

GIRAFFE CONSERVATION FOUNDATION



SAVING AFRICA'S GIRAFFE – A CONSERVATION SUCCESS STORY

NEWS

21 JUNE 2023

World Giraffe Day

JUNE
21















GIRAFFE ARE IN TROUBLE

PERCEPTION:

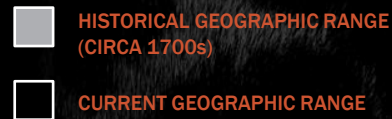
“GIRAFFE ARE EVERYWHERE!”

PERCEPTION:

“GIRAFFE ARE EVERYWHERE!”

89%

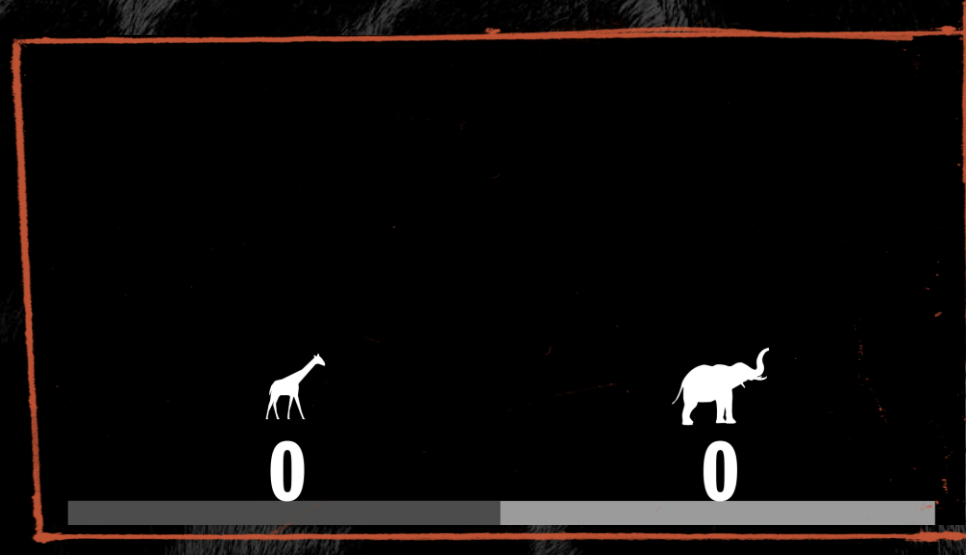
DECLINE IN
RANGE AREA



117,000
GIRAFFE IN AFRICA

117,000

GIRAFFE IN AFRICA



117,000

GIRAFFE IN AFRICA

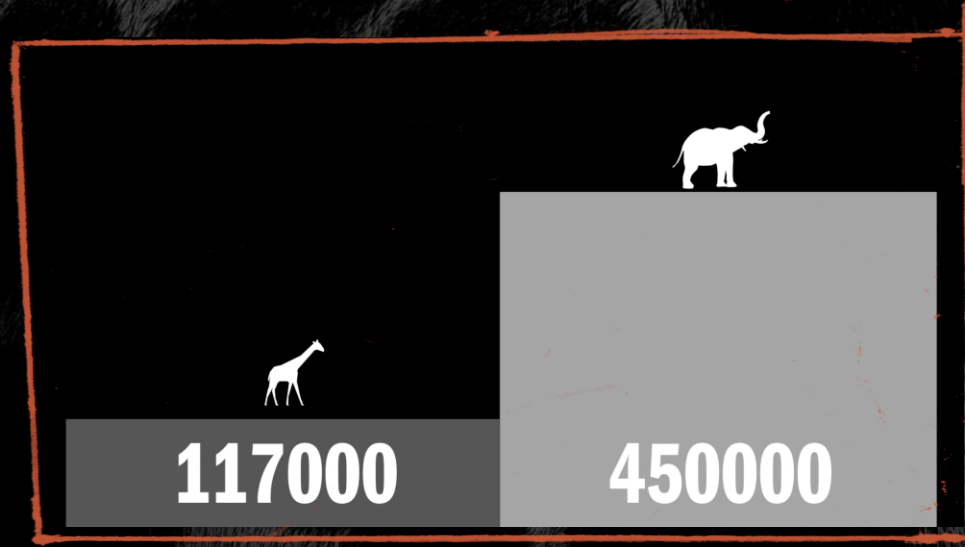


GIRAFFE

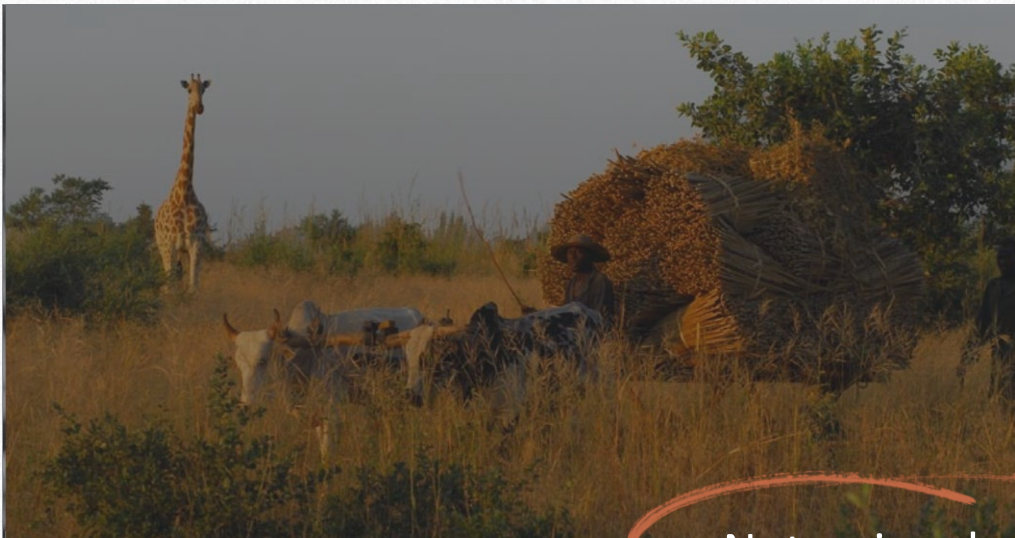
FOR
EVERY



ELEPHANTS







Not a singular problem





GIRAFFE HAVE BEEN UNDERGOING A SILENT EXTINCTION.

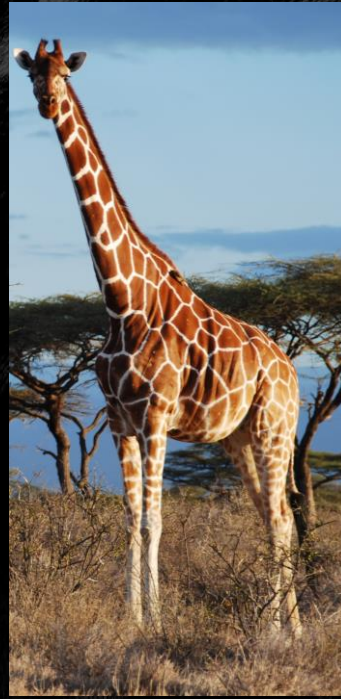




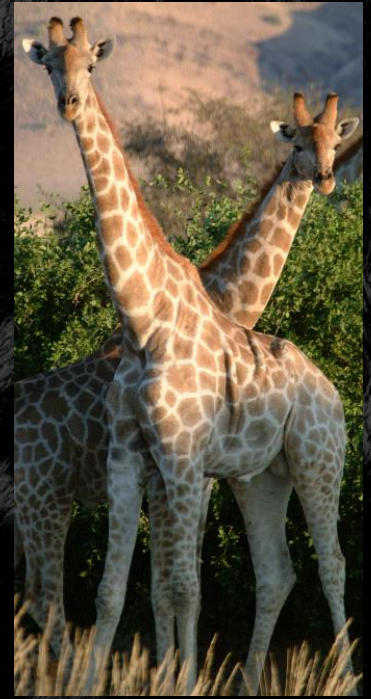
Masai giraffe
Giraffa tippelskirchi



Northern giraffe
Giraffa camelopardalis



Reticulated giraffe
Giraffa reticulata

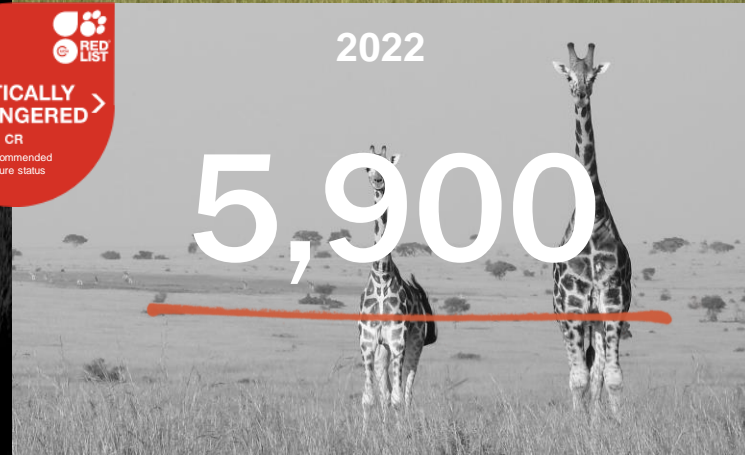


Southern giraffe
Giraffa giraffa

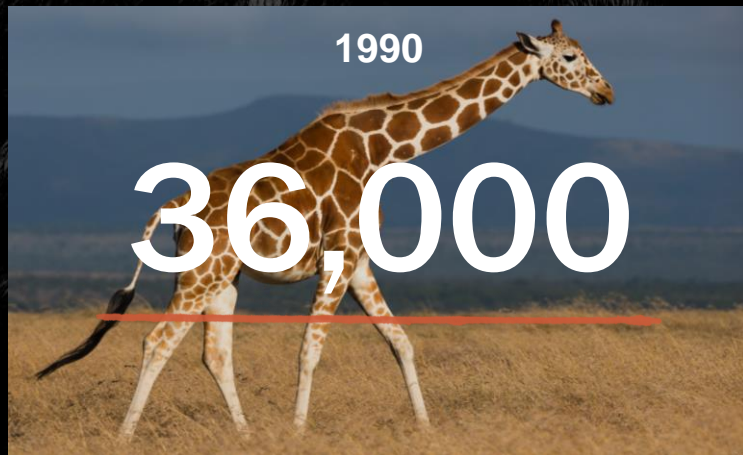
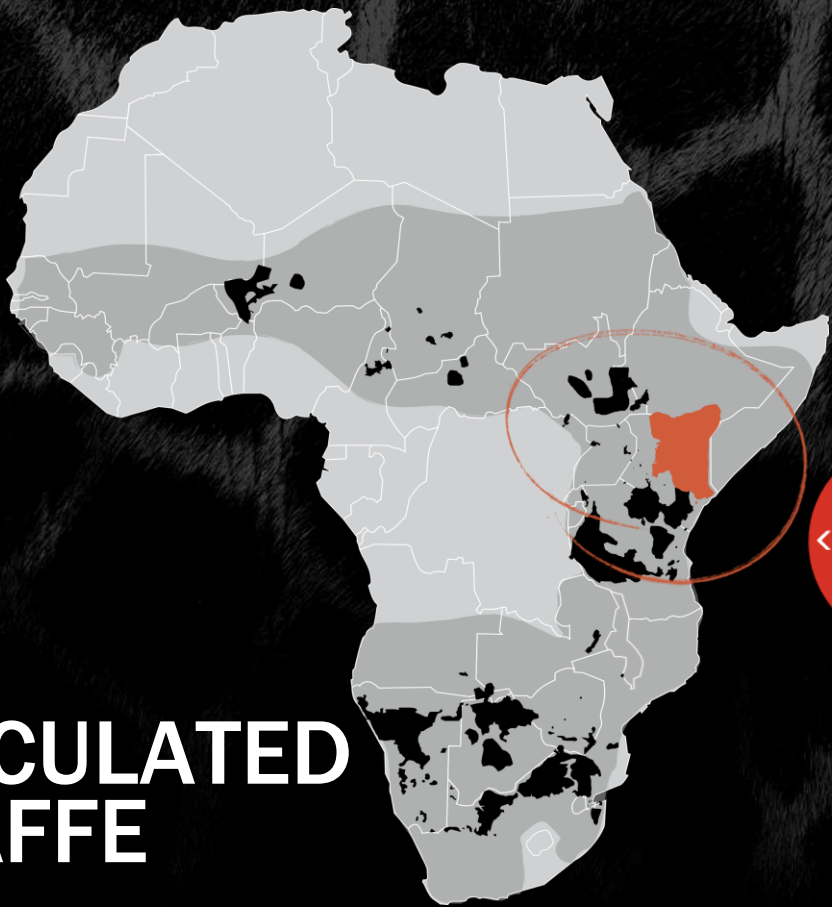
NORTHERN GIRAFFE



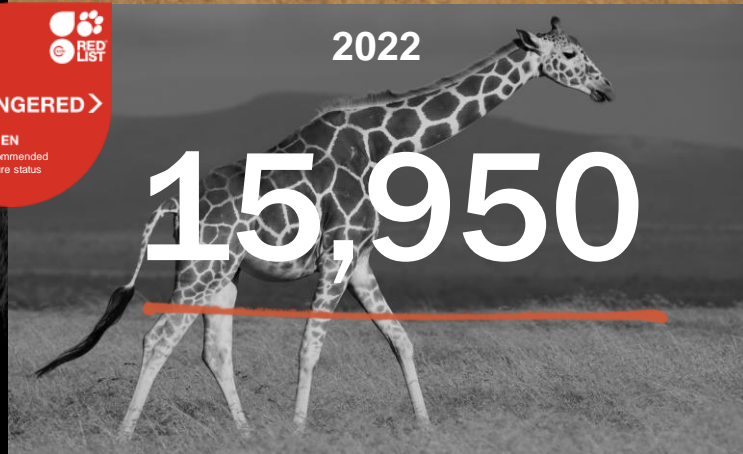
 **CRITICALLY ENDANGERED**
CR
Recommended future status



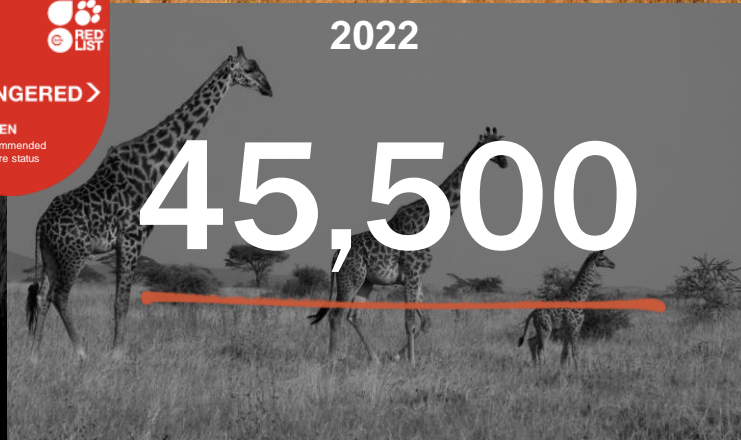
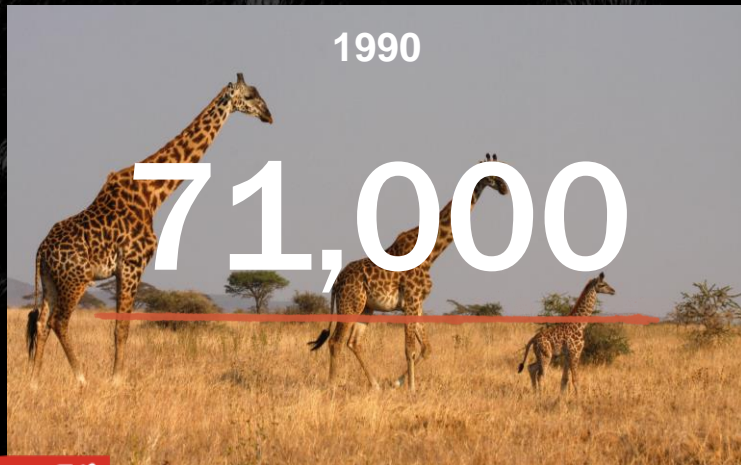
RETICULATED GIRAFFE




< ENDANGERED >
EN
Recommended
future status




MASAI GIRAFFE




< ENDANGERED >
EN
Recommended
future status

SOUTHERN GIRAFFE




LEAST CONCERN >
LC
Recommended future status



POSITIVE NEWS:

20%

INCREASE IN GIRAFFE
NUMBERS SINCE 2015

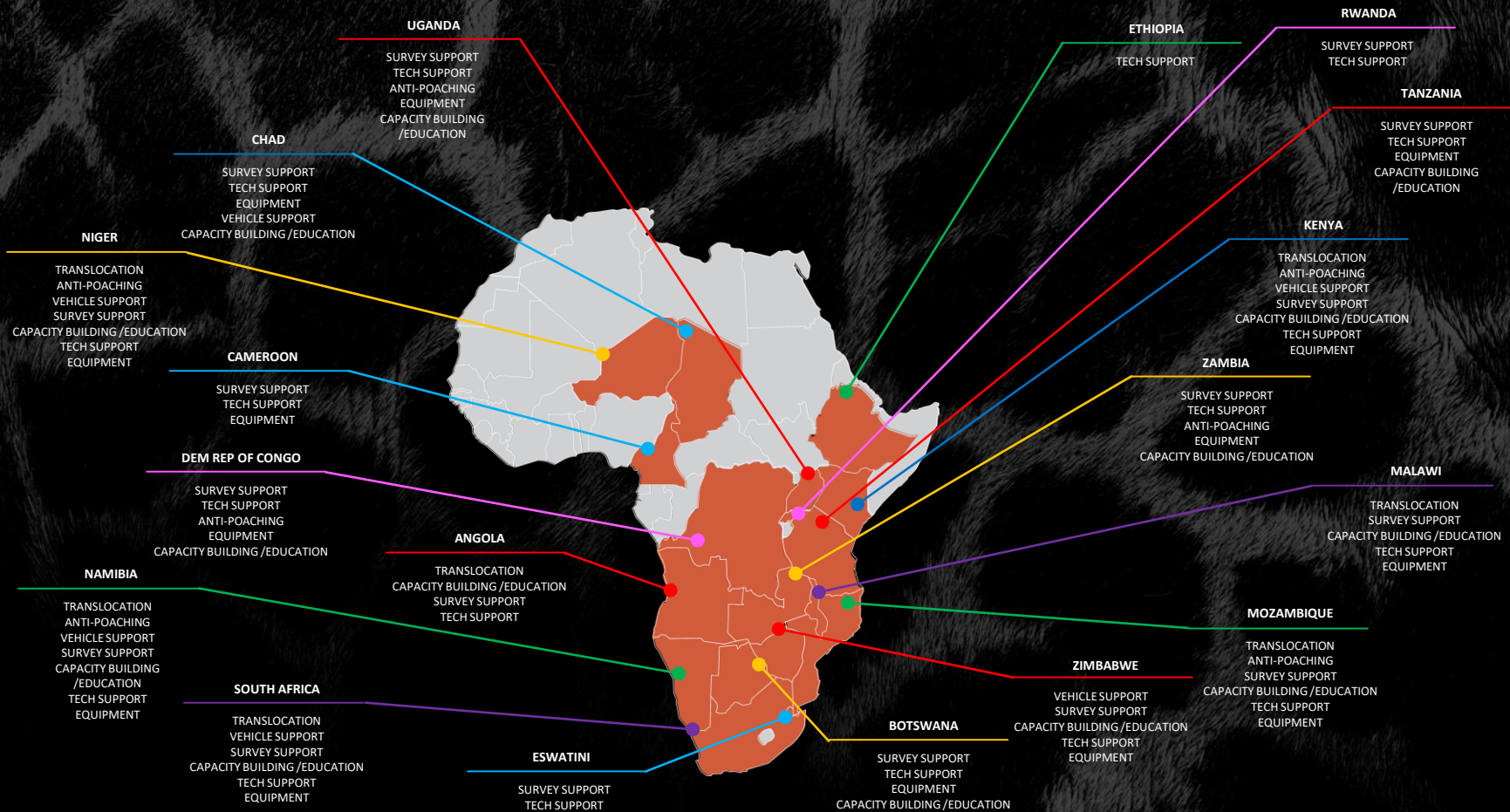
OUR MISSION



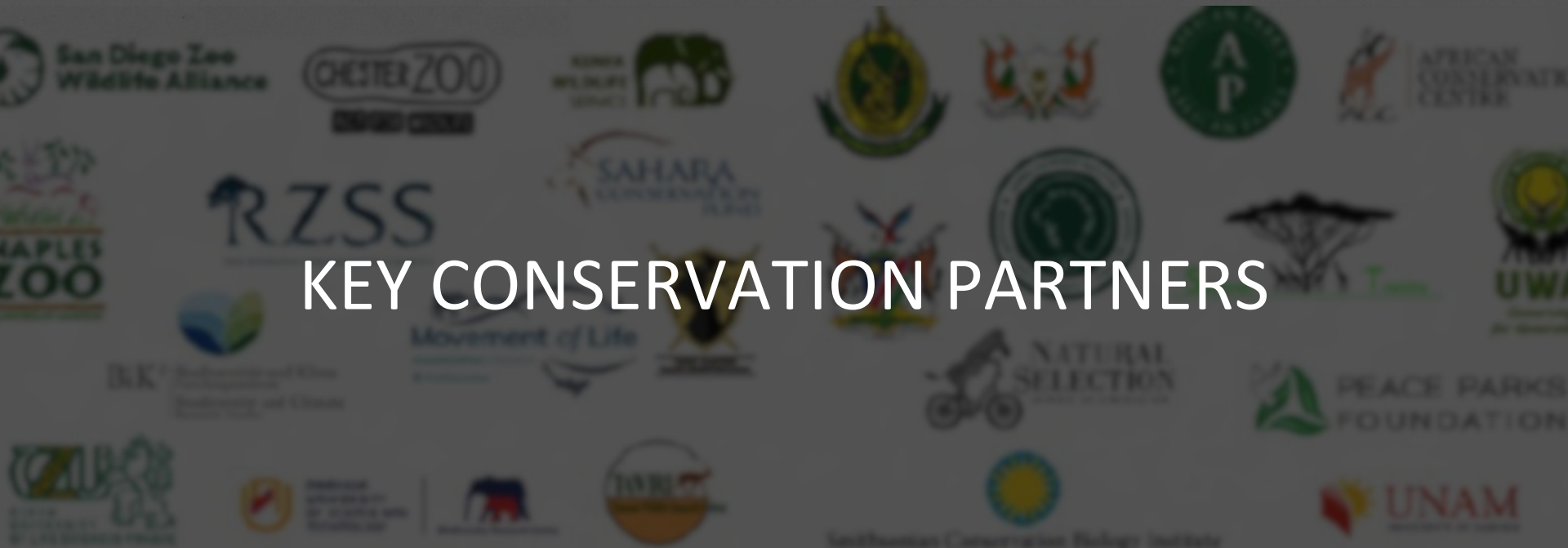
WE ARE A VOICE FOR GIRAFFE

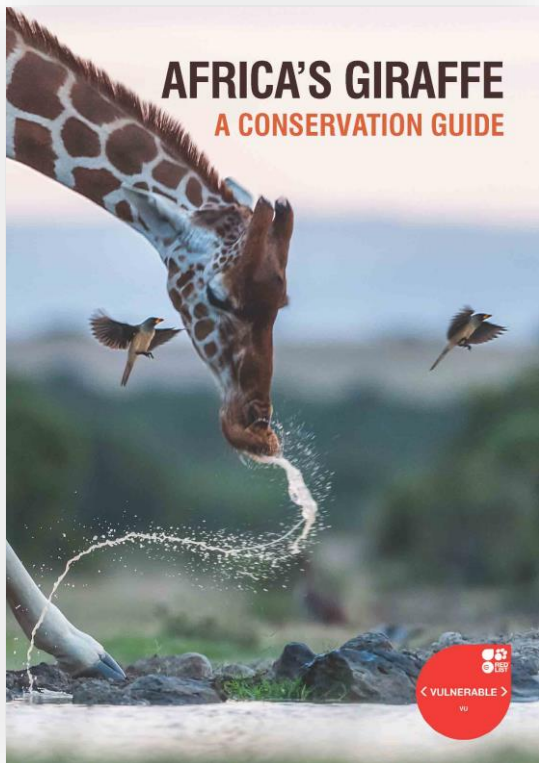






KEY CONSERVATION PARTNERS



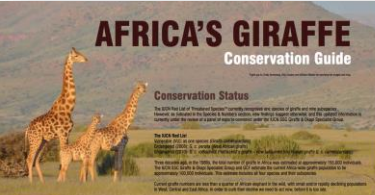


AFRICA'S GIRAFFE

A CONSERVATION GUIDE



AFRICA'S GIRAFFE Conservation Guide



Conservation Status

The IUCN Red List classifies all giraffe populations as **conservationally vulnerable**. This is because the species is declining rapidly and its future is uncertain. The population of giraffes is estimated to be around 100,000, down from 250,000 in the 1970s. The population is declining rapidly and its future is uncertain. The population of giraffes is estimated to be around 100,000, down from 250,000 in the 1970s.

Conservation Status
Conservation Status
Conservation Status

Taxonomy & Populations

Class	Mammalia
Order	Artiodactyla
Family	Cervidae
Genus	Giraffa
Species	Giraffa camelopardalis
Subspecies	4
Populations	100,000
Populations	100,000
Populations	100,000
Populations	100,000
Populations	100,000
Populations	100,000

Conservation Significance

The giraffe is a keystone species in its ecosystem. It plays a role in seed dispersal and soil aeration. It is also a symbol of African wildlife and is a popular tourist attraction.

Economic Significance

The giraffe is a source of income for local communities through tourism. It is also a source of meat and hides for some communities.

Limiting Factors



Land Use Change: The loss of natural habitat to agriculture and urban development is a major threat to giraffes. **Overhunting:** Giraffes are hunted for their hides and horns. **Climate Change:** Droughts and fires are becoming more frequent, affecting giraffe populations.


Management Priorities

- Protect and restore natural habitat.
- Reduce hunting and poaching.
- Improve community-based conservation.
- Strengthen law enforcement.
- Conduct research on giraffe genetics and population dynamics.
- Engage local communities in conservation efforts.

Threats

Land Use Change: The loss of natural habitat to agriculture and urban development is a major threat to giraffes. **Overhunting:** Giraffes are hunted for their hides and horns. **Climate Change:** Droughts and fires are becoming more frequent, affecting giraffe populations.




The Giraffe Conservation Foundation (GCF) is dedicated to a sustainable future for all giraffe populations in the wild. GCF is the only NGO in the world that concentrates solely on the conservation and management of giraffes in the wild throughout Africa.

giraffeconservation.org

AFRICA'S GIRAFFE

Did you know that there are now four different species of giraffe, instead of only one?


CAN YOU SPOT THE DIFFERENCE?



Masai giraffe *Giraffa tippelskirchi*


Pattern: Large and dark brown. Striped distinctly like the neck. The pattern is surrounded by a narrow white line.

Lower leg: The same colour as the neck, there are no patches.



Southern giraffe *Giraffa giraffa*

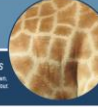
Pattern: The southern giraffe has few subspots. Their markings are slightly different from each other.



South African giraffe *G. g. giraffa*

Pattern: Dark shaped and vertical stripes of brown. The patches are sometimes in a light brown color.


Lower leg: Fairly mottled with uneven spots.



Northern giraffe *Giraffa camelopardalis*

Pattern: Light, narrow and irregular vertical. Light brown. The patches are surrounded by a dark cream-colored.


Lower leg: Fairly mottled with uneven spots.



Kordofan giraffe *G. c. antiquorum*

Pattern: The patches are composed by an off-white, creamy color.


Lower leg: Fairly mottled with uneven spots.



Nubian giraffe *G. c. camelopardalis*

Pattern: The patches are surrounded by an off-white, creamy color.


Lower leg: Fairly mottled with uneven spots.



West African giraffe *G. c. peralta*

Pattern: The patches are surrounded by a creamy color.

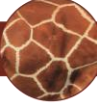
Lower leg: Fairly mottled with uneven spots.




Reticulated giraffe *Giraffa reticulata*

Pattern: The patches are surrounded by a network of white lines.

Lower leg: Off-white, mottled with lines that surround the patches because the white lines of the legs.





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giraffeconservation.org

GIRAFFE CAN ONLY BE SAVED IN AFRICA –
BY THE PEOPLE WHO SHARE THEIR SPACE
WITH THEM





NATURE
GCF
WORKBOOK

Goodbye!
Carry on looking!
Keep on learning!



Name: Harry Smith
Home address:
Telephone number:
City:









GCF

RESPEITO
Pessoa - Comunicaç
Inclusão
Unidade
Indizem
EM



The background of the slide is a close-up, high-contrast image of a giraffe's fur, showing the characteristic dark brown and black spots. The text is centered and overlaid on this background.

WE USE SCIENCE TO ACT
DECISIVELY AND ADDRESS GIRAFFE
CONSERVATION NEEDS

Scientific Research



- Academic Timelines
- Novelty Bias
- Peer-Review Scrutiny
- Nuance

Conservation Management



- Evidence – Based Decision Making
- Systems-Level Understandings
- Crisis Mitigation
- Limited Risk
- Management Metrics
- Simplicity

IF SCIENCE IS TO ACT IN SERVICE OF CONSERVATION:

- What are the most useful metrics?
What spatiotemporal scales are most appropriate for inferences?
How would you maximize the utility of the data being collected?
How would you integrate data into conservation management?
How would you coordinate studies across different sites?
How would you ensure that data/inferences are translatable across sites?

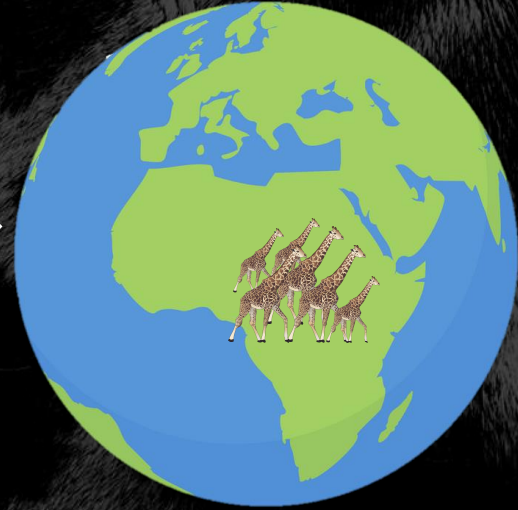
INDIVIDUAL



POPULATION



REGION/COUNTRY/
CONTINENT





Alfred



Inspect Query Resultcid(4 v 1)



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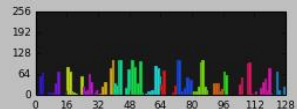
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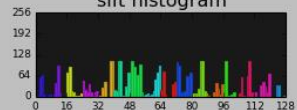
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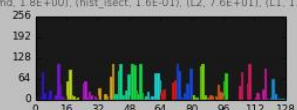
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sift histogram

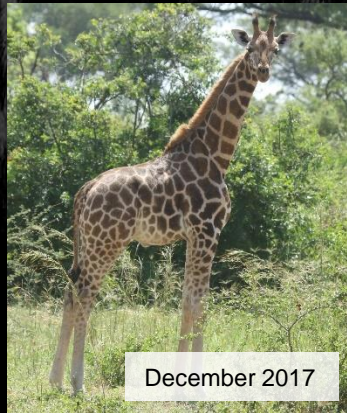


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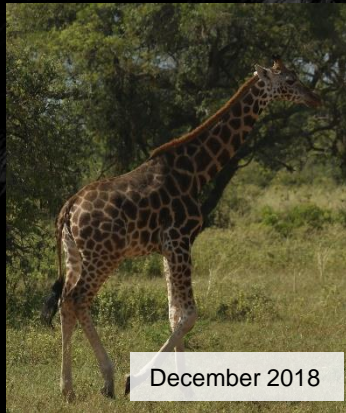


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December 2017



December 2018



March 2019

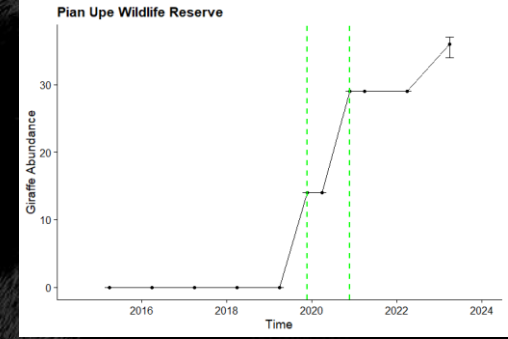
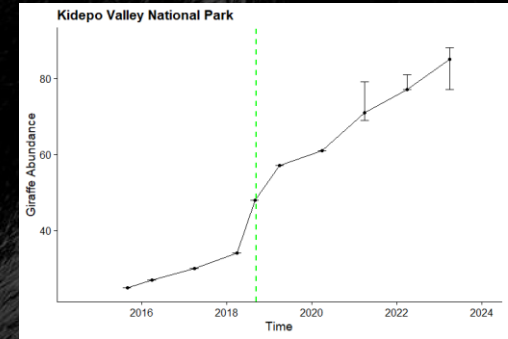
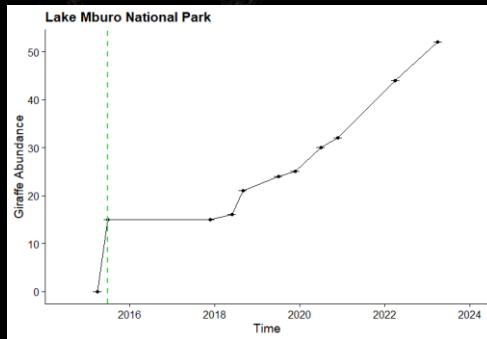
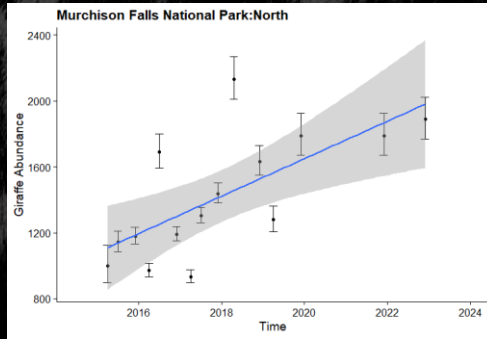


December 2019



March 2020

MONITORING AT THE COUNTRY SCALE



CONSTRUCTING GIRAFFE NARRATIVES

1997



2015



MAGGIE IS ONE OF THE OLDEST
DOCUMENTED WILD GIRAFFE
TO GIVE BIRTH





POPULATION MONITORING IN NUMBERS:

>100 SITES

4 SPECIES

14 COUNTRIES

>30,000 Encounters



The IUCN Red List of Threatened Species™
 ISSN 2307-8259 (online)
 IUCN 2009: 792948433626699
 Scope: Global
 Language: English

Giraffa camelopardalis, Giraffe

Amended version

Assessment by: Muller, Z. et al.



View on www.iucnredlist.org

Short citation: Muller, Z. et al. 2016. *Giraffa camelopardalis* (amended version of 2016 assessment). The IUCN Red List of Threatened Species 2016: e.T9484A13626699. <http://dx.doi.org/10.2305/IUCN.LIJK.2016.3.BLT5.T9484A13626699.en> [see full citation at end]

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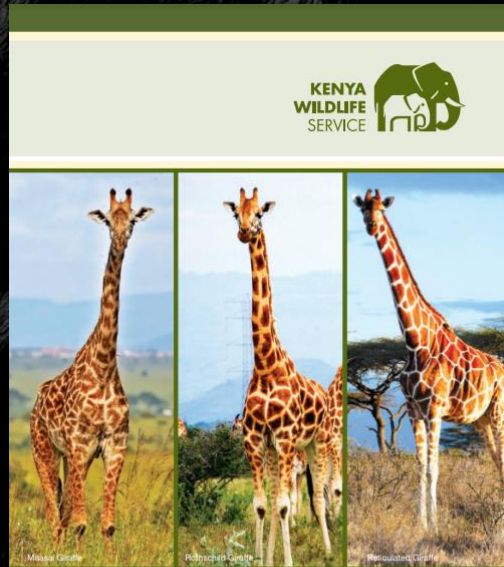
The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Centre. The IUCN Red List Partners are: [African Bird Knowledge Institute](#), [International Nature Conservation Centre](#), [International Conservation Universities Network](#), [Royal Botanic Gardens, Kew](#), [Sorbonne University](#), [University of Cambridge](#), [University of Edinburgh](#), [University of Exeter](#), [University of Oxford](#), [University of Reading](#), [University of Warwick](#), [University of York](#), [Zoological Society of London](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with feedback so that we can correct or extend the information provided.

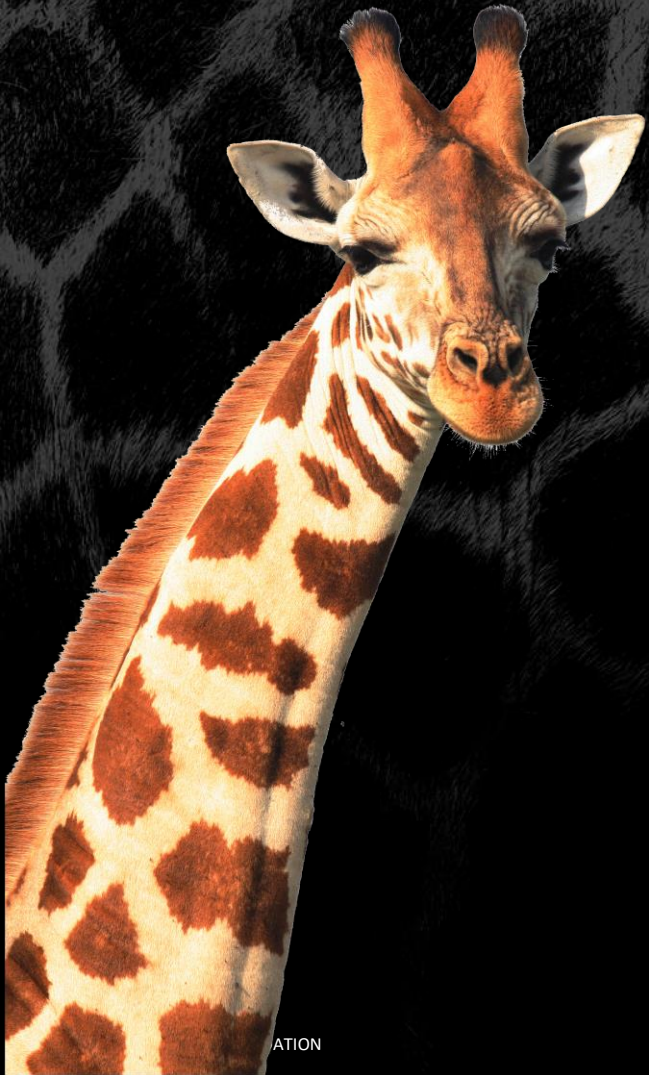
THE IUCN RED LIST OF THREATENED SPECIES™



National Giraffe Conservation Strategy and Action Plan for Uganda (2020-2030)

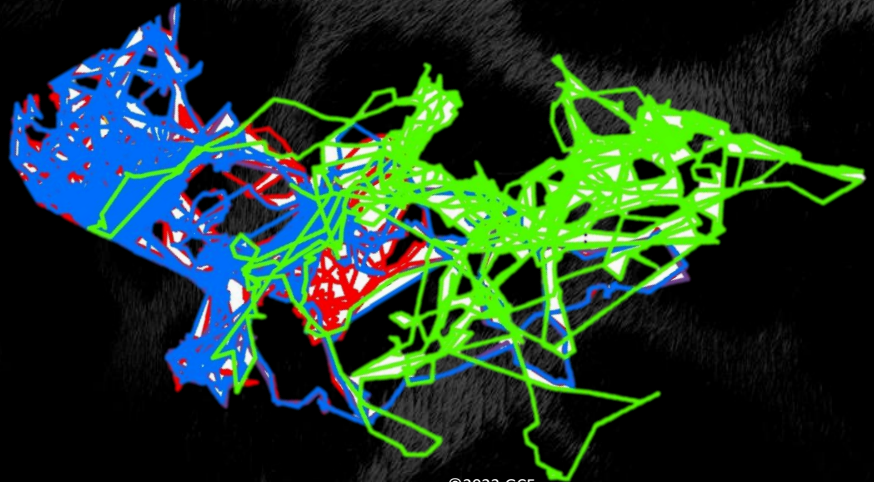


National Recovery and Action Plan for Giraffe (*Giraffa camelopardalis*) in Kenya (2018-2022)



TWIGA TRACKER INITIATIVE

USING MODERN TECHNOLOGY TO
CONSERVE GIRAFFE AND THEIR HABITAT



Engage with stakeholders to identify key issues

Develop and apply appropriate technology

Design site-specific conservation objectives

Design site-specific research goals

Integrate data into continent-level studies

DESIGN AND APPLY CUTTING EDGE TECHNOLOGY



A) Female



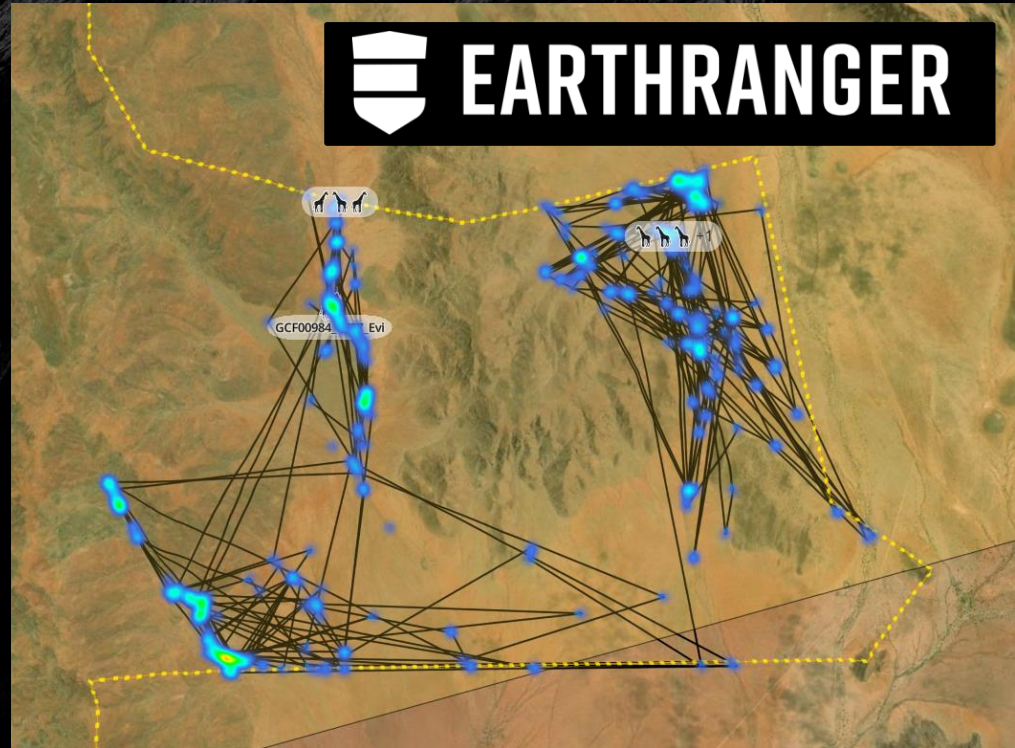
B) Male



DEVELOP DATA SHARING PLATFORMS

KEYS:

- RAPID ANALYSIS OF HIGH VOLUME
- INSTANT, CURRENT FEEDBACK



TWIGA TRACKER IN NUMBERS:

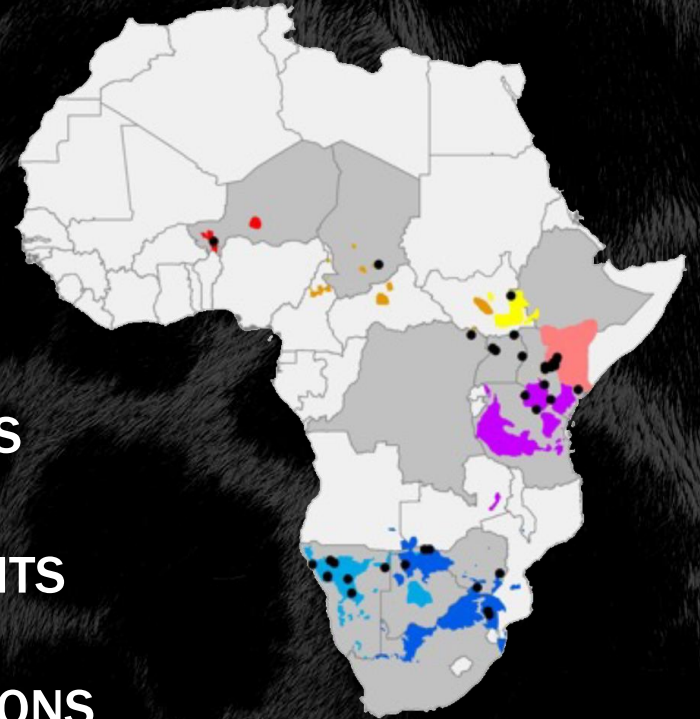
>400 UNITS

4 SPECIES

15 COUNTRIES

>2MM DATA POINTS

>14 PUBLICATIONS



BUT PLACING DOTS ON A MAP
ISN'T QUITE SCIENCE...



Male-Biased Partial Migration in a Giraffe Population

Michael B. Brown^{1*} and Douglas T. Bolger²

¹ Department of Biological Sciences Graduate Program in Ecology, Evolution, Ecosystems, and Society, Dartmouth College, Hanover, NH, United States, ² Environmental Studies Program, Dartmouth College, Hanover, NH, United States

Received: 7 January 2019 | Revised: 9 August 2019 | Accepted: 11 August 2019

DOI: 10.1002/eev3.5640

ORIGINAL RESEARCH

Ecology and Evolution WILEY

Population structure and spatial ecology of Kordofan giraffe in Garamba National Park, Democratic Republic of Congo

Mathias D'haen^{1,2,3} | Julian Fennessy⁴ | Jared A. Stabach⁵ | Karolína Brandlová³

African Journal of Ecology

Use of home range behaviour to assess establishment in translocated giraffes

Shea E. Flanagan¹, Michael B. Brown², Julian Fennessy³ and Douglas T. Bolger^{1*}

¹ Environmental Studies Program, Dartmouth College, 03755, 6182 Steele, Hanover, NH, U.S.A., ² Department of Biological Sciences, Dartmouth College, 03755, Hanover, NH, U.S.A. and ³ Giraffe Conservation Foundation, PO Box 86099, Eros, Namibia

Mammal Review



REVIEW, EDITOR'S CHOICE

Updated geographic range maps for giraffe, *Giraffa* spp., throughout sub-Saharan Africa, and implications of changing distributions for conservation

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Peter LEIMGRUBER Smithsonian's National Zoo and Conservation Biology Institute, Washington, DC, USA. Email: LeimgruberP@si.edu

Jenny A. GLIKMAN San Diego Zoo Institute for Conservation Research, Escondido, CA, USA.

Email: JGlikman@sandiegozoo.org

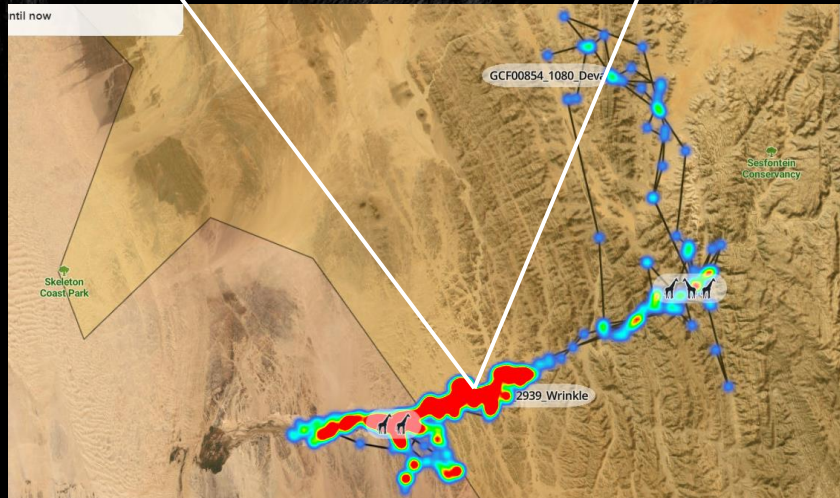
Kirstie RUPPERT San Diego Zoo Institute for Conservation Research, Escondido, CA, USA.

Email: kruppert@sandiegozoo.org

Symon MASIAINE San Diego Zoo Institute for Conservation Research, Escondido, CA, USA and Twiga Walinzi Initiative, Laikipia and Samburu Counties, Nanyuki, Kenya. Email: smasaine@gmail.com

Thomas MUELLER Faculty of Biological Sciences, Goethe University, Frankfurt, Germany and Senckenberg Biodiversity and Climate Research Centre, Senckenberg Gesellschaft für Naturforschung, Frankfurt, Germany. Email: thomas.mueller@senckenberg.de

HOANIB RIVER

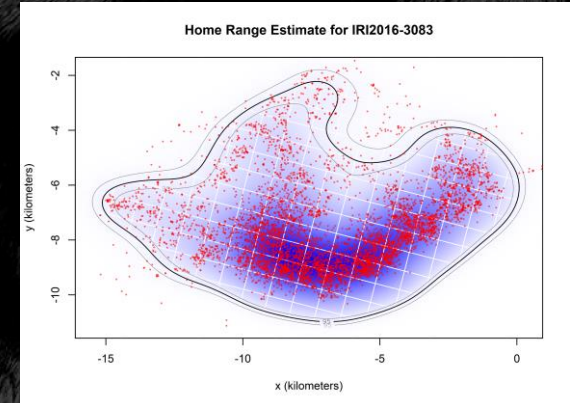
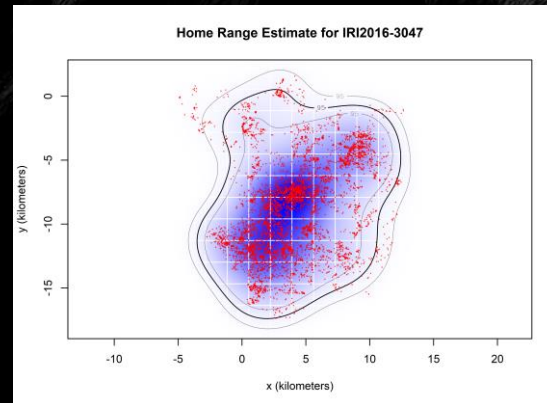
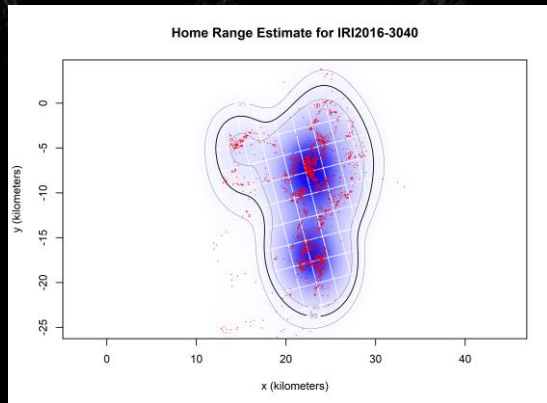


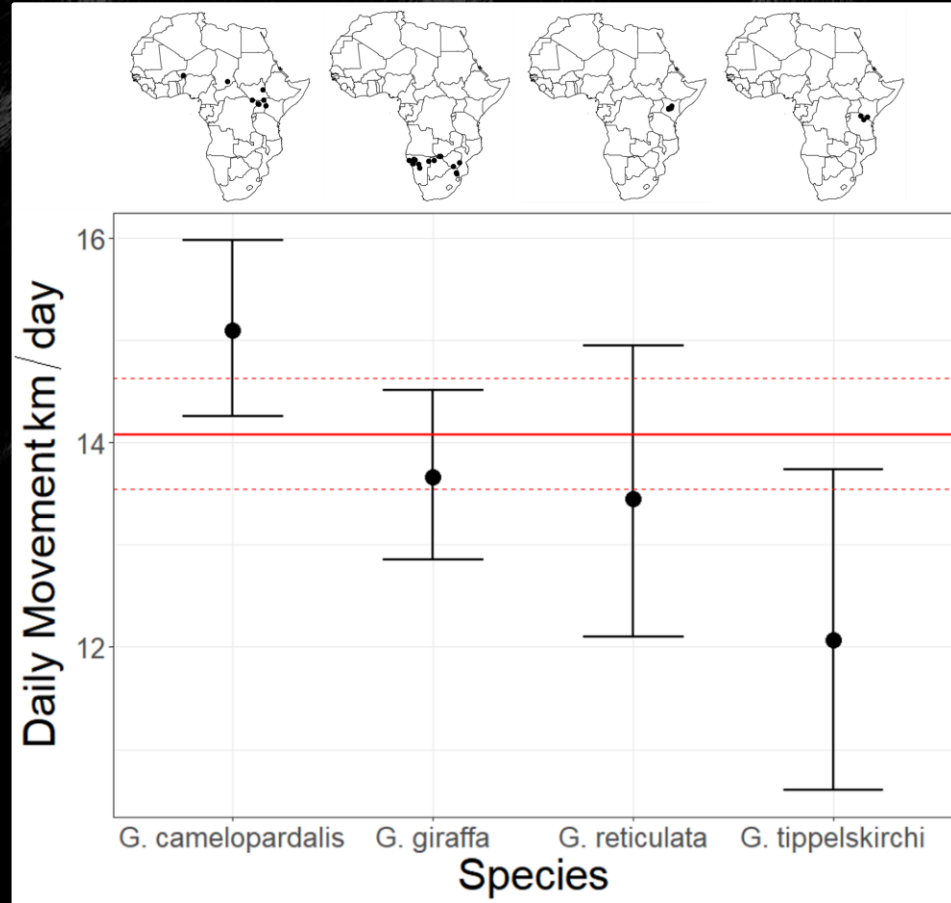
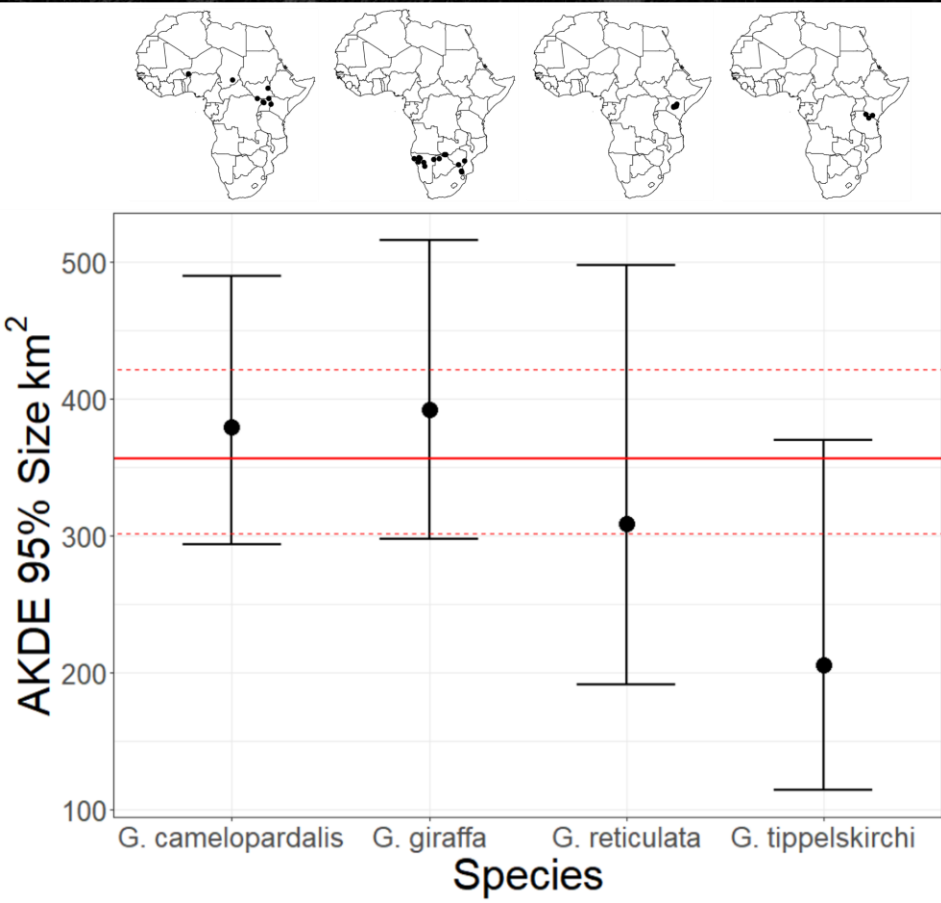
ETOSHA HEIGHTS PRIVATE RESERVE



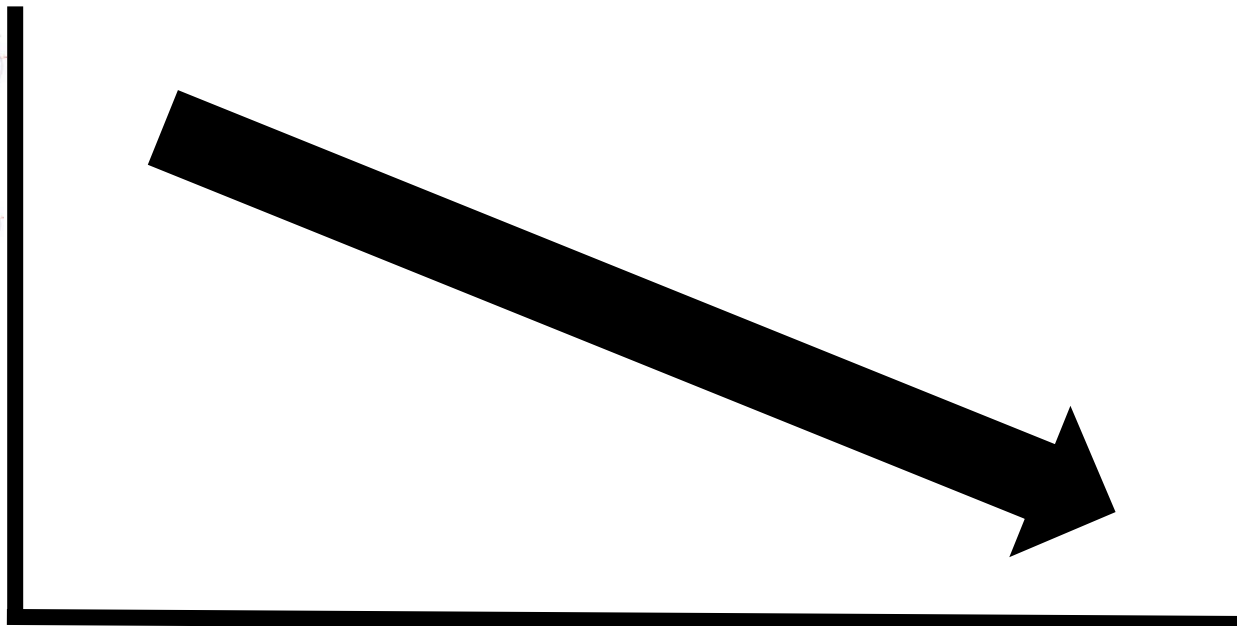
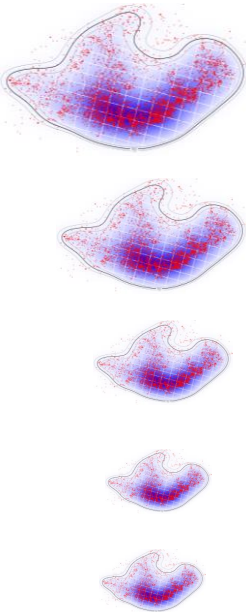


WHEN AGGREGATING DATA AT THE CONTINENTAL SCALE, WHAT ARE THE ECOLOGICAL AND ANTHROPOGENIC DRIVERS OF GIRAFFE SPACE USE?





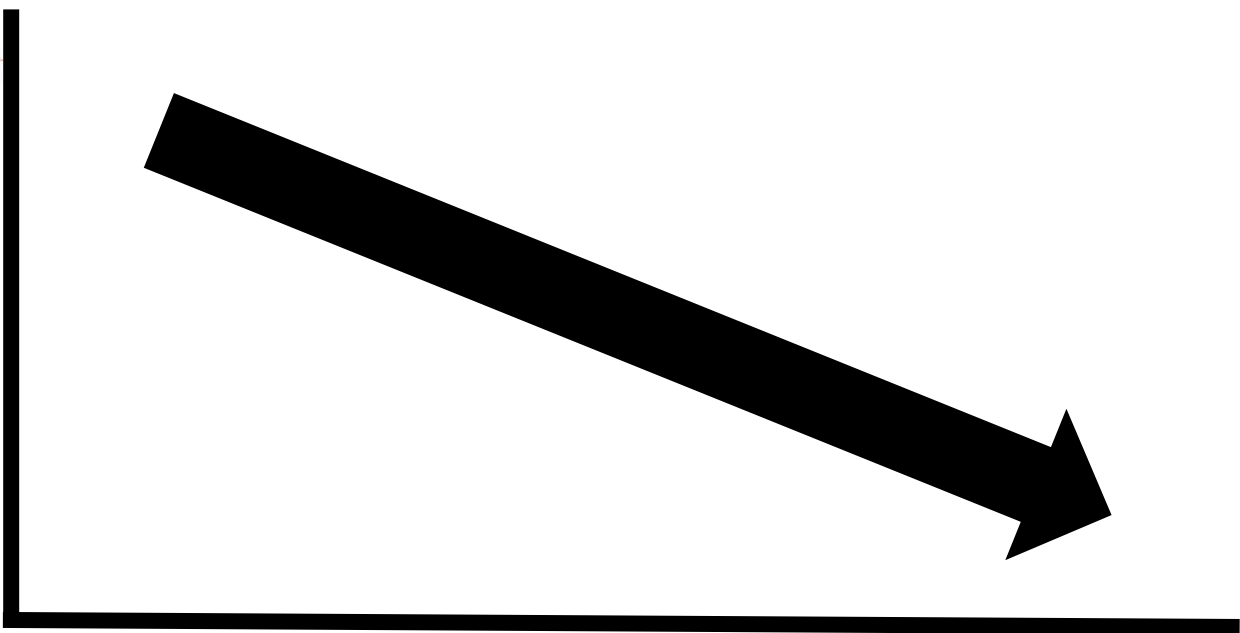
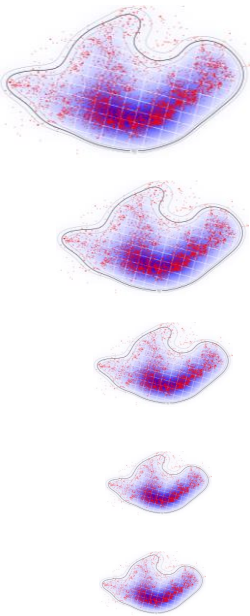
**Giraffe Space Use
(Home Range / Daily Movements)**



**Anthropogenic Disturbance
(Human Footprint Index)**



**Giraffe Space Use
(Home Range / Daily Movements)**



**Environmental Productivity
(NDVI, Woody Biomass)**



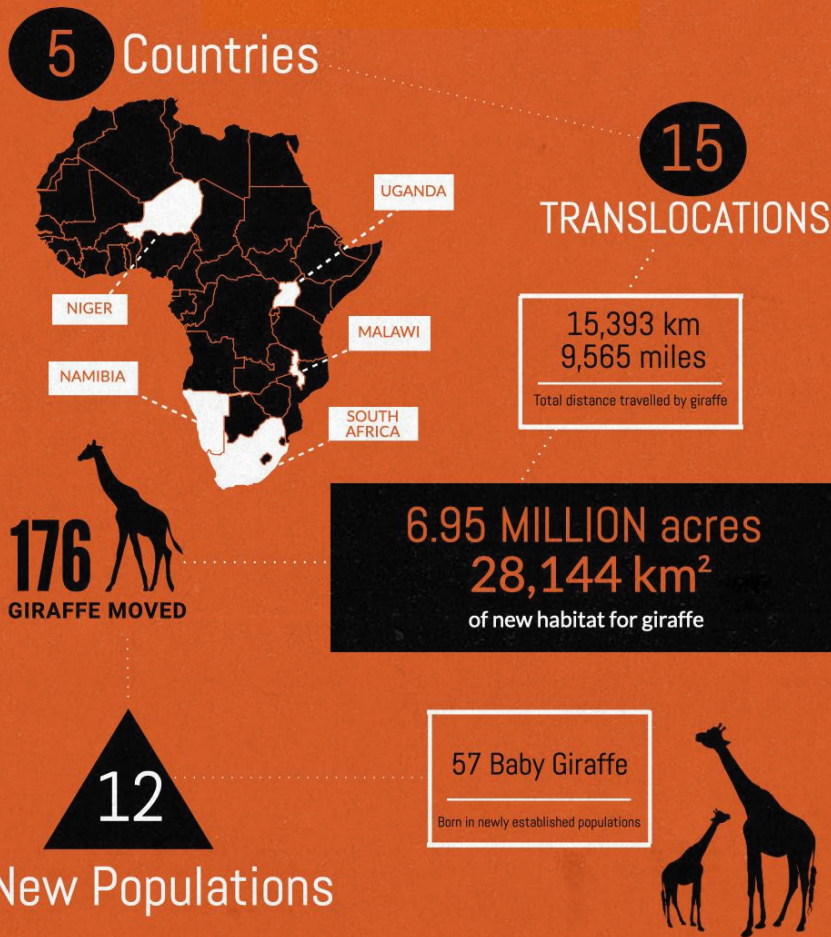
CONSERVATION SCIENCE: MOVING BEYOND PATTERNS TOWARDS PRINCIPLES

CONSERVATION TRANSLOCATIONS ARE
TRULY COLLABORATIVE EFFORTS AND GCF
IS AT THE FOREFRONT





GIRAFFE TRANSLOCATIONS





BE A VOICE FOR GIRAFFE

