

SHORT NOTE

On the occurrence of two egg "clutches" in the lappet-faced vulture

by

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The lappet-faced Vulture *Torgos tracheliotus* is regarded in all standard reference works as laying only one egg per clutch (Brown and Amadon 1968, MacLachlan and Liversidge 1970, etc.). However, Morrison-Scott (1936) recorded a lappet-faced vulture laying two eggs on the same day in captivity. Jensen (unpub.) recorded a nest with two eggs in the Namib Desert in 1970. The eggs found by Jensen were deserted and disappeared before they could be examined.

During the 1976 breeding season three nests of lappet-faced vultures each containing two eggs were found in the Namib Desert Park. Sixteen other nests found that season contained one egg each and five nests one chick. As lappet-faced vultures readily desert nests with eggs when disturbed no attempt was made to inspect nests early in the 1977 breeding season. To date 36 nests have been found this year, each with one chick, and one nest with two deserted eggs. The three double clutches found in 1976 had eggs with the following measurements:

Clutch 1:

94,3 × 72,0mm	265 g
89,1 × 69,0mm	235 g

Illustrated in Plate 1.

Clutch 2:

97,2 × 71,8 mm	250 g
95,3 × 67,5 mm	225 g

Clutch 3:

92,7 × 72,1 mm	240 g
93,3 × 71,9 mm	245 g

The 1977 clutch measured 94,8 × 71,1 mm and 91,4 × 71,0 mm. These eggs were not weighed.

The first of these clutches was found on 24.7.76, the female was still sitting but was not disturbed on 25.8.76, on 15.9.76 the nest was inspected and found to contain one dead chick, approximately ten days old and one addled egg. The egg was collected.

The second clutch was found on 6.7.76 and when next visited on 25.8.76 the eggs were deserted and addled, they were also collected.

The third nest was found on 25.8.76 and on 15.9.76 both eggs had disappeared without trace.

The 1977 clutch was found on 30.9.77. The eggs were not being incubated and were collected as they were obviously rotten. There are three possible explanations of double egg clutches in lappet-faced vulture nests:

1. The eggs were laid by the same, or different females in two subsequent breeding seasons.
2. The eggs were laid by different females in the same season.
3. The eggs were laid by the same female in the same season.

Jensen (*loc. cit.*) suggested that one egg of the double clutch found by him may have been an addled egg from the previous season. One egg of clutch one above was apparently much older than the other and may



PLATE 1: Two eggs of the lappet-faced vulture from near Ganab, Namib Desert Park.

have been from the previous season. The larger, heavier of these two eggs hatched and the other was extremely rotten when blown and more nest stained than any other egg encountered that season. The nest in which these two eggs was found was an old one from a previous season and was not as high in the canopy as is normal for lappet-faced vulture nests. Two factors mitigate against an egg remaining in the nest during the period between breeding seasons: Pied crows *Corvus albus* are common in the Namib Park and will inspect any large nest from which a sitting bird has been disturbed. Although crows have now been observed to eat vulture eggs, vultures seem to recognize them as potential predators and will return to their nests extremely quickly following disturbance if there are crows in the vicinity. Also it seems unlikely that an old egg would survive intact through the rebuilding and lining of a nest during the following breeding season.

Mundy and Ledger (1975) regard to eggs of the Cape vulture *Gyps coprotheres* from the same nest as being sufficiently different in width (66 and 70 mm) to indicate that different females had laid them. If their assumption is correct, the differences in Clutch 2 above would also indicate that two females were involved. Both these eggs were only slightly incubated and were equally rotten when blown, indicating that they were laid in the same season and at more or less the same time.

The two-egg clutch found in 1977 had eggs matching extremely closely in width. The nest in which the eggs were found was situated less than 1 km away from the next in which Clutch 2 of 1976 was found. The 1977 two-egg nest was a new one and no nest was found anywhere nearer the nest in which Clutch 2 of 1976 was found. The possibility exists that one female was involved in both these nesting attempts.

In the third clutch above, the eggs match extremely closely in size and could have been laid by the same female. The similar weights suggest that they were equally fresh when found. Two of the observations reported on here are regarded as being possibly genuine double-egg clutches. Mundy and Cook (1975) have shown that the hooded vulture *Necrosyrtes monachus* is capable of rearing two chicks from artificially increased broods. Possibly *Torgos* would, at least in favourable seasons, also be able to successfully raise two chicks. Charnov and Krebs (1974) have stressed that the commonest clutch size in birds is usually less than the most productive. They suggest that adult survival, particularly in large birds, is of importance in determining clutch size.

Double clutches or broods of the Cape vulture have been found from widely separated localities almost throughout that species breeding range. (Mundy and Ledger *loc. cit.*). It appears that under certain conditions some lappet-faced vultures are physiologically able to lay two eggs in one season.

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