## DEVELOPMENT OF THE SPURWINGED GOSLING

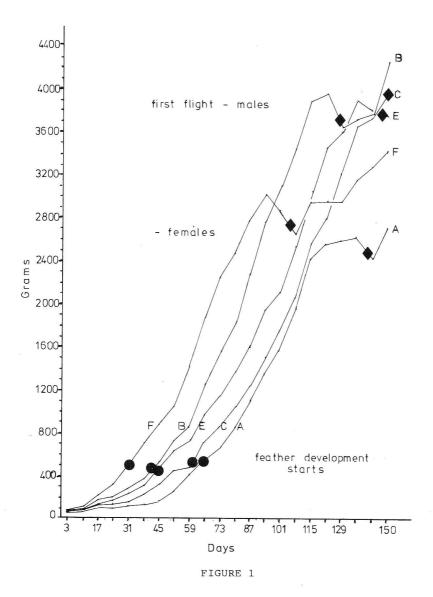
## D. Hanmer, D. Evans & V. Blackwood

On 14 April 1981 six young Spurwinged Geese Plectropterus gambensis were rescued from a African at Nchalo, Malaŵi (16 16S; 34 55E). They were assumed to be about three days old and five were raised to independence by D.E. and family, assisted by V.B. The sixth gosling died at 25 days old, of a presumably cancerous mass in the throat and is not included in the data that follow.

Initially the goslings were kept in a warm box at night but were allowed to run about in a small enclosure during the day. They were fed mainly on maize meal and layer's mash but were allowed to forage on the lawn for a short time each day. From 1 August, at three and a half months old, they were free to forage in the garden all day only being penned at night until all had learned to fly, after which they spent the night somewhere on the river nearby returning to the garden in the morning to feed. Items eaten are listed in order of preference:— lettuce, rice, pawpaw, tadpoles, grass seed, onion leaves, mosquitoes, ants, cut-worms, water lilies, grasshoppers, spinach, beetroot leaves, cabbage, bananas, Cotton Stainer Bugs and dead fish. As one might imagine, the Evans's vegetable garden suffered somewhat.

The goslings were weighed weekly to 150 days old (8 September) and notes were taken of the date when each bird first showed developing feathers on the body (i.e. when the tip of the feather emerged from its sheath), plus the date when each bird took its first proper flight (airborne for at least 50 m). The results are shown in Fig. 1 (opposite).

The graph shows some interesting points. Initial weight gain varied considerably between the five birds irrespective of their probable sex. They were presumably all the same age and weighed between 71-88 g at the start, yet there was an interval of 21 days between the first and last reaching 100 g. development started at approximately 500 g body weight, not at a particular age and despite the disparity in final weight between the two presumed females and three males. There was an interval of over 30 days between the appearance of feather tips in first and last bird. No weight loss occurred with feather growth and, once started, all five gained weight at the same rate. Shortly before each made its first real flight, when the flight feathers were still not fully grown, the birds started much wing flapping and exercising. This is presumably reflected in the weight drop just before first flight (except in 'C' for some Weight dropped slightly more over the next few days but then increased in the three birds which were weighed after flying.



WEIGHT INCREASE IN SPURWINGED GOSLINGS FROM DAY 3 TO DAY 150

= FIRST APPEARANCE OF BODY FEATHERS
◆ = FIRST SUSTAINED FLIGHT

The two presumed females flew at about 2 500-2 700 g 35 days apart and the males at 3 700-3 900 g 23 days apart, but basically they flew in the same order as they had started feather development, although 'A' flew slightly before 'E' and 'C'.

None was weighed after 8 September as they were all flying and becoming difficult to catch. Unfortunately they were too trusting and two were murdered when they went too close to some fishermen; the culprits brought the coloured rings back. The other three may still survive although none has been seen since 2 January 1982, but in her last appearances 'A' returned several times with a wild mate. From experience with others of this species and with Whitefaced Ducks Dendroeygna viduata, hand-reared birds seldom return home after becoming integrated with wild flocks on the river.

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MARKING AND OBSERVING HELMETED GUINEAFOWL IN THE KRUGERSDORP GAME RESERVE

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The trapping of Helmeted Guineafowl Numida meleagris in the Krugersdorp Game Reserve has been described in some detail in Safring News Vol 11(2) 1982. This paper describes the marking and related aspects of guineafowl study in the Reserve.

Marking Material (Fig. 1 opposite)

From a total of 110 guineafowl trapped during the period April 1982-July 1983, 53 were fitted with small plastic triangular numbered patagial tags and tarsal rings (both metal and coloured plastic rings). Some guineafowl were given two patagial tags to allow easier field identification.