

Pink-backed Pelicans *Pelecanus rufescens* show a remarkable advance in the onset of breeding in Uganda

A few years ago, we reported a significant advance in the breeding season of a proportion of the Marabou Stork *Leptoptilos cremeniferus* population that nests in Kampala, Uganda (Pomeroy & Kibuule 2017). Here we report an advance in the breeding seasons of Pink-backed Pelicans *Pelecanus rufescens* which, co-incidentally, often share the same nesting trees with the Marabou Stork, although their seasons are different.

According to Brown *et al.* (1982), the incubation period of Pink-backed Pelicans is 30 days and the young fledge at about 84 days. Thus, for eggs laid in September, which is reported to be the peak month (Brown & Britton 1980), young would be expected to fledge in December or January, which is typically a dry season in this region. Brown and Britton (1980) further suggested that at this time of year, waters are clearer, and fish more easily seen (and hence caught). We have recorded the nesting dates of pelicans at several sites in Uganda over a number of years, mainly from 2002 to 2018 (Pomeroy 2002, DP & MK, unpub.). Covid-19 caused a gap in our coverage, but the two main colonies at Kakooge and Nakitoma, were again checked in 2023.

The bar chart (Fig. 1) shows the months of egg-laying of Pink-backed Pelicans as recorded by Brown & Britton (1980) for climate region “B”, which covers most of Uganda, compared with our estimated months of egg-laying from four colonies in Uganda: Kakooge, Nakitoma, Soroti and Mbale (see Pomeroy 2002 for details of these colonies). It seems that, in recent years, the pelicans have been breeding up to four months earlier. However, in 2023, young at both Kakooge and Nakitoma mainly fledged in May, implying egg-laying a further three months earlier than shown in the chart. So the breeding season of these pelicans has advanced by about eight months in 40–50 years!

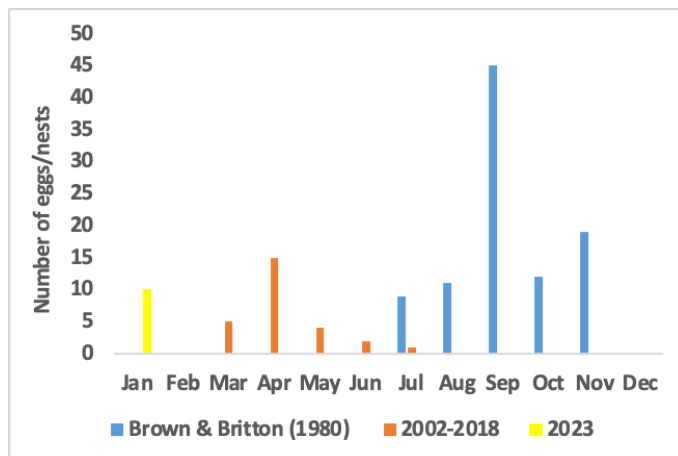


Figure 1. Patterns of breeding seasonality in Pink-backed Pelicans *Pelecanus rufescens* in Uganda, as represented by egg-laying dates. Data for Brown & Britton (1980) are actual numbers of eggs whereas those of 2002–2018 and 2023 are numbers of nests at the estimated time of egg-laying.

Whilst recording such changes is of interest and potentially of significance, it is not obvious what has driven them. Both rainfall and temperature are increasing in Uganda (Hepworth & Goulden 2008, Dove 2021) with rainfall in the main rainy season of western Uganda having already increased by about 70% (Diem *et al.* 2019). But while the trend lines are gradual, the changes in breeding phenology have been comparatively quick.

We would be interested to know of any similar observations from elsewhere in the breeding ranges of these species.

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