

Supporting materials

Experimental evidence on the impact of biodiversity conservation videos on charitable donations

Accepted version (refereed)

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I. Film scripts

Non-charismatic species script: Giant Leaf-nosed Bat

Introduction: This is the Giant Leaf-nosed Bat. The Giant Leaf-nosed Bat lives in the Savanna, in sub-Saharan Africa. Bats live in groups, called colonies, in cave habitats but also roost in tree canopies, hollow trees and dense vegetation.

Ecological role: Bats have an important role in maintaining the health of the local ecosystem. Bats maintain the equilibrium in the Savanna ecosystem by consuming a large number of insects. They also feed on fruit and nectar, and in the process, they pollinate numerous plants and disperse seeds.

Endangerment: Although the Giant Leaf-nosed Bat was once a widespread species, the population is now in significant decline. It is classified as a Threatened species, but it has disappeared in the majority of its range. Habitat loss and conversion has led to a number of Bat populations becoming small, isolated or extinct.

Information on anthropogenic threat: But the main threats to Bats are indiscriminate mining in limestone caves and disturbance of their roosting spots by local populations. Illegal hunting for their pelts and their meat has also lead to a population decline in some areas.

End: The Giant Leaf-nosed Bat is one of Africa's greatest treasures, but needs protection to survive.

Charismatic species script: African Lions

Introduction: This is the African Lion. The African Lion lives in the Savanna, in sub-Saharan Africa. Lions live in groups, called prides, in open grasslands or woodlands.

Ecological role: Lions have an important role in maintaining the health of the local ecosystem. Lions maintain the predator-prey equilibrium in the Savanna. By hunting medium and large herbivores, lions keep their populations in check to prevent over-grazing and habitat destruction.

Endangerment: Although the African Lion was once a widespread species, the population is now in significant decline. It is classified as a Vulnerable species, but it has disappeared in the

majority of its range. Habitat loss and conversion has led to a number of Lion populations becoming small, isolated or extinct.

Information on anthropogenic source of threat: But the main threat to Lions comes from local populations that kill them to protect themselves and their livestock. Illegal hunting for trophies and meat has also led to a population decline in some areas.

End: The African Lion is one of Africa's greatest treasures, but needs protection to survive.

Habitat script: African Savanna

Introduction: This is the Savanna, in sub-Saharan Africa. The African Savanna is the largest grassland and woodland ecosystem in the world and supports a wide variety of plant and animal life.

Ecological role: The diverse community of organisms that live here depend on each other to form a complex food web. The African Lion for instance has an important ecological role in the savanna. By hunting medium and large herbivores, lions keep their populations in check to prevent over-grazing and habitat destruction. The Giant Leaf-nosed Bat is another species that has an important role in maintaining local ecosystem health. By consuming large numbers of insects, bats keep their population in check. They also pollinate numerous plants and disperse seeds.

Endangerment: Although the Savanna - and its wildlife - was once widespread, this ecological habitat is now in significant decline. The African Lion, for example, is classified as Vulnerable, and has disappeared in the majority of its range. The Giant Leaf-nosed Bat is also Threatened, and missing in its native range.

Information on anthropogenic source of threat: Intensive farming, deforestation and over-grazing have led to the removal of naturally occurring Savanna vegetation and habitats. Other threats from humans to both lions and bats are killings by local populations as well as illegal hunting for meat and body parts.

End: The Savanna grassland and its endangered animals - such as the Lion and the Bat - are some of Africa's greatest treasures, but need protection to survive.

II. Links to the films

Bats – Control: <https://youtu.be/hg28VbhLbAA>

Bats – Cause: <https://youtu.be/cQVT7wJ0hoQ>

Lions – Control: <https://youtu.be/k-KVGQSizgE>

Lions – Cause: https://youtu.be/2nF_mrfsdwU

Savanna – Control: <https://youtu.be/yKA60PevI9w>

Savanna – Cause: <https://youtu.be/AErTDRa0XaU>

IV. Sequence of photos with sources/links:

The videos are intended only for education/research purposes as in Shreedhar and Mourato (2017). All photos were taken from Wikipedia, Wikimedia, Flickr, Google images., Search terms included Africa, Savanna, Lion, Leaf nosed bat. Images used were available under the creative commons license and/or for reuse for non-commercial purposes. Hyperlinks are provided by the source name and date wherever available. No copyright infringement is intended.

Bats and Lions:

1. Intro: "Please clear your mind of all thoughts and feelings." (20 seconds)
2. Single individual in habitat 1
 - a. Bats: Frank Vassen, 2010 (Commerson's Leaf-nosed bat, *Hipposideros commersoni*)
 - b. Lions: Kevin Pluck, 2004
3. Savanna landscape 1: Ikiwaner, 2008
4. Savanna landscape 2: CT Cooper, 2011
5. Pair of individuals
 - a. Bats: Charlesjsharp, 2013 (Commerson's leaf-nosed bats, *Hipposideros commersoni*)
 - b. Lions: Robek, 2006
6. Single individual in habitat 2
 - a. Bats: David Dennis, 2007 (Commerson's leaf-nosed bats, *Hipposideros commersoni*)
 - b. Lions: Anette Mossbacher
7. Group/family in habitat 1
 - a. Bats: US Geological survey 2014 (unspecified)
 - b. Lions: Benh LIEU SONG 2012
8. Group/family in habitat 2
 - a. Bats: BBC 2014 (Horseshoe bat, page removed)
 - b. Lions: amanderson2
9. Single individual
 - a. Bats: Micheal Pennay 2009 (Diadem leaf-nosed bat, *Hipposideros diadema*)
 - b. Lions: Corinata 2008
10. Ecological role photo
 - a. Bats with pollen: Merlin D Tuttle 2015 (Lesser long-nosed bat, *Leptonycteris yerbabuena*)
 - b. Lions eating: Samuele Cavadini, 2010
11. Single individual in habitat 3
 - a. Bats: Coke and Som Smith photography and travel (*Hipposideros lankadiva*)
 - b. Lions: Drew Avery 2009
12. Single individual in habitat 4
 - a. Bats: Coke and Som Smith photography and travel (*Hipposideros lankadiva*)
 - b. Lions: freestock.ca, 2008
13. Habitat loss: deforestation/tree burning: Frank Vassen 2010
14. Deceased individual
 - a. Bats: Patricia Litton, 2012 (Leaf nosed bat, unpeified)
 - b. Lions: Africa Geographic blog, 2014
15. Cause treatment: Illegal hunting
 - a. Bats: Stan Dalone 2007 (unspecified, bats for eating)
 - b. Lion: accessed from Flickr, creative common license, but removed
16. Single individual in habitat 7
 - a. Bats: Frank Vassen 2010 (Commerson's Leaf-nosed Bat, *Hipposideros commersoni*)
 - b. Lions: rcrhee, 2013

Savanna

1. Intro: “Please clear your mind of all thoughts and feelings.” (20 seconds)
2. Savanna opening: Gossipguy 2008
3. Savanna landscape 1: Ikiwaner, 2008
4. Savanna landscape 2: CT Cooper, 2011
5. Single individual lion in habitat
 - a. Lions: Kevin Pluck, 2004
 - b. Lion’s ecological role photo: Samuele Cavadini, 2010
6. Single individual bat in habitat
 - a. Bats: Frank Vassen, 2010
 - b. Bat’s ecological role photo: Merlin D Tuttle 2015
7. Habitat loss, deforestation/tree burning:
 - a. Individual Lions: freestock.ca, 2008
 - b. Individual Bats: Coke and Som Smith photography and travel
8. Cause: Intensive farming, overgrazing: Hobgood, 1987 – 1991.
 - a. Deceased Lions: Africa Geographic blog, 2014
 - b. Deceased Bats: Patricia Litton, 2012
9. Lion/Bat/Savanna collage:
 - a. Bats: Coke and Som Smith photography and travel
 - b. Lions: dutchbaby 2009
 - c. Savanna: CT Cooper, 2011

CORRIGENDUM NOTE: There are different species of leaf-nosed bats in the Hipposideridae family, living in African Savanna, with varying degrees of threat. Our focus is on the Commerson’s Leaf-nosed bat (*Hipposideros vittatus*, Near Threatened), that shares the largest portion of its range with the Lion. However, due to very limited availability of photos, in the video we used photos of other leaf-nosed bats as well (as mentioned in the photos list). In an unfortunate error while transcribing, we announced the Commerson’s Leaf-nosed bat as the Giant Leaf-nosed bat (as confusingly the latter was formerly included in the *Hipposideros commersoni* and some of its specimens may also represent *Hipposideros vittatus*) and its IUCN status as ‘Threatened’ rather than ‘Near threatened’ in the videos. We express our utmost gratitude to an anonymous reviewer for bringing this to our attention.

V. Experimental interface/Donation appeal

Instructions for watching film

Please sit directly facing the screen. Make sure that your shoulders and head are in line with the box on either side of the walls of your cubicle. Do not put your hands on your face or lean forward into the computer.

Remain seated in this position for the rest of the session. Please put on the headphones that are on your cubicle.

Please click on the **play** button. Proceed to the next page by clicking the **'next'** button only after you have watched the entire video. Please note that some pictures maybe disturbing to some viewers.

Do not press any other button on this screen.

Donation page:



One person from this session will be given £25. You and every other person in the room has an equal and fair chance of being selected.

If you are selected, you will keep £25, minus whatever you choose to donate to the Africa Wildlife Foundation. The Africa Wildlife Foundation is a charity that works to conserve vulnerable African species, and their habitats. You can choose to donate the whole £25, a part or none of it.

To publicly acknowledge your donation, 'The Beaver', which is the newspaper of the LSE Student Union will run a short piece listing the names of the donors and the charity later this year. There will also be posters listing the names of the donors and the charity in the Saw Swee Hock Student Centre and the LSE Library.

Please enter your donation amount using the slider below.

0

25

Donation amount in Pounds (£)

Notes: Films with Bats and Lions films only have a single picture of the individual embedded in this donation appeal photo, and the size of each photo image is held constant across groups. Note that all groups have a default donation on the slider of 0. Interventions without the offer of public recognition lack the following paragraph starting with, “*To publicly acknowledge your donation ‘The Beaver’ ...*”

Donations receipt and further payment instructions



You decided to donate £ $\$(q://QID141/TotalSum)$.

Please write down your lab ID code and postal address on the paper form on your table. Your address will be used only to send you a receipt from the charity to acknowledge any donation amount that you may have decided to make. Do not write your name or anything else. A lab volunteer will come around to collect this shortly.

One person will be picked at random from the participants in the lab. You and every other person in the room have an equal and fair chance of being selected. The selected person will receive the £25 minus any donation amount that they may have decided to make.

Affect questions:



This scale consists of a number of words and phrases that describe different feelings and emotions.

Please indicate to what extent you have felt this way while watching the film clip. Read each item and then select the appropriate answer .

	None at all	A little	A moderate amount	A lot	A great deal
Angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathetic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

V. Debrief sheet

Study on economic decision making and social issues

Thank you for participating in this experiment.

This study aims to uncover how participants respond to different types of media content of biodiversity conservation films. Specifically, the study examines if different types of species or information about the conservation issue impacts [*economic decision making, through the donation*] or how people feel after watching the film. First all participants watch a short movie. [*They can then decide to donate some or any part of their endowment to an organization working on wildlife conservation, if they so wish (Africa Wildlife Foundation).*] Then, they state the amount of affect (i.e. emotional states) they feel after watching the movie.

All the data from the experiment is anonymised, private and confidential. Please note that some of the photographs of the bats included photographs of different bat species, other than the Giant leaf nosed bat. This was due to the scarcity of photos for the focus species.

If subjects would like more information about the study, please contact the researcher at email.
Notes: Text in italics for was used in debrief form for Study 1 only.

Table B 1: Description of variables

Variables	Description	Obs.	Observed values			
			Mean	Std. Dev.	Min	Max
<i>Study 1.- D: Donations</i>						
Donations	Charitable donation decision from £0 to £25	377	8.51	6.99	0	25
<i>Study 2.- A: Affect</i>						
Happy	Self-report from PANAS-X affect schedule (Very slightly or none at all (0) to Extremely (4))	177	0.39	0.66	0	2
Angry	Self-report from PANAS-X affect schedule (Very slightly or none at all (0) to Extremely (4))	177	1.11	1.18	0	4
Sad	Self-report from PANAS-X affect schedule (Very slightly or none at all (0) to Extremely (4))	177	1.86	1.22	0	4
<i>Study 1 and 2: Pooled sample</i>						
Donor	Previously made donations to charity (No (0), Yes (1))	554	0.76	0.43	0	1
Pro-environmental behaviour (PEB)	Average PEB score (Minimum (0) to Maximum (4))	554	2.28	1.02	0	4
Age	Continuous, in years	554	24.41	7.51	17	66
Gender	Categorical, Male (0), Female (1)	554	0.66	0.47	0	1
Job status	Categorical, Full time student (FTS, 0), Working full time (WFT, 1), Working part time (WPT, 2), Other (3)	554	0.36	0.86	0	3
Subjects/session	Number of subjects per session (Maximum of 20)	554	16.11	3.77	1	20