

URBAN ANTICS!

In summer, the Swan Estuary is a beautiful, warm and windy, salt-sprayed loafing ground for both wildlife and humans, but on many winter days, it is a perfect, cool, still and sunlit sanctuary where nature is the supreme artist.

On days when the estuary is like a millpond and the water surface mirrors all surrounding vistas, a distant, dark patch of disturbance may be discerned. It is the feeding ritual of hundreds of little black cormorants (*Phalacrocorax sulcirostris*).

Usually flanked by an entourage of pesky, scavenging silver gulls, large flocks of little black cormorants forage in inland waters and marine inlets. These gregarious birds feed cooperatively by surrounding schools of fish in open water and forming lines across inlets to intercept fish leaving with outgoing tides.

Swimming in a tight raft across the water surface, birds from the rear of the formation take off, fly over and dive immediately in front of the advancing group. The result is a flock that appears to roll across the surface of the water. Meanwhile, underwater, individuals zip in all directions, pursuit-diving for prey by using their powerful, large, webbed feet in unison and their wings, at times slightly open, for stability and direction.

Successful catches are brought to the surface, usually impaled behind the gills on the hook at the end of the upper bill. In a few well-executed and skilful flicks and tosses, the prey is turned and swallowed head first.

As well as a variety of fish, the little black cormorant also feeds on crustacea, aquatic insects and molluscs.

Commotion on the Swan

After feeding, the birds either gather in groups on secluded beaches and spits, or individually seek pole-tops, jetties, walls or moored boats to recuperate and dry-off. They are often seen standing with their backs to the sun and wings outstretched, and after a time, begin to preen their feathers and regain body temperature.

Although water-repellent when not immersed, their plumage is permeable under water and sheds air so that buoyancy is reduced. This limits the time they can spend in the cold winter water to less than thirty minutes. When loafing, it is interesting to note the birds' comfort behaviour. They exhibit fluttering of the small pouch under the lower mandible (to dissipate heat), direct head-scratching, true yawning and jaw stretching.

Little black cormorants nest mainly in freshwater, vegetated lakes and swamps throughout the State; near Perth, colonies have been observed at Booragoon Swamp and on the Murray River at Yunderup. In the south-west of the State, eggs are laid between August and October, and young are usually flying by November or December.

During the breeding season, little black cormorants attain various lighter lines and patches and a metallic sheen to their normally dull black-brown plumage. Courtship rituals are the order of the day, where movements from both sexes include circle-flying, hopping, penguin-walking, entwining of necks and pre and post take-off postures. Males usually give a variety of croaks, grunts and groans, whereas females hiss or are relatively silent.

BY JOHN HUNTER

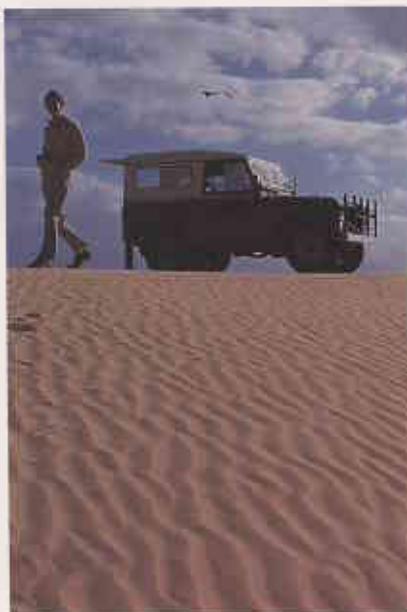
DID YOU KNOW?

- There are more than thirty species of cormorant in the world: they, like the pelican, belong to the 'totipalmate swimmers', which differ from all other web-footed birds by having the hind toe joined to the front three by a web.
- True shags are not cormorants; they are placed in different genera in most modern classifications. They have a shorter tail and are unable to perch in trees, on wires or similar thin perches.
- A flightless cormorant (*Nannopterum harrisi*) of the Galapagos Islands has evolved small, useless wings, possibly as a response to its restricted island habitat, where feeding grounds, nest sites and roost sites are within walking and swimming distance of each other, and predators are absent.



LANDSCOPE

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Cooperation between 4WD clubs and CALM is helping to protect WA's special recreation spots through a program of education. See 'Go Lightly' on page 17.



The noisy scrub-bird is one species that is responding well to its recovery plan. 'Recovering from the Brink' (page 10) discusses how such plans are drawn up.



Mt Augustus is the biggest rock in the world; yet few people know it exists. Find out more about this natural wonder on page 28.



There is a great deal written and talked about our forests. But what are the facts? 'Looking Beyond the Obvious' (page 22) dispels some of the myths.



Specially developed computer software is helping speed the identification of plant species in 'The Smart Collection' (page 49).

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COVER

The rainbow bee-eater is a common bird found throughout most parts of the State, including Mt Augustus National Park.

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