Text and images extracted from Heather, B.D. & Robertson, H.A. (2005) The Field Guide to the Birds of New Zealand. Penguin Books, Auckland. Pages 62, 64, 65, 240, 248.

Shags are medium to large aquatic birds. Most are all black, or black above and white below. Bill long, strongly hooked at the tip. Upright posture when perched. Short legs; feet are fully webbed. Many have brightly coloured facial skin when breeding. Sexes alike. In flight, wings short and broad, and neck is extended. Swim with head held uptilted and body low in the water.

### PITT ISLAND SHAG Stictocarbo featherstoni

#### Locally common endemic

63 cm, 1200 g. Like Spotted Shag but darker, no white neck stripe and facial skin apple green in breeding season. Habitat: Coastal waters around Chatham Is only. Breeding: Aug-Mar. [Sp 102]



# SHAGS

33 species worldwide in freshwater and marine habitats; 12 species breed in the New Zealand region, including 8 endemic species.

In New Zealand, all members of the Phalacrocoracidae are called shags, whereas elsewhere the term 'cormorant' is used for members of the genus Phalacrocorax. Foot colour varies between the three genera in New Zealand: black in the mainly freshwater Phalacrocorax, pink in the marine Leucocarbo, and yellow in the marine Stictocarbo. Shags are medium to large, long-necked

aquatic birds with a stiff, wedge-shaped tail, and moderately short, rounded wings, which black-footed shags hold out to dry when perched. They feed by diving from the water surface to catch fish and crustacea with their long hooked bill. They use their webbed feet to swim underwater. The outermost toe is 102. PITT ISLAND SHAG Stictocarbo featherstoni

## Phalacrocoracidae

longest, and a web connects the inner toe with the long hind toe. In the breeding season, bare skin on the face becomes brightly coloured and contrasts with the eye and bill.

Shags sometimes feed in flocks, but they typically roost in flocks and breed in colonies on cliffs or rocky islets, or in trees overhanging water, sometimes together with other shags. They have an elaborate series of ritualised courtship displays at or near the nest, a bulky platform made of sticks or seaweed. Their eggs have a chalky encrustation on the surface. Both sexes share incubation. The chicks are naked at hatching but soon develop down. Both parents regurgitate food for the chicks. If a predator approaches, chicks in tree nests overhanging water will jump well before they can fly, but they are adept at climbing back up to the nest.

# lay 1-3-4 pale blue eggs (58 x 35 mm)

Plate 24

**Size:** 63 cm, 1200 g Distribution: Breed on Chatham and Pitt

Islands and most of the smaller islands in the group. Not recorded elsewhere. **Population:** Widespread and moderately

common (729 breeding pairs in 1997, but only 547 pairs in 2003).

Conservation: Protected endemic. Pitt Island

Shags are sometimes illegally shot by fishermen. As colonies are small and widely scattered, and vary in numbers from year to year, population trends are hard to assess. Breeding: Nest in small colonies of 5–20 pairs, normally apart from Chatham Island Shags.

The colonies are usually on coastal cliff ledges or rocky islets. The nest is a platform c. 30 cm in diameter, made of seaweed, grass and

iceplants. The breeding season is extended.

The peak of laying is in August–September,

but laying continues as late as December. They

probably at 2-day intervals. Incubation and fledging periods are unknown.

Behaviour: Breed in much smaller colonies than Chatham Island Shags or the closely related Spotted Shag. They usually feed alone. Silent away from their colonies; displaying males are noisy, but females remain silent. Feeding: Diet is mainly small fish, especially bullies, and marine invertebrates such as snails and polychaete worms. They mostly feed in coastal waters up to 20 m deep, but occasionally feed in the brackish water of Te

Whanga Lagoon. Their average dive time is c. 30 seconds, with a 15-second rest between dives. The longest dive recorded lasted 68 seconds. Reading: Fleming, C.A. 1939. Emu 38: 380-413. Imber, M.J. 1994. Notornis 41(S): 97-108. Lalas, C.

1983. PhD thesis, Univ Otago.