



Human Wildlife Solutions

Annual Report

2015

TABLE OF CONTENTS	Page
A. REPORTING PERIOD	3
B. BABOON MANAGEMENT AND RAID REPORTING	3
SOUTH EAST REGION	
1. Smitswinkel Troop	4
2. Waterfall Troop	6
3. Da Gama Troops (DG)	8
Births and Deaths	12
Recommendations	12
SOUTH WEST REGION	
1. Groot Olifantsbos Troop (GOB)	12
2. Misty Cliffs Troop	14
3. Slangkop Troop	18
Births and Deaths	20
Recommendations	20
NORTH REGION	
1. Tokai Main Troop	21
2. Zwaanswyk Troop	25
3. Constantia Troop	26
4. Mountain Troop	29
Births and Deaths	31
Recommendations	31
C. GENERAL COMMENTS ON ALL BABOON TROOPS	
Population Data	31
Hotline Data	33
Percentage Time Out of Town	36
Conclusion	40

A. INTRODUCTION

This annual report covers the period 1 January to 31 December 2015. This report will however, also consider trends that have become evident over the past three years, since HWS took over baboon management for the City of Cape Town in August 2012. HWS' current contract with the City of Cape Town began in December 2014, so this report will be based on the calendar year of 2015.

One of the mandates for the 2012 – 2014 tender, was to keep the baboon troops out of town for 80% of the time. In the 2014 – 2017 tender this figure was increased to 90%. Over the past three years, the percentage time the baboons were held out of town averaged 98.7%, and ranged from 98.5% in 2012/13 to 98.9% in 2014/15. This percentage increase might not seem very high, but if one looks at it the other way around, the baboons' time IN town decreased from 1.5% to 1.1%. This therefore represents a 27% decrease in the percentage time baboon troops spent in town. Over this same period assertive raids (house raids and attacks etc.) decreased by 38%, and bin raids decreased by 31%.

One of the most significant events in terms of baboon management over the past three years was the massive fire that swept across the Cape Peninsula for the first 5 days of March 2015. The fire left devastation in its wake, burning roughly 80% of the northern troops' home ranges. The immediate effect of the fire was the death of 13 baboons (12 from the Tokai Troop and one from the Zwaanswyk Troop) caught amongst tall pine and gum trees while sleeping at night. The Constantia and Mountain Troops did not suffer any loss of life during the fire, although their home ranges were equally affected.

There were a number of side effects of the fire, the most obvious of which was that the baboons changed their foraging ranges, particularly after the pines started being removed. Another prominent event was the splitting, by natural fission, of the Constantia Troop in about May 2015. The troop was extremely large (74 baboons) and had an unusually large number of adult males (10 full adults and several large sub-adults). There had been a pronounced increase in aggressive behaviour since the Cape fire which had changed the distribution and availability of food resources for the baboons. The size of the troop, the increasing number of adult males, and the sudden change in distribution of food resources probably all played a role in leading to the fission of this troop.

Another significant development over the past year was the successful translocation of three non-raiding, dispersing males from the northern troops into two managed troops in the south east. These translocations therefore show that baboons from the north, where their diet consists of a relatively high percentage of human derived foods (HDF's), can successfully adapt to the more natural fynbos diet of

the baboons in the south. These translocations also enable management to contribute towards gene flow within this island population and provide new males, if a troop loses an alpha male through natural or unnatural causes.

B. BABOON MANAGEMENT AND RAID REPORTING

South Eastern Region – Area Manager: Ziggy Rode

1. Smitswinkel Troop

The Smitswinkel Troop has improved from being one of the most notorious raiding troops along the Peninsula to a virtually non-raiding troop by the end of 2015. There were no assertive raids (this would entail raiding houses, caravans, tents etc.) recorded throughout 2015 for the troop as a whole, although SWB8 did raid alone during the winter.

The troop has started showing a definite trend in terms of its annual movement within its home range. For the first few months of the year it utilized the northern parts of its home range more, namely the Miller's Point, Rocklands Farm area. Here it fed mainly on the fynbos in the Miller's Point area, especially on the *Leucospermum* bushes, while in the Rocklands area it fed mainly on invasive alien vegetation. 2015 was different, in that the troop pushed much further north than what it had done since 2012. This was mainly due to SWB8, who kept on leading the troop north and then sleeping on the cliffs above Murdock Valley, the troop had not done for several years.

From February onwards SWB8 started to reach dispersing age, he became more dominant and attempted to assert himself more within the troop. He also attempted to challenge SWB6 several times, but he did not succeed in taking over as alpha male. It therefore often led to him leaving the troop to raid by himself, mainly at the Miller's Caravan Park or at the Black Marlin. In the beginning it was difficult to manage him because he did not have a collar and was difficult to locate. During May SWB8 was fitted with a VHF collar and this facilitated a significant improved in his management.

Meetings were also held with the Black Marlin Restaurant to find ways to improve their waste management, to baboon-proof the kitchen, and any other facilities where food or waste is kept. There has been a reasonable improvement in terms of the waste management at the restaurant, and the baboons have not been raiding there. Meetings were also held during May with the Castle Rock Conservancy, in an attempt to get the cooperation of the entire conservancy when it comes to baboon-

proofing their houses, managing their waste, and not leaving dog food outside their houses. The response here has also been positive.

On 14 September there was a very heavy thunderstorm on the southern peninsula, and a lightning strike set the mountain alight just above Murdock Valley and Rockland's Farm. The troop was in a position that it could be pushed down to Miller's Point, and it slept there that night. Fortunately, the wind turned and it started to rain overnight and the fire did not come close to the baboons.

During October the troop started utilizing the southern section of their home range more frequently. On 6 October SWB8 made his first attempt at dispersing and joined the Waterfall Troop for the day, but he returned to the Smitswinkel troop that same day. On 13 October he finally dispersed from the Smitswinkel Troop. The troop seemed to settle down considerably after he left.



Figure 1: Red and orange areas indicating the fires that occurred in the northern part of the Smitswinkel Troop's range during late 2015.

Another fire started on the afternoon of 18 November, in Klawer Valley, and spread high up on to the mountain slopes. Strong winds changed the direction of the fire and pushed it over the mountain down towards Murdock Valley. The blaze went down towards the residential area, burning several houses and then pushing further towards Rockland's Farm where the baboons sometimes forage and sleep.

During this period the baboons were utilizing the central part of their home range, so the rangers blocked them from moving north towards the fire to prevent them from being caught up in the fire.

After the fire the baboons started spending most of their time from Castle Rock down towards Smitswinkel Bay. During December the troop regularly came down in the morning feeding on Protea flowers (*Leucospermum*). The troop would spend several hours in the Proteas and then move down to feed along the coast. It would then generally move back up to the mountain after 14h00. The rangers noted that there were still various streams with water on the mountain from which they drank.

2. Waterfall Troop

Similar to 2014, the Waterfall Troop spent the majority of the year sleeping predominantly above the South African Naval Ammunition Depot (SANAD). This is definitely the favourite sleep site, with the troop sleeping there 74% of nights in 2015. Since the troop started sleeping there in October 2013 the troop has become much easier to manage. However, there are still difficulties because the baboons still have access to human derived foods (HDF's), at SANAD. At times bins are even visible to them from the sleep site, which is located above the actual SANAD facility.

From January to April there was some raiding happening on the vineyards at the Cape Farmhouse. The problem was exacerbated by rangers not being allowed access on to the property and therefore being unable to push the baboons off the vineyards once they had gained access. A meeting was arranged with all the farmers, the City of Cape Town and HWS, and after a constructive session, HWS was granted access and the problem was resolved.

During February the Groot Olifantsbos Troop (GOB) also spent some time on Shamballah which meant that the Waterfall Troop would not move south of Klaasjagersberg and would only go as far as the Klaasjagersberg Mountain. In previous years when the two troops met, RH2 would have chased the GOB Troop back, but this year, the alpha male from the GOB Troop chased the Waterfall Troop all the way back to Simon's Town.

The two animals that were responsible for most of the raiding in the first half of the year were RH2 and WF2. WF2 had a very serious incident in February when he charged a man on the Admiral's Footpath in Simon's Town, but it was later established that people down at the naval barracks were throwing stones at some young juveniles and he must have mistaken the man on the footpath as being involved in hurting the juveniles. WF2 also had multiple incidents at the Cape Farmhouse and both he and RH2

entered the Red Hill Settlement on a few occasions. WF2 was euthanized on 20 May (with WAAC approval), because of his aggressive and persistent raiding behaviour.



Figure 2: Map showing the current Waterfall Troop and GOB Troop home ranges.

From May onwards the troop started feeding on the southern slopes of the Klaasjagersberg Mountain again, mainly feeding on the Proteas. During July, the GOB Troop was back at Shamballah, and this time it led to WF3 leading the troop back to the Waterfall Barracks. It was alarming to see how quickly the troop reverted back to their old ways and it soon became very difficult to push them out of the barracks.

RH2, WF3 and WFF4 were the most difficult animals to manage and would always break the line back into the urban area. During August it was decided to bring in extra staff to assist with the push out of town, because it was feared that the troop was staying too long and all the progress that was made since 2014 would be lost if decisive action wasn't taken. During this time WF3's raiding also became extremely aggressive and assertive and he had to be euthanized on 14 August (with WAAC approval). On 20 August, extra staff was brought in and the troop was successfully pushed back up to Klaasjagersberg Mountain.

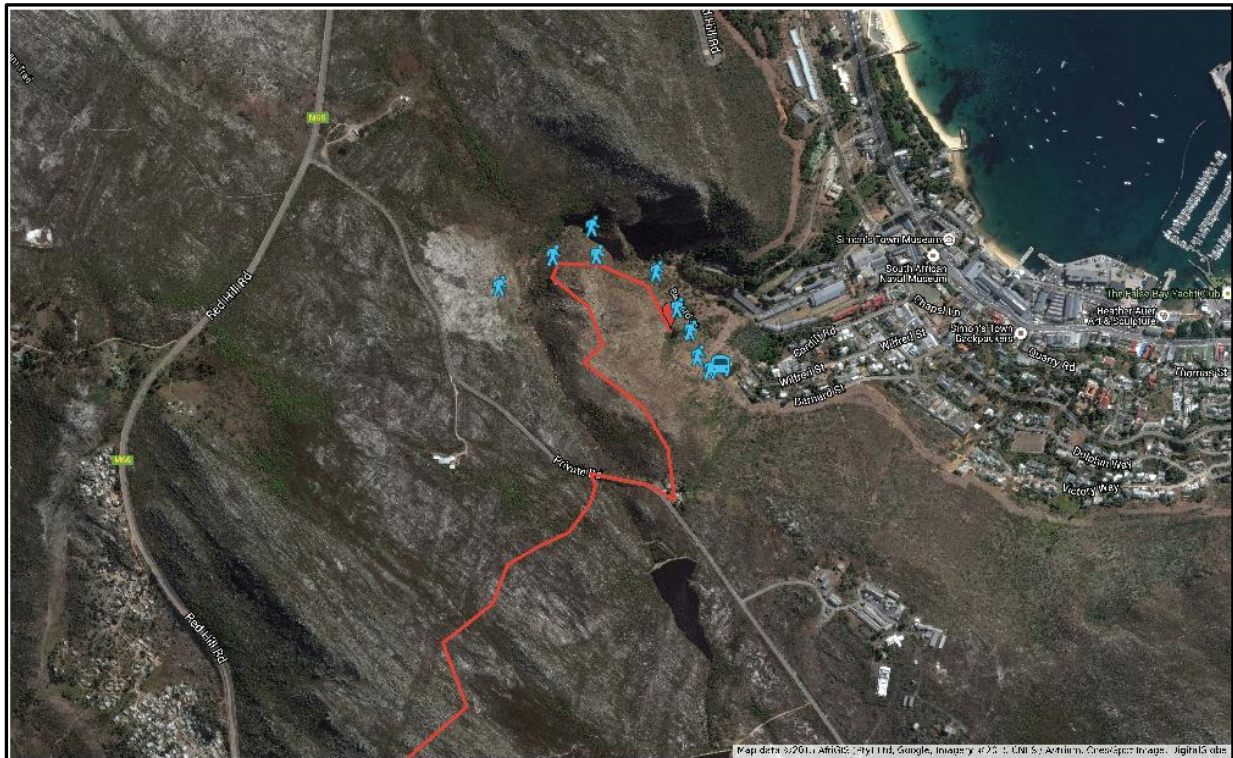


Figure 3: Map showing the line that was held by the rangers and the route that was taken to push the Waterfall Troop back to Klaasjagersberg Mountain.

During September RH2 continuously went back to the Waterfall Barracks and took the troop with him. The troop therefore slept 57% of the time at the cliffs above the Waterfall Barracks and only 43% at SANAD. This meant that the troop spent more time around the urban area than in the previous month. RH2 was an old male, approximately 17 years, with a very bad raiding history, which was being exacerbated by his age and poor dental condition. It was therefore decided to euthanize this male (with WAAC approval) because he was again jeopardizing the progress that had been made with the troop, and repeatedly leading the troop back to town. Two dispersing males from the northern Tokai Troop were brought to Waterfall to act as replacement males for RH2. Both males integrated remarkably quickly into the troop, with no major fighting between them. However, it was immediately evident that the younger male, TK42, was the dominant male.

3. Da Gama Troop

As in previous years, during the long summer months this troop predominantly utilized the Da Gama Park Flats and the nearby Pine Trees as its main sleep site. This has become a trend because the long daylight hours allow baboons enough time to move until approximately 21h00. Hotline calls have also been received from this area alerting HWS to the fact that baboons are moving around during those hours.

It is noteworthy that the troop as a whole did not enter or raid a house or flat during 2015. Although the troop spent some time in town, there were only bin raids by the troop, and raiding incidents were limited to individuals. Sub-adult males and juveniles remain the problem animals. The sub-adult males usually encourage the juveniles into town with them, but older juveniles occasionally do enter town by themselves.

During the first few months of 2015, DG11 and DG12 were the main problem individuals. Both animals would break away from the troop and form raiding parties, entering Da Gama Park or Welcome Glen to raid. Numerous attempts were made to block them and pre-empt their movements in order to stop their raiding behaviour. But due to the splitting up of the team when the two males left the troop, it became more and more difficult to manage both males at the same time.

During January DG12 injured his back foot and leg, in what was suspected to be a baboon on baboon injury. Dr. Breed immediately came out to assess the injury and initially it was decided to give him time to heal. Unfortunately the injury only got worse, and on 14 January he had to be euthanized as all the skin on the foot had been scraped off and the wound was open to the bone.

During February DG13 attempted to disperse to the Slangkop Troop, but when he came close to the troop he came into conflict with DG6 (the alpha male of Slangkop), and he sustained an injury to his right hind leg, and returned to the Da Gama Troop. His injuries were also assessed by Dr. Breed and she decided to give him an opportunity to recover naturally. Over the year it gradually became better.

In March 2015, the troop had a severe setback when the alpha male SK3 was injured during the evening of 17 March. On 18 March the rangers noticed that he was moving much slower, he was not feeding and he would hide behind the bushes. Immediately the Area Manager was notified and all efforts were made to ascertain what was wrong with the animal. Initially there was nothing noticeably wrong with him, but after several days one could see some swelling on the side of his face.

Multiple attempts were made to dart and/or capture him; however all the attempts failed because he immediately noticed when someone would come closer to dart him. He was then treated with anti-inflammatories and pain medication and it was decided to give him time to recuperate. From the assessments that were made, it was determined that he sustained blunt force trauma injuries to the head and abdomen, possibly inflicted by humans.



Figure 4: SK3 during the period when he was injured.

On 1 April a dispersing male from Tokai, TK43, was darted in the Meadowridge area and it was decided to relocate him to Da Gama because there were no other adult males in the troop that could take over, should SK3 have died of his injuries. The first two days the troop ran away from him, but by the third day he had seemed to have integrated into the troop. This also seemed to spark SK3's attention and he started joining the troop again.

TK43 took over the alpha status in the troop fairly easily, with SK3 being in very poor condition. There was some chasing between the males but no severe fighting. In May TK43 killed one infant, but that was the only infanticide recorded by TK43. Unfortunately, SK3 was attacked by dogs in Da Gama Park, whilst protecting a female and her baby. During the attack the dogs ripped off his collar, which made him even more difficult to monitor. He sustained some injuries during the fight, but was regularly assessed by the veterinarian, Dr Breed. He recovered slowly from his injuries.

After the injury to SK3 and the introduction of TK43, the troop structure became unstable, and the troop started sleeping in up to four sleep sites at a time. Over the next four months there seemed to be turmoil in the troop and the troop structure and hierarchy was not clearly defined. SK3 has made a full recovery and has regained his body condition. He has however lost his status in the troop and is currently the lowest ranking adult baboon among the males.

The waste management situation at the naval flats in Da Gama was very poor from January till October. The bin system that was put in place by HWS in 2012, was no longer working. There was too much dumping happening, with residents just leaving their refuse bags on top of the dustbins instead of dropping them inside. Waste was also being dumped inside the corridors of the flats and at the

stairways. Several meetings were held with the navy in an attempt to improve the situation and an agreement was made that a new system would be put in place by the navy.

However, this problem was not just confined to the flats, and waste management at the houses in Da Gama Park also had deteriorated again. Furthermore, dumping of waste was happening outside of the buildings in the riverine area, with waste landing in the Elsie's River. In June a blocked sewer also started overflowing and flooding into the Elsie's River. This was also brought to the Navy's attention, and the unblocking of the sewer is still underway. The Navy has undertaken to clean the river area as well as to build a bin bay, however the bin bay will fall under the larger programme of overhauling the entire waste management system of the Navy, which might take some time.



Figure 5: Photos (a) and (b) shows dumping on top of bins at the navy flats. Photos (c) and (d) show the deterioration of waste management at the Da Gama Park houses.

Residents living within the residential area of Da Gama Park have been told to alert the Navy if they have broken bins or bins without baboon-proof clips, so that these can be replaced. More awareness will also be undertaken so that the residents know how to best use the bins to ensure that they are 100% baboon-proof.

In November, SWB8, left the Waterfall troop and started to attempt to join the Da Gama Troop. On 2 November, TK43, left the troop to fight with SWB8. During the fight TK43 sustained a cut on his shoulder. SWB8 continued to follow the troop, but always slept separate. Several females would join him during the day and then go back to the troop. Several fights ensued between TK43 and SWB8, however neither sustained any serious injury. On 12 November, SWB8 was seen sleeping with the troop for the first time. By the end of November, SWB8 seemed to have been fully integrated into the troop.

The Da Gama Troop can be regarded as a troop that is slowly but steadily improving. Raiding behaviour as a troop is definitely decreasing each year. During 2015, the troop spent 98,6% of its time out of town, which is exceptional for a troop which used to live mainly in town.

Births and Deaths 2015

Da Gama: 10 births and 6 deaths.

Smitswinkel Bay: 3 births and 1 death.

Waterfall: 5 births and 5 deaths.

Recommendations

- A long term solution is required for the **power line** poles along the Smitswinkel Bay route and the Elsie's River Valley in Da Gama Park to reduce electrocution deaths. Waterproof grease has been applied to the poles as a short term solution. Installing the power lines underground should be considered.
- **Waste management and baboon-proofing** is an urgent requirement in Da Gama Park and the SANAD facility. Raids will not be resolved unless both waste management and baboon-proofing have been addressed fully.
- **Education and awareness campaigns** should be considered in the South East Management Region. Due to high resident turnover the children in Da Gama Park should be educated on how to deal with baboons. Holiday makers staying along the Smitswinkel Bay tourist need to be made aware of baboons in the area in order to reduce raids during the holiday season.

South West Region – Area Manager: Cath Shutte

1. Groot Olifantsbos Troop (GOB)

The Groot Olifantsbos Troop (GOB) moved in and out of the Cape of Good Hope Reserve (CoGHR) throughout the year. They varied their diet by feeding on the low lying fynbos within the CoGHR and in

the Protea stands on the mountain slope behind the Cape Point Nursery. When they foraged within the reserve, the troop also fed on a variety of marine organisms from the intertidal zone and from the Schusterskraal Wetland. The troop roosted within the CoGHR for the majority of the year, they moved between the Bonteberg, Klaasjagersberg and Olifantsbos sleep sites. While out of the reserve the troop roosted in the pines at Shamballah.

The GOB Troop is essentially a non-raiding troop because they spend the majority of their time within the CoGH Reserve. They therefore have limited access to human derived foods. However, in April 2015, the troop began raiding the skips at the Kogelfontein dump site. The problem was reported to SANParks and the skips were replaced and the area cleaned up by May 2015.

While at Kogelfontein, GOB7 would tend to move across the road to Kilfillan Farm and Baskloof in an attempt to raid. A HWS ranger was subsequently positioned to monitor the area between Kilfillan Farm and the Cape of Good Hope Nursery. With the use of telemetry equipment, the ranger monitored GOB7's movement and was able to hold the line along the fence, preventing GOB7 from exiting the reserve. The result of this was that GOB7 no longer attempted to exit the reserve and remained within the CoGH Reserve.



Figure 6: Map showing the shift of KOB and GOB home range due to the CoGH Fire in March 2015.

On 6 August 2015, GOB7 (the alpha-male) was fitted with a VHF radio collar – replacing the old GPS collar, which had gone flat. After being assessed by the vet, he was found to be in an excellent health condition. The new radio collar greatly assisted in keeping track of his movements.

In September 2015, GOB7 left his troop on a few occasions to pursue two of the Misty Cliffs Troop's females who were in oestrus. On 5 October 2015, the GOB Troop followed GOB7 out of the reserve. They moved along the beach in front of Scarborough and linked up with the Misty Cliffs Troop on the cliffs between Scarborough and Misty Cliffs. It was interesting to note that the two Misty Cliffs females, who were in oestrus, joined the GOB Troop and moved back into the reserve with them.

It is pleasing to note that even after spending fourteen consecutive nights outside the CoGH Reserve, with the Misty Cliffs Troop, that the GOB Troop remained within the CoGH Reserve for the remainder of the year.

HWS rangers continue to monitor the GOB Troop through the use of telemetry equipment, they often picked up a signal that the troop was deep within the reserve. This is a very pleasing result as it means that the troop is foraging on indigenous fynbos vegetation and coastal organisms, with little opportunity to access human derived foods.

2. Misty Cliffs Troop (MC)

The Misty Cliffs Troop spent the majority of the year moving in and out of the CoGH Reserve. This troops movement patterns were influenced not only by food availability, but also by the movement of the GOB Troop.

Baboons are generally not territorial and in many instances various troop's home ranges may overlap each other. If two troops are within a 'shared' area, initial fighting can occur, but ultimately one troop will move into another section of their home range. This is a common occurrence on the Southern Peninsula, as some of the baboon troop's home ranges overlap one another. Generally when the GOB Troop moved to the northern section of their home range (Figure 7) then the Misty Cliffs Troop would do the same, taking them out of the reserve and into the northern section of their home range.

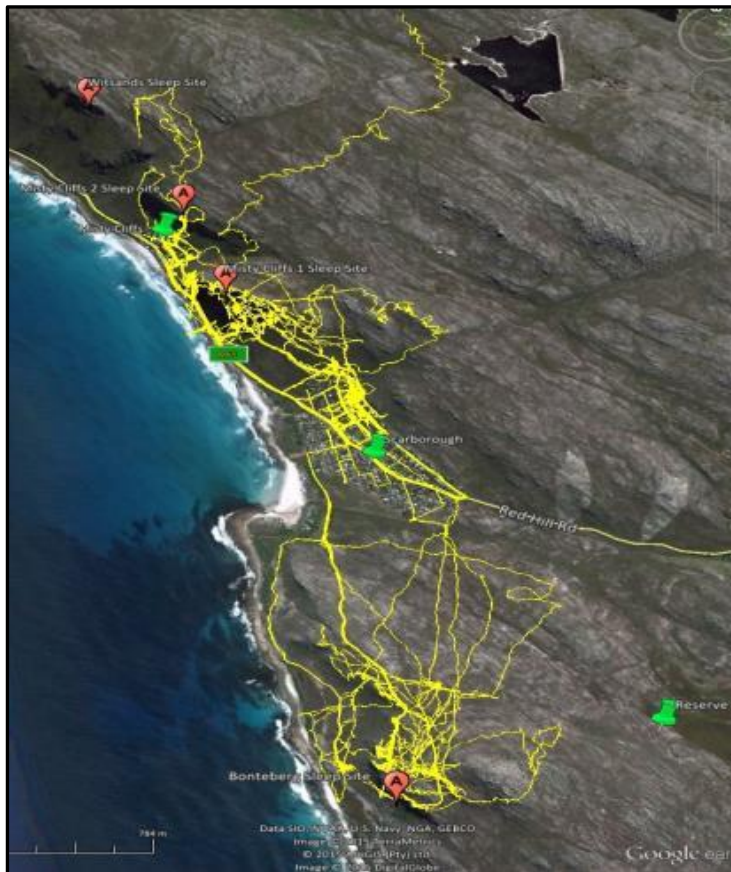


Figure 7: Misty Cliffs Troop movement from January 2015 – December 2015.



Figure 8: Map showing the overlap of the Misty Cliffs and GOB Troops' home range.

While in the reserve, they roosted mostly on the cliffs at Bonteberg. The troop would come down from the cliffs in the morning and spend the day foraging, grooming and strengthening social bonds. They would feed, in the indigenous vegetation, on bulbs, leaves and flowers. They varied their diet and fed on a variety of marine organisms found in the intertidal zone. On some occasions they foraged at the Schusterskraal Wetland inside the CoGH Reserve.

While outside of the reserve, they roosted mostly on the cliffs between Scarborough and Misty Cliffs. They also slept, although less frequently, on the cliffs above Misty Cliffs and at Witsand. Given the close proximity, of these three sleep sites to town, the propensity for the troop to enter the urban area was increased as opposed to the CoGH Reserve sleep sites.

While in the urban area, the baboons fed on various fruit trees, vines and natural vegetation found in the residential gardens of Scarborough and Misty Cliffs. Once they were moved out of the urban area, they would settle in the indigenous vegetation below the sleep site and spend the day foraging and grooming. They also fed on an abundance of nutrient rich organisms in the rock pools, along the coastline, between Scarborough and Misty Cliffs.

The troops raiding behaviour consisted mainly of bin raids. The highest number of bin raids occurred in April 2015, where 19 bins were raided. March and May 2015 closely followed with 17 and 13 bin raids respectively. It is however interesting to note that even though the troop was raiding bins, their time in town was low. This indicates that they would move into town, raid the bins and then move out of the urban area.

While the Misty Cliffs Troop was in the CoGH Reserve, HWS rangers held the line on Bonteberg to prevent the troop from moving into Scarborough. This strategy was highly effective.

On 29 April 2015, while the Misty Cliffs Troop was out of the reserve, they were foraging in the indigenous vegetation between Scarborough and Misty Cliffs. KOB1, the Misty Cliffs alpha male, broke the line and ran towards Scarborough. Half way there he stopped, climbed an electrical pole and barked for the troop to join him. Unfortunately he grabbed the wire at the top of the pole and was subsequently electrocuted. This was a huge blow to the troop because KOB1 was the only adult male in the Misty Cliffs Troop.

In August 2015, GOB7 (alpha male of GOB Troop), began chasing the four females of the Misty Cliffs Troop who were carrying infants. On both occasions GOB7 did not succeed and was chased away by the females. In October 2015, GOB7 led the GOB Troop out of the CoGH Reserve because he was in pursuit

of two females of the Misty Cliffs Troop who were in oestrus. The two troops met up on the cliffs between Scarborough and Misty Cliffs, where they spent the next 12 nights. GOB7 continued to chase the adult females with infants. Until eventually, on 07 October, GOB7 chased the females and their infants into Misty Cliffs where they hid from him until he was moved out.

From then on the females with infants no longer slept on the cliffs with the GOB Troop, they chose to either sleep on the other side of the cliffs or above Misty Cliffs. On 19 October, HWS rangers were successful in moving the GOB Troop back into the CoGH Reserve. The two Misty Cliffs females, who were in oestrus, left the Misty Cliffs Troop and moved back into the reserve with the GOB Troop.

It is interesting to note that after this event, the Misty Cliffs Troop did not return to the CoGH Reserve. They utilised the cliff sleep site between Scarborough and Misty Cliffs for the majority of the time and foraged in the indigenous vegetation below the cliffs. This was coupled with an increase of their presence in town.

It is again interesting to note that even though there was an increased presence in town, there were very few raids. This low number of raids combined with an increased presence in town creates the idea that the individual females were using Scarborough more as a place of refuge, rather than a feeding site.

December 2015 was a difficult month for all HWS staff in terms of the Misty Cliffs Troop. Two baboons were shot and killed by injuries inflicted by a high-powered pellet gun. The first individual was found, in a garden of a Scarborough resident, on 13 December 2015. He was taken for immediate treatment to a temporary holding facility of the veterinarian, Dr Dorothy Breed. He was monitored twice daily over the following week. Upon final examination, prior to being released, the extent of his internal injuries became apparent and MC3 was euthanized due to humane reasons.

The second individual was a lactating female. A report came from the field on 20 December 2015 that an adult female was moving sluggishly and was not keeping up with the troop. She was monitored from a distance by the Field Manager on duty. Unfortunately the female passed away where she had been resting and her infant had been picked up by another female.

The two shootings exacerbated the situation in Scarborough for the Misty Cliffs Troop. The troop continued to view Scarborough as a place of refuge, but this pattern increased after the shooting of MC3 on 13 December 2015. Prior to the shooting on 13 December 2015, the troop as a whole, was in

town on five occasions over the initial 15 days of December. After the shootings, the troop as a whole was in town on 11 occasions over the remaining 13 days of December.

Prior to the shooting on 13 December, the troop was found to be sleeping in town on six occasions out of the initial 15 days of the month. This number increased after the shootings and the baboons slept in town on 11 occasions over the remaining 13 days. This is a clear indication that the shooting of the two individuals of the Misty Cliffs Troop (MC3 and MCF4) caused the troop further stress and exacerbated the situation in Scarborough.

3. Slangkop Troop

The Slangkop Troop travelled extensively through their entire home range during 2015. However, their travel patterns were concentrated in certain areas, such as the Rasta Camp, Kompanjestein and the stream next to Ocean View. The troop spent the majority of the year utilising the sleep site on the cliffs above Compass Bakery. They would move down from the cliffs during the late morning and spend the day foraging, grooming and strengthening social bonds.

The Slangkop Troops raiding behaviour reduced drastically from the middle of the year. It peaked in May when the troop raided bins on nine occasions. From then on their raiding behaviour reduced and there was only a single bin raid in both October and November and zero raids in December.

Both DG6 and SK6's raiding behaviour was increasing in the first half of the year. It became a concern when these individuals began entering occupied houses to raid. It was decided to put extra effort into both of these individuals in an attempt to curb this raiding behaviour. It is pleasing to note that their individual raiding behaviour has declined drastically. In December 2015, DG6 raided only one bin and SK6 raided only two bins.



Figure 9: Slangkop Troop movement from January 2015 – December 2015.

There was an increase in the Slangkop Troops raiding behaviour in July 2015. The troop raided Rodgers Fruiterers, on Kommetjie Road, on numerous occasions. The Slangkop Troop foraged on the discarded fruits and vegetables on the compost heap and the chicken/geese coup at the back of the property. On 14 August, a meeting was held with the owners of Rodgers Fruiterers and Cape Nature to discuss the situation and the way forward.



Figure 10: Chicken/geese coup at Rodgers Fruiterers serving as an attractant for the Slangkop Troop.

Troop held here during the fire

Compass Bakery Sleep Site

Kalle's Place

South westerly wind direction

Page 20

- **Removal of Alien Vegetation:** The invasive alien vegetation extending from Ocean View to below the Compass Bakery sleep site needs to be removed in order to improve management of the Slangkop Troop. This issue has been addressed with SANParks.
- **Electric Fencing:** A hard barrier, i.e. electric fence, established along the existing fence line of CoGH near Scarborough. This should greatly improve the success rate of keeping the Misty Cliffs Troop inside the CoGH reserve and will increase their foraging range inside the reserve. Discussions are currently in process.

Northern Region – Area Manager: Robyn Khoury

The 2015 year was a year of significant change in the Northern Section, mostly due to the devastating fire in March 2015. The fire ripped through over 5000 ha of land in 5 days, leaving approximately 80% of the Northern Troops' home ranges in ashes. The main impacts of the fire were shifting home ranges, a split troop and the change from foraging primarily on human derived foods (HDF's, mainly agricultural crops and pine nuts) to a largely fynbos based diet in many of the Northern troops.

The North only had one management (due to the raiding protocol) euthanasia in 2015, compared to three in 2014, four in 2013 and 12 in 2012. This shows a pleasing decline in euthanasia's in the North since HWS management began. The Northern section also translocated three dispersing males to the south, and these successfully integrated well within their respective new troops.

Finally, the Northern Section also started regular educational talks at Chrysalis Academy in each new intake. These talks have educated the students about baboons in general, and how to prevent raiding when living in a baboon-impacted area.

1. Tokai Troop

In the past year, the Tokai Troop went through several changes, most of which resulted in positive outcomes. There was ongoing aggression from many of the adult males to establish alpha status. For the first half of this reporting period it appeared that TK40 had taken over as alpha. TK40 did not hold this position long however, because TK16, from the Constantia Troop moved into the troop and asserted his dominance very quickly, taking over as alpha.

In addition to the hierarchical changes, there were four males that dispersed from the Tokai Troop in 2015.

- TK43 left the troop in April 2015 and was captured three days later in Bergvliet. TK43 was relocated to the Da Gama Troop and settled very well in this troop.
- TK42 left the troop in September 2015 and was captured before he entered the urban space. TK42 was relocated to Waterfall and integrated well and very fast with the Waterfall Troop.
- An untagged male left the Tokai Troop and showed signs of dispersal in August 2015. This male entered an urban garden and unfortunately was attacked by two dogs and killed.
- TK41 left the Tokai Troop in July 2015, and joined the Mountain Troop. In November 2015, surprisingly, TK41 dispersed from the Mountain Troop. A translocation to Plateau Road was attempted, however this was unsuccessful, and TK41 was later euthanized following WAAC approval (read more about this in the Mountain Troop section below).

The Tokai Troop was the worst impacted troop following the March 2015 fires. Twelve individuals died as a direct impact of the fire, and the majority of the troop's home range was burnt.

The March 2015 fires burnt all the pine and gum trees in Tokai Plantation. For safety reasons SANParks had to remove all the burnt trees following the fire. By the end of 2015, about 85% of the trees in Tokai Plantation were removed. Additionally, Tokai Plantation and Silvermine Reserve were closed to the public, which influenced the baboon situation greatly.

Tokai Plantation recovered slowly post fire, as the fire burnt hotter in this area and burnt most of the organic matter out of the soil. The upper, fynbos dominated areas which were adapted to fire, recovered faster than the plantation, and provided a rich food source for the Northern troops in the form of nutrient rich new growth. Additionally, Tokai Plantation was covered in post-felling debris (Figure 12), which prevented new growth after the fire, however this also provided some forage in the form of pine seeds and nuts. The Tokai Troop also extended their home range to include Silvermine Reserve during 2015 (Figure 13).



Figure 12: Debris from felling operations in Tokai Plantation. Note the exposed soil, and lack of new growth.

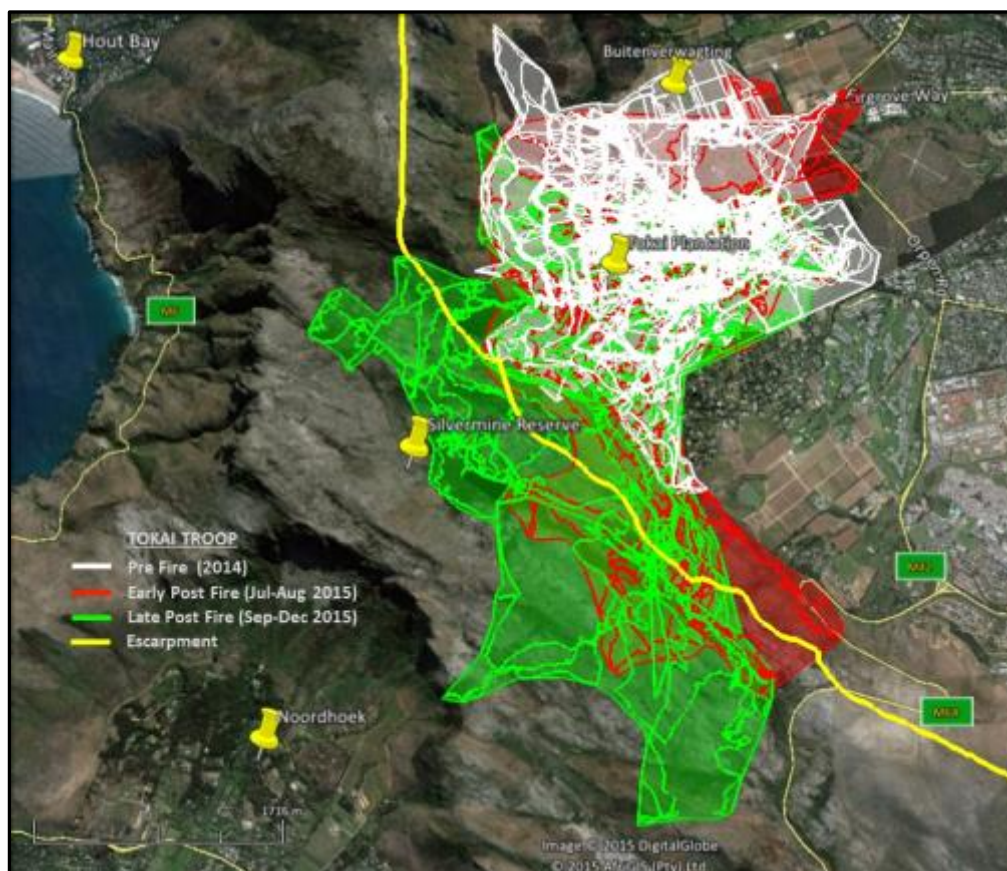


Figure 13: Post-fire home range shift of the Tokai Troop.

The Tokai Troop were really enjoying Silvermine Reserve, and were regularly seen swimming in the dam, foraging in the new growth (Figure 14) and playing on the cliffs. Silvermine Reserve reopened to the public in late December 2015.



Figure 14: Tokai Troop enjoying the spring growth in Silvermine Reserve.

Although the Tokai Troop began the year very badly with the deaths during the March 2015 fires, since then, 2015 became a good year for the troop. They extended their home range, and shifted to a diet that was predominantly made up of fynbos. They had no opportunity to raid hikers, cyclists and picnickers, and hence overall raiding in this troop dropped. Additionally, two males were successfully translocated from this troop, and were given the opportunity to spread their genes in new troops in the southern peninsula.

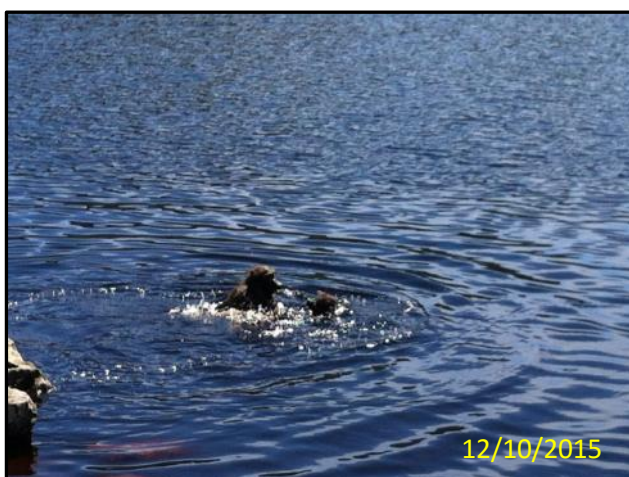


Figure 15: Tokai Troop baboons swimming in Silvermine Dam.

2. Zwaanswyk Troop

The Zwaanswyk Troop was a very quiet, non-raiding troop for the majority of 2015. The new alpha male (MT2) from the Mountain Troop, which joined the troop in mid-2014, had a very positive influence on the Zwaanswyk Troop in 2015.

MT2, unlike the previous alpha male, had a healthy respect for humans, and was aggressive in any form of raiding. Occasionally MT2 would enter Zwaanswyk when there were fence problems (gates left open, trees overgrowing the fence) and opportunistically raided bins and houses. Other than occasional opportunistic raids, MT2 led the troop up to Silvermine Reserve and contributed to them shifting to a largely fynbos dominated diet (Figure 16).

It was suspected that one individual from the Zwaanswyk Troop was killed due to the fire, however this was based on pre- and post-fire counts. A body was never found. Other than this, the Zwaanswyk Troop escaped the fire relatively unscathed. However; the majority of their home range was burnt.

MT2 was collared with a GPS collar, which was kindly donated by the Friends of Tokai Forest, in September 2015. This provided valuable insight into the troops' movements, and confirmed that the Zwaanswyk Troop found a new sleep site, in the pine trees on the edge of Silvermine Reserve.

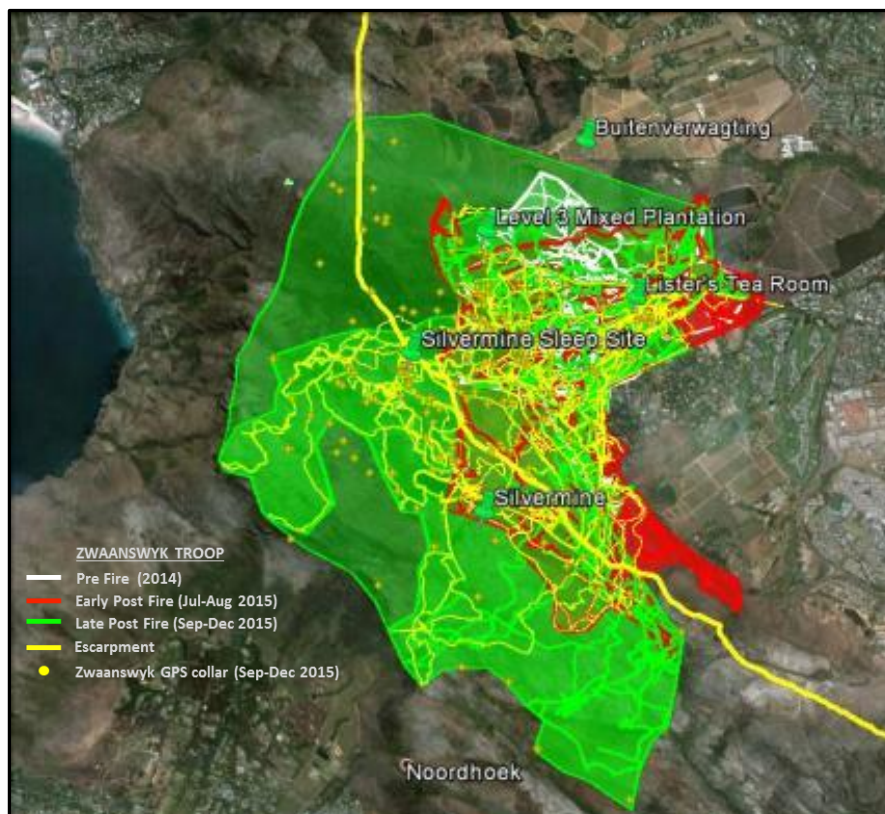


Figure 16: Post-fire home range shifts of the Zwaanswyk Troop.

Overall, it was a particularly good year for the Zwaanswyk Troop. The closure of Tokai Plantation and Silvermine Reserve prevented this troop from raiding, and helped switch them to a largely fynbos dominated diet. Hopefully this change will be sustained in 2016.

3. Constantia Troops

There were several large changes in the Constantia Troop in 2015. These include a new electric fence, a troop split, two dispersing males and a home range shift.

In November 2014, Groot Constantia completed their electric fence, which separated Klein Constantia and Groot Constantia (Figure 17). This fence excluded the Constantia Troop from Groot Constantia. In 2014, the Constantia Troop lived primarily on Groot Constantia, foraging on grapes, barley and natural vegetation found on the farm. The completion of the fence caused an immediate home range shift. Hence in 2015 the Constantia Troop were forced to spend more of their time above Klein Constantia, above Buitenverwachting, at the bike trails, and in the stream vegetation below Price Drive. The Constantia Troop also foraged on Klein Constantia and Buitenverwachting, however rangers employed by Klein Constantia and Buitenverwachting attempted to keep the Constantia Troop off these respective wine farms as much as possible.

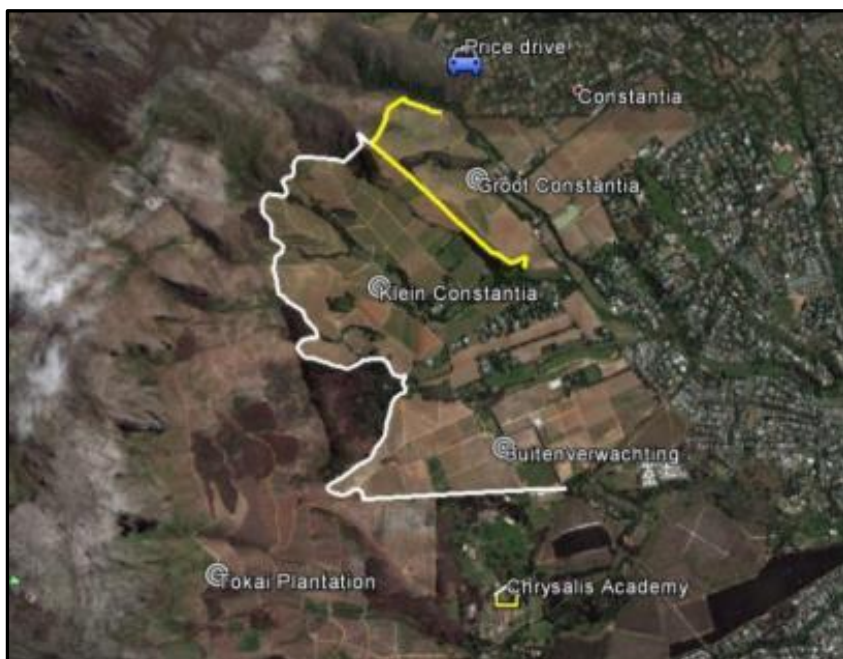


Figure 17: Electric fences surrounding Constantia Wine Farms. Yellow line demarcates the Groot Constantia fence that was completed in 2014, and white line demarcates the new fence surrounding Klein Constantia and Buitenverwachting that was completed in 2015.

At the end of 2014, the Constantia Troop had 10 adult males and at least four large sub-adult males. This created intense pressure on the females in the troop and led to a period of excessive fighting within the troop. At the beginning of 2015, the Constantia Troop was showing signs of splitting, but HWS rangers were working hard to keep them together.

In March 2015, the fires became the catalyst for a troop split. No deaths or injuries were reported in the Constantia Troop as a result of the fire. The natural vegetation above the wine farms was burnt, however the vineyards were mostly unscathed. During the fires, the Constantia Troop found refuge on the wine farms.

The Constantia Troop gradually split during the first six months of 2015, until they eventually became two separate troops, CT1 and CT2. CT1 was the largest of the split comprising approximately 45 individuals, while the CT2 troop contained approximately 25 individuals. These two troops settled into situation similar to that of the Tokai and Zwaanswyk troops. They were distinctive troops, with separate sleep sites, but were often found foraging and moving together during the day. CT1 occupied the more northern side of Vlakkenberg and extended their range up the mountain, into the plateau between Vlakkenberg and Constantiaberg.



Figure 18: New growth in the saddle between Vlakkenberg and Constantiaberg.

CT2 ranged mainly above Buitenverwachting and around the bike trails. This troop was kept off the wine farms by the farm rangers, and were kept away from the urban edge as they were sandwiched between other troops. As such, CT2 was not regularly seen and was not actively managed by HWS rangers unless they approached the urban edge.

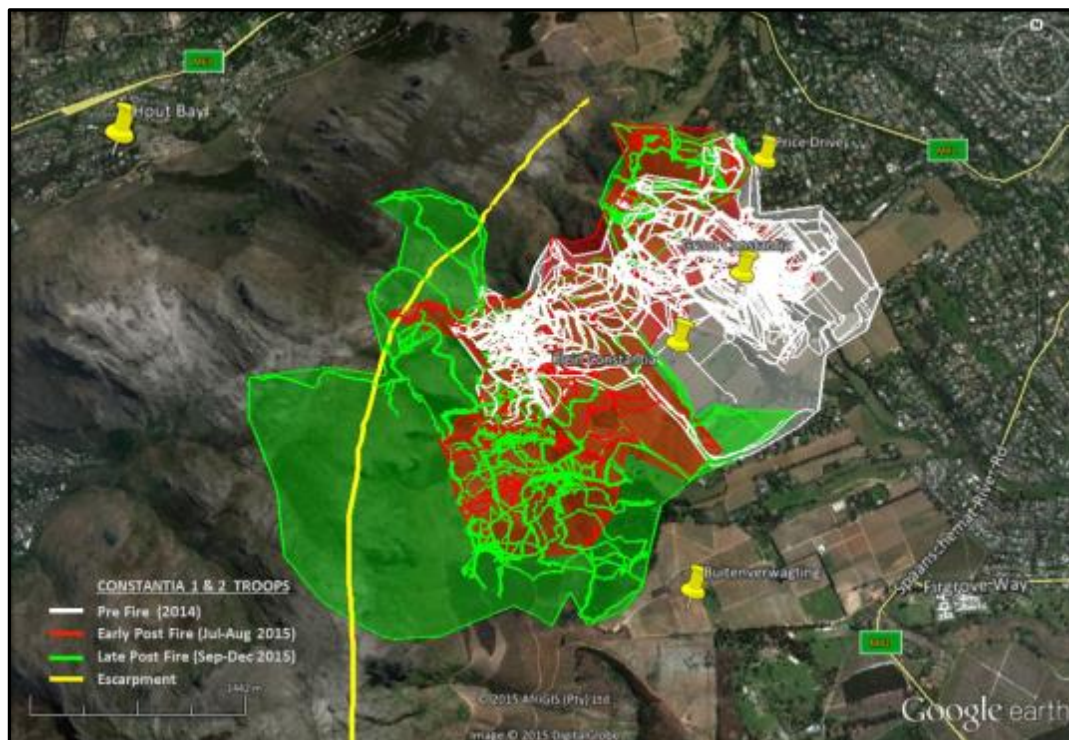


Figure 19: Post-fire home range shifts of Constantia (CT1 and CT2) Troops.

Buitenverwachting and Klein Constantia have been struggling to keep the Constantia and Mountain troops off their farm throughout the year. In order to prevent massive crop losses throughout the summer (grape) season, these farms erected an electric fence to keep the baboons out. This fence was completed in late December 2015. The efficacy of the new fence will be determined in 2016.

Finally, there were three male dispersal events in 2015 from the Constantia Troop:

- TK16 moved from the CT1 Troop to the Tokai Troop in May 2015. TK16 asserted his dominance over the Tokai males and quickly took over as alpha.
- TK15, an old adult male, left the troop in August 2015 and remained in the urban area in Constantia for two days until captured. Upon inspection it was found TK15 was unwell, with what seemed to be an internal head injury. He was classed as a displaced male (as oppose to dispersing) because he was pushed out of the troop by other males, rather than leaving to find a new troop. It was not possible to return TK15 to the Constantia Troop given his injury and age, hence he was euthanized as a welfare case.
- TK19 left the troop in September 2015, and was captured in Bergvliet the day after leaving. TK19 was translocated to Waterfall. Refer to the South East Section 1 for further details of this translocation.

The combination of the troop split and the dispersing males, released much of the pressure that was mounting within the Constantia Troop. The two troops seem to have settled well in the second half of 2015 however, it remains to be seen how the complete exclusion of the wine farms will impact the Constantia Troops in 2016.

4. Mountain Troop

The Mountain Troop was named as such initially because they spent the majority of their time up the mountain, and were seen very rarely. Unfortunately, in the last year this changed dramatically.

In previous years, this troop was not actively followed by rangers, because they were sandwiched between the other troops, and could not commit any urban raiding. During 2015, several factors contributed to the Mountain Troop becoming a more prominent troop, requiring more permanent management through 2015.

During the March 2015 fires, the majority of the Mountain Troop's home range was burnt. A small pocket of lush vegetation remained however, at Veels-te-ver Woods, which is between Buitenverwachting and Tokai Plantation. This section sustained the Mountain Troop for the first critical weeks after the fire.

In the following months, while the Tokai, Zwaanswyk and Constantia troops were extending their home ranges upwards into the mountains, the Mountain Troop extended their home range across and down into Tokai Plantation. Additionally, the Mountain Troop pushed to spend more time on Buitenverwachting to forage on the farm after the fire.

The Buitenverwachting rangers pushed the troop out the farm on a daily basis, and into Tokai Plantation. As such, the Mountain Troop were seen in the lower levels of Tokai Plantation several times, and even ventured as low as Chrysalis Academy on a few occasions. Since November 2015, was one ranger constantly monitoring the Mountain Troop to ensure they do not go low enough to start raiding around the lower sections of Tokai Plantation.



Figure 20: Post fire home range shifts of the Mountain Troop.

One factor which further influenced the Mountain Troop's movements was TK41. TK41, an adult male from the Tokai Troop, joined the Mountain Troop in July 2015 as a beta male. TK41 was familiar with Tokai Plantation, which may well have influenced his new troop movements. TK41 was likely responsible for pulling the troop down the mountain to Porter Estate, as he was aware of the fruitful raiding opportunities in this area. The combination of TK41's influence, the Buitenverwachting Rangers pushing the troop to Tokai Plantation, and the innate need to extend their home range after the fire, ultimately caused the Mountain Troop to use the lower lying sections of Tokai Plantation much more frequently during 2015.

Surprisingly, TK41 dispersed from the Mountain Troop in November 2015. He was translocated to Plateau Road in the hopes that he might join that troop, but showed no interest in doing so in the week following translocation. TK41 was then returned to the North, but again showed no indication of re-joining any northern troops. Instead he spent the next three days moving through the urban fringe of Nova Constantia. Despite concerted effort by HWS rangers, TK41 would not move up the mountain to re-join any of the Northern troops. Due to his dispersal, as well as raiding history, TK41 was euthanized following WAAC approval in November 2015.

Births and Deaths

Tokai: 19 deaths and 11 births

Zwaanswyk: 6 deaths and 8 births

Mountain Troop: 1 birth and 1 death

Constantia troops: 14 births and 5 deaths

Recommendations

- **Chrysalis Academy** created an ongoing problem throughout the year. The staff and students at the Academy need to be constantly vigilant about baboons, and responsible with their waste. Chrysalis Academy has all the relevant systems in place to prevent most raids; (burglar bars, locks on doors, waste skips and baboon-proof bins) however the students and staff need to use these facilities correctly in order to prevent raids.
- **Constantia Wine Farms** should ensure that their fences are baboon-proof if they are to rely on this in future. Trees that overhang the fence should be cut back, and any weak points modified to prevent baboon access. Additionally, the fence should be monitored regularly for weak points.
- **Buitenverwachting rangers** should only move the Mountain Troop off their farm in a westerly direction, (i.e. up the mountain) and not south (sideways) into Tokai Plantation.

C. GENERAL COMMENTS ON ALL BABOON TROOPS

Population Data

Since HWS took over baboon management on the peninsula in August 2012, the two managed subpopulations have shown very different growth patterns. The population in the south declined initially, but since then has remained relatively stable. At present the southern sub-population is still ten less than that of December 2012. By Contrast, until March 2015, the northern sub-population had been steadily growing at about 10% per annum. Thirteen baboons died in the fire in Tokai in March. Since then the Tokai Troop has hardly changed, but the northern population as a whole has already recovered (Table 1).

TROOP	Total Dec 2012	Total Dec 2013	Total Dec 2014	Total Births 2015	Total Deaths 2015	Emigration/ Immigration 2015	TOTAL CURRENT POPULATION
Da Gama Troop	54	45	43	10	6	+2	49
Smitswinkel Bay	23	21	22	3	1	-1	23
Waterfall	28	30	30	5	5	+2	32
Groot Olifantsbos	19	13	17	0	2	+1	16
Misty Cliffs	18	16	14	6	8	-1	11
Slangkop	33	32	36	7	2		41
SUB TOTAL	175	157	162	31	24	3	172
Zwaanswyk	25	26	28	8	6		30
Tokai	61	65	72	11	19	-2	62
Mountain	33	44	48	1	1	+1	49
Constantia 1 & 2	60	63	70	14	5	-2	77
SUB TOTAL	179	198	218	34	31	-3	218
TOTAL	354	355	380	65	55	0	390

Table 1: Population data for the eleven managed troops on the Cape Peninsula.

Table 2 below shows the breakdown of the causes of baboon deaths since 2012. All recorded baboons deaths have been summarised into three categories: (i) Management – baboons euthanased for management reasons according to the WAAC raiding protocol; (ii) Human Induced deaths are divided into two categories; (a) Direct – baboons killed by dogs, car accidents, poisoning, shooting etc.; (b) Indirect – electrocutions, human related fires. These categories also includes baboons seriously wounded by the above causes, then humanely euthanased; (iii) Natural – baboons dying from old age, fights, infanticide etc.; (iv) Unknown – occasionally a baboon is found dead and the cause could not be determined.

Deaths	2012*	2013	2014	2015	TOTAL
Management	17	16	8	7	48
Human Induced	8	7	10	24	49
Direct	8	6	6	8	28
Indirect	0	1	4	16	21
Natural	7	30	19	20	76
Unknown	1	3	0	4	8
TOTAL	33	56	37	55	181

Table 2: Causes of baboon deaths since 2012. (* Data collected during the first half of 2012 provided by Baboon Research Unit, UCT).

The most notable point evident from this table, is the marked decline in the number of management deaths in 2014 and 2015 (seven each year), which were just under half those of the previous two years. Baboon management in Cape Town has now reached the stage where most of the alpha males are good

parents that devote most of their time towards looking after their troops and spend very little time raiding. Thus most baboons that are now euthanased under the WAAC raiding protocol are either old or young adult males that have reverted to a lifestyle which they remember from the past. It is a prime objective of HWS to prevent juvenile baboons from learning the raiding lifestyle while growing up, so that they do not attempt to revert to it when they reach puberty or become emigrant males.

If one considers this feature, in combination with the fact that baboons raids have steadily declined, both in terms of number and intensity (see Hotline report below), this is very positive because it means that the current management strategy using aversive conditioning in combination with selective euthanasia is highly effective. Baboons are raiding less, and fewer baboons are needing to be euthanased because of excessive raiding behaviour.

Hotline Data for 2015

An overall view of hotline calls over the past three years, reveals some very interesting trends. The most obvious feature of Figure 21, is that Scarborough (Misty Cliffs Troop) stands out as having made at least two to three times more hotline calls than any other suburb of Cape Town.

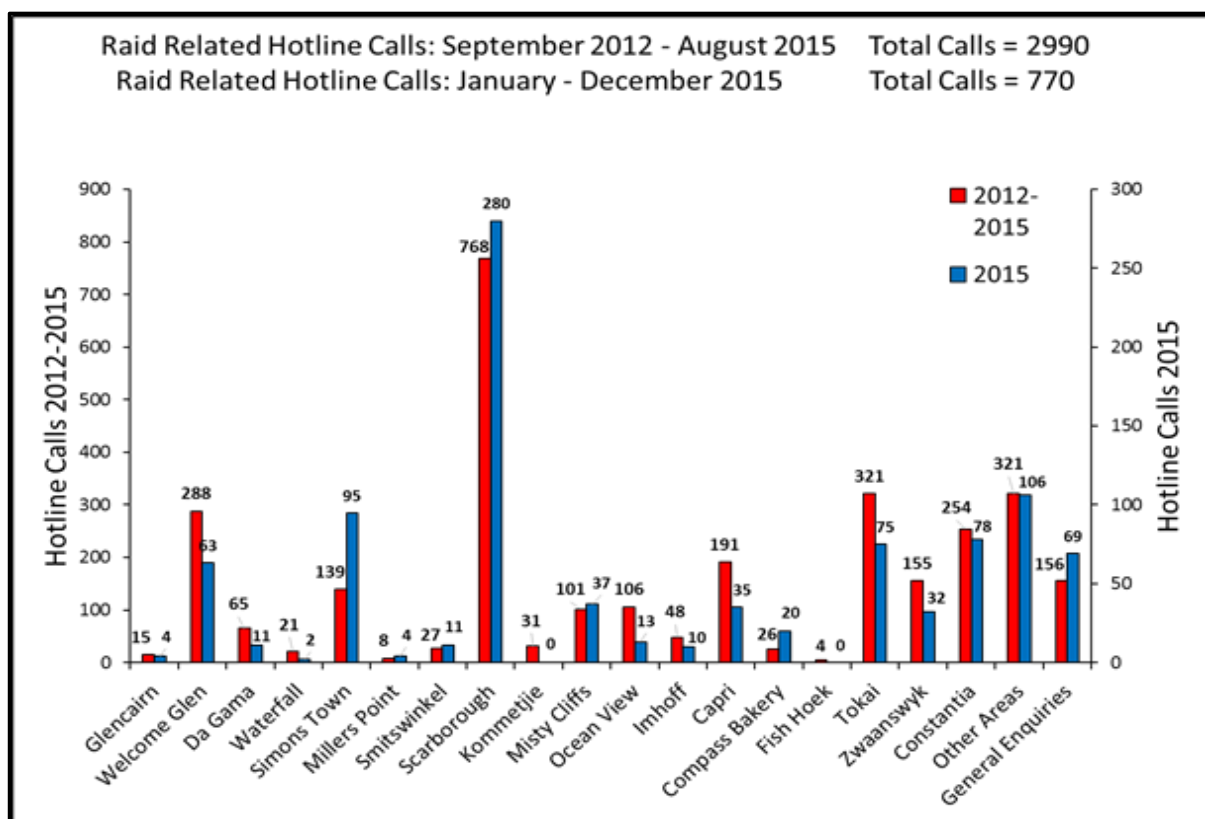


Figure 21: Composition of raid-related hotline calls from September 2012 to August 2015.

The summary of hotline call raids in Figure 22 shows that there has been a significant decline in raids reported over the past three years. This trend is evident for both bin raids and assertive raids, although

the trend is most obvious for assertive raids. Here assertive raids are defined as raids where baboons either entered a residence (whether occupied or not), directly confronted a human, had a fight with a pet, or did damage to property on purpose in order to gain access.

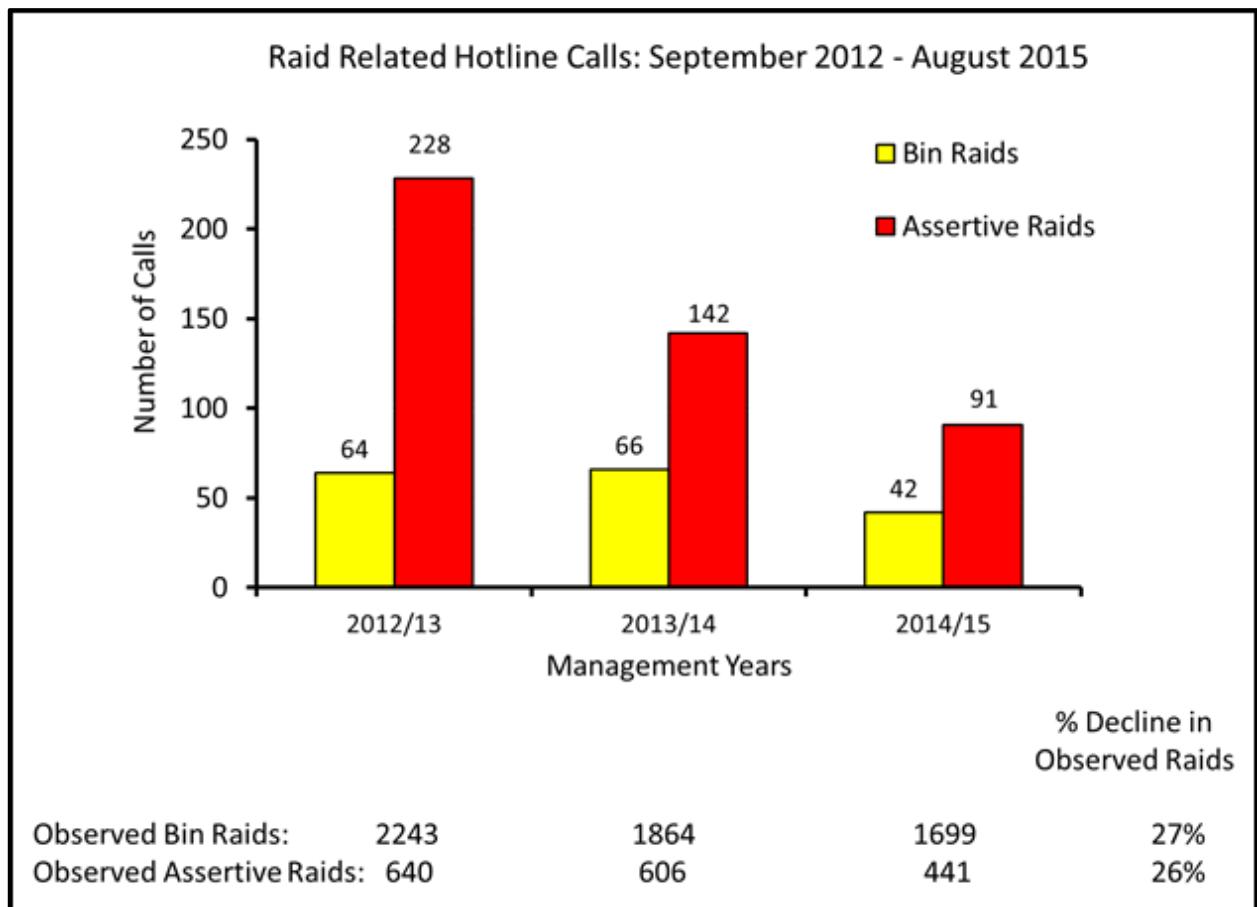


Figure 22: Hotline calls broken down by raid type from September 2012 to August 2015.

In order to measure the reliability of hotline calls, all raiding data are presented in Table 3. It is evident from this table that assertive raids are reported much more frequently (average 28%) than bin raids (average 3%). This bias is understandable because people are much more likely to report a raid that directly affects them, than just observing baboons raiding a bin outside. Similarly, assertive raids are also much more likely to be witnessed by the public than bin raids, which could easily go unnoticed.

Despite these biases, it is pertinent to note that the trends remain very similar from year to year, and therefore convey a high degree of reliability to the hotline data in terms of accurately reflecting the raiding behaviour of the baboons observed by rangers in the field. Both troops and individuals raided (assertive and bin) a quarter to a third less during the third year of HWS management than they did in the first. This again is promising confirmation of the efficacy of the current management strategy.

Troops	2012/13	2013/14	2014/15	% Decrease in Raids:
Observed Bin Raids	269	193	200	26%
Observed Assertive Raids	14	16	10	29%
Individuals	2012/13	2013/14	2014/15	% Decrease in Raids:
Observed Bin Raids	1974	1671	1499	24%
Observed Assertive Raids	640	590	431	33%
Troops and Individuals	Percentage of Raids Reported:			
	2012/13	2013/14	2014/15	Total
Bin Raid related hotline calls	64	66	42	172
Percentage Bin Raids Reported	2.7%	3.7%	2.6%	3%
Assertive Raid Related Hotline Calls	228	142	91	461
Assertive Raids Reported	35%	22.6%	22.7%	28%

Table 3: Frequencies of bin raids and assertive raids reported in hotline calls, and observed in the field during the first three years of HWS management. Declines in raids from year 1 to year 3 are presented as percentages of the first year's data.

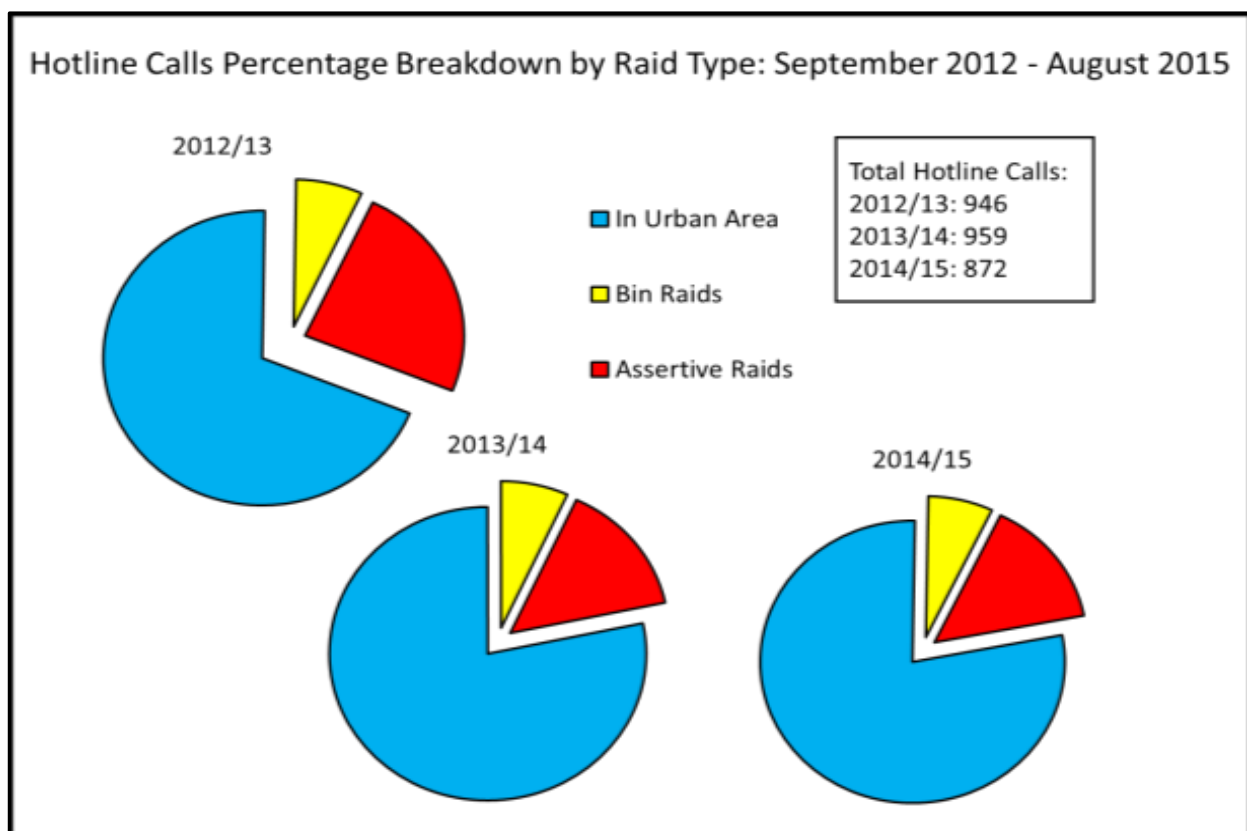


Figure 23: Hotline calls percentage breakdown by raid type from September 2012 to August 2015.

In Figure 23, the frequency of the three broad categories of raids reported on hotline calls are illustrated for the past three management years. The data for 2013/14 and 2014/15 are almost identical, however the data for 2012/13 are very different. In this first year of HWS management the number of calls reporting urban raids was much lower, while assertive raid calls were much greater and represented approximately 25% of all raid-related calls.

A more detailed breakdown of hotline raid calls made in the calendar year of 2015 is given in Figure 24. As in previous years, assertive raids remain the second highest category after urban raids. Nevertheless, it is still pleasing to see that over 83% of raids reported were simply reporting baboons in town. Also the total number of raid related calls made in the 2015 year (770) was approximately 20% less than that for the first two years of HWS management.

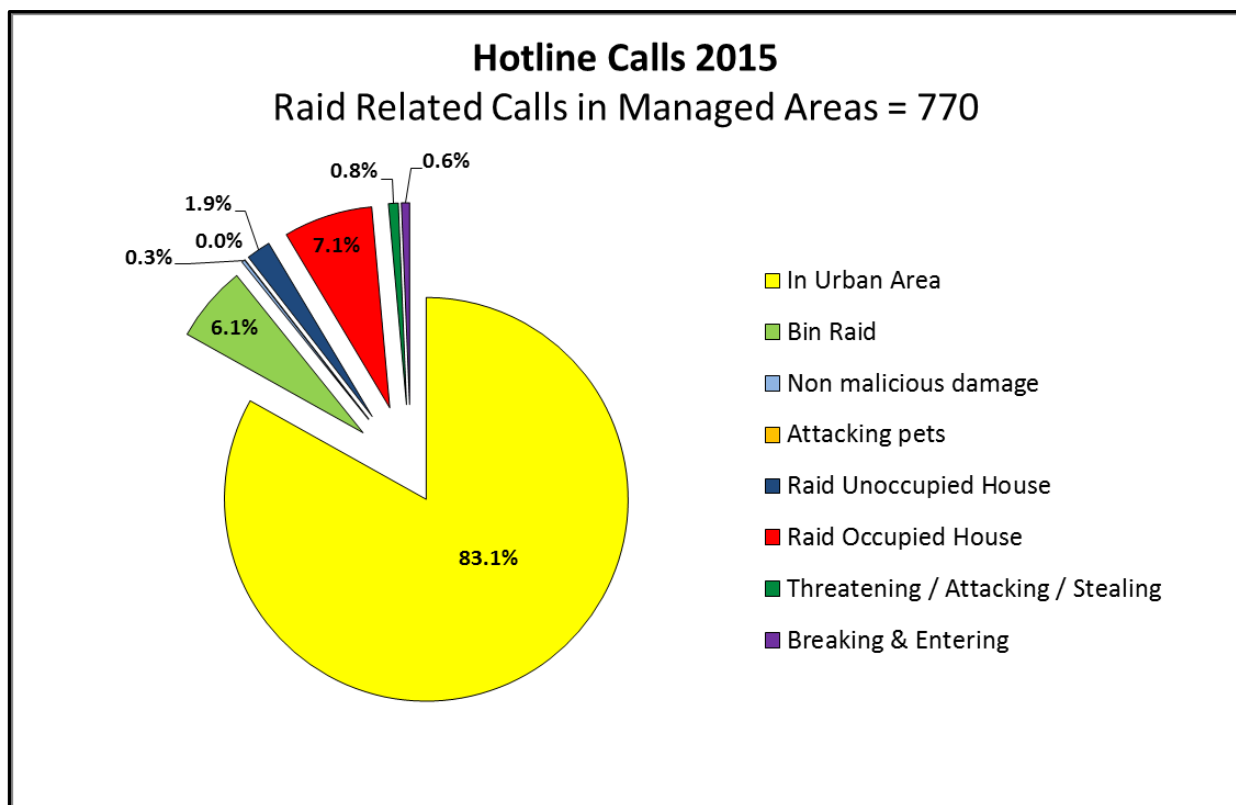


Figure 24: Composition of raid-related hotline calls.

Percentage Time out of Town

The average monthly, percentage time troops spent out of town over the first three management years is illustrated in Figure 25. This graph shows a very clear tendency towards the baboon troops spending much more time out of town in the summer months and more time in town during the winter months. During winter it is cold and there is less food available for baboons, so they naturally come down the mountain to the lower lying areas which are warmer and more protected from the wind and rain. The lower lying areas are also more productive and provide greater access to human derived foods (farms

and houses), so naturally the baboons come into conflict with humans more, and are more prepared to risk confrontation to gain access to more energy rich food.

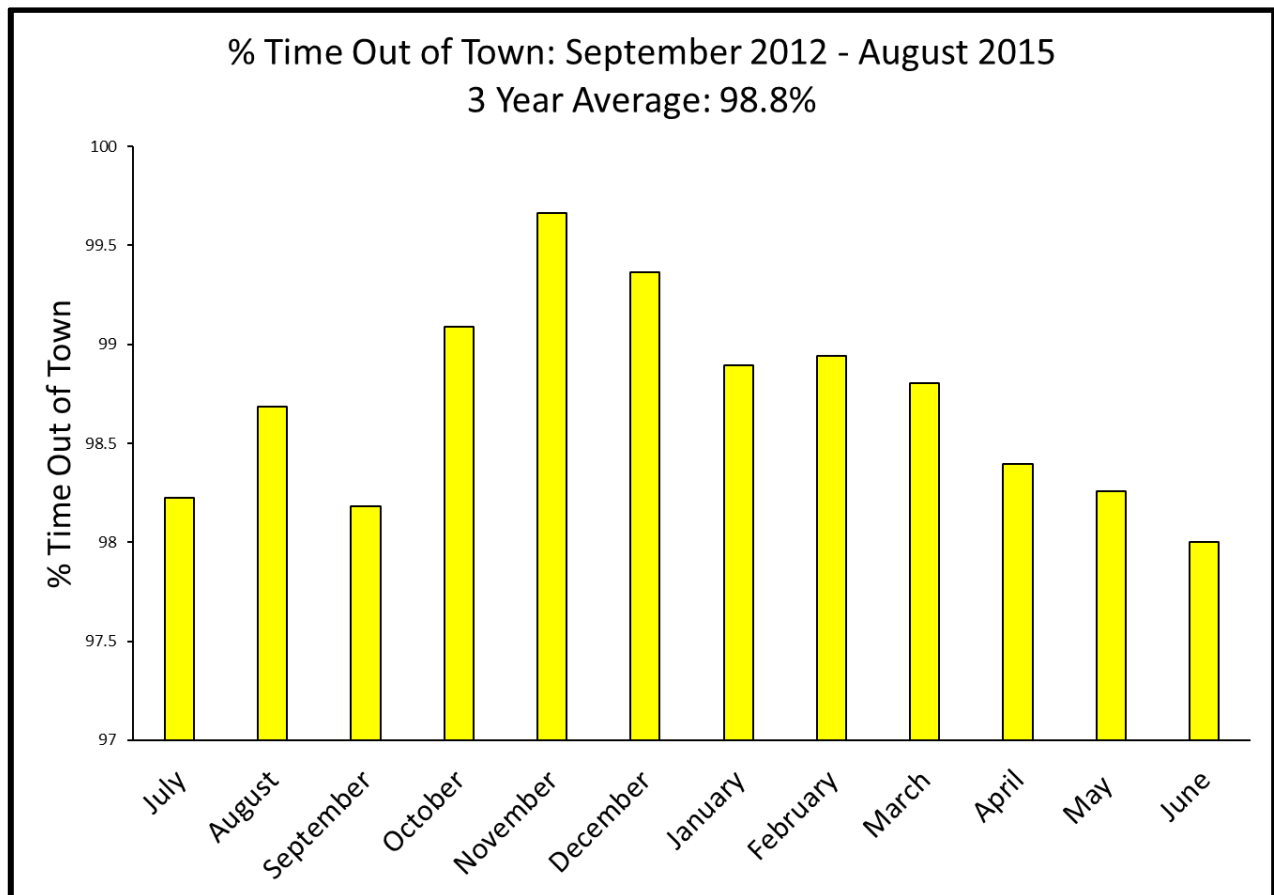


Figure 25: Average Troop time out of town from August 2012 to July 2015.

The overall percentages time the different troops spent out of town over the first three years of HWS management are presented in Figure 26. There are three basic trends evident in these data:

- i) Troops where both the troop and most individuals spent close to 100% of their time outside the urban area. These troops were the Mountain, Zwaanswyk, GOB, Slangkop and Smitswinkel Troops;
- ii) Troops which were similar to those above, except individuals in these troops spent significant amounts of time in town. Definitely the worst of these troops was Da Gama, but this grouping also includes Waterfall, Tokai and Constantia;
- iii) Troops where both the troop and individuals spent significant amounts of time in town. The Misty Cliffs Troop was the only one in this category.

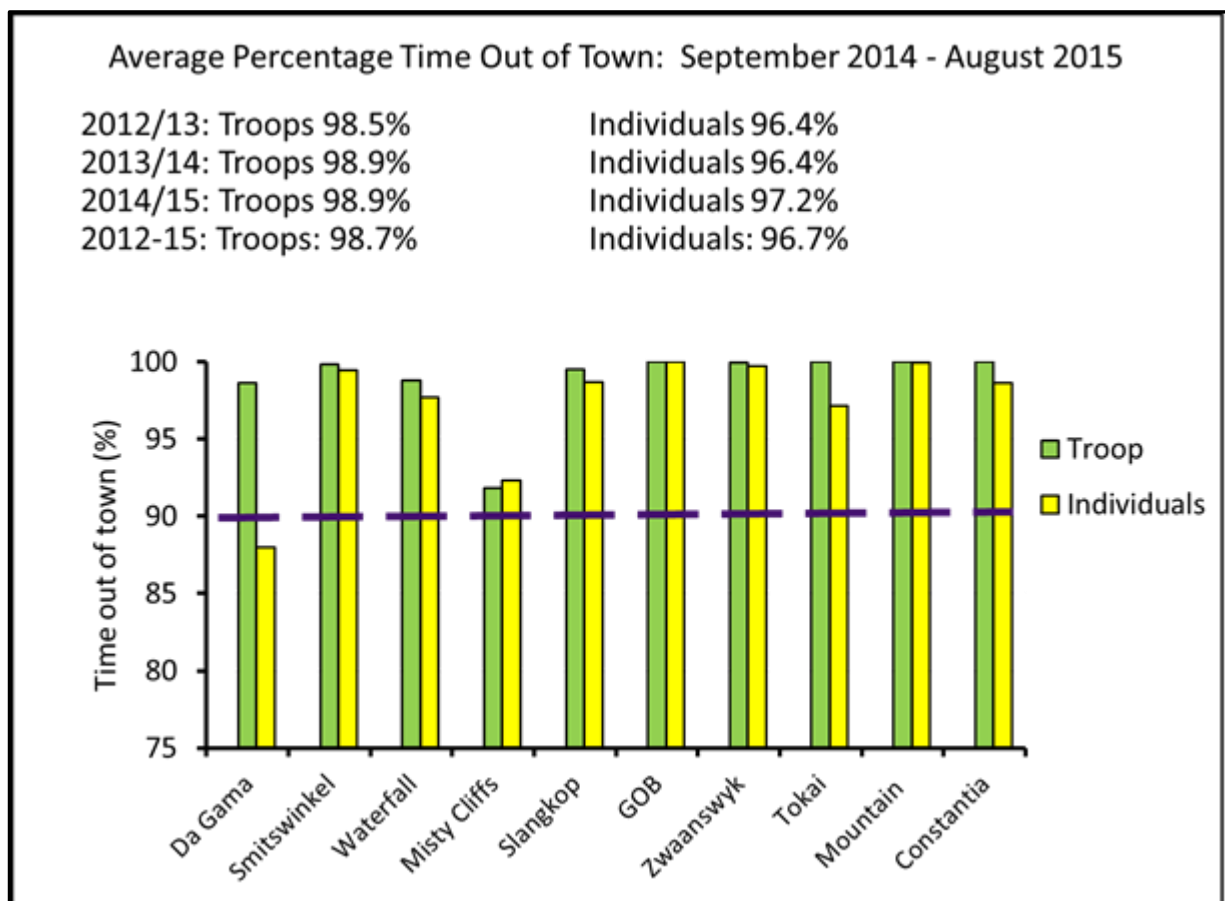


Figure 26: Percentage time troops spent out of town, broken line indicates the CoCT's 2014 contract requirement.

In order to add a different perspective to the time out of town data, in Figure 27, these data are presented the opposite way round, showing troops time IN town instead. When showing annual time in town against a scale of 100%, one can see that the time is barely visible on this scale. Furthermore, if one compares the data for 2012/13 with that of 2014/15, the time in town for troops decreased by 27%. Similarly, time in town for individuals decreased by 26%.

HWS can therefore say that throughout its contract periods, it has fully complied with, and consistently far exceeded, the 90% time requirement that baboons must be kept out of town. In fact, over the past 18 months, HWS has regularly suggested that if the baboon problem in Cape Town is ever going to let up and the baboons become fully rehabilitated, then the baboon troops will need to be kept out of town for an average of at least 95% of the time, and one should aim at 99%.

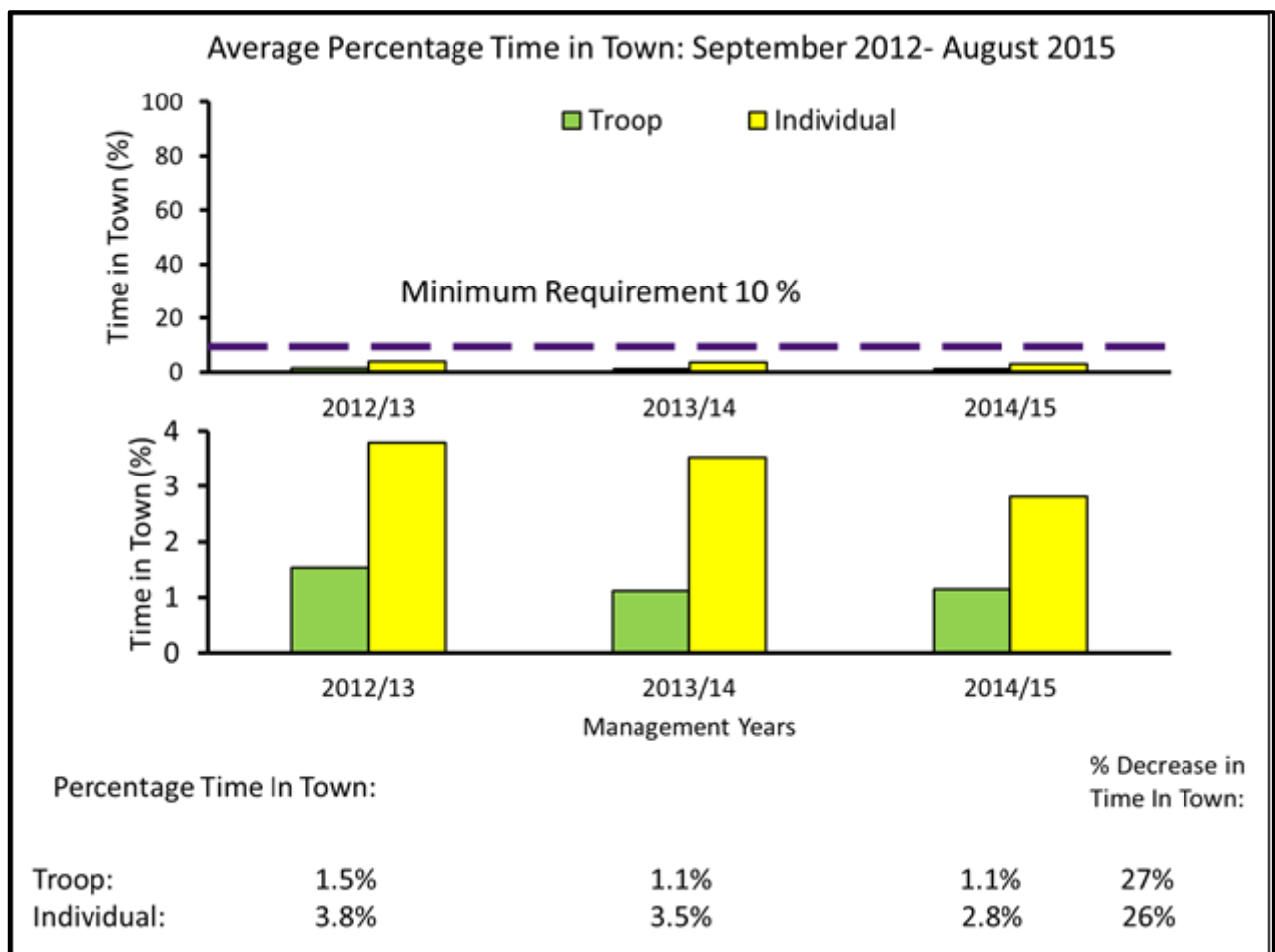


Figure 27: Percentage time troops spent in town, broken line indicates the 10% City threshold.

The annual data for the numbers of baboon's euthanased for management reasons per troop are presented in Table 4. It is clear from this table, that the Misty Cliffs Troop had by far the highest number of management euthanasias relative to its original population size. It is also the troop with by far the greatest number of hotline calls and which spent the most time in town.

It must be noted however, that this is not a never ending process, because several troops showed remarkable transformations after their worst offenders were euthanased. When HWS started managing the Cape Town baboons in August 2012, the Smitswinkel Troop was considered to be one of the worst raiding troops. However, after two of the worst raiders died, one euthanased with WAAC approval, and the other dying under anaesthetic while changing his collar, raiding in this troop came to an abrupt end. Since then, this troop has become one of the best behaved on the peninsula.

Similarly, early in 2012, the GOB Troop was resident in Scarborough and was the focus of extensive media attention because of the high level of conflict between humans and baboons there. Just prior to August when HWS took over baboon management, the alpha male and alpha female were caught and

euthanased. The alpha male was immediately replaced by a wild male from the Klein Olifantsbos Troop. He took the troop back into the CoGH Reserve and they have not slept in town as a troop since then.

The same principle applies to the Zwaanswyk and Tokai troops which spent huge amounts of time in Zwaanswyk and the surrounding areas of Tokai in 2011 and the first half of 2012. The erection of the Zwaanswyk fence kept these troops out of Zwaanswyk, but for the rest of 2012 individuals still raided Tokai, Lister's Tea Garden, Chrysalis, the Tokai Picnic Site and the Cape Academy on a regular basis. The euthanasia of the worst of the raiding individuals during 2012 and 2013 has resulted in these two troops becoming relatively well behaved and spending virtually no time in town.

Troop	Dec 2012 Troop Size	2012	2013	2014	2015	Total	% Euthanized, relative to original troop size
Da Gama	54	2	4	3	1	10	18.5
Smitswinkel Bay	23	1	0	0	0	1	4.3
Waterfall	28	0	1	0	3	4	14.3
GOB	19	2	1	0	0	3	15.8
Misty Cliffs	18	0	3	2	2	7	38.9
Slangkop	33	1	3	0	0	4	12.1
Zwaanswyk	25	4	2	1	0	7	28.0
Tokai	61	4	1	2	0	7	11.5
Mountain	33	0	0	0	1	1	3.0
Constantia	60	3	1	0	0	4	6.7
Total	354	17	16	8	7	48	13.6

Table 4: Troop numbers of WAAC approved protocol deaths from 2012 – 2015.

Conclusion

When HWS took over baboon management for the City of Cape Town in August 2012, troops living in town and whole troops aggressively raiding occupied houses was a common occurrence in several areas. The introduction of the use of paintball markers and having vehicle supported rapid response teams, soon had a major impact in reducing devastating troop raids to an uncommon occurrence. By the end of 2012, troops breaking into houses and literally destroying all food and considerable property inside had become a thing of the past.

From the first year (2012/13) to the third year (2014/15) of baboon management by HWS, there was a consistent decrease, of between a quarter to a third, for all categories of raids, hotline calls and time spent in town by troops or individuals. This success can largely be attributed to the use of aversive tools

like paintball markers and bearbangers, and highly mobile teams that can respond quickly to incursions by baboons. Another contributing factor was that it had become evident that if one was going to limit raiding behaviour, one needed to remove the leader of the raid, who was also training up a whole new cohort of future raiders. During 2012 and 2013, 33 baboons were euthanased under the WAAC raiding protocol. During the following two years it became necessary to euthanase less than half this number of baboons (15 during 2014 – 2015).

Over the same time period all types of raids decreased by 24 – 37%. All these data are regarded as providing very good proof of concept for the management strategy currently employed by the City of Cape Town.

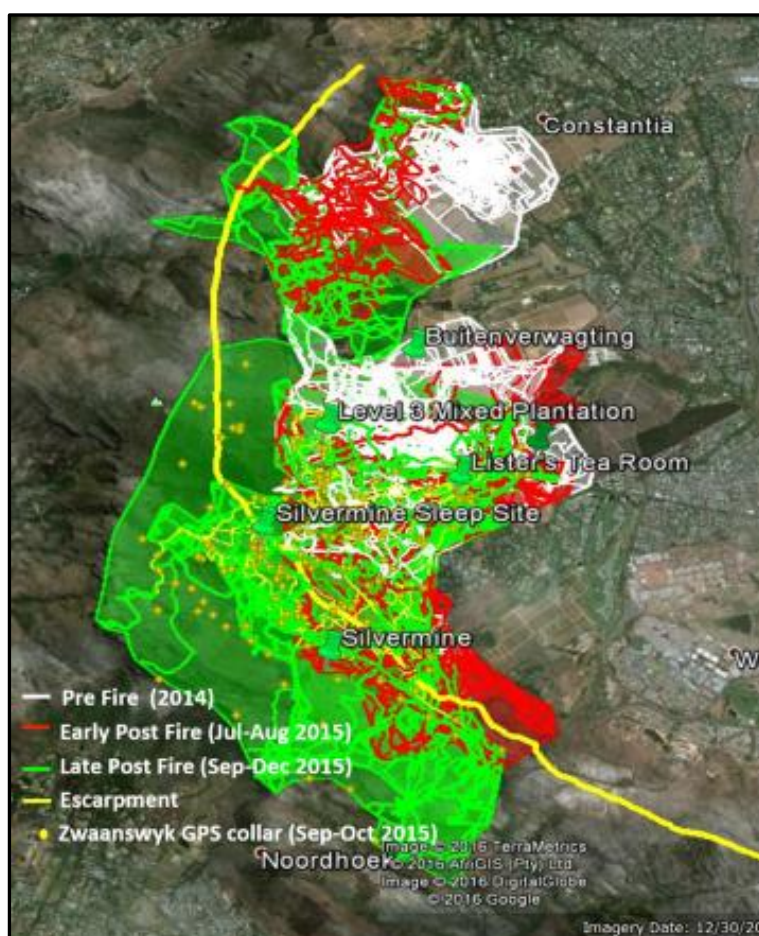


Figure 28: Post-fire home range shifts of all the northern baboon troops on the Cape Peninsula.

The Cape Fires in March 2015 had a profound effect on all the northern baboons, affecting troop numbers as well as home ranges. The Constantia Troop split through a natural fission, and all northern troops underwent major shifts in their movement patterns. These range shifts are evident in Figure 28. The main feature here, is that all the troops showed a major movement up the mountain, particularly when spring arrived in September 2015. This movement is understandable considering that the pine plantations were being removed at a rapid rate, and that fynbos after a fire is particularly nutritious.

Thus the baboons were experiencing a loss of food lower down the mountain, and a sudden abundance of highly nutritious food higher up the mountain. At this stage it is difficult to predict what will happen in the winter of 2016, when baboons generally come down off the mountain to be less exposed to the cold and rain.

Dr Phil Richardson

Human Wildlife Solutions