



Annual Count for the Managed Baboon Population on the Cape Peninsula

Human Wildlife Solutions

1 July 2019 - 30 June 2020

INTRODUCTION

Human Wildlife Solutions (HWS) was first awarded the tender to manage the baboons on the Cape Peninsula in August 2012. As part of the management and monitoring programme, an annual count of the managed baboon population is a requirement by the City of Cape Town. This report is compiled on behalf of the City of Cape Town by the service provider, Human Wildlife Solutions.

Since 2016, HWS is responsible for conducting the annual survey. Counts were conducted in May and June to align with the City of Cape Town's tender year (July to June) and financial cycle. This report presents a synopsis of the count data for 2019 / 2020, and a detailed breakdown for the population as of the end of June 2020, per the 2017 tender requirements. The methodology used for counts and the numbers recorded are described. This report does not present any population trends or provide any explanations for numbers increasing or declining. For those details please see HWS 2020 Annual Report.

METHODOLOGY

The annual count is a total count during which each individual is recorded. The count is therefore an enumeration of the whole managed baboon population. Within each baboon troop, the troop structure is broken down into the different age and sex classes. The following categories are used to determine the different age classes:

Adult male (AM): Muscular nose ridges fully developed, canines fully descended, shoulder mantle present, testicles fully descended. Physical bulk and neck thickness increase (>8 years).

Adult female (AF): Sexual skin swells/ deflates with menstrual cycle. Nipples obvious and elongate in mature females; may show dappled colour in older females. Has had at least one offspring (> 6 years).

Sub-adult male: Larger than AF; canine/s project beyond the tooth row but not fully descended (often uneven length); testicles not fully descended, appear flat/slightly rounded from behind; the body is angular in shape and lacks bulk (5 - 8 years).

Sub-adult female: First sexual cycle begins, and a small oestrous swelling may be present; small button-like nipples present; has not had offspring; smaller and slither than an adult female (5 – 6 years).

Immatures: Includes juveniles (1 - 5 years) and infants (0 – 1 years)

Juveniles: distinguish large juveniles from sub-adults

Large juvenile male: same size/smaller than AF; canines do not extend beyond the tooth row

Large juvenile female: nipples not obvious, smaller than AF

Infants: includes 2 categories, Brown & Black

Brown: Hair grey/ brown. Skin dark. Eyebrows change colour to brown. Clings to belly but also rides on back (6 – 12 months).

Black: Hair black (natal coat). Skin, ears, nose, and scrotum (males) pink. Clings to belly of female (0 – 6 months).

Counts were conducted by at least one senior spotter (with experience in ageing and sexing baboons in the field), with an assistant dedicated as the scribe who took a written record of the age and sex classes as called out by the senior spotter. On many occasions the senior spotter also self-recorded the count, as this helps to verify any queries in the written record. When there were three persons counting, the second person confirmed the count while the third recorded the details in a notebook, on a dictaphone or collected a video recording.

The counters positioned themselves in a fixed spot, in the line of movement, ahead of the baboon troop. Counts were done when the troop was crossing a road or other barrier or in an open area with low vegetation so as not to obscure any members of the troop. The counters remained stationary as the baboons moved past them. The count was never rushed to ensure the troop was in a favourable area whereby all individuals could be seen. Once the troop had moved past the counting team, this process was repeated in a similar suitable position. Multiple counts were done on all troops to ensure accuracy. When conditions were favourable, several counts were conducted on the same day, provided the senior counter was confident that the whole troop was present. Troops were counted at least three times to ensure accuracy. If the counts did not concur, additional counts were made until the team was confident the count was accurate. Sometimes neighbouring troops overlap while foraging. In these cases, counts were abandoned until such time as the troops were clearly separated. See Annexure 1 for dates of the counts and counter details.

Binoculars were used to ensure accuracy in identifying individuals and age classes. Where the terrain and vegetation made it feasible, a video camera was also set up to record the movement of the troop passing a predetermined point. The video recording assists as a tool for verifying numbers and troop structure because the recording can be replayed at a later stage.

RESULTS

The total count for the managed baboon population is currently 445, as of 30 June 2020. This count does not include the Plateau Road (PR) Troop, as it is not considered a managed troop because it does not enter the urban area. This troop has minimal management, mainly to keep it away from Plateau Road in order to prevent tourists from feeding the baboons.

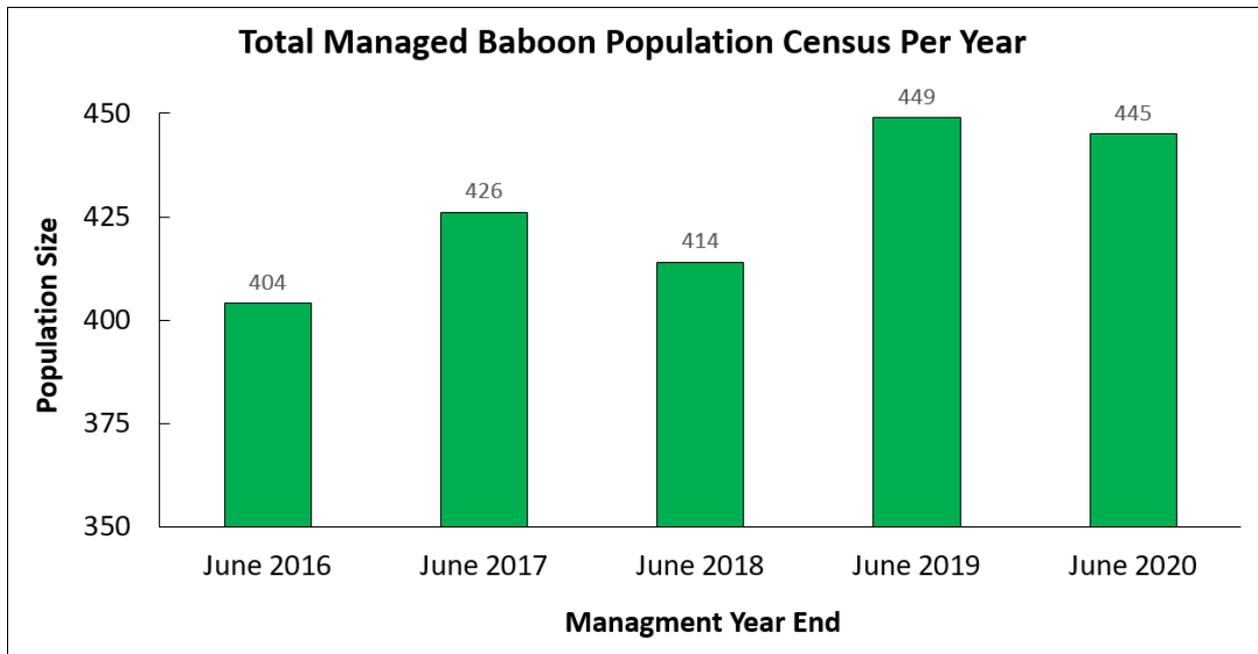


Figure 1. Total population numbers for the managed baboon population on the Cape Peninsula at the end of June each year (2016 – 2020).

Since June 2016 (and indeed since 2012), the managed population of baboons has shown a general increase from 404 to 445 baboons (Figure 1). This trend is evident for both the southern and northern sub-populations with a slightly higher overall increase for the northern sub-population. In 2020, both sub-populations were more or less stable compared to 2019 (Figure 2).

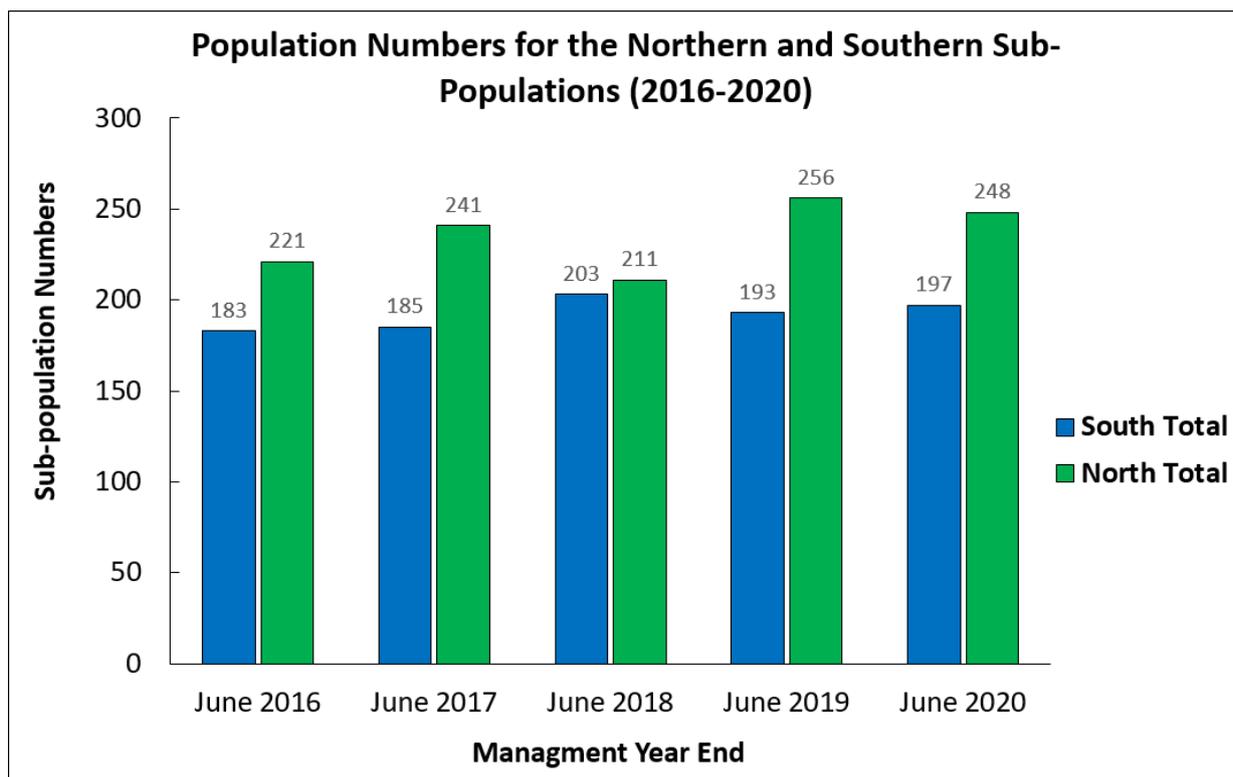


Figure 2. Total counts for the northern and southern managed baboon sub-populations on the Cape Peninsula from July 2016 to June 2020.

Individual troop population numbers are shown in Table 1. The northern sub-population have on average higher troop sizes than the southern sub-population (in 2020 northern troop size 50 individuals vs 39 individuals in the southern troops). Population changes over the last four years have been most noticeable in the Waterfall, Tokai and Constantia 1 troops.

SOUTHERN TROOPS	June 2016	June 2017	June 2018	June 2019	June 2020
Da Gama	52	52	55	48	48
Smitswinkel Bay	29	33	35	31	35
Waterfall	33	37	40	48	47
Groot Olifantsbos (GOB)	17	23	29	23	25
Misty Cliffs (Splinter Troop)*	11				
Slangkop	41	40	44	43	42
Sub-Total (South)	183	185	203	193	197
NORTHERN TROOPS					
Zwaanswyk	28	30	20	20	18
Tokai	65	69	75	91	92
Mountain	47	57	60	73	63
Constantia**	81				
Constantia 1		63	46	64	68
Constantia 2		22	10	8	7
Sub-Total (North)	221	241	211	256	248
TOTAL	404	426	414	449	445
<i>Plateau Road***</i>			23	17	21

Table 1. Total counts for the managed baboon troops on the Cape Peninsula at the end of June each year (2016 - 2020). *The Misty Cliffs Splinter Troop re-joined the GOB Troop in December 2016 although a few individuals continued to sleep at Misty Cliffs (4 individuals in 2019). These 4 individuals were moved to a sanctuary in March 2020 and were excluded from the count data.

***The Constantia Troop split into CT1 and CT2 late in 2015. The totals for the separate troops are illustrated here from 2017 onwards.*

****Plateau Road Troop's total count is included here, but this total is not included in the managed baboon total as it is not considered a properly managed troop because it does not affect the urban area.*

Sex and age structure for the troop is indicated in Table 2. In 2020, on average immatures comprised over half of the troop (>50%) followed by adult females (30%) but there has been little change in age or sex structure of the troops over the last year. The GOB troop currently does not have an alpha male.

	Adult Male	Adult Female	Sub-adult Male	Sub-adult Female	Immatures	TOTAL
SOUTHERN TROOPS						
Da Gama	1	16	1	2	28	48
Waterfall	2	16	1	0	28	47
Smitswinkel	2	10	1	2	20	35
GOB*	0	8	1	1	15	25
Slangkop	2	14	4	1	21	42
Sub-Total (South)	7	64	8	6	112	197
NORTHERN TROOPS						
Zwaanswyk	1	8	0	1	8	18
Tokai	4	24	6	7	51	92
Mountain	4	23	3	2	31	63
Constantia 1	4	22	4	3	35	68
Constantia 2	1	2	0	1	3	7
Sub-Total (North)	14	79	13	14	128	248
TOTAL	21	143	21	20	240	445
<i>Plateau Road**</i>	<i>2</i>	<i>6</i>	<i>0</i>	<i>0</i>	<i>13</i>	<i>21</i>

Table 2. Age and sex class structure of the managed baboon troops of the Cape Peninsula for June 2020. **The Misty Cliffs individuals have been included in the GOB Troop totals since December 2016 but have been excluded from the GOB Troop total for 2020 as they were moved to a sanctuary in Mpumalanga in March 2020. The GOB adult male was recently hit by a motor vehicle and was humanely euthanised.*

***Plateau Road Troop's details are included here, but the total is not included in the managed baboon total as it is not considered a properly managed troop because it does not enter the urban area.*

TREND ANALYSIS

For an analysis of annual population trends see the HWS 2019/2020 Annual Report.

Dr Phil Richardson

HUMAN WILDLIFE SOLUTIONS (PTY) LTD

Annexure 1 – Detailed information regarding the Annual Counts

DATES OF COUNTS UNDERTAKEN:

SOUTHERN TROOPS	Count 1	Count 2	Count 3	Counters
Da Gama	22/05/2020	22/05/2020	29/05/2020	Kim Gordon Tara Naeser
Smitswinkel Bay	29/04/2020	05/05/2020	21/05/2020	
Waterfall	06/05/2020	29/05/2020	08/06/2020	
Groot Olifantsbos (GOB)	04/05/2020	14/05/2020	29/05/2020	
Slangkop	27/05/2020	29/05/2020	03/06/2020	
<i>Plateau Road</i>	23/04/2020	15/05/2020	15/05/2020	
NORTHERN TROOPS				
Zwaanswyk	30/04/2020	19/05/2020	08/06/2020	Kim Gordon Tara Naeser
Tokai	04/05/2020	26/05/2020	05/06/2020	
Mountain	30/04/2020	30/04/2020	04/06/2020	
Constantia 1	08/05/2020	11/05/2020	05/06/2020	
Constantia 2	08/05/2020	01/06/2020		

Table 3. Multiple counts were conducted for each troop during April to June 2020.

EXPERIENCE OF HWS STAFF CONDUCTING COUNTS:

Kim Gordon – B.A. (Psych. & Comm. Sci.), PGD Nat. Con. Kim has more than four years work experience with wild primates. She worked as a research assistant and project coordinator at a vervet monkey field site in Kwa-Zulu Natal for one year and three months. In addition, she carried out a university research project on Chacma baboons in Hermanus for three months. She was also the manager and main researcher at a Zambian field site studying Kinda baboons for one year. She has been with HWS baboon management for two years.

Tara Naeser: B.Tech. Nat. Con. Tara assisted in conducting counts on various species of mammals and insects in the Tswalu Kalahari Reserve during her practical student year (2016). She has been with HWS managing baboons for two and a half years.

The principal HWS Staff conducting the counts were also supported by Cath Schutte, Fanus Ferreira and Bronwyn Maree as third observers for some counts.