to large untidy platform of sticks, reeds and grass, often in close proximity to other nests of same or other species usually in tree over water or swamp	Spring to early summer
Black-necked Stork (E)	Very large platform of sticks, rushes and grass in live or dead tree usually near water or within swamp	April to June

(E) = Endangered, (V) = Vulnerable Species listed in the *Threatened Species Conservation Act 1995*

### What can you do?

Trees with nests or roosts of any species of raptors, forest owl or colonial nesting water birds must be protected from forestry activities and a buffer of vegetation around nests should be protected. Often these nests are used over many breeding seasons.

Trees should be inspected from two angles, preferably using binoculars, to establish whether they contain stick nests. Where stick nests occur these trees must be retained and protected. The falling of any tree with a large stick nest can also be very dangerous to the operator on the ground. Additionally, trees that are suitable for nests of specific birds

should be retained and protected wherever possible (e.g. large dead trees near coastal estuaries and lakes for Ospreys, hollow-bearing trees for owls and cockatoos).

### References and Further Reading

- Debus S (1998), *The Birds of Prey of Australia, A Field Guide*.
- The National Photography Index of Australian Wildlife (1985), *The Water Birds of Australia*.
- DECC: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)