



THE CAPE PENINSULA BABOON MANAGEMENT JOINT TASK TEAM

CAPE PENINSULA BABOON MANAGEMENT ACTION PLAN 2025

***Implementing the Tools of the
Cape Peninsula Baboon Strategic Management Plan
(CPBSMP) 2023/24 to 2033/34***

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CAPE PENINSULA BABOON MANGEMENT ACTION PLAN 2025

IMPLEMENTING THE TOOLS OF THE CAPE PENINSULA BABOON STRATEGIC MANAGEMENT PLAN (CPBSMP) 2023/24 TO 2033/24

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APPROVED FOR THE CAPE PENINSULA BABOON MANAGEMENT JOINT TASK TEAM

	CapeNature	SANParks	City of Cape Town
Signed by			
Signature			
Date			

EXECUTIVE SUMMARY

Baboon management in the Cape Peninsula is a complex and unique challenge that has to consider the wellbeing of both baboons and people within an urban context and the wider social, economic and environmental challenges of having a national park adjacent to the City of Cape Town. Baboons and people are natural competitors, both showing a preference for low-lying more productive land on the Peninsula. Spatial overlap of baboons and humans has been shown to have negative consequences for both species which, in 2000, led to the implementation of a trial management programme to reduce human-baboon conflict, primarily through the use of monitors, baboon-proof bins and education. The program has gradually evolved into a permanent baboon management program becoming better resourced and including an ever-increasing array of non-lethal and lethal management interventions to reduce negative interactions between baboons and humans. The baboon population has increased from ~360 baboons living in 10 troops in 2000 to over ~600 in 17 troops in 2024. This near doubling in baboon numbers has greatly increased the annual costs of mitigating human-baboon conflicts. Disagreement amongst the three conservation authorities about mandates and budgets, combined with legal challenges by animal rights groups, resulted in failures to act decisively and effectively for the betterment of baboons and residents in Cape Town. We are currently in a situation where management costs are unsustainable, baboon welfare has worsened, there is an increasingly negative public perception of baboons and there has been a marked increase in conflict amongst community members living in baboon affected areas. This conflict is associated with divergent opinions on how best to limit baboon damage to property and the negative lifestyle impacts and safety risks for the public when baboons frequent urban areas, in addition to the increase in the injuries and death of baboons in urban areas.

With the historical goal of achieving a sustainable baboon population, a steady increase in baboon numbers was considered a management success. However, numbers have exceeded the predicted capacity of the Peninsula according to two earlier studies and baboons with limited access to preferred low-lying natural land are pushing harder into urban areas to search for food. The more time baboons spend in urban areas, the lower their welfare and conservation status and the higher the damage to resident property and livelihoods. Management has also been hindered by uncertainty in the mandates of the different authorities, legal challenges by animal rights groups over non-lethal and lethal management methods, declining per capita baboon resources and, in some instances, the avoidance of difficult decision-making specifically as it relates to the emotive issue of lethal management. While understandable that any decision maker may want to avoid a difficult decision of this nature, a failure to take decisive action has resulted in escalating welfare harms to baboons and more damage to property and the well-being of people, respectively. Halting and reversing these trends was the impetus for this Baboon Management Action Plan (hereafter referred to as the Action Plan), which can be described as the committed implementation of an appropriate management approach to the population. The Action Plan includes the recommendation to remove four highly habituated baboon troops that frequent urban environments and which respond poorly to acceptable non-lethal deterrents that can be sustainably implemented within reasonable time frames. Here removal refers to the capture and relocation of whole troops either to their former home range or to a purpose-built trial

enclosure¹. Movement back to their current ranging areas will be prevented using baboon-proof fencing constructed along the urban and rural edge or in the form of an enclosure. Only if these efforts fail to prevent overlap with urban and rural land uses will humane euthanasia be considered as the last resort. Allowing these troops, all of which formed as small fissions from managed troops, to persist living in marginal pockets of natural habitat with daily incursions into urban and farming areas, will lead to ongoing poor welfare and conservation outcomes for baboons and routine damage to property and loss of quality of life for affected people.

The current circumstances, combined with communities and stakeholders that hold a very wide range of conflicting values regarding baboon welfare and conservation, has resulted in what is best described as a “wicked problem” with no single outcome that can satisfy all parties. For this reason, the preparation of this Action Plan has been centred on “what is best for the Peninsula baboon population is also best for people”. This Action Plan describes a range of actions that if implemented will result in a healthy, well-managed, sustainable, free-ranging Peninsula baboon population with minimal human conflict and a focussed reduction on day-to-day aversive measures through securing baboon habitat and not permitting troops to live in marginal areas.

All management interventions have been considered and those management measures that have been deemed unsuitable or unviable, but which often form part of the public and media narrative are discussed in Appendix H. Critically it must be acknowledged that once the Action Plan implementation has been completed, ongoing management by the authorities must be sustained to ensure that the current untenable situation never occurs again. This Action Plan will be regularly reviewed to ensure that the actions, assessments, and outcomes are in line with regulatory requirements, strategic direction, emerging trends and new knowledge. In that regard, the Action Plan and its implementation will undergo a formal review in 2030.

Box 1. Critical distinction

The Peninsula baboon population has to be managed as part of Cape Town, a very complex urban environment. The city cannot be managed exclusively around or for baboons.

¹ The purpose-built trial enclosure will be part of a pilot study investigating the feasibility of a baboon sanctuary located on the peninsula (refer to Section 6.7.1)

CONTENTS

DOCUMENT DETAILS	2
EXECUTIVE SUMMARY	3
Contents	5
Tables and Figures	6
Abbreviations	6
1 Introduction	7
1.1 Background	7
1.2 Action Plan Development	7
1.3 Objectives of the Action Plan	8
1.3 Scope of the document	8
1.4 Structure of the document	8
2 Background and history	10
3 Current state of the baboon troops	12
4 Proposed management principles	14
4.1 A clear and transparent adaptive management approach.....	14
4.2 Moving from crisis management to sustainability, accountability and committed implementation.....	14
4.3 Ethical Assessment Management Actions.....	15
4.4 Summary of the Core Principles that informed the Action Plan	23
5 Defining available habitat and sustainable population levels	24
5.1 Defining available baboon habitat on the Peninsula.....	24
5.2 Transformed (urban) vs untransformed (natural) spaces	25
5.3 Public Tolerance	27
5.4 Baboon Waste Management Strategy.....	28
5.5 Managing baboon population numbers at sustainable levels	29
6 Management Measures to be implemented	30
6.1 Fencing	30
6.2 Managing Upper Population Limits and Fence Breakouts	34
6.3 Development and implementation of the Urban Wildlife Management Bylaw	34
6.4 Improved baboon population welfare and care	35
6.5 Updated Baboon Management Guidelines.....	35
6.6 No new troops will be allowed to establish in transformed areas	36
6.7 Removal of troops	36
7 Management of the remaining Troops	40
7.1 Northern Troops	40

7.2	Southern Troops.....	41
7.3	Alternative management solutions considered by the JTT and found to be unviable or lacking efficacy.....	42
8	Areas of Research	43
8.1	Birth control as a management tool.....	43
8.2	Annual independent population count.....	43
8.3	Genetic Enrichment of the Peninsula Baboon population.....	43
9	Timeframes and Schedule of the Implementation of the Action Plan	43
10	Review of this Action Plan	43
	References	44
	Appendices	46

Tables and Figures

Figure 1: Map of the location of the baboon troops outside of the Cape of Good Hope section of Table Mountain National Park and the extent of the estimated areas over which they have ranged in the previous decade, in both natural and urban landscapes.....	13
Figure 2: Map showing existing low-lying habitat (green) and habitat less favoured for foraging (orange).....	25
Figure 3: Proposed fence line running from Steenberg to Silvermist (refer to Appendix I).....	31
Figure 4: Proposed fence between the western residential area of Capri and Table Mountain National Park.....	32
Figure 5: Proposed fence between Heron Park and Kommetjie Road.....	32
Figure 6: Proposed fence in Murdoch Valley.....	33
Figure 7: Estimated ranges of the northern troops.....	40
Figure 8: Estimated ranges of the southern troops.....	42

Abbreviations

DG	Da Gama Troop
CPBSMP	Cape Peninsula Baboon Strategic Management Plan
CT1	Constantia 1 Troop
CT2	Constantia 2 Troop
GOB	Groot Olifantsbos Troop
JTT	Joint Task Team
KEAG	Kommetjie Environmental Awareness Group
MT1	Mountain 1 Troop
MT2	Mountain 2 Troop
PR	Plateau Road Troop
SANParks	South African National Parks
SF	Seaforth Troop
SK	Slangkop Troop
SWB	Smitswinkel Bay Troop
TK	Tokai Troop
WF	Waterfall Troop
ZW	Zwaanswyk Troop

1 INTRODUCTION

1.1 Background

The Cape Peninsula Baboon Management Joint Task Team (JTT), comprising the three authorities: CapeNature, SANParks and the City of Cape Town, is responsible for developing and implementing a baboon management programme in the Cape Peninsula.

The JTT has compiled this Action Plan to detail the management actions to be implemented in respect of the Cape Peninsula chacma baboon population between November 2025 and November 2030, after which a formal review will take place. This document sets out defined management actions based on scientifically informed principles and an approved set of tools already detailed in the *Cape Peninsula Baboon Strategic Management Plan (CPBSMP) 2023/24 to 2033/34* (see Appendix A). The intention of this document is to set a transparent and open plan of action which is publicly available.

1.2 Action Plan Development

The process to finalise the Action Plan is briefly set out below.

- Draft Action Plan submitted and presented to the JTT (May 2025)
- Draft Action Plan presented to the Baboon Advisory Group (BAG) in May 2025
- External Expert Review Panel appointed (June 2025)
- Draft Action Plan reviewed by Expert Panel (July 2025)
- Written submission received and an Expert Review Panel Comments and Response Report prepared and submitted to the Expert Panel for record (attached as Appendix L)
- Draft Action Plan as well as the full Expert Review Panel Comments and Response Report submitted to the BAG for review and comment. This was also publicly accessible on the Cape Baboon Partnership website.
- All written submissions received from the BAG and public were recorded and documented in a Comments-Response Report attached as Appendix M.
- JTT reviewed the Action Plan and considered all submissions in preparing the final Action Plan (October 2025)
- November 2025 the three member organisations of the JTT signed and approved the final Action Plan (this document)

1.3 Objectives of the Action Plan

The main intended outcome of this Action Plan is the long-term conservation, health and welfare of the Peninsula Baboon population.

The key objective of the Action Plan is to work towards a well-managed population of baboons on the Peninsula that are healthy, as free ranging as possible and with as little human interference, overlap and conflict with urban spaces as can realistically be achieved.

Action Plan is based on the principle that what is best for the Peninsula baboon population is also best for people.

1.3 Scope of the document

This document is based on all available information including the **Agreement by the Parties on the Implementation of the Baboon Strategic Management Plan**, the **CPBSMP** which is an approved set of tools for the management of the Peninsula baboons as well as all submissions by the Expert Panel, BAG members and public submissions.

This document is intended to provide a concise overview of the recommended baboon management measures, the short rationale behind these measures, and an implementation strategy timeframe.

Action

Where appropriate, actions are assigned to management measures in a box like this.

1.4 Structure of the document

The document is structured as follows:

Chapter 1:	Introduction
Chapter 2:	Background and History
Chapter 3:	Current State of the Baboon Troops
Chapter 4:	Proposed Management Principles
Chapter 5:	Defining Available Habitat and Sustainable Population Levels
Chapter 6:	Management Measures to be Implemented
Chapter 7:	Management of the Remaining Troops
Chapter 8:	Areas of Research
Chapter 9:	Timeframes and Schedule of Implementation of the Action Plan
Chapter 10:	Review of this Action Plan

The informants to the Action Plan are appended to this document and listed overleaf:

Appendix A	Cape Peninsula Baboon Strategic Management Plan
Appendix B	Constantia 1 Troop Brief
Appendix C	Constantia 2 Troop Brief
Appendix D	Waterfall Troop Brief
Appendix E	Seaforth Troop Brief
Appendix F	Translocation as a Management Method
Appendix G	Sanctuaries as a Management Method
Appendix H	Unfeasible Management Methods
Appendix I	Fencing as a Management Method
Appendix J	Existing Guidelines
Appendix K	Decision Matrix and Tool
Appendix L	Expert Comments and Responses Report
Appendix M	BAG Comments and Responses Report
Appendix N	Proposed Implementation Schedule
Appendix O	Baboon Waste Management Strategy (to be added at a later stage)

2 BACKGROUND AND HISTORY

Cape chacma baboons (*Papio ursinus*) are believed to have inhabited the Cape Peninsula for over a million years (Skead, 1980). Conflict between humans and baboons can be traced back to the early European settlers (ca. 300 years ago) on the slopes of Table Mountain during the establishment of vegetable gardens and early agriculture (Gerber, 2004; Skead, 1980). In the last century, the baboon population has increasingly lost access to large proportions of their preferred low-lying ranging areas due to land transformation driven by agriculture and urbanisation on the Peninsula. As a result, the degree of spatial overlap and frequency of negative interactions between people and baboons has increased.

In the early 2000s, human and urban-induced mortality rates mirrored the rates of mortality that occur in natural ranging populations undergoing sustained natural predation (Cheney et al., 2004; Beamish & O'Riain, 2009, in press). This was the result of a general intolerance for the presence of baboons which was associated with tangible costs, such as property damage and food loss, as well as intangible psychological impacts related to concern over the health and safety of family and pets (Kansky et al., 2016). These factors manifested in high levels of retaliatory injury and killing of baboons by people (Beamish & O'Riain, 2009, in press).

Prior to the early 1990's, baboon-human conflict was mainly managed by conservation authorities through the culling of "problem" troops and individuals, including the complete removal of troops in Kalk Bay, Chapman's Peak and the City Bowl in the late 1980's. This approach resulted in long-term success in mitigating baboon-human conflict in those areas, and to date troops have not returned to these locations.

Box 2: Definition of and rationale for culling wild animals

Culling of wild animals refers to the selective killing of animals usually done to prevent disease spread, prevent resource and habitat depletion associated with overpopulation, removal of invasive species, and to reduce human-wildlife conflict. This can be a highly emotive and contentious issue, and an Ethical Framework based on global best practice and literature has been added to the Action Plan (Section 4.3)

The culling of the Slangkop troop in Kommetjie in 1990 sparked concerns among residents and local conservationists who, in response, started a non-profit organization called the Kommetjie Environmental Awareness Group (KEAG). This introduced a new approach of human-centred baboon management founded on the first baboon monitoring programme that trained members of local historically disadvantaged communities to "herd" baboons away from urban areas, in an attempt to mitigate baboon-human conflict and thus avoid the need for culling programmes. In the early 2000's, the monitoring programme transitioned to Baboon Matters, an NPO set up by one of the KEAG founders specifically to expand the baboon monitoring approach to additional troops.

In 2009, responding to increasing human-baboon conflict, the City of Cape Town formalized the baboon management programme through a tender process which appointed the first commercial baboon management service provider with the specific intention of reducing conflict between people and baboons. The programme initially continued with an emphasis

on non-aversive herding of baboons, but this resulted in continued habituation of troops to both the rangers and local communities. Additional measures, including the lethal management of damage causing baboons and novel aversive conditioning methods (e.g., paint ball markers) were then investigated to improve the efficacy of deterring baboons from urban areas and reverse habituation. By 2013 a full suite of aversive conditioning tools and management guidelines (viz., health, dispersing makes, damage causing baboons, injured baboons) were implemented by the programme. This implementation led to a significant reduction in the time baboon troops spent in transformed areas (Fehlmann et al., 2017) and subsequently a significant reduction in the number of baboons that were injured or killed due to human action and urban hazards (Beamish & O'Riain, 2009, in press). Until 2020, the implementation of the management programme centred on aversive strategies with select lethal removal of sick, injured and damage causing individuals and was successful in reducing baboon-people conflict. However, the associated lack of baboon numbers resulted in the growth of the peninsula-wide population from ~360 baboons in 2000 (Kansky & Gaynor, 2000) to ~over 600 baboons in 2024 (UBP Annual Census 2023/2024). This population growth has occurred during a time of urban expansion with the associated loss of preferred low-lying baboon habitat to development. This has resulted in a baboon population that has the following characteristics:

- » Increasingly limited access to natural habitat in low lying areas where foraging opportunities are better and the resource return on foraging efforts are higher for baboons.
- » Geographical isolation and the fragmentation of natural land have limited the natural dispersal of individuals between the Peninsula and other regions of the Western Cape.
- » The absence of the last local natural predator of baboons, i.e., the Cape leopard (*Panthera pardus*), following extirpation in the early 1900s (Skead, 1980), that would influence the movement, behaviour and mortality patterns of the population (Willems & Hill, 2009).
- » Extremely high levels of habituation to human presence with clear preference for foraging and sleeping in human modified landscapes including buildings in urban areas.
- » Routine access to human based food sources including urban gardens.
- » Variable troop growth sizes and growth rates with a steady increase in the overall population from 2002 to 2025 specifically in the north.
- » The acquisition of human pathogens including viruses and endoparasites (Drewe et al., 2012; Ravasi et al., 2012).
- » Poor baboon health in some troops due to access to human based food (Leith et al., 2020).

3 CURRENT STATE OF THE BABOON TROOPS

While the population of baboons on the Peninsula has grown (almost doubled) in the last 25 years, transformation of the lowland areas of the Peninsula has also increased, resulting in more baboons and much less available natural habitat, particularly natural habitat in low lying areas where foraging opportunities are more favourable (Hoffman & O’Riain, 2012). Additionally, baboons have become progressively habituated to both non-lethal deterrents and urban areas. The increasing population combined with limited management resources has also led to an increase in unregulated baboon management by unpermitted volunteer groups.

These factors, in conjunction with the reliance on baboon rangers using aversion tactics as the only management tool, have resulted in:

- Very poor outcomes for baboons in certain regions of the Peninsula (e.g. injury, urban death) where baboons frequent urban areas
- Very poor outcomes for people in these same regions of the Peninsula (e.g. property damage, injury to domestic animals)
- Increasing baboon management costs with associated poorer outcomes for both people and baboons
- Increasing negative interactions between baboons and people
- Increasing proportion of baboon deaths linked to human and urban causes
- Poorer health and welfare of Peninsula baboons
- Increasing baboon damage to urban infrastructure
- Increase in wildlife transgressions (e.g. hunting and feeding) by people
- Increasing conflict within communities
- Increasing public dissatisfaction, concern and meaningful unhappiness at the current state of baboon management in certain areas
- Certain urban areas becoming increasingly intolerable to live in with a loss of businesses opportunities and depreciation in the value of private properties routinely impacted by baboons

In the last decade, an ongoing emphasis by the authorities on day-to-day crisis management, lack of a long-term plan and the lack of a corresponding shift toward long-term sustainable solutions, has resulted in escalating conflict for both baboons and communities.

Box 3: Acknowledgement of a “wicked problem”

The above circumstances, combined with communities and stakeholders that hold a very wide range of often conflicting values regarding baboon welfare and conservation, has resulted in what is best described as a “wicked problem”. Wicked problems are a pervasive feature of human-wildlife conflict globally, where multiple stakeholders, uncertain outcomes, and interdependent issues complicate management, as no single solution can satisfy all parties or resolve the conflict in a final, definitive manner (Parrot, 2017). In the best interest of baboons and people, we need to move in a new direction efficiently, with a clear plan and with purpose.

The approximate location of 13 of the baboon troops in the Cape Peninsula is shown in Figure 1. This map excludes the troops permanently located in the Cape of Good Hope section of Table Mountain National Park, namely the Cape Point, Buffels Bay, Kanonkop and Klein Olifantsbos troops.

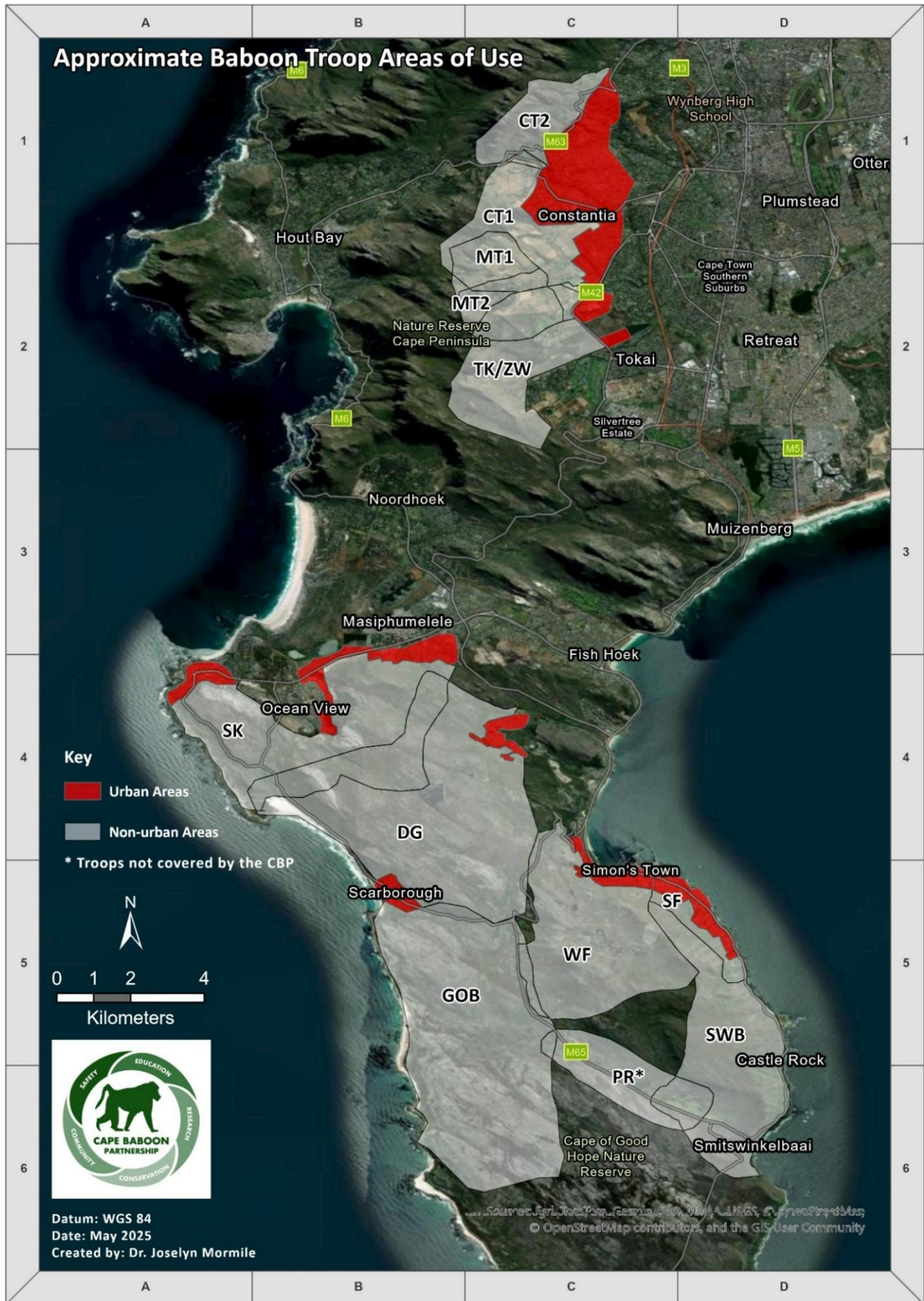


Figure 1: Map of the location of the baboon troops outside of the Cape of Good Hope section of Table Mountain National Park and the extent of the estimated areas over which they have ranged in the previous decade, in both natural and urban landscapes.

4 PROPOSED MANAGEMENT PRINCIPLES

4.1 A clear and transparent adaptive management approach

Baboon management on the Peninsula over the last two decades has increasingly become mired in controversy. Although activism to protect baboons and promote peaceful coexistence is usually well-intended, baboon management is often hampered by extreme activism, fuelled through social media and misinformation, and with personal attacks toward individual management personnel and researchers becoming commonplace. This in turn has led to management authorities increasingly “closing the door” and being unwilling to engage publicly on complex and emotive issue while also increasingly being unwilling to make difficult or progressive decisions due to the aggressive and personalised social media environment which has on occasion extended to physical damage of infrastructure and direct threats to individuals and their livelihoods. This paralysis of management decisions comes at great cost to the welfare and long-term management of the baboon population, which is constrained to a limited space surrounded by urban environments and therefore requires permanent ongoing intervention and management. The management authorities must be allowed to implement their mandate to manage the baboon population in a manner that prioritises baboon welfare and conservation and reduces human-baboon conflict.

Action

Adoption of this Action Plan that clearly and transparently sets out management actions to be undertaken as required and needed by the authorities or agencies appointed on their behalf on a day-to-day basis without public interference and which will remain in place until the first five-year formal review in the last quarter of 2030.

4.2 Moving from crisis management to sustainability, accountability and committed implementation

The current situation is unsustainable with poor outcomes, increasing costs and no long-term plan. The committed implementation of the Action Plan is the first step towards regaining an appropriate level of management success which ensures better outcomes for baboons and people. The implementation of the Action Plan requires commitment by the JTT to act decisively on a range of challenging and controversial actions. The goal of all actions is to ensure that each improves the short and long-term baboon population welfare, health and conservation in addition to human well-being, health and safety. The merits of each action should thus be evaluated on the likelihood that they will improve the probability of these goals being achieved.

Action

The immediate implementation of all the tools available and already approved in the BSMP necessary to achieve the daily and long-term sustainable management of the Peninsula baboon population against a clear set of outcomes/limits.

4.3 Ethical Assessment Management Actions

Management of human-wildlife conflict is fraught with a variety of animal welfare and ethical dilemmas that complicate satisfactory conflict resolution, especially when the available management options include both the lethal and non-lethal control of animals. Failure to clearly articulate the relevant values under consideration or explicitly describe the ethical rationale for management action can lead to unnecessary tension and misunderstanding between stakeholders as they try to reach resolution (Lynch et al., 2025).

To address this issue, five different ethical philosophies (and some of their associated principles) are briefly reviewed, to assist with determining whether an action can be considered ethical, morally right or permissible. The arguments, justifications or rationale used as the ethical basis supporting baboon management from each of these philosophies are then systematically articulated. The purpose of this assessment is to establish the ethical foundations of the Action Plan, which has been developed based on the implementation plan outlined in the Cape Peninsula Baboon Strategic Management Plan (2023/24 to 2033/34). Although a wide variety of ethical issues might be considered, the focus of the ethical framework in this Action Plan is on killing, culling, euthanasia or lethal control, given its contentious nature. Ethical issues associated with translocations, removal to sanctuaries, reproductive management and other such issues are not considered here.

4.3.1 Inclusions and exclusions

Ethical justifications for the lethal removal of baboons, inclusive of critical contextual factors, the ethical differences between killing sick/injured animals or healthy animals, and the logistical issues associated with implementing lethal control in urban areas are considered here.

Two classes of animals exist when considering the ethics of killing:

- (1) sick, injured or distressed animals experiencing welfare harm(s), and
- (2) presently healthy animals at high risk of becoming sick, injured or distressed and experiencing welfare harm.

The ethical justification needed to kill each class of animal is slightly different, because the type and source of harm being addressed is different in each case. Sick, injured or distressed animals are experiencing harm associated with urban living, including compromised health, injuries from dogs, vehicles, or other sources (Beamish & O'Riain, 2014), or elevated levels of fear and anxiety (Chowdhury et al., 2020). In such cases, the purpose of the lethal removal of baboons is to *alleviate existing harm* associated with these issues. Presently healthy animals are highly likely to become impacted by these issues because their proximity to urban areas means they will likely experience preventable harm in the near future (Beamish, 2009; Beamish & O'Riain, 2014; Chowdhury et al., 2020). In this case, the purpose of the lethal removal of baboons is to *prevent imminent or inevitable harm*. Here the harm of humane lethal removal is considered preferable to the harms that result in suffering and inhumane deaths when baboon frequent urban areas.

This ethical assessment focuses on the rationale for killing these two classes of animals. Though substantial harm is also experienced by pets (e.g. dogs) and humans associated with urban baboons and urban baboon management, we do not consider these harms here – the focus of the ethical assessment remains on baboons. Social and economic considerations are also critically important for determining appropriate baboon management strategies. However, this assessment intentionally avoids consideration of any social or economic issues and instead

focuses solely on ethical and welfare issues. In other words, we do not consider the economic viability of any management action. Social and economic issues have no influence on the ethical assessment described below but remain important considerations in decision-making and which are addressed elsewhere in the Action Plan.

4.3.2 Ethical starting point

One might assert that all animals (including baboons) have no moral status, or that humans can do whatever they want to animals, or that animals deserve no moral consideration. This assessment does not adopt this view. Instead, this assessment acknowledges baboons' sentience, sapience and intelligence, and assumes that baboons indeed have moral status and that they deserve moral consideration.

One might alternatively assert that human involvement in baboon management might be avoided altogether if baboons were simply 'left alone'. However, in addition to the ecological impossibility of this view, the conceptual starting point for this ethical assessment begins with an acknowledgement and acceptance that indirect killing of wild animals exists and will continue to exist for the foreseeable future given global trends towards ongoing human population growth and urbanisation (Allen et al., 2023). More specifically, baboons in the Cape Peninsula exist in a fragmented, closed population surrounded by extensive urbanised ecosystems devoid of predation pressure and with limited dispersal opportunities, and these circumstances will not change but are only expected to intensify. The ethical issues associated with the management of baboons in these circumstances are, therefore, distinct from ethical issues associated with the continuation of human population growth and urbanisation processes more broadly, which are not addressed or discussed here.

4.3.3 Ethical focus

Though it can sometimes be the case, death is usually not the end point of a linear progression of pain, suffering and distress. Death is independent of pain and suffering because death can be instantaneous, painless, and without suffering or consciousness of death. Likewise, pain and suffering can be temporary or long-lasting but not fatal. For purposes of this assessment, however, the terms 'harm' or 'harms' are used to refer to pain, suffering, distress and death in all its forms (Fraser & MacRae, 2011). Thus, the ethical focus of this assessment, or the ethical target or object of baboon management efforts, is on the avoidance of pain, suffering, distress and death to baboons.

With respect to avoiding the lethal removal of highly habituated animals that frequent rural and urban areas, the ethical choice that needs to be made by authorities is to kill such baboons now in a relatively humane manner (Caspers, in press), or continue to allow them to suffer painful, often prolonged, eventual death in urban/rural areas; the choice to allow urbanised baboons to remain in-situ and live long, flourishing lives is not available in the case of highly habituated baboons.

4.3.4 Ethical philosophies applied in this assessment

A variety of ethical philosophies, viewpoints, or frameworks have been developed to help determine whether an action is morally right or wrong, acceptable or unacceptable, or permissible or prohibited. Some are common and well understood by many people, whereas others are uncommon or less developed by philosophers. This assessment briefly describes and applies (1) deontology or animal rights, (2) virtue ethics, (3) consequentialism, (4) ethical particularism, and (5) environmental ethics to assess the moral permissibility of various strategies and approaches used to manage urban baboons. A brief outline of each of these

philosophies is given below, principally taken from more comprehensive descriptions and sources found in Bobier and Allen (2022); those interested in further information on these philosophical frameworks should consult this study.

4.3.5 Deontology (the animal rights view)

Deontology, or Kantian ethics, often referred to as animal rights philosophy, is one of a few popular ethical theories that describe the different considerations of what makes an action morally right or wrong, or praiseworthy or blameworthy. Deontologists assess actions based on whether the action conforms to one's duty (e.g. do not lie), with duties being grounded in and identified by the rights of persons to be respected (e.g. not lied to). Animal ethicists inspired by deontology argue that animals have certain rights, which often are or should be the same rights afforded to humans, and that humans should therefore act in ways that respect the rights of animals. Deontologists often claim that animals have a right to live free of intentional harm or fear from humans, so humans have a duty to act in ways that do not intentionally harm animals, or a duty of care towards animals. Importantly however, such rights and duties can be annulled in certain situations.

For example, when confronted with overriding the rights of many or the rights of few, each with equal harm, application of the 'Miniride Principle' means that the needs of the many overrides the needs of the few (e.g. killing one animal if it means many others can be saved). Alternatively, under circumstances of comparable harm, application of the 'Worse-off Principle' means that inflicting a minor amount of harm to many animals is better than allowing a major amount of harm to a few (e.g. vaccinating 100 animals is better than allowing 10 animals to suffer terribly from a disease).

4.3.6 Virtue ethics (the compassionate view)

Virtue ethicists focus on whether a person's decisions or actions manifest or are in accordance with virtue, for virtuous living is integral to living a flourishing life. Virtue ethicists seek to act in ways that manifest moral character, which is integral to the flourishing of human beings and the natural cosmos in which they are part; and for precisely this reason it is critical that one exercises virtuous actions toward others. Compassion, justice, temperance, and so on are important virtues in our treatment of others, so virtue ethicists seek to act in ways that exhibit these virtues toward others. In the context of animal management, they assert that virtuous people should demonstrate compassion toward animals, which typically involves an active refrain from killing or otherwise harming them. According to this view, humans should do whatever is virtuous in a given situation; an act is good or right if – and only if – it is what a virtuous person would do in that situation. Importantly, virtue ethics is a person-relative and situation-specific philosophy (e.g. courage on the battlefield looks different for an experienced soldier vs a new recruit). This means that there can be no prescribed prohibition of animal harm under a virtue ethics philosophy, and harming animals might indeed be the most virtuous or compassionate thing to do in some contexts (e.g. euthanasia of a bird with a broken wing).

4.3.7 Consequentialism (the practical view)

Consequentialism does not focus on rights or duties like deontology, or on character traits like virtue ethics, but focuses instead on the outcomes or consequences of an action or inaction: an action is good if it maximises good outcomes and/or minimises bad outcomes, and an action is bad if it minimises good outcomes and/or maximises bad outcomes. A common form of consequentialism posits that good and bad outcomes are the result of the total sum or net amount of pleasure and pain produced, and so animal ethicists espousing consequentialism attempt to quantify the potential amounts of animal harm occurring in a given context before

seeking to act in ways that minimise those harms. This means, for example, that harming or killing some animals to save others is acceptable if it avoids more harm than it causes, even if doing so appears to be uncompassionate or a violation of animal rights (e.g. culling a small number of predators to save a large number of prey).

4.3.8 Ethical particularism (the personalised view)

According to this view, causing harm needs a good reason, or harm needs to be assessed on a case-by-case basis. Inflicting pain or harm requires sufficient justification, and inflicting such pain without sufficient justification is wrong. Thus, those using ethical particularism to justify animal harm need to develop a compelling reason for causing harm to animals in each particular case. These reasons may change over time or be different under different circumstances. Preventing illness, injury or distress to at-risk urban animals might be considered a good-enough reason to kill otherwise healthy animals, whereas alleviation from suffering may be a good-enough reason to kill sick, injured or distressed animals.

4.3.9 Environmental ethics (the holistic view)

The previous ethical theories and frameworks (see above) were first described to govern moral conduct between humans, and were then only later applied to other animals, typically with a focus on individual and usually domestic animals. Consideration of additional ethical frameworks designed specifically to address morality in the wider biotic or non-human community addresses many of these limitations and provides unique perspectives on intentional animal killing, particularly in ecological contexts (Minteer & Collins, 2008). Where the previous ethical theories focus on the life of the individual animal(s), environmental ethics focuses on the wellbeing of whole groups, populations or ecosystems including but not limited to their constituent individual animals. One of the most prominent nature-directed ethical frameworks is 'the land ethic', captured by the moral maxim: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold 1949, pp. 224–225). Like all other animals, humans have long been and remain a key part of ecosystems (Arlinghaus et al., 2007; Ben-Dor et al., 2021; Darwin, 1859) and act ethically whenever we undertake actions that support ecosystem health; hence, humans are morally obliged or permitted to kill animals when doing so is 'for the good of the ecosystem'. Thus, the lethal control or removal of overabundant animals is permitted when they compete with, prey upon, or exclude other animals, alter biodiversity or affect soil fertility, or create otherwise avoidable harms to their own or other species. Lethal control is also acceptable when it is inconsequential or does not harm ecosystems.

4.3.10 Formalised arguments

An ethically defensible argument for intentional animal killing can be made under each of the ethical systems or philosophies mentioned above, even though their motivations or rationale may be different. Or in other words, many different ethical philosophies permit the lethal removal of animals, but for different reasons. Strong arguments against animal killing might also be made from these ethical philosophies. However, it is incorrect to claim that animal killing cannot be ethically justified given multiple defensible arguments for it. These arguments are summarised in Table 1.

Table 1. Selected ethical frameworks and arguments to support intentional animal killing.

#	Ethical theory or framework	Position aligned against animal killing	Position aligned for animal killing	Formalized argument to support intentional animal killing
1	Natural law or deontology	Animals have certain rights (e.g. right to life), humans have a duty to respect those rights, and killing animals violates those rights.	The miniride principle permits the killing of some animals to save many others when all animals will be equally harmed.	<ol style="list-style-type: none"> 1. Humans are morally justified in killing some animals when it prevents the death and suffering of many more animals. 2. There are cases where killing some animals will prevent the death of many more animals. 3. Therefore, humans can kill animals in such cases.
2	Virtue ethics	Virtuous humans should demonstrate virtuous attributes and behaviour (i.e. compassion) towards animals.	Acting virtuously sometimes requires killing animals.	<ol style="list-style-type: none"> 1. The virtuous person cares about both animals and other humans and seeks to promote their flourishing or reduce their harm. 2. Expressing compassion for animals and other humans sometimes requires the virtuous person to kill animals. 3. Therefore, the virtuous person is not opposed to all animal killing.
3	Consequentialism	The consequences of animal killing are excessive or produce unacceptable amounts of harm.	Animal killing is justified if it increases animal and/or human welfare.	<ol style="list-style-type: none"> 1. We should adopt actions that minimize suffering while maintaining or increasing the wellbeing of sentient creatures. 2. Killing animals minimizes net suffering and/or promotes the wellbeing of affected sentient creatures in some situations. 3. Therefore, we can kill sentient animals in these situations.
4	Ethical particularism	Animal killing is usually unnecessary, so humans should not kill animals.	There are good reasons to kill animals, so humans can kill animals for these reasons.	<ol style="list-style-type: none"> 1. Killing animals requires good reason. 2. There are good reasons to kill some animals. 3. Therefore, killing animals for these reasons is permissible.
5	Environmental ethics	Killing animals can compromise ecosystem health, so non-lethal approaches should be used to maintain ecosystem health.	Killing animals can improve ecosystem health, so lethal approaches should be used whenever it can enhance ecosystem health.	<ol style="list-style-type: none"> 1. We should act to support or maintain the health of ecosystems. 2. Killing animals can support or be inconsequential to ecosystem health. 3. Therefore, killing animals is morally permissible when it supports or is inconsequential to ecosystem health.

4.3.11 Choosing an ethical philosophy

One of the common reasons fomenting debate about the permissibility of animal killing is the application of different ethical philosophies by those for and against different actions. For example, some may criticise an action on deontological grounds, whereas others may defend the same action on consequentialist grounds, which is unacceptable to deontologists. To avoid this issue, an ethical justification or rationale for engaging in baboon management is presented using all five ethical philosophies described above, without recommending or committing to any one philosophy. This enables ethical defence of animal harm against criticism arising from within the same philosophy, and mutual understandings between those who might otherwise apply differing ethical philosophies.

4.3.12 Ethical rationale for lethal baboon management

Applying the ethical principles and reasoning summarised in Table 1 above, Table 2 below describes the ethical rationale for euthanising baboons that are highly habituated to urban areas. Allen et al. (2023) listed 10 broad reasons why humans kill animals, of which at least two apply to urban baboon management, corresponding to the two classes of animal described earlier. Thus, Table 2 is structured so that each row represents one of these reasons or purposes (1 = invasive, overabundant or nuisance wildlife control, and 2 = mercy or compassion) and each column represents a different ethical philosophy (A = Animal rights, B = Virtue ethics, C = Consequentialism, D = Ethical particularism, and E = Environmental ethics). A summarised ethical justification statement based on the formulas presented in Table 1 is then provided within each cell (e.g. A1, D2 etc.) alongside three alternative restatements in slightly different ways to improve clarity, if needed. Thus, Table 1 presented the formal arguments for animal killing, and Table 2 presents the applications of these formulas specifically for baboons, enabling rapid identification of the ethical rationale underpinning the lethal activities recommended in the Action Plan.

Table 2. Overview of ethical arguments that support lethal baboon management, derived from five different ethical frameworks. See Allen et al. (2023) for full descriptions of the reasons or purposes of animal killing.

		A	B	C	D	E
	Reason / purpose	Deontology	Virtue ethics	Consequentialism	Ethical particularism	Environmental ethics
1	Invasive, overabundant or nuisance wildlife control. or Lethal removal of healthy baboons likely to become sick, injured, or distressed.	<p><i>Summary:</i> The miniride principle applies, making it ethically permissible to undertake lethal baboon management.</p> <p><i>Statement 1:</i> Given that many habituated animals will eventually suffer and die, it is better to save a larger number of animals from suffering and death by overriding the rights of a smaller number of animals.</p> <p><i>Statement 2:</i> Our duty to protect a large number of animals from avoidable suffering and death overrides the rights of a small number of animals not to be euthanised given that many will suffer and die regardless.</p> <p><i>Statement 3:</i> Faced with the choice to euthanise some animals and save many others or refrain from euthanasia and allow many animals to suffer and die, the miniride principle supports the euthanasia of some animals to save many more.</p>	<p><i>Summary:</i> Lethal baboon management is the most compassionate thing to do given they will eventually suffer and die regardless.</p> <p><i>Statement 1:</i> Compassion leads the virtuous person to both prevent and alleviate the suffering of animals that will eventually suffer and die. Failure to euthanise such animals prolongs their inevitable suffering and cannot prevent their death, and inaction that allows ongoing harm is not kind, loving, or compassionate.</p> <p><i>Statement 2:</i> Compassion motivates people and agencies to euthanise at-risk animals to avoid the suffering and death that will otherwise ensue if euthanasia did not occur.</p> <p><i>Statement 3:</i> Failure to euthanise habituated animals to curtail the harms associated with habituation would knowingly allow more animals to become habituated and suffer, and would not be compassionate.</p>	<p><i>Summary:</i> Lethal baboon management minimises the total amount of suffering and death.</p> <p><i>Statement 1:</i> Euthanising a small number of animals now (as painlessly as possible) minimises the number of animals that would otherwise suffer and die in the future.</p> <p><i>Statement 2:</i> The overall number of animals killed by humans as part of a baboon management plan is fewer than the number of animals that would suffer and die as a consequence of ongoing habituation and frequenting urban areas if humans did nothing.</p> <p><i>Statement 3:</i> Fewer animals will suffer and die if lethal control is undertaken. More animals will die a more-harmful death if we do not undertake lethal control.</p>	<p><i>Summary:</i> Stopping or preventing the harms associated with habituation and urban foraging is a sufficient reason to undertake lethal baboon management.</p> <p><i>Statement 1:</i> Euthanasia requires good reasons and preventing intense and widespread harm to many animals is a sufficiently good reason to euthanise some of them. This is especially so if an individual animal is already suffering or is likely to be suffering.</p> <p><i>Statement 2:</i> Euthanising a few to save the many is permissible, especially when the few are going to increase in number and lead to larger scales of suffering.</p> <p><i>Statement 3:</i> Euthanising habituated urban foraging baboons is justified, especially when doing so is likely to save them and many others from suffering and death.</p>	<p><i>Summary:</i> Lethal baboon management can be good for baboon populations and the broader ecosystem.</p> <p><i>Statement 1:</i> Reducing overabundant animals can prevent excessive death, reduce resource overexploitation, and contribute to ecosystem stability.</p> <p><i>Statement 2:</i> Lethally removing individuals that are highly habituated to foraging in urban areas would prevent the establishment and growth of new habituated troops and avoid the harmful individual and ecosystem consequences of overpopulation.</p> <p><i>Statement 3:</i> Lethally removing highly habituated and urbanised baboon troops would have little to no impact on the sustainability of the broader baboon population or ecosystem health on the Cape Peninsula.</p>
2	Mercy or compassion. or Lethal removal of sick, injured or distressed baboons.	<p><i>Summary:</i> Euthanasia may be ethically justifiable when the harm cannot be halted and suffering cannot be easily treated and overcome.</p> <p><i>Statement 1:</i> The miniride principle applies if the harm cannot be avoided, because a continuation of harm would result in more suffering and potentially death.</p> <p><i>Statement 2:</i> Our duty to prevent a greater amount of avoidable suffering and potential death overrides the rights of an animal not to be euthanised, given that the animal will suffer and may also die regardless.</p> <p><i>Statement 3:</i> Faced with the choice of a quick and painless death or a protracted and painful death, the miniride principle supports quick and painless death to avoid unnecessary suffering.</p>	<p><i>Summary:</i> Euthanasia may be the most compassionate thing to do, especially if treatment and recovery is impractical, unachievable or too harmful.</p> <p><i>Statement:</i> Compassion leads the virtuous person to both prevent and alleviate the suffering of sick, injured or distressed animals. If treatment is impractical, unachievable or too harmful, failure to euthanise affected animals and alleviate harm prolongs their suffering. Inaction that allows a continuation of harm is not kind, loving, or compassionate.</p> <p><i>Statement 2:</i> Compassion motivates people and agencies to euthanise sick, injured, distressed and at-risk animals to avoid the suffering and potential death that would otherwise ensue if euthanasia did not occur.</p> <p><i>Statement 3:</i> Failure to euthanise sufficient animals to stop the harm would knowingly facilitate more suffering and death and would not be compassionate.</p>	<p><i>Summary:</i> Euthanasia minimises suffering and death, especially if the harm and suffering cannot be easily treated.</p> <p><i>Statement 1:</i> Euthanising a small number of distressed animals (as painlessly as possible) now minimises the number of animals that would otherwise suffer and likely die in the future.</p> <p><i>Statement 2:</i> The overall number of animals killed by humans as part of a management plan is fewer than the number of animals that would suffer and die from habituation to urban foraging if humans did nothing.</p> <p><i>Statement 3:</i> Euthanising a sick, injured, or distressed baboon now would reduce and avoid the suffering it would experience later if it was not euthanised.</p>	<p><i>Summary:</i> Stopping the harm an animal is presently experiencing is a sufficient reason to undertake euthanasia.</p> <p><i>Statement 1:</i> Euthanasia requires good reasons and preventing a painful and possibly lethal condition is a sufficiently good reason to euthanise an animal.</p> <p><i>Statement 2:</i> It is ethically permissible to euthanise an affected animal to save it and others from becoming sick, injured, distressed and potentially dying.</p> <p><i>Statement 3:</i> If the harm cannot be contained and suffering cannot be treated and avoided, then mitigating ongoing harm justifies euthanasia.</p> <p>While indiscriminate killing may be prima facie wrong, mercifully killing a suffering animal is permissible.</p>	<p><i>Summary:</i> Ending the suffering of animals does not have negative consequences for ecosystems.</p> <p><i>Statement 1:</i> Euthanasia of suffering baboons can reduce the duration of stress and anxiety experienced by other baboons, thereby improving their mental and social health.</p> <p><i>Statement 2:</i> Euthanising sick, injured or distressed baboons can prevent harm to other baboons, thereby helping populations and ecosystems to flourish.</p> <p><i>Statement 3:</i> Euthanising sick, injured or distressed animals can enhance the beauty and stability of ecosystems.</p>
		A	B	C	D	E

Table 2 can be used as a resource to rapidly identify and articulate various ethical justifications for lethal baboon management in defined circumstances. A few key examples are further explored here.

The lethal control of damage causing, unsuccessful dispersing individuals (refer to the Existing Guidelines – Appendix J) or small groups that frequent urban environments is ethically permissible under a virtue ethics framework because 'compassion leads the virtuous person to both prevent and alleviate the suffering of animals that will eventually suffer and die' (Table 2, B1, Statement 1) and 'failure to euthanise sufficient animals to curtail the harms associated with urbanisation would knowingly allow more animals to suffer, and would not be compassionate' (Table 2, B1, Statement 3). Moreover, it is also ethically permissible under an environmental ethics framework because their removal would 'avoid the harmful individual and ecosystem consequences of overpopulation' (Table 2, D1, Statement 2), or at the very least 'would have little to no impact on the sustainability of the broader baboon population or ecosystem health' (Table 2, D1, Statement 3). Alternatively, under a deontological framework 'our duty to protect a large number of animals from avoidable suffering and death overrides the rights of a small number of animals not to be euthanised' (Table 2, A1, Statement 3) given that many baboons will suffer and die if individuals form small groups of highly habituated individuals which routinely forage in urban areas and proliferate. Thus for example the Waterfall troop started as a small fission group from the Smitswinkel Bay troop and immediately assumed a home range that overlapped extensively with urban areas. Individuals within this troop became highly habituated to foraging in urban areas and over many years, many individuals have suffered significant welfare harms in adopting this lifestyle. If the small number of individuals had been humanely lethally removed at inception this would have prevented the documented suffering and inhumane deaths that many individuals in this now large troop have experienced.

The euthanasia of sick, injured or distressed baboons is ethically supported from a deontological position because 'faced with the choice of a quick and painless death or a protracted and painful death, the miniride principle supports quick and painless death to avoid unnecessary suffering' (Table 2, B1, Statement 3). Moreover, from a virtue ethics framework, 'failure to euthanise affected animals and alleviate harm prolongs their suffering... [and]... is not kind, loving, or compassionate' (Table 2, B2, Statement 1). The approach is also supported from a consequentialist framework because 'euthanising a sick, injured, or distressed baboon now would reduce and avoid the suffering it would experience later if it was not euthanised' (Table 2, C2, Statement 3).

Part of the reason why lethal control can be justified for baboons on the Cape Peninsula, especially for highly habituated animals, is because of the extreme frequency, severity and inevitability of harm they experience (Caspers, in press). Recent 'non-lethal' management approaches are driven by sociopolitical factors that have not acted ethically in accordance with the guidance in Tables 1 and 2 which, predictably and unsurprisingly, has led to the current situation exemplified by high levels of sickness, injury, distress and death of baboons in several urban areas. Thus, any management approach that does not prevent or mitigate avoidable harm is not ethically supported.

Box 4: Conclusions of the ethical assessment

Baboons on the Cape Peninsula exist in a fragmented and closed population, and associated human wildlife conflict is only expected to worsen over time if the management guidelines are not followed and highly habituated urban foraging troops are not removed. Authorities must therefore determine an ethical pathway forward which acknowledges this reality. Many people may object to lethal management activities because they conflict with their personal ethics, but the Action Plan provides an ethically supported and baboon-focused management plan and is supported by multiple ethical frameworks.

4.4 Summary of the Core Principles that informed the Action Plan

Given the wide spectrum of views and values surrounding baboons in Cape Town (Psiuk & Enqvist, 2024), **total agreement among all stakeholders on how to conserve and manage baboons is likely to be unattainable**. This Action Plan is therefore informed by the following set of principles:

- Baboons are a valuable and integral part of the natural ecology and biodiversity of the Cape Peninsula.
- Free-ranging baboons living in natural habitats contribute to the economic, social and ecological goals of the City of Cape Town and Table Mountain National Park.
- There is an inherent value in having a free-ranging baboon population present in the natural areas of Cape Town, which forms part of our collective biodiversity and cultural heritage.
- A free-ranging baboon population of the Cape Peninsula is deserving of conservation and active wildlife management interventions to promote their health, welfare and sustainability.
- The baboon population in the Peninsula requires constant management.
- Baboons and people do not live together in urban spaces.
- Baboons and people are natural competitors for the same spaces and resources.
- Spending time in urban areas has poor outcomes on baboon health and welfare and results in habituation, changes in diet, feeding patterns and behavioural change, changes in troop dynamics, increased human and urban-induced injuries and deaths, and greater risk of zoonotic diseases.
- When baboons forage in urban areas and enter private properties, they can cause detrimental physical, economic, health and psychological impacts on residents, their property and their domestic animals.
- Baboons should not live in or utilise agricultural or urban areas. While overlap may happen on the edges of these areas, the management priority is to minimise the amount of time baboons spend in human-dominated environments and prevent further habituation.
- Where people choose to live/visit natural environments where baboons are encouraged to live, they must take responsibility for baboon-proofing their homes.
- There is a limit to the number of free-ranging baboons the Peninsula can sustain in terms of the natural ecology, baboon health and welfare, and management resources.
- Co-operative approaches between authorities mandated to manage the human-baboon interface and stakeholders is best practice for natural resource management and ensures diverse perspectives are integrated into management plans.
- Much lower reliance on aversive conditioning as a management tool is desirable and is a targeted outcome.

- Clear and defined management objectives set out by the authorities create transparency in wildlife management.
- Environmental programmes are important as a means to provide employment, skills, capacity development, and empowerment of individuals within the communities of Cape Town.

Box 5: Reduced reliance on aversive conditioning

A key principle of this Action Plan is to reduce the reliance on aversive management methods (e.g. paintball markers, pain, noise and herding) by implementing alternative measures (described in Section 6) that reduce human-baboon conflict and habituation.

5 DEFINING AVAILABLE HABITAT AND SUSTAINABLE POPULATION LEVELS

The Action Plan is informed by the available natural habitat, existing and target population levels.

5.1 Defining available baboon habitat on the Peninsula

The management of baboons needs to be based on an alignment of the distribution of the baboon population on the Peninsula with the overall availability and distribution of suitable natural habitat. Baboon ranging patterns tend to reflect various habitat characteristics including food and water availability and distribution, as well as sleeping-site locations (Hoffman & O’Riain, 2012). Baboons prefer to use low-lying land (<230 m elevation) for foraging and high-lying areas as sleeping sites. Where there are only small patches of fragmented natural habitat below 230m elevation, baboons are predicted to seek food within rural and urban areas and conflict with humans is predicted to increase (Hoffman & O’Riain 2012). Time spent in urban areas is associated with poor welfare outcomes for baboons, repetitive damage to property, and health and safety risks to people and their pets. Consequently, no troops should persist in areas they have not naturally occupied in the past, or in areas of low-lying habitat now transformed by development, including farmland. The available low-lying habitat (<230 m elevation) is shown in Figure 2 below (indicated in green) with the orange areas indicating habitat less favoured by baboons for foraging (>230 m). While baboons have full access to all the higher altitude areas on the peninsula they choose not to access and utilise those areas when provided with a choice (Hoffman & O’Riain, 2012; Lewis & O’Riain, 2015). There is currently nothing stopping them using this higher altitude environment yet the seldom if at all do. In fact they appear to choose to rather expose themselves to aversive tools (paintballs), dogs, harassment by residents etc. than use the higher altitudes (where these disturbances and harms do not occur) as the lower habitat areas offer far greater food resource rewards.



Figure 2: Map showing existing low-lying habitat (green) and habitat less favoured for foraging (orange).

Suitable large patches of low-lying natural habitat are available in the north for the Zwaanswyk Troop (ZW), Tokai Troop (TK), Mountain Troop 1 (MT1) and Mountain Troop 2 (MT2), but only small patches of suitable habitat are available for the Constantia troops (CT1 and CT2). In the south, there is suitable low-lying natural habitat for the Slangkop Troop (SK), Da Gama Troop (DG), Plateau Road Troop (PR), Groot Olifantsbos Troop (GOB) and Smitswinkel Bay Troop (SW), but insufficient suitable habitat is available for the Waterfall Troop (WF) and Seaforth Troop (SF).

Box 6: Establishment of a northern fence

One of the outcomes of the implementation of this Action Plan is the establishment of a northern fence which will secure large patches of low-lying natural habitat in the north, intended to keep baboons out of the adjacent farmlands and urban areas.

5.2 Transformed (urban) vs untransformed (natural) spaces

Where baboons and people are forced to live in proximity, as they are in the Cape Peninsula, conflict is inevitable and the outcomes for both baboons and people are largely poor. In this regard baboon management in the Peninsula will be clearly structured around a distinction between the transformed (urban) environment and untransformed (natural) environment. The transformed (urban) environment in Cape Town includes farmlands which are attractive to baboons as they are associated with crops, resulting in frequent conflict between farm owners, baboons and

domesticated animals. The areas demarcated in green and orange in Figure 2



Figure 2 are considered the remaining untransformed environment available for baboons, and the remaining areas are considered transformed areas not appropriate for baboon habituation. Green shaded areas are those that baboons prefer to forage in and orange are higher laying areas that baboons very seldom forage in (Hoffman & O'Riain 2012).

Actions for transformed (urban) areas

- **Regular incursions by troops or individual baboons** into the urban area will **no longer be accepted**.
- The authorities will keep baboons out through setting **hard boundaries**, such as a **baboon-proof fences** or rangers utilising **aversion tools**, or a combination of both.
- Infrequent access into transformed environments by troops, individual baboons and particularly dispersing males on the urban edges will be considered tolerable and acceptable (see Section 5.3).
- The City will implement a **Baboon Waste Management Strategy** (Appendix O – to be appended once complete) to mitigate the impact on baboon health and behaviour in transformed areas that are on the very edge of natural areas.
- A **zero-tolerance approach** will be enforced against anyone found to be **harming, feeding or habituating baboons**. To strengthen capacity in this regard the City will develop a specific Urban Wildlife Management Bylaw to ensure active ongoing enforcement.
- **Implementation of the existing Guidelines** will continue.
- **The existing Guidelines will undergo a review process and once completed will replace the current guidelines and be amended to this Action Plan.**
- **The Urban Wildlife Bylaw will include** reasonable baboon mitigation measures that will be required for any new developments/homes directly in the urban edge adjacent to defined baboon habitat.
- Implementation of a **community-based communication system** which will be expanded and improved to warn residents when baboons may be close to accessing the transformed environment so that residents can take proactive mitigation steps.

The untransformed (natural) environments are habitats where baboons are expected to be found and include the appropriate habitat for foraging and sleeping. The responsibility for mitigating wildlife conflict, reducing baboon habituation, preventing harm to baboons, and respecting the rightful presence of baboons in these spaces lies with all people utilising, visiting, traveling through or living in these areas.

Actions for untransformed (natural) areas

- Baboons are to be **actively protected** by the authorities by **applying and enforcing** all wildlife and nature conservation **legislation to protect baboons**.
- A **zero-tolerance approach** will be enforced on anyone found to be intentionally **harming a baboon**. To strengthen capacity in this regard the City will develop a specific Urban Wildlife Management Bylaw to ensure **active ongoing enforcement**.
- A **zero-tolerance approach** will be enforced against anyone found to **be feeding or habituating baboons**. To strengthen capacity in this regard the City will develop a specific Urban Wildlife Management ensure **active ongoing enforcement**.
- The City will implement a **Baboon Waste Management Strategy** (Appendix O – to be appended at a later stage) to mitigate the impact of human-derived waste on baboon health and behaviour
- **The Urban Wildlife Bylaw will include** reasonable baboon mitigation measures will be required for any new developments/homes in untransformed areas
- The Cape Baboon Partnership is to develop and roll out **education and awareness** tools for informing the public on how to respect baboons in their habitat, baboon-proof their behaviour, baboon-proof their homes/business and for minimising negative baboon interactions.

5.3 Public Tolerance

The urban environment of Cape Town evolved and developed within existing baboon habitat. Baboons have a deep history occupying the Cape Peninsula and Western Cape, going back at least several hundred thousand years, as described in archaeological records. This requires a level of reasonable tolerance and acceptance by all communities living around and on the edge of the remaining natural environment to baboons. This tolerance extends to what is considered reasonable responsibility by residents to undertake appropriate actions on their private properties to minimise impact on both individual baboons and the baboon population as a whole.

Actions for public tolerance

The authorities will develop and provide a formal public communication to all residents indicating at a minimum the following:

Should you live in or operate a business in one of the following areas it should be expected that you may/will have baboons moving through your property a few times (less than 10) per year. This should not be considered unusual or requiring any form of additional response by the authorities. It is expected that all residents and visitors to Cape Town living or residing in these areas will demonstrate care, kindness, respect and tolerance towards the baboons.

Should you live or operate a business in one of the following areas it should be expected that you will /may have baboons moving through your property multiple times per year (more than 10 but less than 50). This should not be considered unusual or requiring any form of additional response by the authorities. It is expected that all residents and visitors to Cape Town living or residing in these areas will demonstrate care, kindness, respect and tolerance towards the baboons.

Should you live in or operate a business in baboon habitat areas, defined as untransformed in this Action Plan you are reminded that the onus rests with you to mitigate negative baboon interactions and reduce potential baboon conflict.

- Tokai
- Orpen Road and surrounds
- Sun Valley, Sunnyside and Fish Hoek
- Glencairn and Redhill
- Simon's Town, Seaforth and Murdoch Valley

- Kommetjie
- Ocean View
- Capri
- De Oude Weg
- Heron Park
- Da Gama Park
- Welcome Glen
- Scarborough and Misty Cliffs
- Blue Waters
- Imhoff's Gift

- Plateau Road area
- Smitswinkel Bay
- Castle Rock area
- Porter Estate

5.4 Baboon Waste Management Strategy

An effective Baboon Waste Management Strategy will be implemented by the City, specifically the Urban Waste Management Department minimise the impact of human-derived waste on the behaviour and health of the peninsula baboons. **The primary objective of the Baboon Waste Management Strategy is to prevent access by baboon to sources of human-derived waste.**

Actions for waste management

The Baboon Waste Management Strategy will be appended to the Action Plan as Appendix O and will include:

- The defined roll out of residential baboon-proof bins in high impact areas
- Management of residential waste collection
- Regulation of residential recycling and composting
- Waste management in public spaces
- Waste management in commercial areas within or adjacent to baboon habitat
- Waste Management in public resorts (Miller's Point and Soetwater)
- Waste management by the SA Navy, SANParks, Porter Estate

5.5 Managing baboon population numbers at sustainable levels

The overall population of baboons on the Peninsula has steadily increased and is currently estimated to consist of approximately 600 individuals growing at an average annual rate of 3%. Growth rates vary between troops and regions, with higher growth rates in the northern region (8.5% increase in 2023/2024) and lower growth in the southern region (2.6% increase in 2023/2024) (UBP Annual Census 2023/2024).

The key causes of mortality in descending order over the last year in the Peninsula baboon population are:

- Direct human-induced (e.g. pellet gun shootings, dog attacks, vehicle collisions)
- Indirect human-induced (e.g. electrocutions)
- Natural causes (e.g. infanticide)
- Undetermined/unknown
- Management removal of damage causing individuals through euthanasia

Increases in population numbers with an associated decrease in low-lying natural habitat correlates with:

- Increased pressure on the urban edges
- Increase in human- and urban-induced injury and mortality
- Increase in damage to properties, people and pets
- Decreasing baboon welfare
- Increased likelihood of fissioning of troops resulting in small groups frequenting urban areas and raiding houses
- Increase in habituation and utilisation of urban landscapes, and a subsequent decrease in ecosystem services offered by baboons that spend less time in natural areas
- Significantly increased management costs

Ongoing population management of the Peninsula baboon population is the cornerstone of sustainable management of a healthy, free-ranging population of baboons. An upper limit for the north and south subpopulation sizes is to be implemented after the recommendations for troop removal have been met. These limits were determined based on population capacity figures provided by Kansky & Gaynor (2000) and Hoffman & O'Riain (2012). Excluding the use of all transformed landscapes, and inclusive of the Cape of Good Hope section of Table Mountain National Park, Kansky & Gaynor (2000) estimate space for 540 baboons and Hoffman & O'Riain (2012) estimate space for 488-560 baboons, adding the caveat of no access to exotic vegetation in natural

areas. It is important to note that these estimates were made 25 and 13 years ago respectively and included the entire Peninsula population, not just the managed subpopulation. Since then, considerable transformation of natural habitat for urban infrastructure has since occurred and the Tokai plantation was lost to fire and cleared. Maximum population limits cannot however be set on food and habitat capacity alone but must also consider finite management costs, urban edge pressure, increased likelihood of new troop formation, increased human conflict and poor baboon welfare.

Based on the above figures and these additional considerations, the upper limit of the managed population has been set as 250 baboons in the northern subpopulation and 175 baboons in the southern subpopulation. This brings the total upper figure, excluding the subpopulation that ranges strictly within the Cape of Good Hope reserve (ca. 100 individuals), to 425 baboons. This would mean an estimated total peninsula baboon population (Cape of Good Hope and the managed population) of 525 at any given time. These subpopulation limits have been set with the goal to support a functioning, healthy, well-protected and sustainable baboon population and can be adjusted if necessary (i.e. as part of the 5-year year review).

Actions regarding population control

- The maximum subpopulation number for the **northern troops** (ZW, TK, MT1 and MT2) is set at **250** at any given time. It should be noted that the sub population in this area is currently estimated at 234 (Urban Baboon Programme Annual Population Census, 2024).
- The CT1 and CT2 troops will be given a chance to settle and remain on the mountain side of the northern fence. If they do settle this will bring the northern population to 277. There will be a six-month period for natural mortality to reduce that to 250 after which the population will be reduced by the authorities to the upper limit.
- Should CT1 and or CT2 not settle and either break back over the northern fence or go over Constantia Nek, Section 6.2 will apply.
- The maximum subpopulation number for the **southern troops** excluding the deep Cape Point troops (but including GOB) is set at **175** at any given time. The current population is 164.
- Over the 2025 -2030 implementation period, should the upper population limit in an area be **exceeded for longer than 6 months** (the gestation period of a chacma baboon), then **subpopulation reduction will take place (see Section 6.2)**.
- Population numbers are expected to grow, and **lethal management will be retained as a necessary but last resort management tool**.

6 MANAGEMENT MEASURES TO BE IMPLEMENTED

6.1 Fencing

6.1.1 Northern Fence – Securing Baboon Habitat

Preventing baboons from accessing urban areas and farmland in the northern region will be achieved through the establishment of the northern boundary fence line from Zwaanswyk in the South to Constantia Nek in the North. The fence will consist of a semi-contiguous baboon-proof barrier built to specification as per the proposed alignment depicted below in Figure 3 and in Appendix I. Baboon rangers are to patrol and maintain the fence line. No baboons will be allowed

north of the fence or over Constantia Nek. Should baboons break through the fence or move over Constantia Nek they will be removed (Section 6.2).

The northern fence will be financed and built as a partnership between the Cape Baboon Partnership and the private landowners in a structured agreement. The day-to-day management of the northern fence will be by the Cape Baboon Partnership.



Figure 3: Proposed fence line running from Steenberg to Silvermist (refer to Appendix I).

6.1.2 Southern Strategic Fencing – Slangkop Troop

The Slangkop troop will remain as the most urban troop for the 2025-2030 management period and is at risk of being considered for removal should management improvements not be achieved, especially in Capri residential area and the Heron Park light industrial area.

The following strategic fencing is proposed to aid the rangers in managing the troop and reducing urban incursions. Finalisation of this fencing will be done via an Environmental Impact Assessment that will include public consultation. The City will finance and build the fence, and management will be by the Cape Baboon Partnership in consultation with local residents.



Figure 4: Proposed fence between the western residential area of Capri and Table Mountain National Park

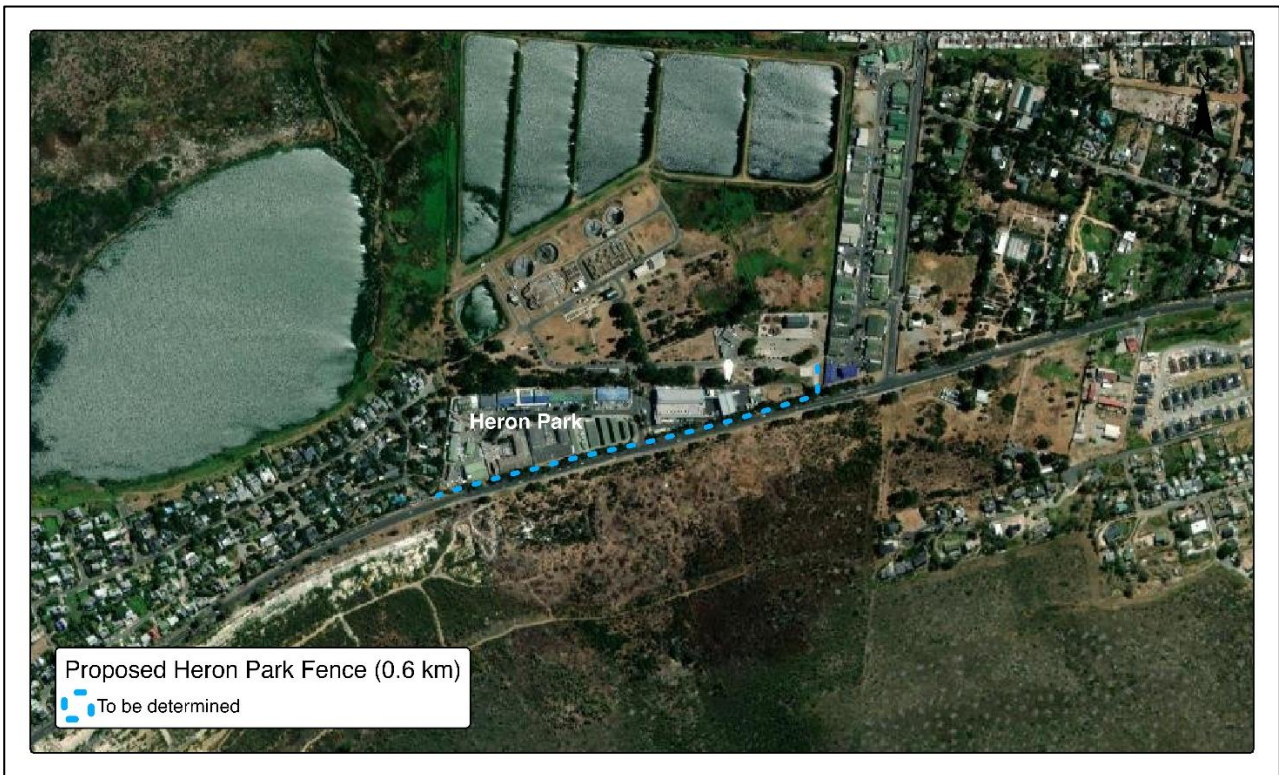


Figure 5: Proposed fence between Heron Park and Kommetjie Road

6.1.3 Southern Strategic Fencing – Smitswinkel Troop

The implementation of the Action Plan will result in Murdoch Valley, Seaforth and Simon's Town becoming baboon free urban environments. It is essential that the Smitswinkel Troop is not able to move into the baboon free urban space nor for individuals to fission and form new small troops which frequent urban areas as happened previously with both Waterfall and Seaforth troops.

The primary intervention for this will be intensified deployment of rangers with the addition of a tracking collar on the Smitswinkel Bay troop's alpha male to assist the rangers with monitoring troop movement and meeting them early should they move towards Murdoch Valley.

Should intensified ranger deployment not be enough to keep baboons out of the urban areas, a Murdoch Valley strategic fence is proposed as a further intervention to ensure Murdoch Valley, Seaforth and Simon's Town remain baboon free.

Finalisation of this fencing will be done via an Environmental Impact Assessment that will include public consultation and will be financed and built by the City. Management will be by the Cape Baboon Partnership in consultation with local residents.

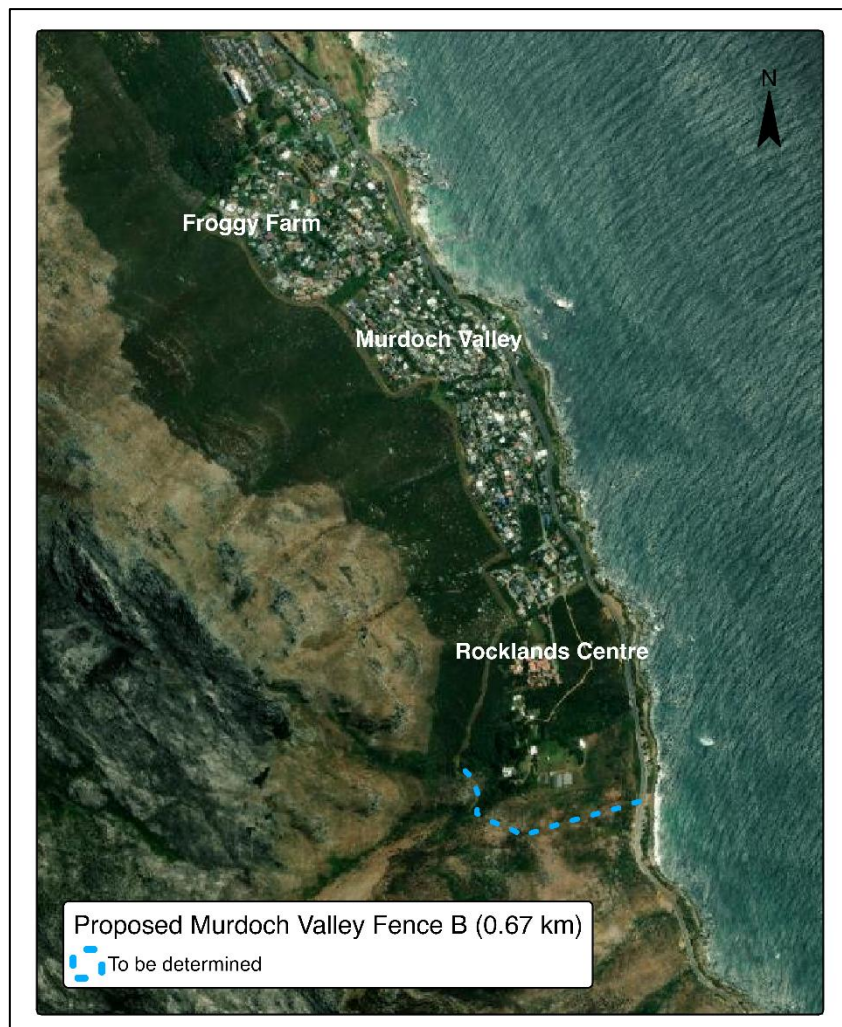


Figure 6: Proposed fence in Murdoch Valley

6.2 Managing Upper Population Limits and Fence Breakouts

If the upper population limits, as set in this Action Plan, are exceeded for longer than six months the relevant population numbers will be reduced by the authorities. Animals will be humanely euthanised to achieve these outcomes. Animals targeted for euthanasia will include chronically sick, permanently injured and very old individuals as identified in the monthly troop counts. Should management succeed in its goal of greatly reduced human causes of death in urban areas and given the absence of natural predators on the Peninsula, then gradual senescence or chronic illness will be the main causes of death. Both of these causes of death are associated with suffering while permanent injury has been shown to correlate with higher raiding behaviour (Beamish & O'Riain 2014). Thus the removal of these individuals will both improve welfare and prevent damage causing behaviours.

6.2.1 Northern Fence: CT 1 and CT2 Breakouts

As part of the commitment to exhaust all interventions prior to lethal management, the CT1 and CT2 troops will be given an opportunity to settle on the mountain side of the new Northern Fence. **It must be noted that the likelihood of success is very low due to available low-lying habitat.**

Following construction of the fence, the Cape Baboon Partnership will:

- Ensure that CT1 and CT2 are moved to the mountain side of the new fence. Should the need arise this may include:
 - Cage trap all individuals from CT1 and CT2.
 - Undertake a welfare assessment of each animal.
 - All healthy animals will be moved to the mountain side of the Northern Fence and released.

6.2.2 Northern Fence: Individual Breakouts

Any baboons that breach a functional and operational Northern Fence will be humanely euthanised. This excludes:

- Any baboon that breached the fence because the fence was either not "live" (electricity failure) or there was an opening in the fence (breakages, vandalism, failures). In these cases baboons will be cage trapped and placed back with their natal troops.
- In the event of wildfire and the baboon fence escape panels are opened. In these cases baboons will be cage trapped and placed back with their natal troops.
- Dispersing males moving through the Orpen Road biodiversity corridor. In these cases the relevant Guidelines will be applied.

6.3 Development and implementation of the Urban Wildlife Management Bylaw

The City will urgently develop its own Urban Wildlife Management Bylaw to support and strengthen existing wildlife protection and management legislation and to bring much needed enforcement capacity to ensure baboons (and other wildlife) are fully protected and managed in natural spaces. The bylaw must specifically:

- Establish significant penalties for any harm caused to a baboon.
- Establish significant penalties for any activity that results in the habituation of any baboon.
- Establish reasonable baboon mitigation measures that will be required for any new developments/homes directly in the urban edge adjacent to defined baboon habitat or within baboon habitat

While the bylaw is in development the Coastal Bylaw will be applied.

6.4 Improved baboon population welfare and care

The welfare and care of baboons and the baboon population as a whole has of late been insufficient, evidenced by the high frequency of human-baboon conflict and health issues present in some of the troops that frequent transformed areas. Increased resources and effort must be directed towards substantially improved baboon welfare, protection and care. With budgetary constraints this is best achieved by applying the available funding to fewer baboons.

Actions regarding welfare and care

- Establishment of **water points** in any area **on City owned land** where baboon-proof fences limit access to natural water sources
- Formal application for underground power cables to reduce the number of baboon electrocutions throughout southern subpopulation ranging areas. Greasing of electricity poles in the interim to limit contact with powerlines and reduce electrocutions.
- Any new baboon fences will be built in such a way that, where possible, provision is made for movement of other wildlife through the fences, including **panels that can be opened during wildfires** allowing for escape routes for baboons as well as other wildlife.
- **Baboon suffering** (human-induced or because of natural factors) will be **addressed immediately**. A **new response protocol** has been agreed between Cape Baboon Partnership and the SPCA.
- **Implementation of the Urban Wildlife Management Bylaw**
- **Health assessments** are to be undertaken by veterinarians to determine the cause(s) of any health issues that are reported or where health issues are suspected (e.g. hair loss, significant weight loss, marked behavioural change).

6.5 Updated Baboon Management Guidelines

The November 2019 Baboon Management Guidelines were developed to address common challenges with individual baboons and were intended to be utilised in tandem with the active management of baboon troops under the former baboon programme. Between roughly 2021 and 2024, these guidelines were not applied consistently, particularly the *Guideline for Categorising and Managing Damage Causing Baboons* (BTTG03) due to legal threats and resulting inaction by authorities.

The resulting paralysis in baboon management has led to a situation in which rather than removing individual baboons, for example to prevent the formation of a troop in a new area, now whole troops must be removed. Revision of the guidelines to appropriately realign management decisions to match the current state of the baboon population and management is now required. A formal process to review the guidelines has been initiated and when completed will be appended to this Action Plan. In the interim, the existing approved Existing Guidelines will remain in place as per Appendix J.

The process to review the guidelines will be as follows:

- Draft Revised Guidelines for review amendment by the Cape of Good Hope SPCA (completed)
- Review and endorsement by the JBOT
- Endorsement by the JTT as a Draft for comment by the BAG
- Final Revised Guidelines for sign off by the Cape of Good Hope SPCA
- JTT approved Guidelines appended to the Action Plan for implementation

6.6 No new troops will be allowed to establish in transformed areas

As of the approval of this Action Plan, no troops will be allowed to establish in new areas immediately adjacent to transformed land that will require a new team of rangers or baboon-proof fencing. Should a small break away occur from the defined and existing troops and the group move into a new area:

- The break-away group will immediately be herded back to the main troop. If they persist then the individual(s) leading the group will be removed and humanely euthanised and the remaining individuals herded back to the troop.
- This excludes the natural process of fissioning providing that the new troops that form remain in the defined baboon habitat (untransformed) and do not take up marginal habitat on the transformed edges and routinely forage in transformed habitat.
- Based on available low-lying resources and habitat, successful and sustainable fissioning within the constraints of the Action Plan is only likely possible in the Northern Area and the Plateau Road troop.

6.6.1 Position statement on the future potential of new troops

There will remain an ongoing risk of new troop formation. Key drivers of the potential for new troops to form include:

- A lack of resources to deter lone small groups that break away from the main managed troop and forage in transformed land
- Lack of natural predators which allows for small groups to persist

It must be noted that all four troops that have been recommended for removal were all originally small groups that fissioned from larger troops (i.e., Waterfall and Seaforth fissioned from Smitswinkel Bay troop, CT1 and CT2 fissioned from Tokai) and moved into marginal natural habitat where they had better access to transformed land.

NB: If new troops are allowed to establish and routinely forage in transformed land then conflict on the Peninsula will remain high and the costs of management will balloon compromising the authorities ability to manage fewer baboons better.

6.7 Removal of troops

Four troops that formed in the last two decades in new areas through fissioning from one of the main troops and establishing independently in marginal habitat will be removed. **The removal of troops is a very difficult decision, but one that is now required.** The troops that will be removed are:

- **CT1** (Constantia 1) – originally known as the Constantia troop which fissioned from the Tokai troop, now called CT1 and lives north of Constantia Nek between the vineyards and the residential areas with very limited access to natural habitat below 230 m altitude. The troop; comprised approximately 25 individuals as of September 2025.
- **CT2** (Constantia 2) – originally split from Constantia troop which is now called CT1 troop and lives north of Constantia Nek extending as far as the Kirstenbosch Gardens. The troop ranging area has very limited access to natural areas below 230m altitude and there is a heavy use road traversing the length of their range. There are high levels of human induced injuries and

deaths recorded in this troop and as predicted by Hoffman & O’Riain (2012) for any troops living north of Constanti Nek. The troop comprises approximately 18 individuals in September 2025.

- **WF** (Waterfall) – split from the Smitswinkel Bay troop prior to 2007 and lives on the northern border of Simon’s Town, with very limited access to natural areas below 230m altitude. This troop is highly habituated with many individuals in poor physical condition with frequent human-induced injuries and deaths; comprised approximately 50 individuals in September 2025.
- **SF** (Seaforth) – split from the Smitswinkel Bay troop and moved north of Murdoch Valley with very limited access to natural areas below 230m altitude. This troop is an ongoing threat to the African Penguin colony (critically endangered on a global scale) in the area; comprised approximately 18 individuals in September 2025.

There are very limited available options for troop removal all of which come with logistical, ethical and financial implications. The available options for the removal of troops are listed below and the ecological, socio-political and financial implications of each option is expanded on in the respective appendices:

- Translocation/re-wilding (Appendix F)
- Existing sanctuary (Appendix G)
- Establishment of new purpose-built sanctuary (Appendix G)
- Combination of the above

All options have been considered and a commitment by the authorities remains to exhaust all possible interventions prior to the use of lethal management (culling).

6.7.1 Plan of action for Seaforth and Waterfall Troop

6.7.1.1 Phase One: Seaforth Troop

- A partnership between the Cape Baboon Partnership and a private landowner in Plateau Road will be formalised for the establishment of a purpose-built baboon sanctuary located on the peninsula.
- All necessary permits and captive animal management plans from CapeNature will be in place.
- A first trial enclosure of minimum size 1.5 hectares will be built on land at Plateau Road.
- Seaforth Troop will be cage trapped by Cape Baboon Partnership and all animals will be given a veterinary-led health assessment.
- All healthy males will be vasectomised.
- All healthy animals will be moved and released into the trial enclosure on Plateau Road.
- At between three and six months a formal assessment of the success of the purpose-built baboon sanctuary on the globally set Welfare Assessment[†] will be conducted.
- In parallel the process to design and build enclosures two and three will be initiated.
- If confirmed feasible, the Environmental Impact Assessment for the additional enclosures will occur simultaneously.

[†] University of Edinburgh. (2024). Understanding the Five Domains Model of Animal Welfare. <https://vet.ed.ac.uk/sites/default/files/2024-09/5%20Domains%20Model.pdf>

6.7.1.2 Phase Two: Waterfall Troop

- Following the confirmation of the success of the Seaforth troop at the purpose-built baboon sanctuary, and Environmental Authorisation (if required), enclosures two and three will be built.
- Waterfall troop to be cage trapped by Cape Baboon Partnership and all animals will be given a veterinary-led health assessment.
- All healthy males will be vasectomised.
- All healthy animals will be moved and released into the baboon sanctuary on Plateau Road.

6.7.1.3 Failure

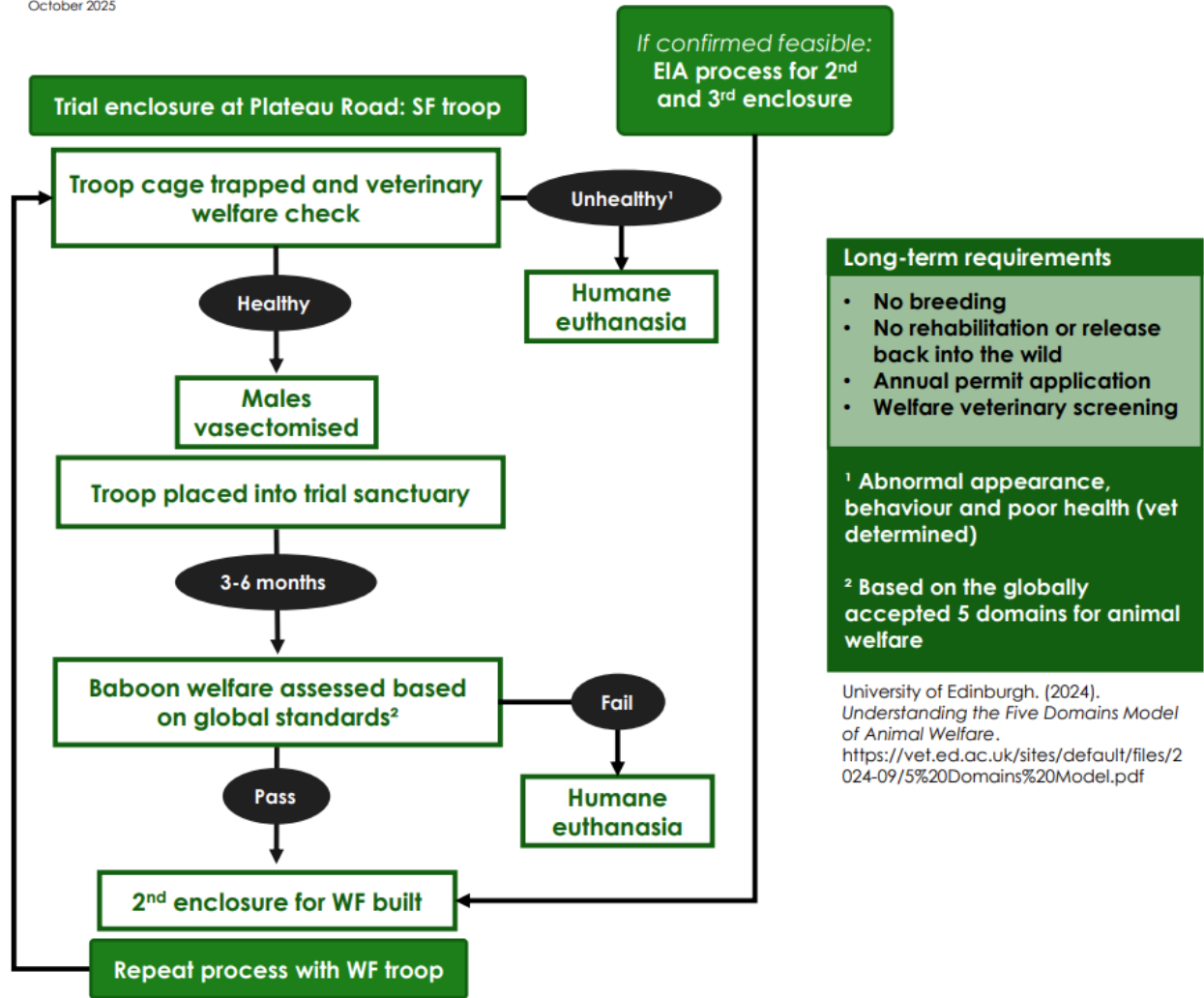
- Should the baboon sanctuary fail at any time with respect to animal welfare outcomes or operational funds such that the situation cannot be remedied, the baboons will be humanely euthanised by the authorities in accordance with CN permit with oversight by SPCA.
- Should the baboon sanctuary fail during Phase One, Waterfall troop will not be moved to the purpose-built baboon sanctuary located on the peninsula and the troop will be humanely euthanised.

Box 7: Note on the purpose-built baboon sanctuary located on the peninsula

- The sanctuary **will only receive baboons from the Waterfall and Seaforth troops**
- **No re-stocking** will be permitted
- **No additional baboons** will be permitted
- **No baboons will be released back into the wild** from the sanctuary
- **No breeding** will be permitted at the sanctuary

PLAN OF ACTION FOR THE FIRST (TRIAL) BABOON ENCLOSURE

October 2025



6.7.2 Plan of action for the Constantia troops

The following will take place for CT1 and CT2:

- The northern fence will be financed and built as a partnership between the Cape Baboon Partnership and the private landowners in a structured agreement. The day-to-day management of the northern fence will be by the Cape Baboon Partnership.
- The fence will be constructed from the northern end southwards.
- As soon as the fence reaches the northern edge of Porter Estate property boundary both the CT1 and CT2 troops will be captured, and all healthy animals released as two troops on the mountain side of the fence. Should the troops or individuals circumvent the fence and move north over Constantia Nek they will be humanely euthanised by the authorities.

****Note: The authorities are fully committed to investing in every effort to avoid lethal management and it is hoped that CT1 and CT2 will settle and establish on the mountain side of the fence but it is equally important to be reminded that due to the limited access of low lying habitat that this management effort may not be successful.**

7 MANAGEMENT OF THE REMAINING TROOPS

7.1 Northern Troops

The Northern Management area includes the Zwaanswyk Troop (ZW), Tokai Troop (TK), Mountain Troop 1 (MT1), Mountain Troop 2 (MT2), and Constantia troops (CT1 and CT2). The management plan for Constantia troops is described in Section 6.7.2. The remaining northern troops that require management are listed below:

7.1.1 Mountain 1 Troop

- Monthly reporting on births, deaths, immigrations, emigrations, health, troop size, troop habituation level, individual behaviour alerts, troop general movements.
- Record of transgressions by people.
- Field rangers assigned to monitor and record data as above.
- Snare patrol and fence maintenance along fence lines in troop ranging area (// 7).
- Targeted reduction in human presence with the troop and the reduction in the use of aversive conditioning.

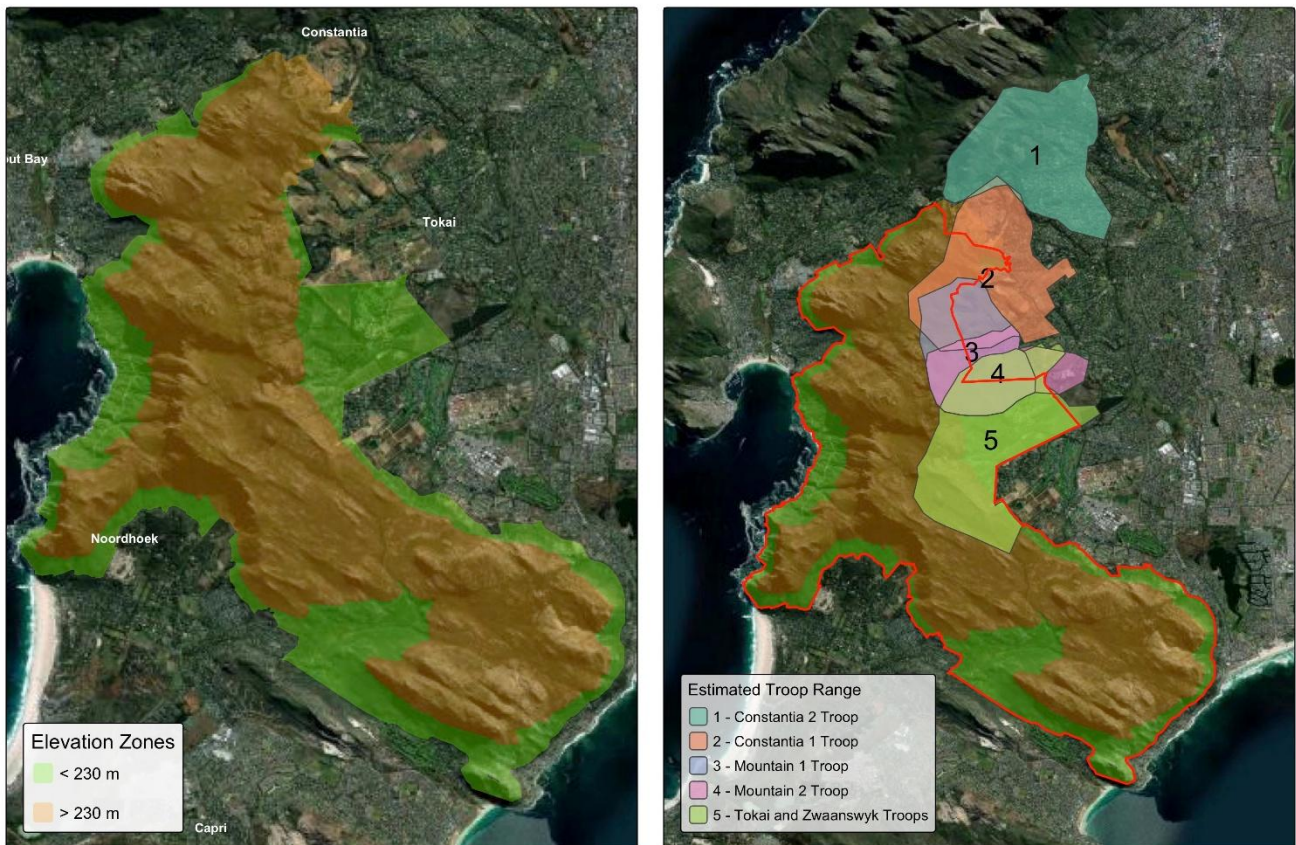


Figure 7: Estimated ranges of the northern troops

7.1.2 Mountain 2 Troop

- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Record of transgressions by people.
- Field rangers assigned to monitor and record data as above.
- Snare patrol and fence maintenance along fence lines in troop ranging area (Figure 7).
- Targeted reduction in human presence with the troop and the reduction in the use of aversive conditioning.

7.1.3 Tokai Troop

- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Record of transgressions by people.
- Snare patrol and fence maintenance along fence lines in troop ranging area (Figure 7).
- Targeted reduction in human presence with the troop and the reduction in the use of aversive conditioning.

7.1.4 Zwaanswyk Troop

- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Record of transgressions by people.
- Field rangers assigned to monitor and record data as above.
- Snare patrol and fence maintenance along fence lines in troop ranging area (Figure 7).
- Targeted reduction in human presence with the troop and the reduction in the use of aversive conditioning.

7.2 Southern Troops

The Southern Management area is described as the area south of Sun Valley and comprises the Slangkop, Groot Olifantsbos, Plateau Road, Da Gama, Smitswinkel Bay, Seaforth and Waterfall troops (Figure 8). This management plan excludes the 'deep' Cape Point troops in the Cape of Good Hope section of Table Mountain National Park. The management plan for Seaforth and Waterfall troops is described in Section 6.7.1. The remaining southern troops that require management are listed below:

7.2.1 Slangkop Troop

- Strategic fencing is a high priority, although limitations to this include budget availability, public acceptance and environmental authorisation. It is noted that without implementation of strategic baboon fencing in this area, the Slangkop troop may not be considered sustainable in the long-term. Fencing is essential to prevent a need for the removal of this troop.
- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Rangers to actively manage the troop at all times and work towards maximum "out of town" time.
- Snare patrol and fence maintenance along fence lines in troop ranging area.

7.2.2 Groot Olifantsbos Troop

- To be managed through actively preventing them leaving the Cape of Good Hope section of Table Mountain National Park. Collar an individual baboon with a tracking collar. Rangers to actively manage the troop by remotely tracking the collared individual and preventing the troop from exiting the reserve.
- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Targeted reduction in human presence and the use of pain aversive tools.

7.2.3 Plateau Troop

- Plateau Road troop to be kept as wild as possible with as little management interference beyond welfare responses and monitoring.
- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.

- No daily rangers as the troop is in a rural area, but a response team is to be on standby at all times for responding to welfare issues or other concerns.
- Baboon-proofing of all electricity poles to reduce the instances of electrocution.
- Minimal engagement with the troop.

7.2.4 Smitswinkel Bay Troop

- Smitswinkel Bay troop to be actively prevented from accessing Simon's Town by baboon rangers.
- Monthly reporting on births, deaths, immigrations, emigrations, troop size, troop habituation level, individual health and behaviour alerts, troop general movements.
- Collar an individual baboon with a tracking collar. Rangers to actively manage the troop by remotely tracking the collared individual and preventing access to Murdoch Valley and Simon's Town.
- Minimal engagement with the troop.

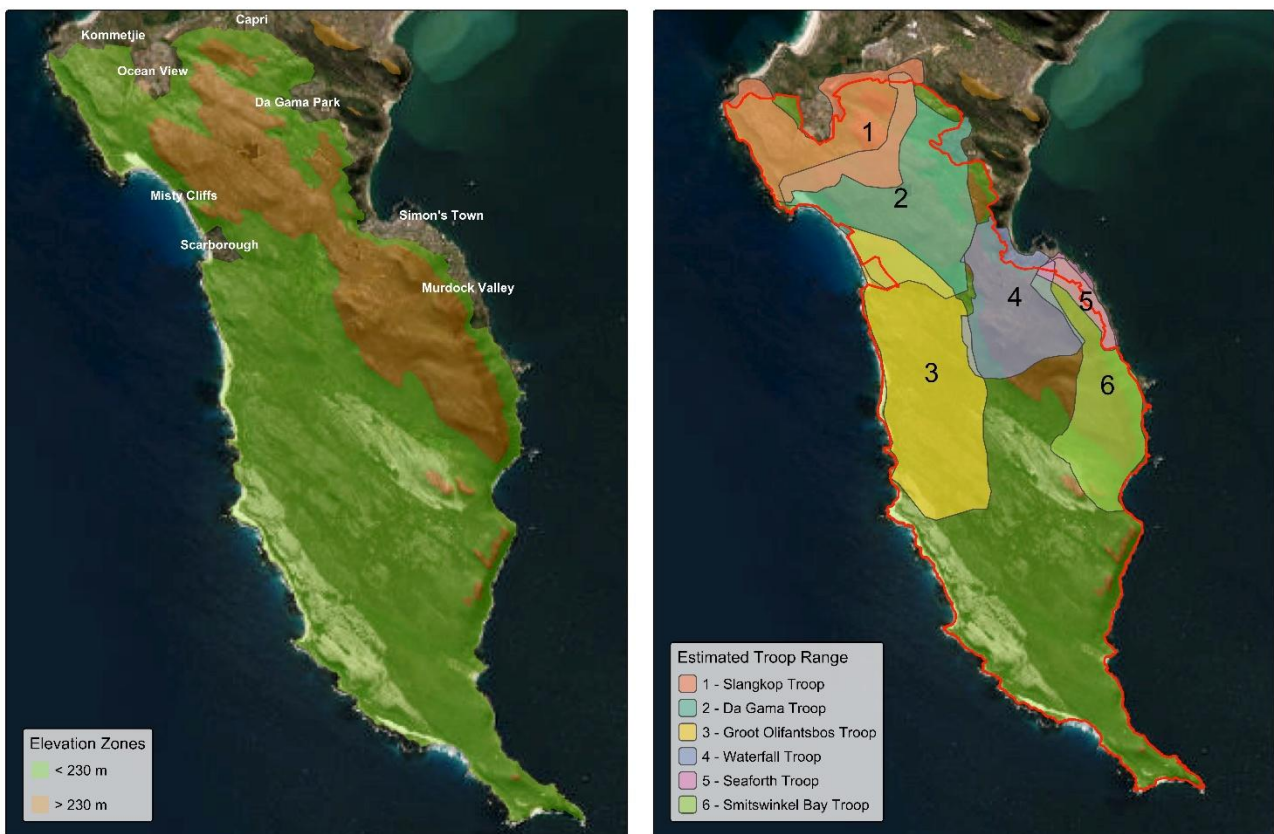


Figure 8: Estimated ranges of the southern troops

7.3 Alternative management solutions considered by the JTT and found to be unviable or lacking efficacy

As record in the Action Plan, various management actions were considered by the JTT in the development of the final plan. These actions comprise technical considerations, suggested and proposed inputs via the Expert Panel and proposed or requested actions by the BAG or public stakeholders. Appendix H lists those that were considered by found to be unviable, lacking efficacy or to be unrealistic or unachievable. These are recorded as part of the Action Plan so as to ensure the reader is aware of all that was considered in the development of the Action Plan.

8 AREAS OF RESEARCH

The following key research areas will be completed for decision on implementation in 2030:

8.1 Birth control as a management tool

A full and detailed report vetted and reviewed by recognised experts must be completed for consideration in the 2030 review and at a minimum must provide clarity on:

- Would birth control offer a meaningful management tool in the specific context and long term goals of the management of the peninsula baboons
- If birth control offers a meaningful tool and outcome, what contraception/birth control method should be used?
- In which troop(s) should it be applied?
- How will it be applied?
- How will it be assessed for efficacy?
- Who would implement it?
- How much would it cost?
- What implications might it have for troop dynamics and how would these be managed or mitigated?
- What are the ethical considerations?

8.2 Annual independent population count

The Cape Baboon Partnership will appoint a recognised and experienced person(s) to undertake an independent population count every second year.

The independent count will:

- Be compared to the monthly troop count numbers
- Be submitted as part of a formal annual Peninsula Baboon Population report to the JTT and BAG in the first week of December every second year.

8.3 Genetic Enrichment of the Peninsula Baboon population

A full and detailed report vetted and reviewed by recognised experts must be completed for consideration in the 2030 review and at a minimum must provide clarity on:

- Is there a scientifically demonstrable need for genetic enrichment?
- If there is a need for genetic enrichment how best would this be achieved?

9 TIMEFRAMES AND SCHEDULE OF THE IMPLEMENTATION OF THE ACTION PLAN

Appendix N details the expected timeframes and schedule of implementation of each of the Actions. This schedule should be used as a reporting mechanism for the JTT, BAG and as a continual public record of progress.

10 REVIEW OF THIS ACTION PLAN

This monitoring programme is drafted in terms of current (2025) knowledge and strategic direction. It is intended as a document, which should be regularly reviewed to ensure that the actions,

assessments, and outcomes are in line with regulatory requirements, strategic direction, and emerging knowledge. An annual minor review is proposed, which should recommend revisions based on any significant changes in population numbers, legislation, or troop status.

A five-yearly major review is proposed in 2030 alongside the scheduled review of the CPBSMP. The five-yearly review should constitute a full reassessment of levels of success or failure of the various actions in achieving the desired objectives and outcomes in terms of the conservation and welfare of the baboon population. It should consider areas of research to be conducted, the introduction of new management actions as required, and the retirement of actions no longer necessary to achieve the outcomes or which have proven ineffective or unimplementable.

Any revisions to the Action Plan will require approval by the JTT, and consultation with stakeholders should be initiated as soon as reasonably practicable after the need for revisions is identified. A record of revisions shall be maintained.

REFERENCES

Allen BL, Bobier C, Dawson S, Fleming PJS, Hampton J, Jachowski D, Kerley GIH, Linnell JDC, Marnewick K, Minnie L, Muthersbaugh M, O'Riain MJ, Parker D, Proulx G, Somers MJ & Titus K (2023). Why humans kill animals and why we cannot avoid it. *Science of the Total Environment*, 896, 165283.

Arlinghaus R, Cooke SJ, Schwab A & Cowx IG (2007). Fish welfare: a challenge to the feelings-based approach, with implications for recreational fishing. *Fish and Fisheries*, 8, 57-71.

Beamish, E.K., O'Riain, M.J. 2009. Causes and consequences of mortality and mutilation in the Cape Peninsula baboon population, South Africa. Department of Zoology University of Cape Town.

Ben-Dor M, Sirtoli R & Barkai R (2021). The evolution of the human trophic level during the Pleistocene. *American Journal of Physical Anthropology*, 175, 27-56.

BirdLife International. 2024. Species factsheet: African Penguin *Spheniscus demersus*. Downloaded from <https://datazone.birdlife.org/species/factsheet/african-penguin-spheniscus-demersus> on 23/06/2025.

Bobier C & Allen BL (2022). The virtue of compassion in compassionate conservation. *Conservation Biology*, 36, e13776.

Caspers C. (in press). Conflict and coexistence: An assessment of welfare outcomes for the methods used to manage chacma baboon (*Papio ursinus*) on the Cape Peninsula, South Africa. Masters, University of Cape Town.

Cheney, D.L., Seyfarth, R.M., Fischer, J., Beehner, J., Bergman, T., Johnson, S.E., Kitchen, D.M., Palombit, R.A., Rendall, D., Silk, J.B. 2004. Factors affecting reproduction and mortality among baboons in the Okavango Delta, Botswana. *International Journal of Primatology*. 25: 401-428.

Darwin C (1859). *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life: 6th Edition*, London, John Murray.

Drewe, J. A., O'Riain, M. J., Beamish, E., Currie, H., & Parsons, S. (2012). Survey of infections transmissible between baboons and humans, Cape Town, South Africa. *Emerging Infectious Diseases*, 18(2), 298.

Frankham, R. 2015. Genetic rescue of small inbred populations: meta-analysis reveals large and consistent benefits of gene flow. *Mol. Ecology*. 24: 2610 – 2618.

Fraser D & MacRae AM (2011). Four types of activities that affect animals: implications for animal welfare science and animal ethics philosophy. *Animal Welfare*, 20, 581-590.

Hoffman, T.S. & O'Riain, M.J. 2012. Hoffman, T. S., & O'Riain, M. J. (2012). Monkey management: using spatial ecology to understand the extent and severity of human–baboon conflict in the Cape Peninsula, South Africa. *Ecology and Society*, 17(3).

Kansky, R., Gaynor, D., 2000. Baboon management strategy for the cape peninsula. Project Number ZA 568, Final Report World Wide Fund for Nature – Table Mountain Fund Research Project, Cape Town, South Africa.

Kansky, R., Kidd, M., Knight, A.T. 2016. A wildlife tolerance model and case study for understanding human wildlife conflicts. *Biological Conservation*. 201: 137-145.

Lawler, R.R. 2018. Emerging and enduring issues in primate conservation genetics. *Annu. Rev. Anthropol.* 47: 395 – 415.

Leith, D. A., Mpofu, B. S., van Velden, J. L., Reed, C. C., van Boom, K. M., Breed, D., & Kohn, T. A. (2020). Are Cape Peninsula baboons raiding their way to obesity and type II diabetes?-a comparative study. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 250, 110794.

Leopold A (1949). *A Sand County almanac: with other essays on conservation from Round River*, New York, Oxford University Press.

Lynch KE, Allen BL, Berger-Tal O, Fidler F, Garrard GE, Hampton JO, Lean CH, Parris KM, Sherwen SL, White TE, Wong BBM & Blumstein DT (2025). Explicit value trade-offs in conservation: integrating animal welfare. *Trends in Ecology and Evolution*, 40, 593-600.

Minteer BA & Collins JP (2008). From environmental to ecological ethics: Toward a practical ethics for ecologists and conservationists. *Science and Engineering Ethics*, 14, 483-501.

Mormile, J. 2024. An interdisciplinary study on the human-baboon interface in Rooiels, South Africa [PhD thesis, University of Cape Town].

Psuik, K., Enqvist, J. 2024. Control or coexist with urban baboons: exploring residents' views and values in Cape Town. *Conservation Science and Practice*. 6: 1-13.

Selvaraj, I., Sha, A.A., Raj MV, B., Singh, A.K. 2023. Intra-abdominal laparoscopic sterilization of macaques: An attempt to mitigate human-primate conflict through an effective animal birth control technique. *International Journal of Veterinary Sciences and Animal Husbandry*. 8:11-15.

Skead, C.J. 1980. Historical mammal incidence in the Cape Province, vol. 1: The western and northern Cape. Cape Town, Department of Nature and Environmental Conservation of the Provincial Administration of the Cape of Good Hope. 1:1-903.

Urban Baboon Programme (UBP) Annual Population Census. 2023/2024.

Willems, E.P., Hill, R.A. 2009. Predator-specific landscapes of fear and resource distribution: effects on spatial range use. *Ecology*. 90: 546-555.

APPENDICES

Appendix A	Cape Peninsula Baboon Strategic Management Plan
Appendix B	Constantia 1 Troop Brief
Appendix C	Constantia 2 Troop Brief
Appendix D	Waterfall Troop Brief
Appendix E	Seaforth Troop Brief
Appendix F	Translocation as a Management Method
Appendix G	Sanctuaries as a Management Method
Appendix H	Unfeasible Management Methods
Appendix I	Fencing as a Management Method
Appendix J	Existing Guidelines
Appendix K	Decision Matrix and Tool
Appendix L	Expert Comments and Responses Report
Appendix M	BAG Comments and Responses Report
Appendix N	Proposed Implementation Schedule
Appendix O	Baboon Waste Management Strategy (to be added at a later stage)