

SHORT REPORT

Counts of greater and lesser flamingos from Bagamoyo, Tanzania

Neil E. Baker

Iringa, Tanzania.

For correspondence: tzbirdatlas@yahoo.co.uk

Abstract

The creation of shadow Ramsar sites requires regular visits to sites with the intention of recording 1% population criteria as often as possible and preferably for multiple species. During many visits to the salt pans north of Bagamoyo town on the coast of Tanzania I have counted numbers of Caspian terns and Madagascar pratincoles that qualify this site for Ramsar status. During each visit I count as many species as possible and both flamingos are relatively easy to count. I would never expect numbers of lesser flamingos to reach the minimum total of 20,000 but never the less the numbers can be used by researches looking at this species. Counts for greater flamingos are closer to 1% levels. These counts therefore contribute towards the creation of a shadow Ramsar site for the lower reaches of the Ruvu River where these salt pans are situated.

Resumen

La creación de sitios Ramsar en la sombra requiere visitas periódicas a los sitios con la intención de registrar el 1% de los criterios de población tan a menudo como sea posible y preferiblemente para múltiples especies. Durante muchas visitas a las salinas al norte de la ciudad de Bagamoyo, en la costa de Tanzania, he contado el número de gaviotines del Caspio y los pratincoles de Madagascar que califican este sitio para el estado de Ramsar. Durante cada visita cuento tantas especies como sea posible y ambos flamencos son relativamente fáciles de contar. Nunca esperaría que los números de los flamencos menores alcancen el mínimo total de 20,000, pero nunca menos los investigadores de esta especie pueden utilizar los números. Las cuentas para los flamencos mayores están más cerca de los niveles del 1%. Por lo tanto, estos conteos contribuyen a la creación de un sitio Ramsar en la sombra para los tramos más bajos del Río Ruvu, donde se encuentran estas salinas.

Résumé

La création de sites Ramsar ombrés nécessite des visites régulières sur les sites dans l'intention d'enregistrer le critère de population de 1% aussi souvent que possible et de préférence pour plusieurs espèces. Au cours de nombreuses visites dans les salines au nord de la ville de Bagamoyo, sur la côte tanzanienne, j'ai dénombré le nombre de sternes caspiennes et de pratincoles de Madagascar qui confère à ce site le statut de Ramsar. Lors de chaque visite, je compte le plus grand nombre d'espèces possible et les deux flamants sont relativement faciles à compter. Je ne m'attendrais jamais à ce que le nombre minimum de flamants roses atteigne le total minimum de 20 000 mais les chiffres peuvent néanmoins être utilisés par les chercheurs qui étudient cette espèce. Le nombre de flamants roses est plus proche de 1%. Ces décomptes contribuent donc à la création d'un site Ramsar ombré pour les tronçons inférieurs de la Rivière Ruvu où se trouvent ces salines.

Introduction

Tanzania hosts the only significant breeding site for lesser flamingos in East Africa on the flats of Lake Natron in the Rift Valley. Greater flamingos also breed "in numbers" at Lake Natron and also at other Rift valley lakes in Tanzania and Kenya. Counting flamingos on the large Rift Valley lakes is fraught with difficulties. Lake Natron is 52 km long and 12-15 km wide and with surface temperatures exceeding 50°C the heat haze is such that usually all one can see from the shore is a pink haze and often not even that. Lake Manyara to the south is 38 km long and 8-12 km wide. Lake Eyasi, 50 km west of Lake Manyara, is 68 km long and 10-16 km wide.

There are a further nine flamingo lakes in Tanzania (Baker & Baker 2002) and others in the Kenyan and Ethiopian Rift. It is well understood by anyone living near these lakes and from satellite tagging studies in recent decades that this population is constantly on the move, especially as water levels and salinity levels fluctuate between seasons. During every night of the year at least some birds from this population are in the air. The only way to accurately count these populations would be by a co-ordinated aerial count over a single day. This has often been talked about but has never been attempted. Counts of lesser flamingo in the literature vary between two and four million, but all of these have been estimated. Single site counts of one million birds can only ever be, at best, an educated guess (Baker 1997; Mlingwa & Baker 2007).

Mundkur & Nagy (2012) give 1% thresholds of 20,000 for lesser flamingos. For greater flamingos a population of 35,000 for the East African has been used for many years but I have long considered this too low, especially given a count of 101,518 from 7 teams in January 1995 (Baker 1997). The latest estimate from Wetlands International (2018) gives a population of 80,000 to 120,000 and a 1% criteria of 980 birds. From 2011 through to 2016 water bird counts were conducted

irregularly on commercial salt pans on the northern outskirts of Bagamoyo (6.4242 S - 38.8927 E).

Evaluation

Four-figure numbers of lesser flamingos were only counted three times; 1,000 on the 14th June 2015 (personal observation), 1,940 on the 15th December 2013 (Jude Jarvis) and 2,000 on the 5th July 2015 (personal observation). Even if the low thousands (maximum) that occasionally occur on the salt works at Saadani National Park are included the coastal population is unlikely to ever reach 10,000 birds.

For greater flamingos on the Bagamoyo salt pans a count of 350 has been exceeded five times. Three-hundred and sixty-two birds on 18th September 2011, 374 birds on 24th May 2015, 375 on 16th December 2012, 400 birds on 2nd January 2015 and 900 birds on 7th March 2014 (all personal observations).

The following monthly visits have been made to this site and other less frequented sites in the same general area. Maximum counts for greater flamingo are given for each month.

- January: 15 counts (maximum of 400 birds).
- February: Seven counts (maximum of <100 birds).
- March: 10 counts (maximum of 900 birds).
- April: Eight counts (maximum of 225 birds).
- May: Five counts (maximum of 374 birds).
- June: Six counts (maximum of 225 birds).
- July: Five counts (maximum of 128 birds).
- August: Four counts (maximum of 163 birds).

- September: Six counts (maximum of 362 birds).
- October: Six counts (maximum of 180 birds).
- November: Five counts (maximum of 180 birds).
- December: Five counts (maximum of 375 birds).

Conclusions

Satellite tracking studies of lesser flamingos in the Kenyan Rift Valley have shown considerable movement within the Rift Valley but no birds moving to the coast or to Lake Rukwa in southern Tanzania. (Childress et al. 2007). Data from three greater flamingos fitted with satellite tracking on lakes in northern Tanzania showed that one moved to the Kenyan coast for several months, and another for a shorter stay (Baker et al. 2007). Present knowledge suggests that the Bagamoyo salt works almost qualify as a shadow Ramsar site for greater flamingos and that the salt pans within Saadani National Park may also qualify. It is strongly encouraged that future satellite tracking is undertaken at peripheral sites such as coastal salt works and lagoons in Kenya and Tanzania and at Lake Rukwa, which might be a transit point for movement between the Rift Valley and southern Africa.

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