

It is interesting to speculate to what extent (if any), the misshapen bill retarded growth in the deformed chick. Although both chicks appeared similar in size, the plumage of the normal chick was further advanced than that of the deformed chick. From observations of other White-faced Heron nests, siblings from about 2 weeks of age onwards appear to be equally developed. This suggests that the bill deformity did have a detrimental influence upon the chick, perhaps in the success with which food was transferred from parent to young.

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INTEGRITY OF DIAGNOSTIC CHARACTERS FOR HUTTON'S SHEARWATER

Not all the problems in differentiating *Puffinus huttoni* from *P. gavia* in beach-washed specimens arise from their incompleteness or state of decay. Harrow (*Notornis* 23: 269-288), working on the breeding grounds of *P. huttoni*, noted a few to have faint white tips to the axillaries.

During January 1981, Lindsay Davies, Bob Creswell and I examined the diagnostic features of 100 *P. huttoni* at an upper Kowhai colony. Like Harrow, we found several with faintly white-tipped axillaries, but in addition at least one had very obvious white tips. One bird had an aberrant axillary that had one vane with alternate brown and white barring. The bars were 1 mm wide and ran the full length of the vane.

In *P. huttoni*, the lateral under tail-coverts have black or grey markings, sometimes filling the outer vane (Serventy *et al.* 1971, *The Handbook of Australian Sea-birds*, p. 137). However, three (3%) of the birds examined had all their under tail-coverts pure white, as does *P. gavia*. These birds had the dark under wing-coverts of *P. huttoni* and, being in the *P. huttoni* colony, presumably were *P. huttoni*. Apparently, then, just as measurements alone need not be diagnostic for these two species, no one plumage character, by itself, is sufficient for identification either.

M. K. TARBURTON



UNUSUAL WANDERING OF A SPOTTED SHAG

On 8 December 1979 I patrolled Papa Aroha and Hautapu beaches, about 9 kilometres north-west of Coromandel township. A strong westerly wind was blowing, and had been for at least 24 hours.

Just south of Opouri Point I found a Spotted Shag (*Stictocarbo punctatus punctatus*) asleep half-way up a clay bank above the high-tide mark. As I approached the bird I noticed it had a red plastic band

on its right leg. I caught the bird before it was aware of my presence, and found it had a metal band 0-20838 on its left leg. The bird was very weak and died about an hour later.

The bird was a female. Measurements in millimetres were: culmen 56.5, wing 253, tail 107, tarsus 60.6, mid-toe and claw (2nd from outer edge of foot) 75.4. Its weight was 0.12 kg. The tenth (last) primary on the right wing was only half grown.

The shag had been banded as a chick on 27 July 1979 on Somes Island, Wellington, by R. W. Benfell.

The banding location greatly surprised me. Spotted Shags are common in the Hauraki Gulf; there is a colony about 7 km from where I found the bird, and I assumed it had been banded locally, although I was unaware of any Spotted Shag banding programme. The bird had travelled a straight-line distance of 500 km, but by the most likely coastal route, via East Cape, the distance is closer to 1100 km.

Although Spotted Shags formerly bred at Cape Kidnappers, and have been reported at Rurima Rocks, Bay of Plenty (Oliver, 1955, *New Zealand birds*), they are now apparently absent from at least 1000 km of this coastline.

Admittedly little can be concluded from a single recovery, but such a movement has interesting implications involving population isolation in an apparently sedentary species. I would be very pleased to know if readers have other records of the wandering of Spotted Shags or to know whether this species is seen along the East Coast of the North Island and in the Bay of Plenty.

— Colin Miskelly

At Somes Island in Wellington Harbour, the Spotted Shag nests on Shag Rock, an outcrop of rocks at the south-west corner of Somes Island. Since I took up employment on the island in July 1972 and we found our first Spotted Shag eggs (3) in November 1973, my wife and I have banded 165 young shags, reaching peaks of 41 in 1979 and 28 in 1980. When we found that banded birds were starting to nest, we decided to use a colour for each year; so far red in 1979, blue in 1980, and yellow in 1981, so that we can easily tell the age of first nesting.

For two years, the shags have nested in two periods of the year, June to August and November to January, and in the 1980-81 summer, young birds have even built unused nests on the north-west corner of Somes Island itself. Out of 17 recoveries, the only other record away from the Wellington area was from the southern Wairarapa.

— Ray Benfell

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