PROBLEMS IN SEXING REDKNOBBED COOTS

W.R.J. Dean & D.M. Skead
Transvaal Nature Conservation Division
Barberspan Ornithological Research Station
BARBERSPAN 2765

Sexually monomorphic species often present problems for ringers, particularly those working on populations and population dynamics, as it is important to know the sex ratio when computing mortality rates and population dynamics.

At Barberspan Ornithological Research Station, numbers of Red-knobbed Coot <u>Fulica cristata</u> are handled and ringed. Attempts to find sexually dimorphic characteristics for this species has this far proved inconclusive, and we present our negative results here so **that** other workers on this species are aware of what has been tried and failed.

Wing measurements

It was thought that wing length may be sexually distinct, and in a small sample of sexed male and female Redknobbed Coot there was a clear difference in wing length. However, the wing length of 127 adult Redknobbed Coot trapped for ringing over a period of three months show that wing lengths are distributed unimodally (normally) but are skewed very slightly towards longer wings (Table 1). The sex [illegible] this [illegible] [illegible] [illegible]

Weight

The distribution of weights (Table 1) has a tendency to be bi-modal, but not markedly so. Weight is therefore not a useful characteristic to sex Redknobbed Coots.

Metatarsal - mid-toe length

Following Gullion (1952) we attempted to sex Redknobbed Coots by

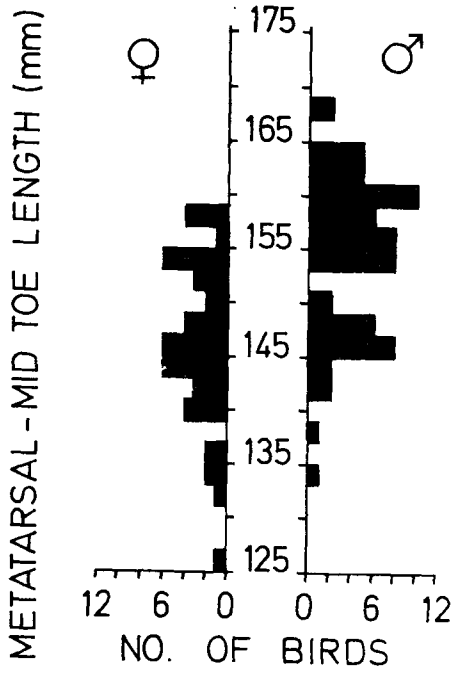

Fig.1. The metatarsal - mid-toe length in male and female Redknobbed Coots Fulica cristata, sexed by dissection.

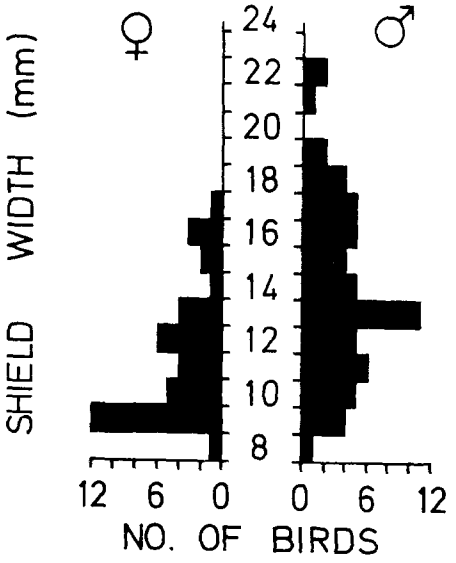

Fig. 2. The shield width in male and female Redknobbed Coots Fulica cristata, sexed by dissection.

measuring the distance from the metatarsal joint to the mid-toe (excluding claw). Results are shown in Fig. 1. This did not prove to be as markedly sexually dimorphic as in Fulica americana (Gullion 1952) and less than 20% (17 males and 2 females) could be sexed with certainty.

Shield width

The width of the shield was measured in 113 adult sexed Redknobbed Coots (Fig. 2) but was found to be not reliable as a sexing characteristic. Males have wider shields, but also totally overlap females in shield width.

In summary, no satisfactory method of sexing the Redknobbed Coot in the hand has been found by us. There may be voice differences between the sexes, but as we were chiefly concerned with sexing Redknobbed Coots while ringing them, no studies were done on this aspect.

TABLE 1

The wing lengths and weights of Redknobbed Coots trapped at Barberspan. Only the lower limit of the wing length class and the weight class is given in the table, e.g. 195 is the 195-200 mm class; 501 is the 501-550 g class.

	Wing length class (mm)										
	195	201	206	211	216	221	226	231	236	241	Total
No. of birds in class	2	7	11	21	39	22	12	8	4	1	127

	Weight class (g)										
	501	551	601	651	701	751	801	851	901	951	1001	Total
No. of birds in class	15	6	40	26	49	25	18	11	4	3	3	200

Reference

Gullion, G.W. 1952. Sex and age determination in the American Coot. J. Wildl. Manage. 16: 191-197