

Forest Raven

Corvus tasmanicus

Description

The Forest Raven is the largest of the five raven and crow species in Australia. Ravens and crows are from the corvid family, which also includes similar birds overseas. Often referred to generically as 'crows', the Forest Raven is the only corvid with a permanent population in mainland Tasmania. The Little Raven is a common visitor to King Island, and occasionally to the far North of the state.

Forest Ravens are glossy-black all over with medium length throat hackles in comparison to the Australian Raven (*Corvus coronides*), its closest relative. They average 520-540 mm in length, with a wingspan of up to 377mm and a weight of 500-800g. The eyes of adults are white, with a blue inner ring. Their call, a "karr...karr...karr", often with the final note drawn out and descending, is well known in Tasmania. Surprisingly, they are classified as a 'passerine', a type of songbird!

Ravens and crows have often featured in legends and literature over the centuries, their blackness and penchant for carrion has created something of an unwarranted image problem for this highly intelligent species, which also provides a valuable public health service for humans. (See Issues Sheet No. 4 for more information).



Forest Raven

Photo: Alan Fletcher

Despite being very recognisable, the Forest Raven has been little studied. The nature of the Raven's relationship with humans has made it very wary, and it greets humans with alarm, so observation of behaviours is difficult.

Distribution

Forest Ravens are common nomads throughout Tasmania and Bass Strait Islands, but also occurs in parts of coastal Victoria, South Australia and a small area in NSW.

Habitat Requirements

Corvids are generally very adaptable, and Forest Ravens

are one species that have found some benefit in increasing human habitation. In some areas numbers have increased as a result of human activities. Roadkill provides a major food source for these birds and there is less competition for carcasses now, with the decrease in Tasmanian Devil numbers.

Ravens occupy wet sclerophyll forest to grassy woodland, through to urban areas. Immature ravens, in particular, will scout urban areas and cities for food, but adults may also make their home in the city environment. A pair have even been seen nesting in the heart of Hobart.

Depending on available food sources, the Australian Raven may have territories of more than 80 hectares. No accurate estimates are available for the Forest Raven, but territories are likely to be around 40 hectares or more.

Diet

Food sources are generally located by flight, when the Ravens head out from their overnight roost at dawn.

Forest Ravens are omnivorous and eat a wide range of foods. They eat carrion, insects, small vertebrates, grains and fruits. A lot of time is spent on the ground foraging, turning over dead wood or cowpats, for example, with their bills in search of insects. Feet are used to hold food items being shredded.

They are known to cache food for eating later on, particularly if they come across carrion that is too large to eat in one sitting and they want to save a portion for themselves for later. They may hide food in a hole they dig in the ground, or perhaps in a tussock.

Breeding

Ravens form strong pair bonds. Although there is no specific research on the Forest Raven, in the case of the Australian Raven the pair bond persists until one of the pair dies, at which time another mate is found or the newly single bird returns to the flock until it finds a new mate and territory. That they have compassion is suggested in a case where a female raven was shot when she had a nest of fledglings. A young female quickly paired with her widowed mate and successfully reared the young.

Nests are on average 20 metres above the ground, in the tree's upper canopy. A clutch of four eggs is laid from September to October. The nest is built of sticks, in rural areas it often includes binder twine and is lined with bark and wool. The nest averages about 60cm diameter, and 25-30cm deep.

Intelligence – did you know?

Research internationally has shown that common ravens in Europe and North America and the New Caledonian Crow make and use tools to obtain food.

New Caledonian Crows make a hooked tool by removing all but one of the side branches from a twig. They also fashion serrated rakes from pandanus leaves, using their beaks as scissors. They make probes by modifying their own moulted feathers. They use their tools to pull grubs from tree trunks, and will carry their favourite tool with them from one site to the next, storing it for later use. A captive crow was seen to mould wire into a hook.

Japanese Carrion Crows will use passing cars to crack walnuts open – strategically placing them in front of vehicles whilst traffic lights are red, and returning on the next red light to claim their fresh walnuts!

Anecdotal stories abound of ravens and crows in Australia opening zipped packs, using tools and utilising problem-solving skills. These skills have enabled them to access rubbish low inside bins and food scraps in containers, even dragging roadkill back onto the road so that it will be run over again and become easier to eat. It is clear this is a species that knows what it wants and how to get it!

It is believed the large forebrain of the corvid species enables them to come up with innovative solutions to problems. It has also been claimed that corvids have the greatest cognitive capabilities of all non-human animals!

Ravens often nest in isolated trees, sometimes in dead ones. They may compete for nest sites with Brown Goshawks, Grey Goshawks and Brown Falcons.

Nest building is a complex three stage task, performed by both male and female. Firstly sticks must be lodged in a chosen fork in the tree, to form a raft or platform. Then sticks are interwoven with twigs and roots to form a bowl shape, many freshly snapped from living or recently dead trees. The nest is then lined and felted together into a mat 5 centimetres thick. This is primarily the female's task as the nest must be the right size for her. One nest of an Australian Raven contained over 450 sticks and weighed over 3.5 kilos.

Ravens start breeding at approximately 3 years of age. Four eggs are laid on average. Mortality is quite high for fledglings, with approximately 50% surviving to leave the nest. Parents struggle to provide enough food for all the hatchlings. Fledglings remain in the nest for at least 6 weeks, and they stay as a family group for 3-4 months. Juveniles have brown eyes, but these gradually turn white as they reach maturity.

As far as is known, only the female incubates eggs, being fed by the male whilst sitting. A fortnight after hatching,



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Photo: Alan Fletcher

both parents feed and defend their young.

Only size differentiates males and females externally, with the males being larger, but during breeding season females have a large bare brood patch on the lower abdomen.

Habits (Family/Social)

Their behaviour, social organisation and displays are similar to those of the Australian Raven. Ravens are strong flyers, enjoy performing aerobatics, and will mob larger avian predators. Pairs preen each other, particularly in areas they can't reach on their own.

A wide variety of calls have been recorded for Ravens. These calls are used in different situations, for example calls when going out in the morning, when coming home, to sound an alarm, to defend a territory, when in flight and part of a flock.

Research on the European Common Raven has highlighted that corvid calls are among the most complex of all animal vocalisations and show an extraordinary level of learning. Different calls are shared with families and among group members. Their superior communication skills contribute to their ability to exploit new environments.

Research on the Torresian Crow in Brisbane, where it lives a suburban lifestyle, show that their voice, loud and low in pitch, is very similar to the sounds produced by human speech, in particular, of adult men talking loudly or shouting. This could explain why some people find their sounds grating!

Adult Ravens maintain their territory year round, whilst juveniles and non-breeding adults live in flocks that are nomadic. Sometimes when there is abundant food at a particular site, territories are ignored by invading flocks of juveniles and other breeding pairs, and large numbers will feed at one site.

Threats & Persecution

Despite their obvious intelligence, and usefulness in cleaning up carrion and food scraps, Ravens are unprotected in Tasmania and continue to be persecuted by farmers. (see Issues Sheet No. 4 for more information)