



**HONEYGUIDE**

CROP PROTECTION GRANT PROPOSAL



# 1.0. Background.

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Tanzanian wildlife, particularly elephants, need large areas in order to survive. They move from place to place in search of food and water, enabling ecosystems to recover and regenerate as they travel across the landscape. National parks protect some core areas, however in order to survive, populations must also venture outside of the parks and seasonally disperse into human habituated areas. As elephants move through farmland, they frequently destroy farms and crops, causing a devastating impact on local livelihoods and often leading to dangerous encounters between humans and elephants, as well as retaliation killings.

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African wildlife is under threat, approaching an ecological tipping point whereby irreversible damages may occur. Here in Tanzania, there are two interconnected problems placing immense pressure on our wildlife, poaching and human encroachment. Poaching is damaging and devastating, and is at the forefront of the media. Lesser known, yet perhaps a

greater threat, is that land for wildlife is decreasing as human populations grow. Wild areas are being converted into farms, not only reducing living space for wildlife, but also increasing human-wildlife conflict. Honeyguide is working with local communities on sustainable solutions to address these issues.

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# 1.0. Background.

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**90% | CROP  
SAVED**

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The Human Wildlife Conflict (HWC) program that Honeyguide implements is a powerful conservation tool, and we are seeing its impacts. In Honeyguide protected areas, the program has reduced crop damage from elephants by 90%; as a result, we have seen zero retaliatory killings of elephants.



Communities in Tanzania are working to establish safe havens for wildlife outside of the National Parks, called Wildlife Management Areas (WMA's). Honeyguide is working with communities within Wildlife Management Areas to establish the business of conservation, and to assist communities in generating revenue through tourism. By establishing wildlife

tourism in these areas, greater value will be placed on local wildlife by communities, and therefore an increased desire to protect it, and to provide more intelligence on illegal activities such as poaching. Honeyguide then provides support for these communities in conserving their wildlife, including providing toolkits to protect crops.

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## 2.0. Community Human-Wildlife Conflict Teams



# 50-50



**COST SHARING.** THE PROJECT WILL PROVIDE THESE REPLACEMENT SETS (CHILLI CRACKERS AND ROMAN CANDLES) AND THE COMMUNITIES HAVE COMMITTED TO CONTRIBUTE 50% OF THE COSTS.

## 7-10

### TEAMS PER VILLAGE

## 800 VOLUNTEERS

FROM RANDILEN AND ENDUIMET THAT WILL PATROL EVERY NIGHT DURING THE CROP RAIDING SEASON. EACH TEAM WILL REQUIRE THE FULL CONFLICT TOOLKIT AND PRIMARILY THESE TOOLKITS NEED REPLACEMENT SETS OF CHILLI CRACKERS AND ROMAN CANDLES.

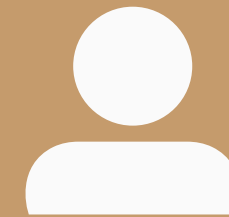
## 90%

REDUCTION OF  
CROP DAMAGED  
BY ELEPHANTS

TARANGIRE ECOSYSTEM  
INCLUDING THE SUR-  
ROUNDING VILLAGES HAVE  
APPROXIMATELY

## 60

HUMAN-WILDLIFE  
CONFLICT TEAMS



## 10

TEAM MEMBERS IN  
A HWC TEAM ES-  
TABLISHED WITH-  
IN COMMUNITIES

## 30

VILLAGES  
IN HONEYGUIDE  
PROJECT AREAS

## FOUR STEP

EFFECTIVE  
HUMAN-ELEPHANT  
PREVENTION  
TOOLKIT

## 2.1. Human-Elephant Conflict Prevention Toolkit (HEC)



### FLASH LIGHT

Visual irritant, targeting elephants vision and helps to locate them at night



### BLOW HORN

Auditory irritant, targeting elephants hearing, best used with flash lights



### CHILLI CRACKER

Olfactory irritant, targeting elephant's strong sense of smell also the burst sound to distract their hearing



### ROMAN CANDLE

As a last resort, loud explosions and bright lights to scare the elephants away



**75%**  
EFFECTIVE



**45%**  
EFFECTIVE



**60%**  
EFFECTIVE



**100%**  
EFFECTIVE

Honeyguide HWC toolkit consists of a set tools used in a pre-defined sequence to deter crop-raiders. The toolkit contains bright torches, blow horns, chilli crackers and roman candles which are to be used in a given order respectively depending on the stubbornness of a crop raider.

The toolkit is used in a progression, with the flashlight being the least invasive and slowly scaling up the irritant level, if the elephants remain in the crops, then finally the Roman candle (which is a firework of sorts) is fired at them. Records show that the flashlight is 75% effective on all raids. Following on from the flashlight, we bring in the blow horn, then the chilli cracker and finally the Roman candle which is 100% effective; however, is rarely used.

# 3.0. Training



**OVER  
40  
HOURS**

TRAINING FROM 10TH  
JUNE-15TH AUG, 2016

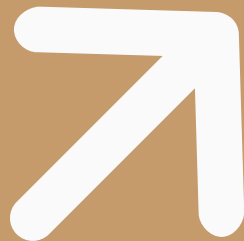


**HWC  
FILM**

SPECIAL FILM  
DEVELOPED FOR  
RANDILEN  
WILDLIFE MANAGEMENT

**235**

PEOPLE WERE TRAINED  
RANDILEN AND  
BURUNGE WMA



Honeyguide, through its crop protection and monitoring and evaluation units, ran 40 hours of training from 10th June to 15th August 2016 and also showed a film that was specifically developed for the Randilen WMA and the conflict with elephants during the month of October. Both the film and the training covered the use of Human-Elephant Conflict Toolkits and also data collection, monitoring techniques, and applicable software usage. The teams also covered all basic pro-

ocols, different techniques used to deter raiding wildlife, safety protocols, and the attributes and significance of good data. Honeyguide also taught lessons from its own training manual, which clearly stipulates directives and procedures for crop damage mitigation. As an intangible output, this training aimed to further contribute to the knowledge base and best practices to alleviate HWC at the community level among these villages in Randilen and Burunge WMA.



How to use  
HWC Toolkit



Safety  
Precautions



Crop Damage  
Mitigation



Data Collection  
and theSignificance  
of good data



Monitoring

# 3.1. Human-Wildlife Conflict Data Collection



## CROP PROTECTION IMPACT

IS IMPORTANT IN ORDER TO MONITOR CROP PROTECTION IMPACT AND BE ABLE TO MAKE DECISIONS ON TOOLKITS, TRAINING THE TEAM AND ENSURING EVERY CROP RAIDING INCIDENT IS BEING RECORDED WHETHER PREVENTED BEFORE ENTRY OR CHASED FROM FARM.

## VCP

VILLAGE CROP PROTECTION TEAM RECORDS INCIDENTS ON A SIMPLE INCIDENTS DATA SHEET



HWC FIELD MONITORING OFFICER RECORDS MORE INFORMATION USING A SPECIAL CROP RAIDS DATA FORM IN OPEN DATA KIT SMART-PHONE APPLICATION.

## DATA

- GPS LOCATION,
- VILLAGE TEAM INVOLVED.
- CROP RAIDING ANIMAL TYPE AND ESTIMATED NUMBERS.
- PICTURES
- DAMAGES CAUSED
- THE DETERRENT METHOD USED TO SCARE AWAY THE ANIMAL(S) SPECIFYING THE EXACT SEQUENCE USED.

## 4.0. Funding Requirements (Randilen and Burunge WMA)

### HWC Kit

Silver crackers and the chilli powder to make the chilli cracker and the Roman candles

**\$700** / village

### Training

Approximately 10 Human Wildlife Conflict teams require training per village.

**\$250** / village

### HWC Teams

Salaries, transport and field expenses for conflict officers who are responsible for managing all the teams in the field

**\$930** / village

**\$1,880** /village/year

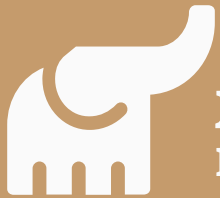
Total costs for supporting communities to protect elephants and their crops from conflict for the entire crop season until harvest ( Usually December until July)



## 4.1.

# Other Human-Elephant Conflict Prevention Tools

### TRACKING COLLAR



**X40**  
Elephants

**\$5,000/ elephant**

**\$200,000**

Randilen WMA/year

### BEE FENCE



**X10**  
kilometers

**\$3,400/ kilometer**

**\$34,000**

Per village/year

### CHILLI FENCE



**X10**  
kilometers

**\$700/ Kilometer**

**\$7,000**

Per village/year



**Saving big spaces for for people and wildlife  
to live together for generations to come.**