

BIRD-IN-THE-HAND

DIFFERENTIATING BETWEEN LESSER AND GREATER FLAMINGO CHICKS FOR RINGING PURPOSES

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Introduction

A basic rule of bird-ringing is that only species which can be positively identified should be ringed. The adults of the two African flamingoes Phoeniconaias minor (Lesser Flamingo) and Phoenicopterus ruber roseus (Greater Flamingo) can be easily distinguished in the field. However, when dealing with unfledged flamingoes the differences become progressively more obscure the younger the chicks. Newly-hatched chicks of the two species are virtually indistinguishable in the field.

During "Operation Flamingo" which took place on the Etosha Pan, South West Africa in 1969, about 20 000 flamingo chicks were rescued and transported to water when the Pan dried before they could fly. Of these 1 500 were ringed but, quite pardonably under the circumstances, they were not specified. "Operation Flamingo" occurred without prior warning and the main objective was to save as many flamingoes as possible from certain death. The ringing was done under the most trying field conditions and time to identify each flamingo chick was not available.

Two recoveries to date have resulted from the 1969 ringing: one from Walvis Bay lagoon and the second from Mõwe Bay on South West Africa's coast. As is the case with many recoveries, the persons finding the dead birds removed the rings and submitted them without positively identifying the species. Thus it remains unknown whether they came from Lesser or Greater Flamingo.

From field observations it is possible to give a simple method with which the chicks of the two African flamingo species can be recognised for ringing.

Method

The method is easily understood if the different feeding habits of Lesser and Greater Flamingoes are examined.

The Lesser Flamingo is a "top feeder", obtaining its mainly plant food from the top few centimetres of water (Brown 1960). Its deep-keeled bill tends to bob and float in the ripples on the water's surface. Plate 1. shows the deep lower mandible and the high ridge on the upper mandible.

By contrast, the Greater Flamingo is a bottom feeder of mainly animal food. Plate 2. shows that the bill is comparatively shallow-keeled and the upper mandible has a much smaller ridge. Fig.1. compares the anterior views of the lower mandible of the two species. It can be seen that the Lesser's bill has a sharply-angled V-shape while the Greater's has a comparatively shallow depression.

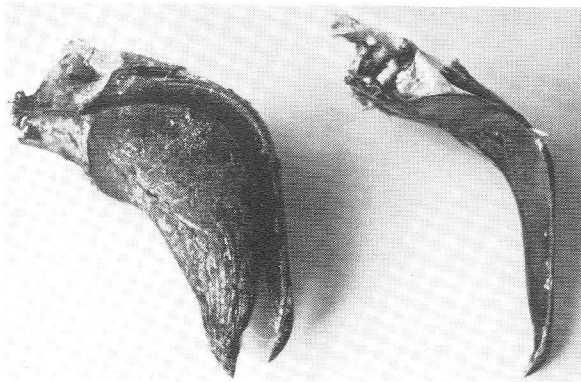


Plate 1. Lesser Flamingo bill, lateral view. On the right the culmen is shown separately to illustrate its distinctive high ridge.

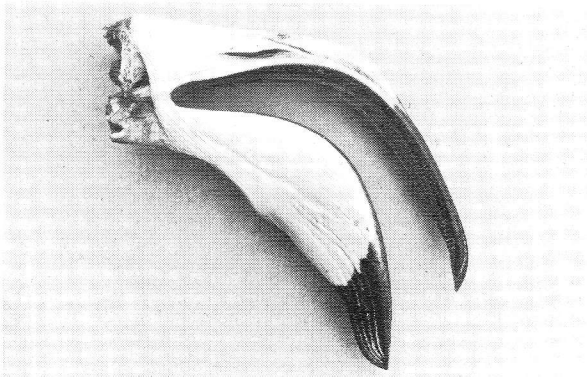


Plate 2. Greater Flamingo bill, lateral view. The culmen's ridge is rudimentary.

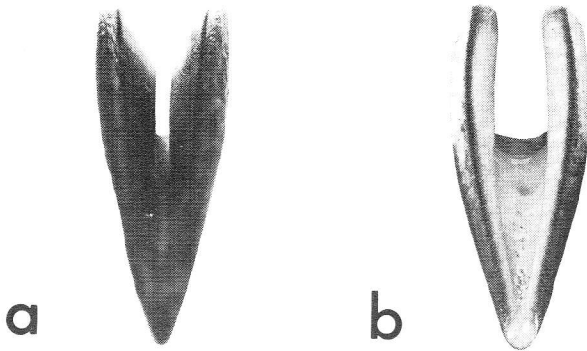


Fig. 1. Lower mandibles of a) Lesser Flamingo and b) Greater Flamingo.

The bill differences in adults are, of course, accompanied by a marked colour difference, but no such colour difference is present in the chicks. The shape of the mandibles has to be used for identification purposes.

The procedure is:

1. Prise the bill open gently by grasping the mandible's tip between thumb and forefinger.
2. Feel whether the culmen has a high or shallow ridge on its inner surface.
3. Confirm by visually checking the inner and outer shape of both culmen and mandible.

General Considerations

The method given here is applicable to flamingo chicks whose legs are sufficiently hardened to permit fitting of rings. Ideally this is at an age of approximately five weeks when the first feathers are showing through the down. It is inadvisable to ring flamingo chicks younger than three weeks because of injury resulting to the relatively soft tarsus or tibia.

Rings may be applied around either of the aforementioned bones. A tibial ring has the advantage of being more easily seen as well as being less often immersed in the corrosive soda or salt waters in which flamingoes spend most of their lives. If tibial (thigh) ringing is undertaken, care must be taken that the ring is shaped closely to the tibia's form. This is to ensure that a ring does not slip over the tibio-tarsal joint and lodge there.

Monel rings are preferable for flamingoes and of the sizes available I can recommend 11,5mm (internal diameter) for Lesser Flamingo and 12,5mm for Greater Flamingo.

It is of general interest to note that newly-hatched flamingoes can also be identified by the method described above although the difference in bill structure between the two species will become more subtle the younger the chicks.

Acknowledgement

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(Ref: Brown, L.H. (1960) The Mystery of Flamingoes. London: Country Life.)
