

Fruit trees and black bags – Temptations for baboons in Eden?

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With city sprawl, diminishing habitat and increasing baboon numbers, urban human-baboon conflicts have become a major, widely publicized issue in the City of Cape Town and surrounds. In George, the recent emergence of baboon WhatsApp groups, Facebook pages, press releases, appointment of wildlife monitors and the occasional baboon in the street may lead one to infer that we have a serious baboon problem. Although the negative impacts experienced by some residents should not be underplayed, it is difficult to draw objective conclusions regarding the scope of the current situation and future scenarios in George due to limited scientific or regular monitoring data. A team of researchers led by Dr Chloe Guerbois from the Sustainability Research Unit based at Nelson Mandela Metropolitan University (NMMU) George Campus, set out to gain some insights for the development of appropriate management options. The George baboon situation is not yet as bad as in other towns and it is the right time to act as the costs could still be kept low both for humans and baboons. Simply changing the way we dispose of our trash may yield promising results in mitigating conflicts in the near future; while improved spatial planning of residential vegetable gardens and orchards at the town scale may offer longer term solutions.

Estimating George baboon population size

Using GPS coordinates and picture IDs, the team identified four troops of Chacma baboons (*Papio ursinus*) in the northern and eastern vicinity of George urban area between March and June 2016. The most encountered Madiba Drive troop (± 34 individuals) can often be seen roaming the NMMU campus and disappearing into the surrounding plantations to settle at night. The Vic Bay troop (± 22 individuals) was only ever seen crossing the N2 on Kaaimans pass going between their usual roosting grounds north of the N2 and Victoria Bay Heights where they have been reportedly entering houses, and occasionally overnighing in the non-indigenous forests. Plantations north of suburban areas were found to be the preferred habitat of the Witfontein (± 31 individuals) and Denneoord troops (± 30 individuals) which seem to occasionally move into residential areas for foraging. In comparison to other areas, George baboon troops exhibit small to medium group sizes, which often correlate with small home ranges or low predation pressures, but optimal group size for grooming (thus good reproduction success). More research will be needed to test these hypotheses and relate George's baboon ecology to their raiding habits.

Trends in baboon incidents reported

Cape Nature recorded a total of 99 baboon incident reports between April 2009 and December 2015 with more than half coming from Eden and Denneoord neighbourhoods, the apparent hotspots for conflicts in George. The Denneoord troop is clearly involved in the Denneoord incidents but whether they or the Madiba Drive troop are the ones raiding Eden properties remains unclear. The highest number of baboon incidents was reported in 2012 with the lowest number reported in 2014, and no significant upward trend was found over the last 7 years. The appointment of three wildlife monitors by George Municipality in September 2015 certainly resulted in reducing the number of incidents in 2016. September was the month with the highest number of reported incidents followed by May while December, January and July showed the lowest. These variations seem to reflect weather patterns, specifically temperature, which is known to affect baboon foraging behaviour. A more systematic reporting system will help to understand the large scale spatial and temporal patterns of baboon movements and raids in and around town.

Factors encouraging baboon raids in George

Interviews with 60 residents from Denneoord and Eden were conducted to gain further insights into baboon raids. Almost 90% had experienced baboon encounters near their residence at least once, with rummaging through rubbish bags, searching for food and passing through private property being the predominant reported activities. Refuse bags were the primary target of baboon raids as well as the item most often damaged, followed by objects such as gutters, washing lines and fruit trees. Consequently, open access to garbage and the presence of fruits trees were the most significant factors increasing the likelihood of baboon damage on their property. The presence and type of fences were found to have a weak effect on deterring them. Placing rubbish bags in baboon-proof bins or in a locked store-room, was found to result in significantly fewer raiding incidents. But leftover food in rubbish bags was found to significantly increase baboon raiding with baboons reportedly ignoring blue recycling bags and one resident reporting that placing leftover food in a separate bag stopped baboons raiding through the black bags. Only a small proportion of residents have thought of stopping placing leftover foods in black bags, probably as a result of the lack of alternatives for food leftovers, specifically meat and dairy products which cannot be composted. Perhaps an opportunity exists whereby the municipality and community can work together to find an innovative manner to dispose of food leftovers. This year the research team will refine the contribution of landscape features to the spatial occurrence of baboon raids.

Attitudes of George residents towards baboons

Attitudes towards baboons varied among residents, but a minority of our informants (only 15%) had a really negative attitude towards baboons. Although it was found, understandably so, that negative attitudes towards baboons increased with negative baboon experiences, negative attitudes also appeared lower for long term residents and higher for people who settled in these areas for work reasons. Most respondents stated that being close to nature was their primary reason for settling in their neighbourhoods. However over 70% of the respondents did not think that these environmental issues should be at the forefront of local development, citing more pressing issues. Furthermore, residents did not seem to feel responsible for solving baboon issues, rather pointing fingers at Cape Nature to resolve the case.

Recommendations

Human-wildlife conflicts raise real challenges and no single solution can be seen as a panacea. Translocations and elimination of problem animals have sometimes yielded satisfying short term results but rarely solved the problem. Further, aggressive responses to problem animals (i.e. shooting, threatening) often result in transferring the problem to neighbours. It has also been reported to increase aggressive behaviours from wildlife towards humans (and between humans), worsening the situation. Proactive collaborative solutions such as improved waste management and adapted farming and gardening practices at the edge of urban areas can offer longer term options to ease human-baboon coexistence. While humans will clearly continue to benefit from ecosystems (monetarily and otherwise), the only hope for long-term conservation is to redefine individually and collectively our relationships with the natural world. What is our vision for baboons and other wildlife in the Garden Route?

DISCLAIMER: All research was conducted in accordance with the ethics committee of NMMU (Ref H16-SCI-NRM-001) and no primates (*Homo* or *Papio*) were harmed during the study. The hardest job was done by Ms Hester Pentz and Keesha Chetty, who collected the data as part of their BTech in Nature Conservation at NMMU George Campus. We are also grateful to George residents, as well as Cape Nature and George Municipality who facilitated the research process. For further information or if you would like to share your vision and experience with wildlife in the area, please contact Dr Chloe Guerbois at chloe.guerbois@nmmu.ac.za.