

# Great Cormorant & Little Pied Cormorant

*Phalacrocorax carbo* & *P. melanoleucos*

## Description

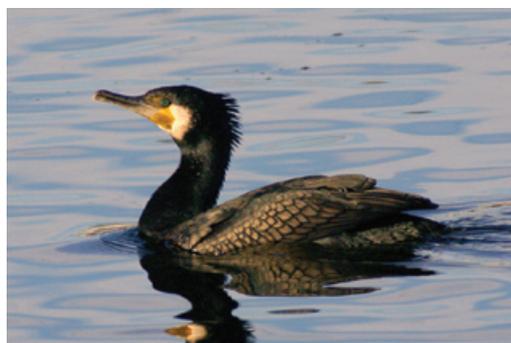
There are around thirty species of cormorant in the world, and four that occur in Tasmania: the Great Cormorant (*Phalacrocorax carbo*), the Little Pied Cormorant (*Phalacrocorax melanoleucos*), the Black Faced Cormorant (*Lucocarbo fuscescens*) and the Little Black Cormorant (*Phalacrocorax sulcirostris*). The Pied Cormorant (*Phalacrocorax varius*) is rarely found south of the Bass Strait Islands. Here we will look in detail at the Great Cormorant and the Little Pied Cormorant, as these two species are offered no protection by law in Tasmania.

The Great Cormorant is the larger of the two and one of the largest members of the cormorant family. It is 800-1000mm in length, and is black with a white chin and cheek, and a bill which ranges from grey to yellowish-mustard colour nearer the face.

The Little Pied Cormorant is only 550-640mm in length with black plumage above and white below. The white area extends around its eye and it has a yellow bill. During the breeding season it has a short tufted crest on its head.



Great Cormorant Photos: Alan Fletcher



They dive from a floating position on the water with a single simultaneous kick with their webbed feet, holding their wings tightly against their body whilst submerged, and using both feet in unison for propulsion. Under water their plumage is permeable and sheds air so that their buoyancy is reduced. Swimming in cold water is restricted to around thirty minutes, to avoid hypothermia.

## Distribution

Cormorants, often colloquially referred to as 'shags' in Tasmania, are common on both inland and coastal waters around the state and elsewhere. The Great Cormorant is found throughout Australia, New Zealand, temperate parts of Europe, China and Japan, parts of Africa, India and eastern Canada. It is the most widely distributed of all cormorants, and occurs over a very broad range of climates, from tropical to arctic. Within Australia the Great

Cormorant is nomadic, with individuals known to cross Bass Strait to and from Tasmania.

The Little Pied Cormorant is common throughout Australia, and can also be found in Indonesia, New Guinea and New Zealand. Although not as nomadic as the Great Cormorant, it has been known to travel great distances.

## Habitat Requirements

Both cormorants enjoy a wide range of habitats, from marshes to lakes, reservoirs, rivers, and coastal estuaries, lagoons and beaches.

In eastern Australia, Great Cormorants prefer waters larger than 100 hectares in size, with 24% found on artificial waterways. They show a strong preference for fresh water. The Little Pied Cormorant also prefers larger areas of water, but single birds can be seen on smaller water courses. The Little Pied Cormorant shows some preference for fresh water, but is also commonly sighted in marine environments.

Cormorant species can often be seen perching on logs, rocks, trees, sandbanks, piers, or any other unused structure that gives them a good view of the water.

## Diet

Australian mainland studies show that around 60% of the Little Pied Cormorant's diet is small crustaceans – yabbies and shrimps.

During the summer months, crustaceans may make up more than 90% of their diet. The fish that it favours, predominately during the winter months, are mainly common Carp, and to a lesser extent Redfin, both non-native species, and some small native fish. No Tasmanian studies have been done on their diet. In Tasmania the common Carp is restricted to only one lake, but Redfin is prevalent.

The Little Pied Cormorant forages alone in relatively shallow areas, and makes dives of short duration, compared with other Australian cormorants.

The Great Cormorant feeds mainly on fish, but also on crustaceans, frogs and large insects. They will dive down to feed on bottom-dwelling fish. Foraging is usually solitary, though large foraging flocks do develop if there is abundant food.

They are efficient hunters but their visual acuity (or

## Carers Story

In South Australia, on the Port River near Adelaide, a Little Pied Cormorant was found one afternoon, tethered to a mangrove tree by a fishing line coming from his beak. The rescuers cut the line and delivered the bird to wildlife carers from Fauna Rescue South Australia.

Whilst no hook was visible in the bird's throat, an X-Ray showed a large hook in his stomach. Luckily for this cormorant, a vet from the Royal Adelaide Zoo was willing to operate to remove what turned out to be two large hooks! The bird was returned to the wildlife carers who fed him on liquid food at first, until he had recovered enough to take small fish. They had to catch him by dropping a towel over him every time.

Less than two weeks after surgery he was ready to go home and was released near where he was found. This little cormorant was very lucky to be found. Many seabirds suffer horrible deaths from fishing hook injuries, and from ingesting rubbish.



*Little Pied Cormorant Photos: Alan Fletcher*

nest with materials brought to her by the male.

The Great Cormorant will choose areas for breeding at various distances from the water, using ledges, rocks, islets or stands of trees. They may breed in groups of just a few pairs or up to 2000 pairs or more. Nests are large and may be used for a number of seasons, and are also constructed by the female using large sticks. Both species average four eggs to a clutch.

It is believed that both species form strong pair bonds, with a monogamous relationship. Pairs of cormorants share the incubation of the eggs, swapping duties a few times each day. Eggs are incubated between the upper surface of the feet and the breast feathers, with the bird inserting its feet beneath the eggs. By 5-6 weeks of age the chicks may be able to fly a few metres and by eight weeks of age they can fly almost as well as their parents. Immature or sub-adult plumage may be visible for up to three years. Immature plumage is browner, but gets progressively blacker over time.

clarity) is poor. To compensate, they pursue their prey briefly over short distances and use a rapid neck extension to capture prey at short-range. The Great Cormorant has been noted diving to a depth of up to 19 metres, with an average of 10 metres, while the Little Pied Cormorant typically dives up to four metres.

Their bills have tooth-like hooks which assist in holding onto slippery prey. They like to inspect prey and turn it, swallowing it head first as the fish scales lie flat that way for easier swallowing. Cormorants have empty stomachs first thing in the morning, having ejected a pellet of all undigested prey remains during the night.

### Breeding

The Little Pied Cormorant nests in areas that have high levels of organic matter, and a range of invertebrates. They usually breed in small colonies with other waterbirds. Nest density may be high – numerous nests have been reported per tree, with nests only one metre apart. They build nests in trees, bushes, reeds, rocks or jetties but appear to show a preference for nests in trees that are off the ground and over water. Nests are usually 30-40cm in diameter, with the male choosing the site, whilst the female constructs the

### Habits (Family/Social)

These species are not known to be very vocal, except around the nest where they have a complex range of calls used in a variety of situations. For example, threat calls, calls before taking flight, and calls after landing. They have a range of displays that they perform. The male performs a display on potential nest sites, and they also have mate recognition displays where the birds sway their heads with their crests erect, bills open whilst making a repetitive 'uk' sound.

They spend little time in the water except when actively fishing. They may often be seen sitting on a fallen branch, rock or pier with their wings outstretched to dry.

### Threats & Persecution

These two species of cormorant have no legal protection in Tasmania, where they have been perceived as a threat to fisheries. (See Issues Sheet No. 4 for more information).

They are susceptible to injuries from fishing hooks and lines and are also known to ingest plastic rubbish. Around half of seabirds have been estimated to ingest plastic, which can mimic the movement of fish in the water. This is likely to be an underestimate as many birds die at sea.