



Preventing Volcanoes National Park from going to the dogs. Gorilla Doctors interventions

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INTRODUCTION



- Domestic dog (*Canis familiaris*) has accompanied man all over the world since its domestication ~150,000 years ago and today it is the most abundant canid on earth.
- When properly managed, dogs serve people in many important ways; guarding property and domestic livestock, assisting the blind and other disabled people, performing search and rescue missions, detecting explosives and drugs etc.
- Clearly dogs are useful and important domestic animals and pets.

INTRODUCTION



- However, without proper care and handling, free roaming or feral dogs may become a nuisance and cause serious damage.
- Feral dogs can survive and reproduce independently of human intervention or assistance.
- Some feral dogs use human garbage for food, but others acquire their primary subsistence by hunting and scavenging like other wild canids

Dogs ownership around VNP

- Volcanoes National Park (VNP) is home to a number of species including two endangered primate species namely mountain gorillas and golden monkeys.
- VNP is also located in the most densely populated region of Rwanda
- As human population increases, people move into more remote areas, coming closer to the refuges of endangered species
- As human populations have grown, so have populations of dogs



Dogs ownership around VNP



- Generally, most domestic dogs in the area are kept for protection or hunting and not as pets and are not well cared for as they are expected to scavenge food.
- Hence, these animals often enter the national park in search of food and water.



Free roaming and feral dogs in the park



- Free roaming and feral dogs are regularly found inside the park by either direct sighting of them, their tracks or hearing them barks as they chase wildlife.
- Gorilla doctors and the park management have identified/observed that it is important to control a population of free roaming dogs inside the park for effective wildlife protection.

Wildlife damage by dogs in VNP



- From 2017 up to June 2020, a total of 43+ bushbucks and duikers were reported to have been killed by feral dogs.
- A number of reports indicated that the park was losing golden monkeys that appeared to have been killed by dogs
- Although the direct killing of wildlife is most apparent form of damage, dogs can also spread disease,
- Transmissible pathogens for parasites and diseases such as rabies, parvovirus, and canine distemper virus (CDV), dogs can cause significant population declines of native, often endangered wildlife.

Objectives of the project

- The project has the following general aims:
 - Finalizing the wildlife damage in Volcanoes National Park by dogs
 - Finding out the source of free roaming and feral dogs using the park
 - Promote responsible ownership
 - Minimizing the risk of disease transmission by dogs at this human-wildlife-domestic animals interface
 - Improving methods of trapping dogs and introduce ethically acceptable way of eliminating them by providing live cage traps and humane euthanasia
 - Research

Free roaming community dogs in the park



- During the effort of monitoring this problem to assess the feasibility of managing these dogs, field camera traps have been deployed at different park entrances to understand the movement of dogs in and outside the park.
- Five camera traps were installed at five different park entrances
- Dogs were documented on several occasions entering and exiting the park at particular time of the day

GD interventions inside the park



- Replacing the wire snares with live age trapping of free roaming and feral dogs inside the park to prevent the unnecessary injuries to the captured dogs as well as the non targeted species e.g. Golden jackals.
- Safe euthanasia of adult feral dogs that can't be rehomed
- Find adoptions for puppies captured in the park
- Possibilities for reuniting free roaming domestic dogs to owners



GD interventions outside the park



- Participated in efforts to control stray dogs in communities in partnership with local administration and RAB
- Survey to dog owners to understand reasons why dogs are allowed to roam freely
- Take part in education campaigns
- Conduct research to understand dogs parasites and diseases of conservation and public health concern
- Historically, Gorilla Doctors has worked with the Rwanda Agricultural Board to give vaccinate more than 1,000 domestic dogs and cats living around Volcanoes National Park.



Research

- The results from this study highlight a high risk of zoonotic and wildlife parasite infections from dogs and the need for monitoring and controlling parasites of domestic animals at this interface.
- *For example, Taenia serialis* detected in this study was also found in a deceased Golden monkey in VNP (Gorilla Doctors data on file, 2017) and this may explain potential transmission to wildlife, including endangered species with potentially serious health consequences for the later.
- Of the three species detected in dog faeces in this study, *T. Hydatigena* depend on livestock as intermediate host and may cause cysticercosis in humans (Taylor, Coop, & Wall, 2007) while *T. Serialis* is endemic in wildlife including wild primate population such as baboons (Schneider-Crease et al., 2017).
- Although these parasites are relatively easy to control, there was little or no delivery of basic animal health services such as dog deworming and vaccination.

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PREVALENCE AND PREDISPOSING FACTORS OF TAENIID
PARASITES IN DOGS IN NEIGHBOURING COMMUNITIES
AROUND VOLCANOES NATIONAL PARK, RWANDA

By
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GORILLA DOCTORS.

Proposed way forward

- The long-term solution to most problems caused by unconfined dogs, including feral dogs, is responsible dog ownership and effective local dog management programs.
- Experience shows that effective control of feral dogs involves the adoption of more than one approach (WHO/WSPA, 1990).
- It is important therefore to develop long-term, sustainable strategies aiming not only to protect humans and wildlife from coming into contact with those animals but to protect the health and welfare of the animals themselves.
- Dog breeding must be controlled. Unwanted dogs should be placed for adoption or destroyed rather than abandoned, since the latter leads to the formation of free-living, feral populations.
- Do regular deworming dogs to break the life cycle of cestode parasite cycle around VNP.
- Improve awareness of dog owners

Thank you



Questions???