



Fauna Technical Note No. 14: Nest Identification



The Fauna Technical Note Series provides information for Forest Practices Officers on fauna management in production forests. These technical notes are advisory guidelines and should be read in conjunction with the requirements of the Forest Practices Code.

The Technical Notes can be accessed on the Forest Practices Authority's website: www.fpa.tas.gov.au

1. How did you know that wasn't an eagle nest?

Identification of eagle and goshawk nests can be tricky, even for the specialists. In answer to this common question we have put together these notes on things to look for when trying to decide to whom that large collection of twigs you have just found belongs? However, if in doubt ask for a site visit by a specialist.

In Tasmania, there are only four raptor species which build large nests in trees; the wedge-tailed eagle, white-bellied sea eagle, grey goshawk and brown goshawk. Other birds that build such nests are the forest raven, two species of currawong and the white-faced heron. The brown falcon and Australian hobby do not build their own nests but use the disused goshawk or raven nests.

Some tips for nest identification

Twig size is very helpful when identifying nest type. When viewing a nest through binoculars, a helpful tool for assessing twig size is to use leaves occurring close to the nest as a ruler: first identify the type of leaves that occur close to the nest and determine the typical length of these leaves, then use these to visually 'measure' some of the twigs in the nest when viewing through the binoculars.

Accurate identification of pellets is a great aid to nest identification. A tool to aid with pellet identification is currently in preparation. For assistance with identification in the interim, photos or samples of pellets can be sent to FPA Biodiversity Program staff.

2. Wedge-tailed eagle and white-bellied sea eagle

A very large nest, when in use, is usually about 1.2 m across and 1 m deep (range from 3 m across and 3 m deep to 0.8 m across and 0.5 m deep) and is built in large, live eucalypts at the canopy level. Sea eagles are more flexible in their preferences, often using dead eucalypts and sometimes using tea tree, she-oaks, pines and rock stacks (on islands).

The nest is usually situated snugly against the main trunk on the downhill side of a tree where two or more large limbs protrude, giving very strong support and the least amount of wind movement. Nest material comprises sticks from pencil sized up to 40 mm in diameter. Most sticks are about the thickness of one's little finger. The nest has a nest bowl lined with bark and leaves. Sea eagles often use sea weed.

It is rare that any part of a sitting bird can be seen from under the nest. Whitewash under nests with advanced chicks can be extensive. Pellets and other prey remains mainly represent mammals but there may be remains of birds, reptiles and fish scattered about. These two species often compete for nest sites so care has to be taken in deciding what species is actually in residence.

Caution

An unusually small or degraded eagle nest can be difficult to identify. However, such nests will still have large sticks in the base and be on limbs that seem too large for the nest. Such small or degraded

nests often are lost in a deep fork. A small nest may seem larger than it is if bark and other detritus have collected on top. Look for the structural material; bark is not usually utilised by eagles as a nesting material.

3. Grey goshawk

Grey goshawks most frequently nest in blackwood, silver wattle, myrtle or sassafras. In some (rare) cases they may nest on an epiphyte growing on any of the above (where their nest may barely be visible). These trees may be associated with a swamp forest or a narrow strip growing along a small creek amongst eucalypts. The nest of the grey goshawk tends to be situated beneath the shady crown of a tree, close to bases of limbs which provides a more sturdy foundation with less likelihood of the nest structure flexing in winds. If in large trees (such as eucalypts) the nests are more likely to be out on a limb built into a multi-forked structure. The nest is usually about 50 cm across and made of sticks up to 20 mm thick. The tail tip of a sitting grey goshawk may at times be visible protruding from the nest.

Whitewash under nests with advanced chicks can be obvious but may not be visible immediately after a heavy rainfall event. Pellets mainly contain remains of birds and small mammals and there may be further remains of their prey scattered about.

4. Brown goshawk

Grey goshawk and brown goshawk habitat preferences do overlap so nest identification may be difficult. The nest and sticks used by brown goshawks and grey goshawks are very similar in size and structure. However, brown goshawk nests tend to be on a junction of several limbs out from the main stem of tree, particularly where epicormic growth come up from the branch. Brown goshawks show a marked preference for eucalypts and do not nest in isolated trees or in wet forest types. Brown Goshawk nests are usually in the lower canopy of the tree and they usually choose much larger trees than grey goshawks. The tail tip of a sitting brown goshawk may be visible protruding from the nest.

Whitewash under nests with advanced chicks can be extensive. Pellets mainly contain remains of birds, reptiles and small mammals. There may also be remains of these prey scattered about.

5. Forest ravens and currawongs

Nests of these birds are most often placed in the upper canopy amongst the extremities of outer limbs. In this situation, the nests would sway around a lot in wind and therefore would not be suitable for goshawks (ravens and currawongs are better able to manipulate twigs and they use a wide range of materials to bind their nest together). The raven's or currawong's nest is typically built of sticks lighter than those of goshawks and in rural areas often includes bale twine, plastic bale wrap and other farm debris. Usually it is about 60cm in diameter and 25–30 cm deep. Raven nests are often in isolated, even dead trees. Raven nests are often not deep structures and the incubating bird can sometimes clearly be seen on the nest.

Whitewash under nests with advanced chicks can be extensive. Pellets can contain all manner of prey but typically are dominated by ground dwelling invertebrates, berries and undigested grain. Faeces of large animals may also be present in pellets, as these birds may look for invertebrates in animal dung.

Brown goshawks, grey goshawks, brown falcons and forest ravens may compete for nest sites so care has to be taken in deciding what species is actually in residence.

6. White-faced heron

This heron's nest is typically a shallow platform of sticks, up to 1 m in diameter and less than 200 mm deep. The nest tends to be very scraggly and untidy looking. Sticks are often not well arranged compared to a goshawk nest and may be in any species of large tree. The heron nest is often very flat

and open and located within easy reach, half a km or less, of foraging habitat i.e. large river, open farm land, marshes etc. Herons may nest in exposed trees.

Large splashes of whitewash are usually under active heron nests and pellets often contain crustacean remains.

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2.2	Oct 2014	Amy Koch	Minor edit_ remove reference to pellet technical note