Ducks, Geese, and Swans of the World: Tribe Stictonettini (Freckled Duck)

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Tribe Stictonettini (Freckled Duck)
Map 32. Breeding or residential distributions of the freckled duck.
Freckled Duck

Stictonetta naevosa (Gould) 1840

Other vernacular names. Oatmeal duck, monkey duck; Pünkchenente (German); canard moucheté (French); pato manchado (Spanish).

Subspecies and range. No subspecies recognized. Regularly resident in only a limited area of south-central Australia in the Murray-Darling Basin, and in the southwestern portion of Western Australia. Elsewhere the birds are extremely local breeders or occur irregularly as vagrants. See map 32.

Measurements and weights. (Mainly from Frith, 1967.) Folded wing: males, 186-258 mm; females, 205-36 mm. Culmen: males, 50-59 mm; females, 46-53 mm. Weights: males, 747-1,130 g (av. 969 g); females, 691-985 g (av. 842 g). Eggs: av. 63 x 47 mm, cream or ivory, 66 g.

Identification and field marks. Length 20-22' (50-55 cm). The freckled duck is unique in several respects, including its “oatmeal” coloration of dark brown with small buff-colored freckles on the head and upperparts, which grade into a vermiculated pattern on the flanks and tail coverts. The bill is high at the base but unusually flattened toward the tip, with a large nail, and is generally dark gray, except in breeding males, which exhibit a bright orange red color at the base of the bill. The wings are brownish above and below, with coverts freckled like the back, and the legs and feet are slate gray. The front of the legs have a reticulated scale pattern, as in whistling ducks. Females resemble males, but are lighter in color and have a less contrasting pattern of freckles. Juveniles resemble females, but are much lighter in color, and their freckles are a deep buff color.

In the field, freckled ducks slightly resemble Australian black ducks, but are smaller and have a nearly uniformly dark head. The head shape is characteristic; a small crest makes the head appear almost triangular in profile from the side. The most commonly heard call is a flutelike note similar to that of a black swan. Frith (in Delacour, 1954-64) was erroneous in describing the flight as slow and bitternlike; it is almost as rapid as a mallard's.

Natural History

Habitat and foods. The favored breeding habitats of freckled ducks are heavily vegetated areas of fresh water, often a permanent swamp or a newly flooded creek. Permanent cattail (Typha) swamps or lignum swamps are typical inland habitats, while near the coast the birds favor tea tree swamps. Their foraging is done by filter-feeding at the surface, dabbling while immersing the bill or upending, and by wading along shore, dipping the bill to the bottom and filtering food through it in the manner of typical stifftails (Oxyura). The bill is well adapted in shape for this mode of feeding, and resembles that of stifftails. On the basis of samples of food taken from wild birds, it appears that algae are the most constant source of food, with seeds of such aquatic or shoreline plants as smartweeds (Polygonum) and docks (Rumex) also important. Many other kinds of plant seeds have been found in smaller quantities, and a small percentage of animal foods, mainly insects, has been reported (Frith et al., 1969).

Social behavior. During the nonbreeding season freckled ducks gather in small to moderately large flocks on lakes, lagoons, and billabongs. There they remain in fairly closely spaced groups, with little aggressive behavior evident. Whether they are mostly paired or unpaired is a matter of conjecture, but I observed almost no pair-forming activities in a group of nearly 200 birds just before the nesting season (Johnsgard, 1965b). The only social display I observed consisted of a rapid and extreme vertical neck stretching associated with gaping (and probably calling) on the part of two birds while closely facing each other. Although it was similar in form to the triumph ceremonies of some swans such as the black swan, I observed no prior aggressive behavior by the birds. I also observed no inciting on the part of females. Regrettably, no observations on copulatory behavior have yet been made. Frith (1967) kept the species in
captivity for some time but paid little or no attention to their social behavior, and nobody else has had the opportunity to study the birds under these conditions. With the advent of local or general drought, the birds move about nomadically, sometimes for considerable distances, but there is apparently no general pattern of migratory movements evident for this species. On the other hand, during unusually wet years the birds are sedentary and the breeding season may be quite prolonged, from about July until January in most areas, while in normal years it probably occurs between September and December (Frith, 1967).

Reproductive biology. Only a limited amount of information is available on the reproduction of this unusual species. It seems that the breeding season is normally regular in this species and relatively late as compared with that of such birds as the black duck and the Australian white-eye, but the birds are able to breed at other times when flooding conditions provide a favorable situation. The observed nests of this species are few, and have consisted of bowl-shaped structures built of small lignum (*Meuhlenbeckia*) sticks and spike rush (*Eleocharis*) placed in flooded lignum bushes in about four feet of water. They are probably normally built close to the water level, but declining waters may cause them later to become elevated above it. A moderate amount of down is present as a nest lining, and unlike the male whistling ducks, the male of this species evidently does not help incubate. The clutch size ranges from 5 to about 10 eggs, and 7 is the number most often found. The probable incubation period is from 26 to 28 days (Frith, 1967), but Braithwaite (1976) estimated a 36-day period for one clutch. He also noted that only the female incubated, and that there was no indication of a strong pair bond during the incubation period, as no males were seen near the nests he observed. On the basis of information from captive-raised birds, it would seem that the fledging period is relatively long, requiring about nine weeks (Frith, 1967).

Status. The status of this species is of special significance in view of its remarkable evolutionary interest. Frith (1967) has indicated that the species' future depends on preservation of the relatively few permanent swamp habitats where it breeds. Many of these swamps in South Australia are now being drained, and such activities could spell disaster for this unique species.

Relationships. In 1960 I suggested that a special anserine tribe Stictonettini should be erected for the freckled duck, and after observing the species in life added (1965b) supporting observations on that point. Frith's (1964) description of the downy young as swanlike has provided additional support for this position. Most recently, Brush (1976) has analyzed the feather proteins of this species and found that in this regard the species is completely unlike the dabbling ducks; although its electrophoretic pattern is unique, it is somewhat closer to the goose and swan complex than to the whistling ducks. Likewise, studies of the wax esters secreted by the uropygial gland of waterfowl (Edkins & Hansen, 1972; Jacob & Glaser, 1975) indicate that these secretions in the freckled duck are similar to those of certain swans such as the mute swan.