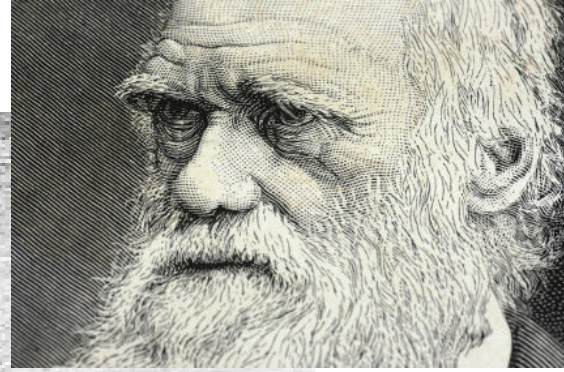
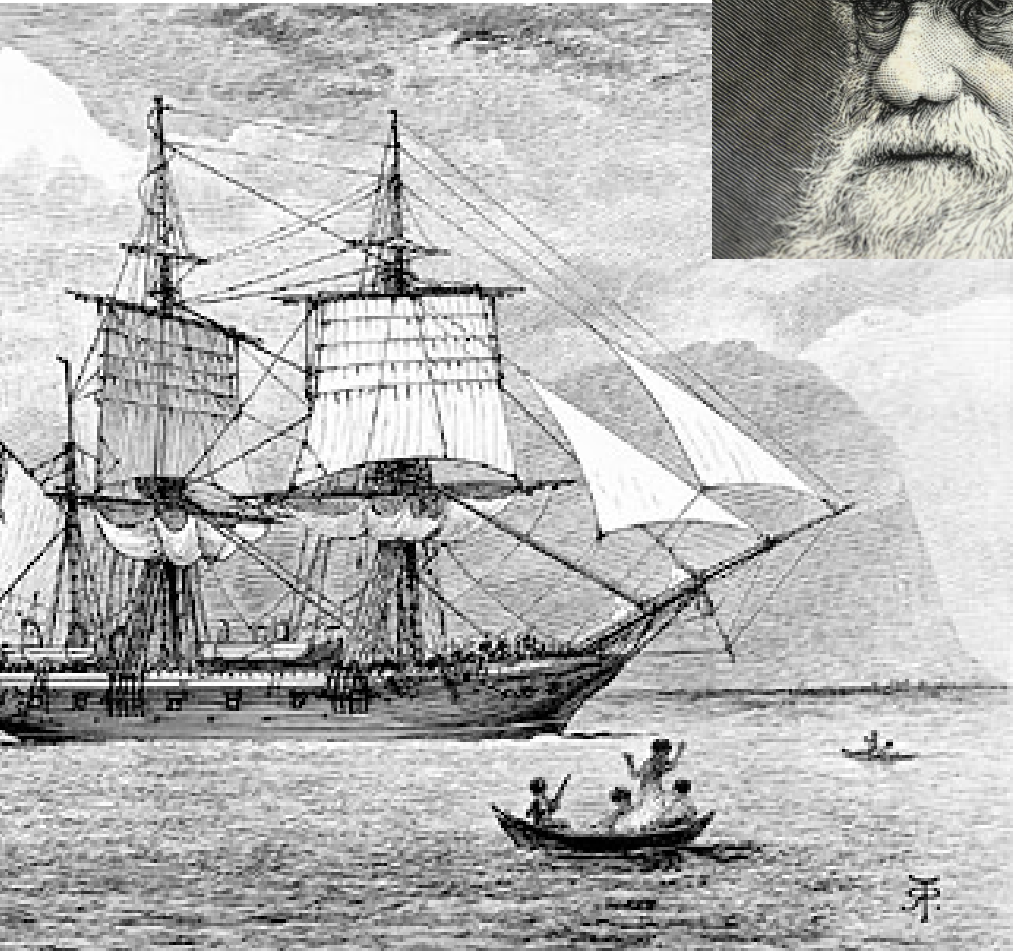


Africa's Vultures Collapsing toward Extinction

Darcy Ogada





”.....disgusting birds with bald scarlet heads formed to revel in putridity.....”

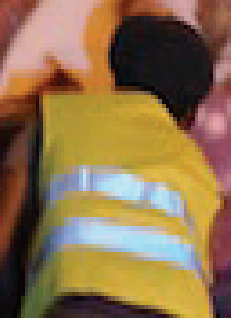
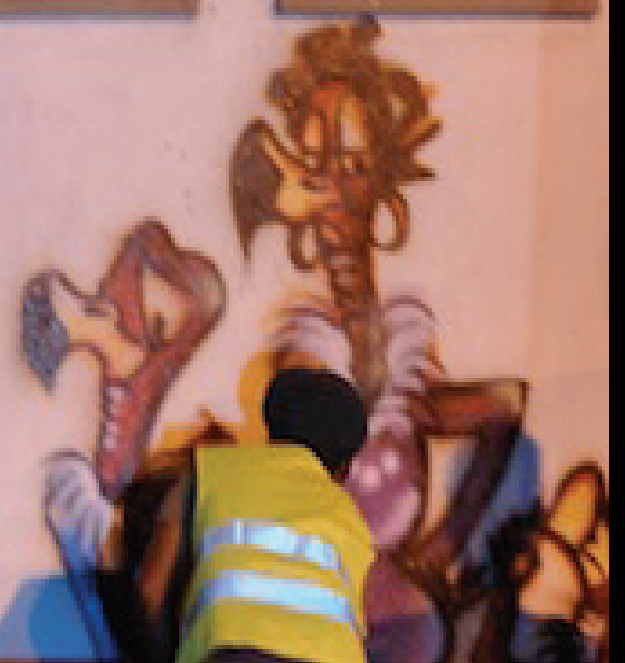
Charles Darwin 1832

THIEVES
IRRESPONSIBLE
WAR MONGER
PATHETIC
MISSING IN ACTION
LEECH
DOUCHEBAGS
SLOW
LAZY

DESCRIBE YOUR MP VULTURE

UNRELIABLE
INCONSISTENT
BUEFOONS
AN
HUNGRY
SIDERATE

GREEDY
SELFISH
INFECTIVE
INSINCERE
ARROGANT



Vultures are the most highly adapted scavengers





carcass visited by vultures









































carcass not visited by vultures



























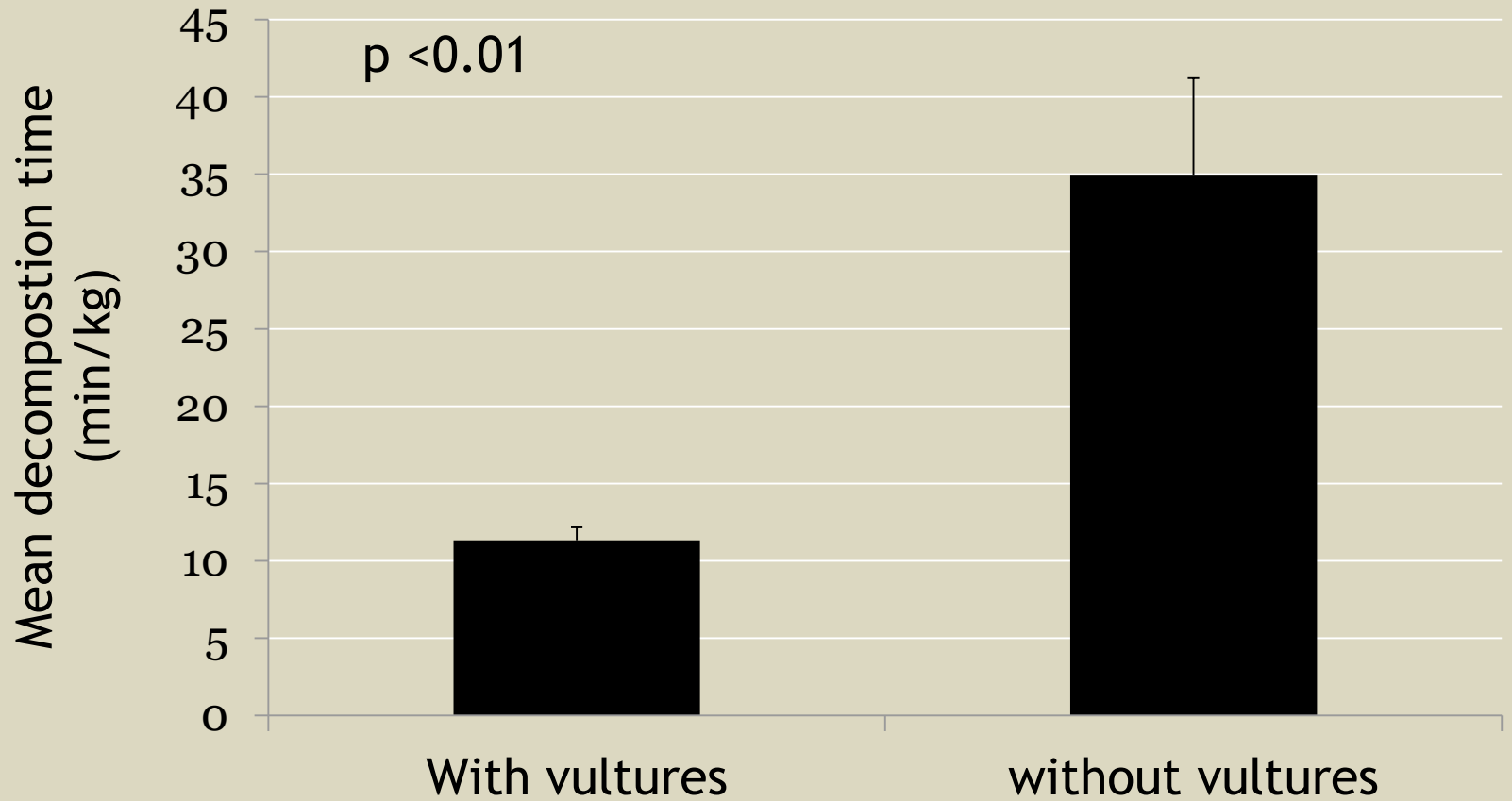




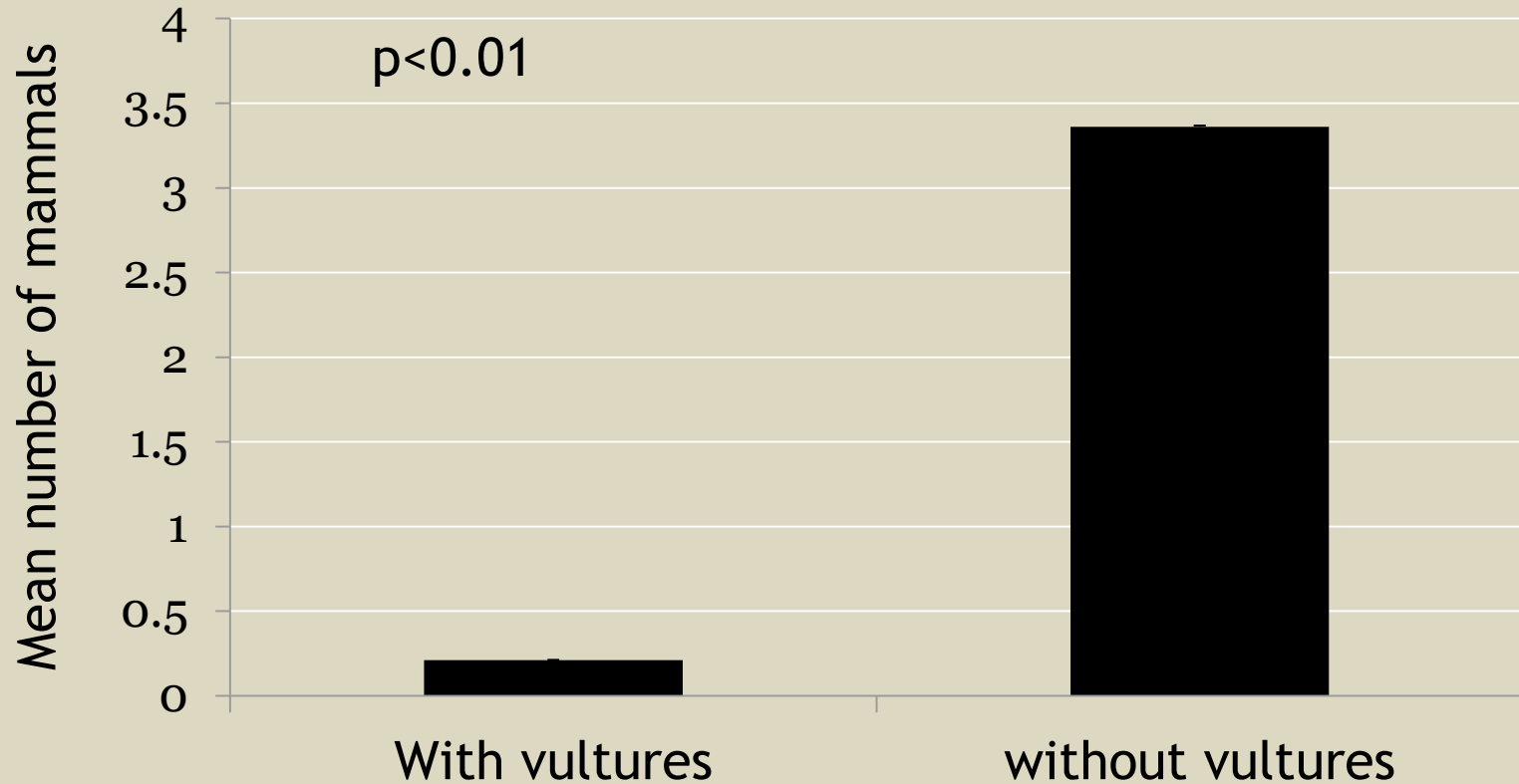




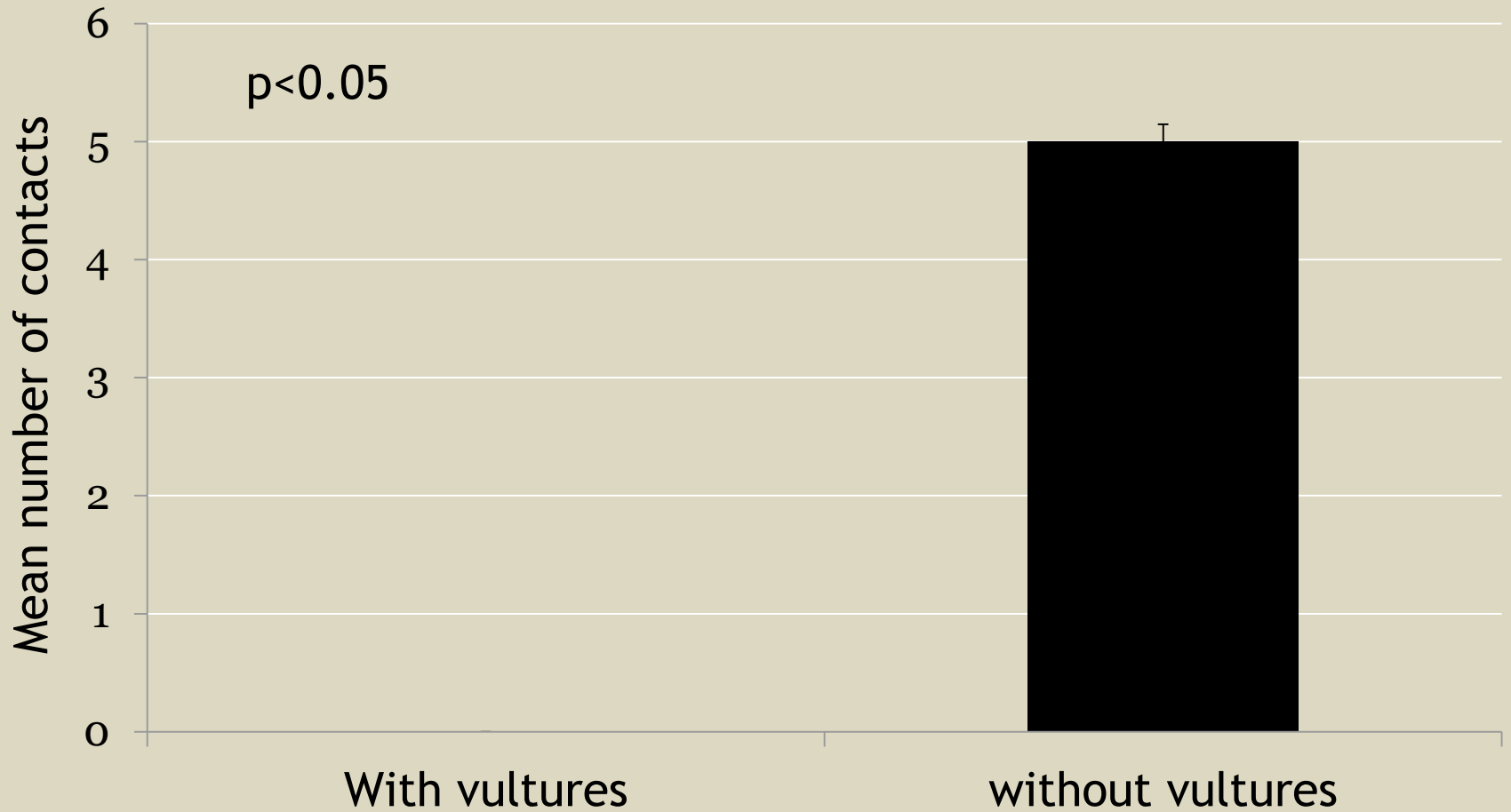
CARCASS DECOMPOSITION TIME



NUMBER OF MAMMALS AT CARCASSES



NUMBER OF CONTACTS BETWEEN MAMMALS

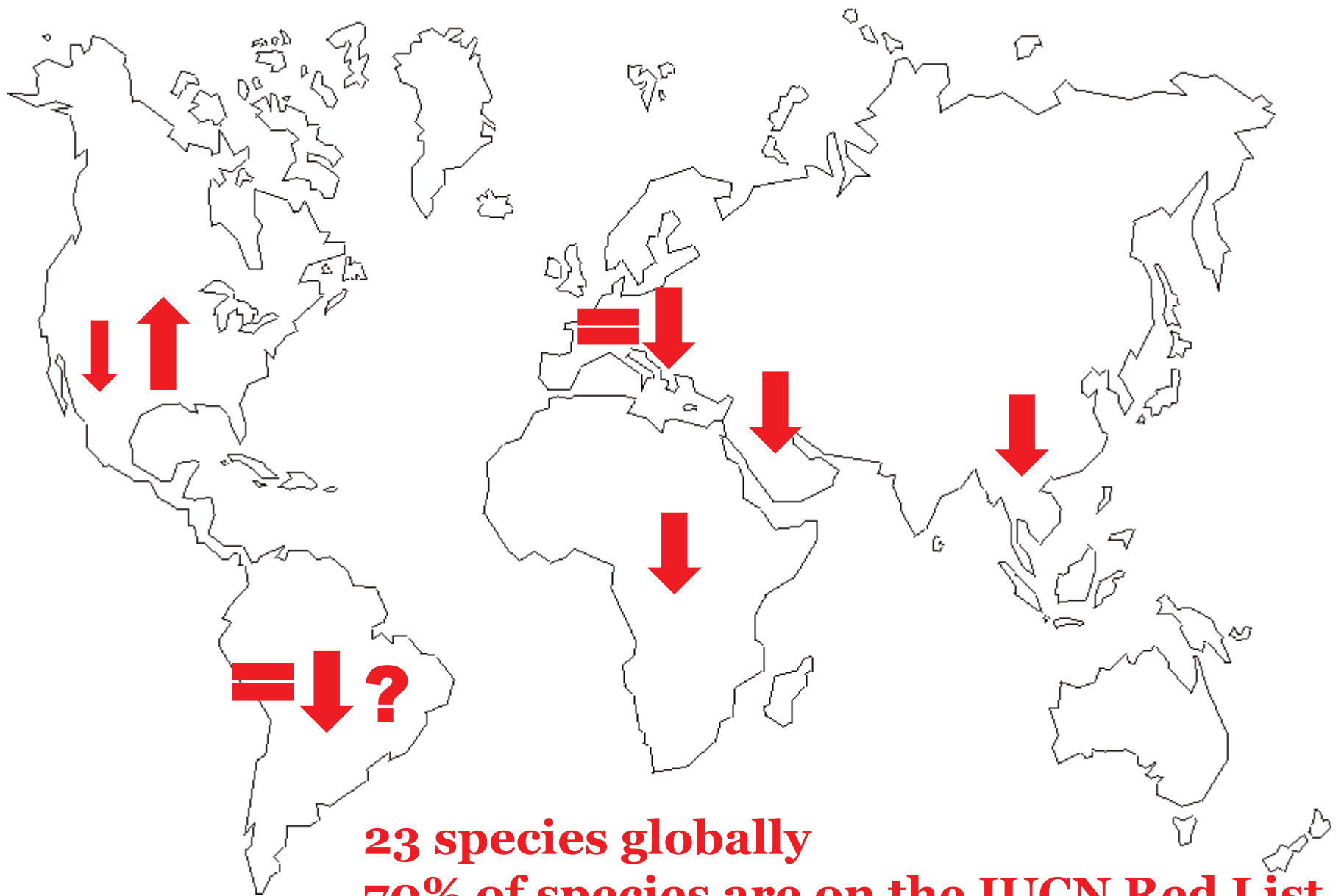




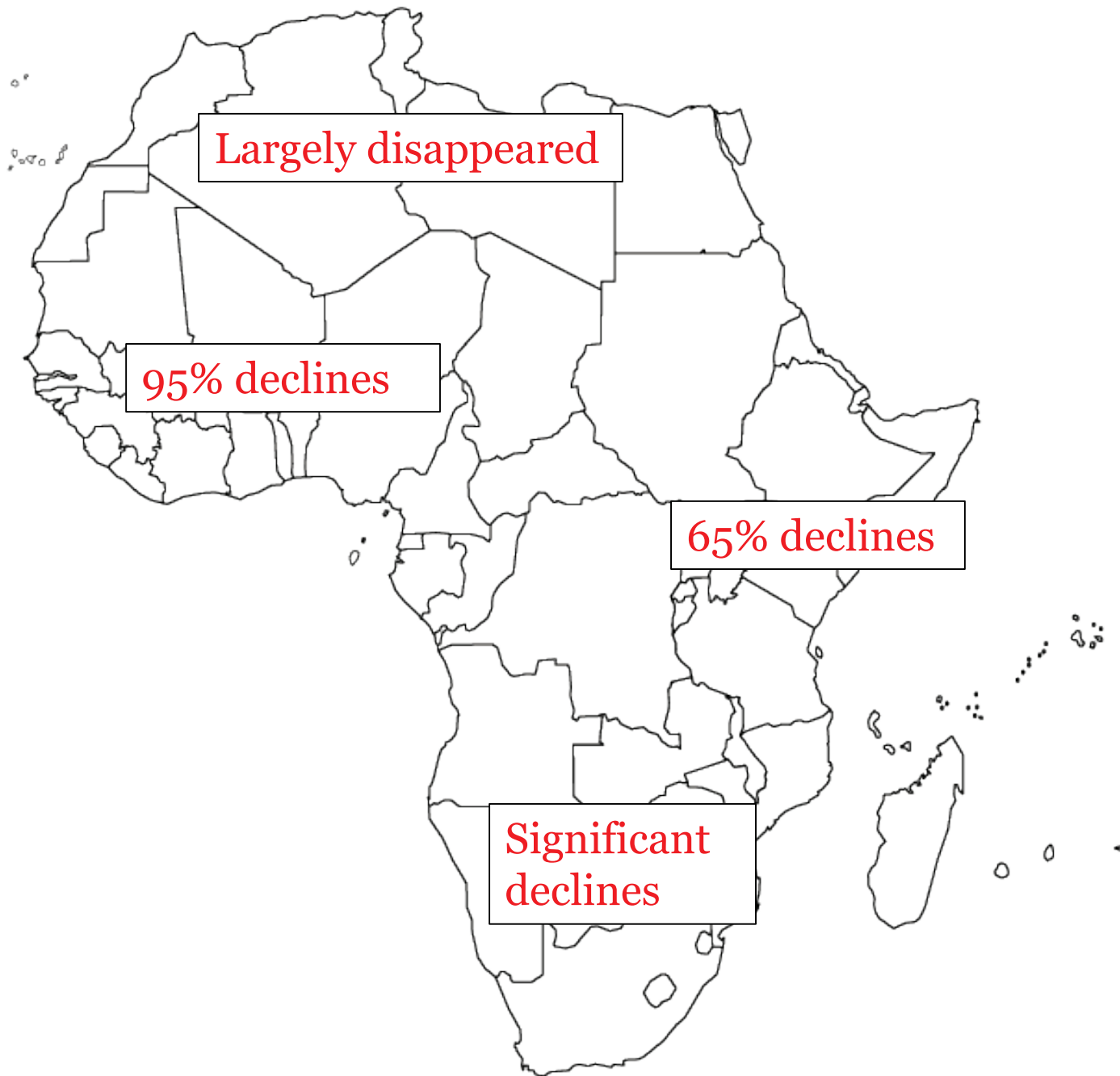
Human health costs of the loss of vultures

resulting increases in dogs and rabies are about \$1.5 billion annually in India





23 species globally
70% of species are on the IUCN Red List

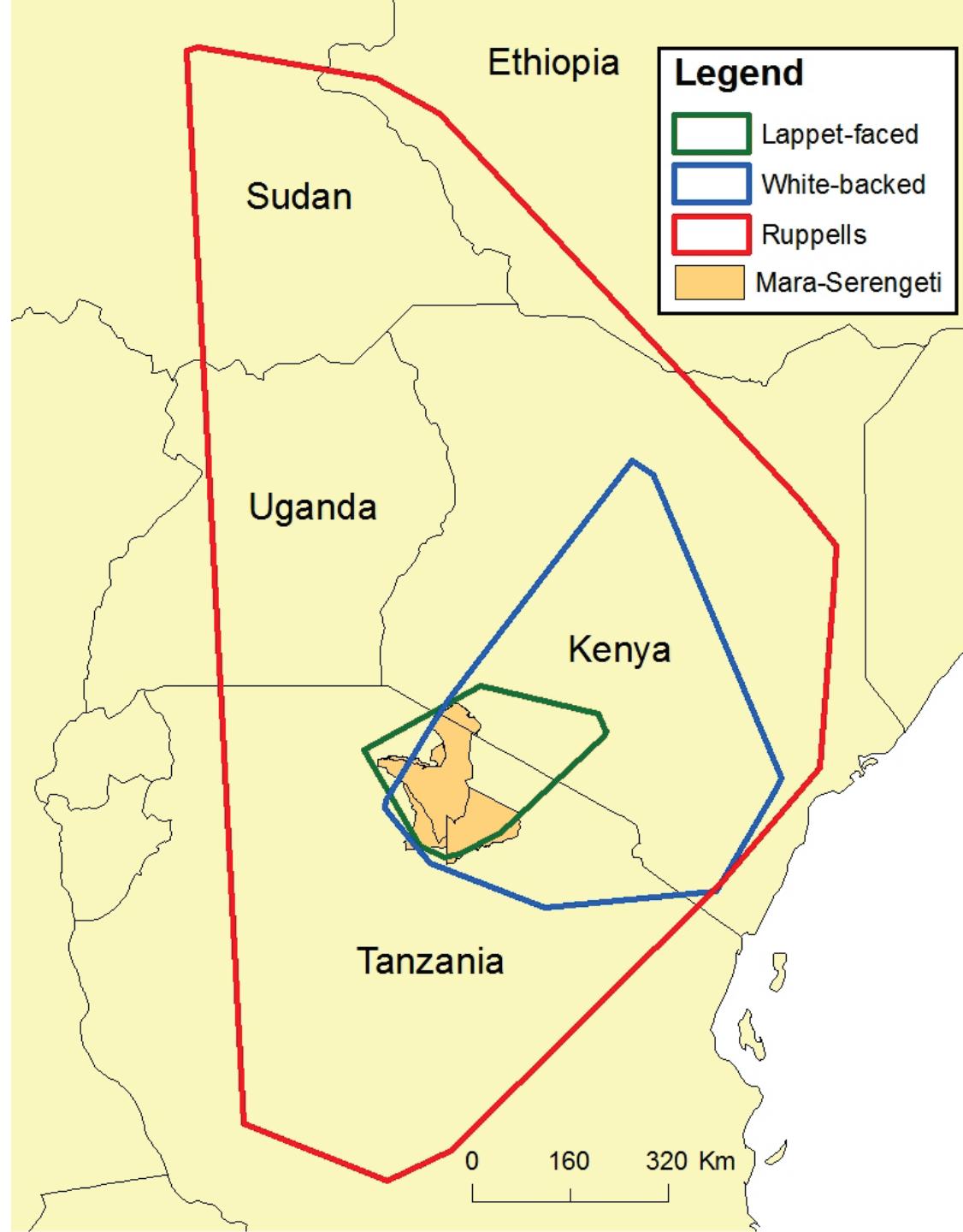




Conservation Challenges

Range Size

Species	Home Range (avg km ²)
Lappet-faced	22,000
White-backed	68,000
Ruppell's	166,000



Life history strategies
delayed maturity, low productivity, and high adult survivorship



LETTER

Another Continental Vulture Crisis: Africa's Vultures Collapsing toward Extinction

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¹⁰ Tanzania Bird Atlas, P.O. Box 1605, Iringa, Tanzania

¹¹ Ezemvelo KwaZulu-Natal Wildlife, P.O. Box 13053, Cascades, 3202, South Africa

¹² Endangered Wildlife Trust, Private Bag X11, Modderfontein, 1645, South Africa

¹³ The Peregrine Fund, 5668 West Flying Hawk Lane, Boise, Idaho, 83709, USA, and National Museums of Kenya, P.O. Box 40658-00100, Nairobi, Kenya

¹⁴ Department of Biological Sciences, University of Swaziland, Kwaluseni, Swaziland

¹⁵ Beaty Biodiversity Research Centre, University of British Columbia, 6270 University Boulevard, Vancouver, V6T 1Z4, Canada

Road surveys

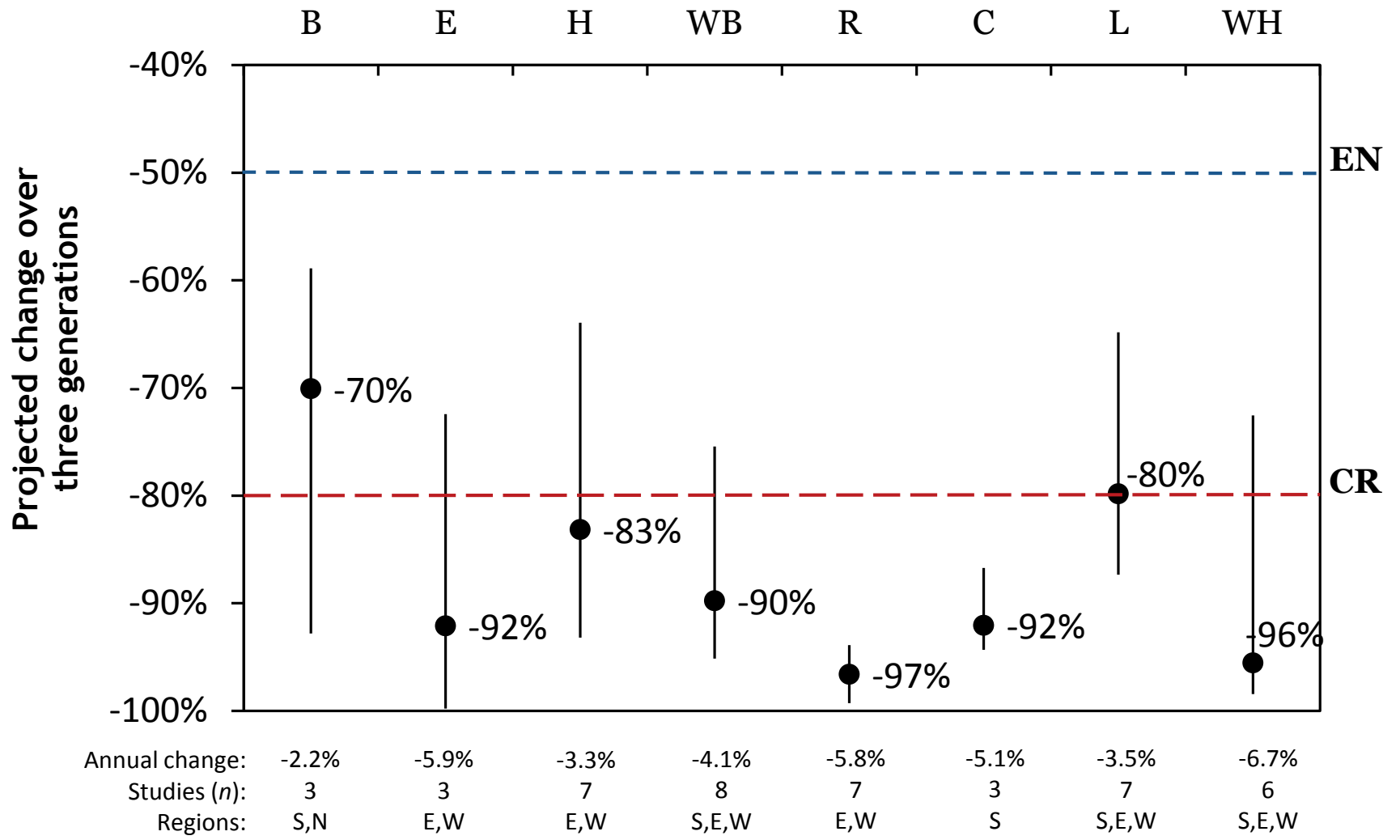


Nest surveys



Counts of Dead Vultures





Bearded Vulture

**Projected to decline
by 70% over three
generations**



Egyptian Vulture



Projected to decline by 92% over three generations

Rüppell's Vulture

Projected to decline by 97% over three generations

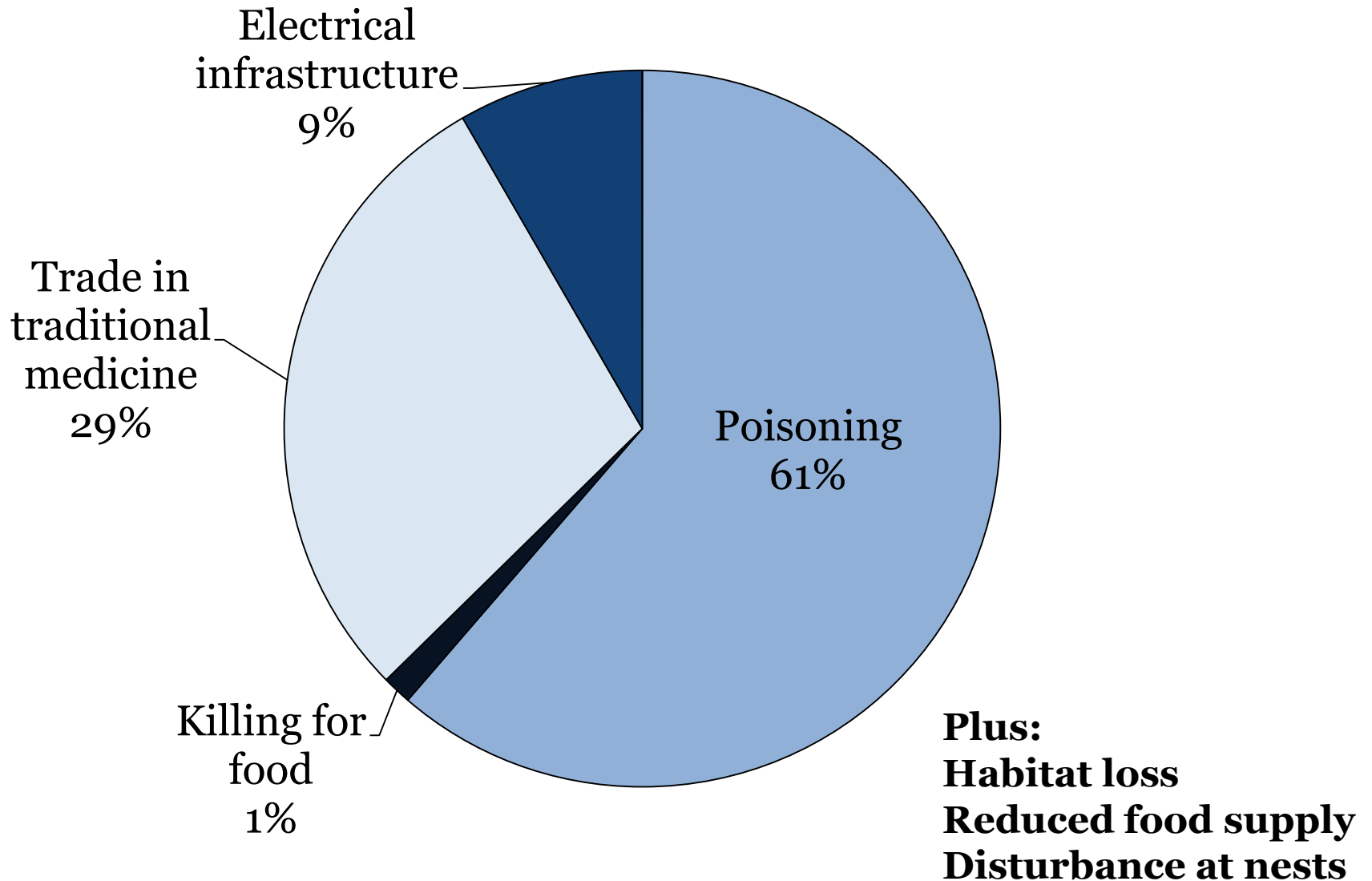


Lappet-faced Vulture



**Projected to decline by 80%
over three generations**

Threats to Africa's vultures



Unintentional Poisoning



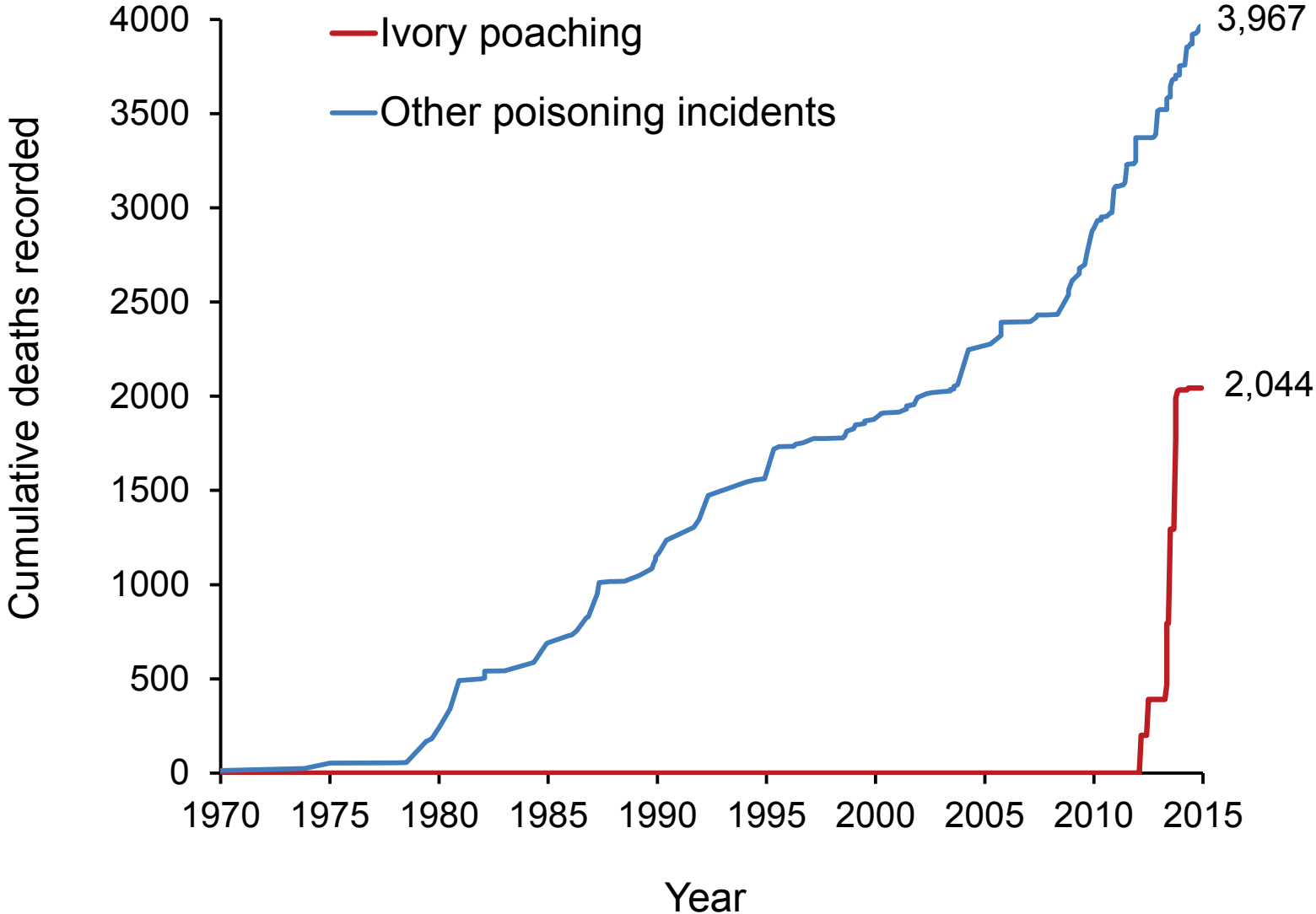
Intentional Poisoning



Intentional Poisoning



Cumulative African vulture deaths caused by illegal poisoning



Trade in vultures and their parts





Roasting vulture heads Maswa Game Reserve, Tanzania

Countries with significant trade:

- 1) Nigeria
- 2) Benin
- 3) South Africa
- 4) Tanzania
- 5) Morocco



Electrical infrastructure



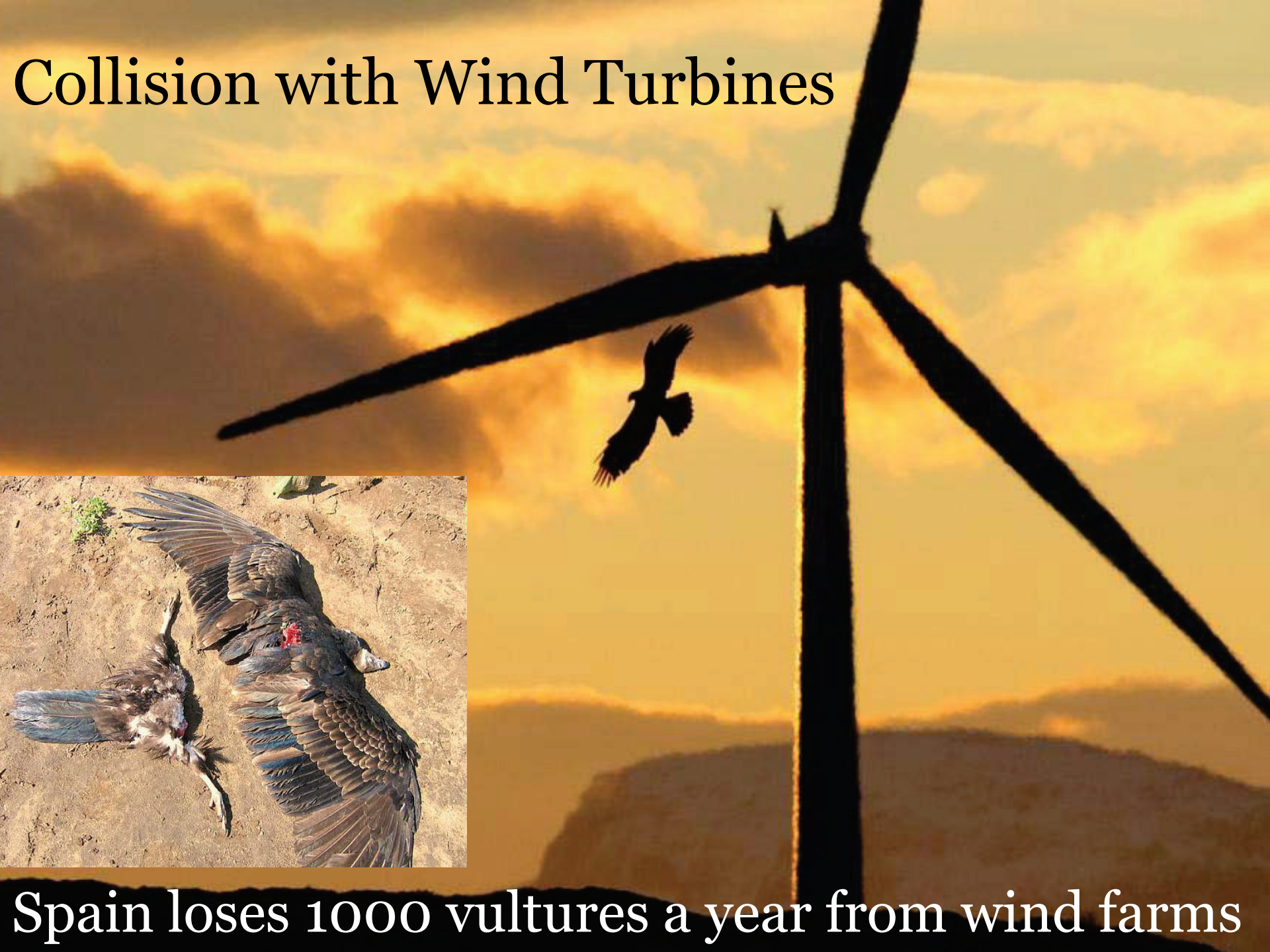
Electrocutions



Pro 2014 - Walter Nesper

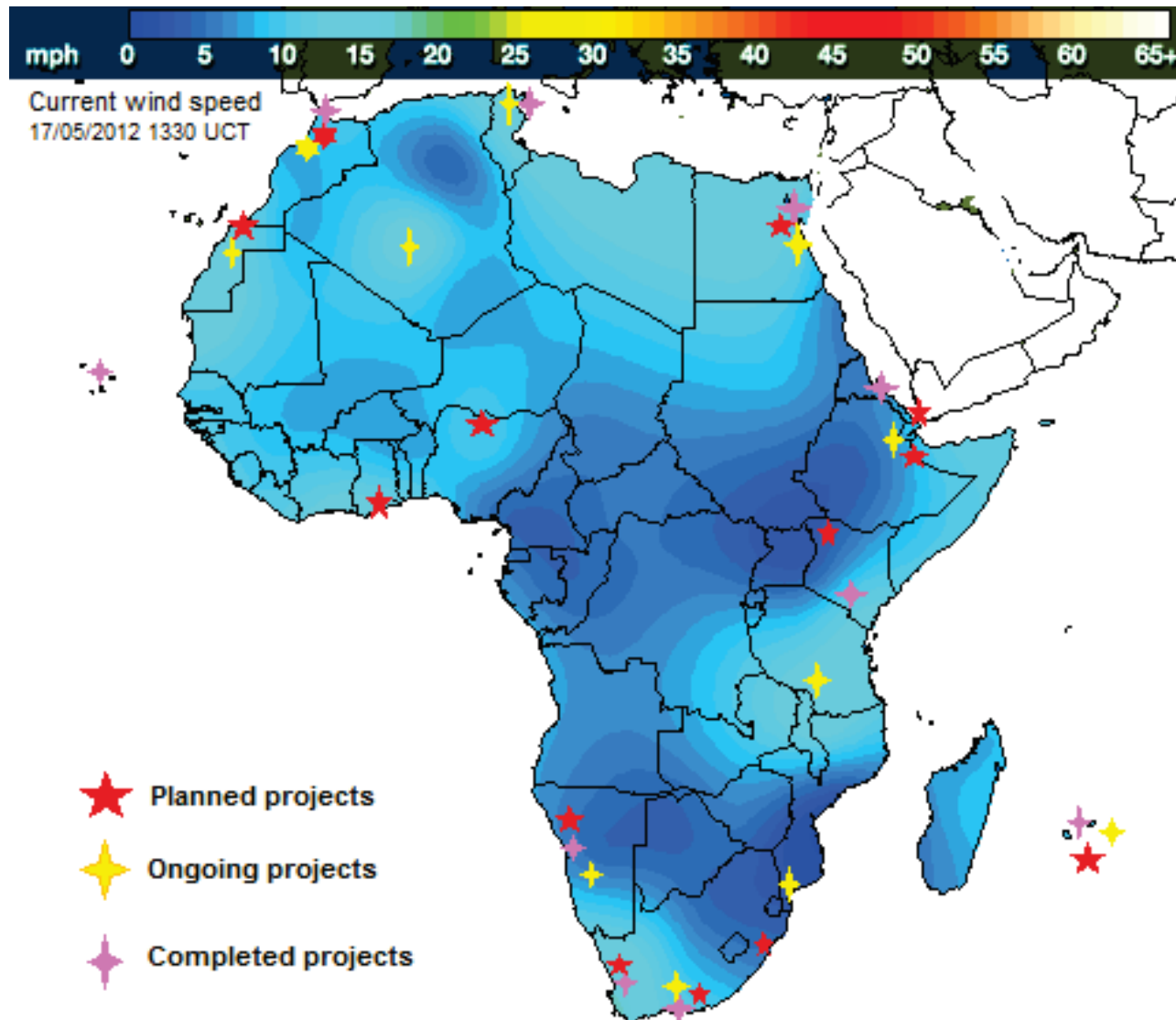


Collision with Wind Turbines



Spain loses 1000 vultures a year from wind farms

Geographic location of wind projects in Africa

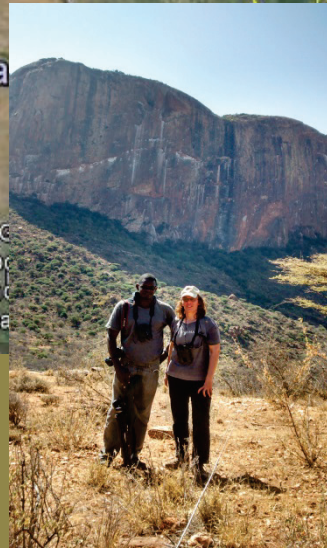
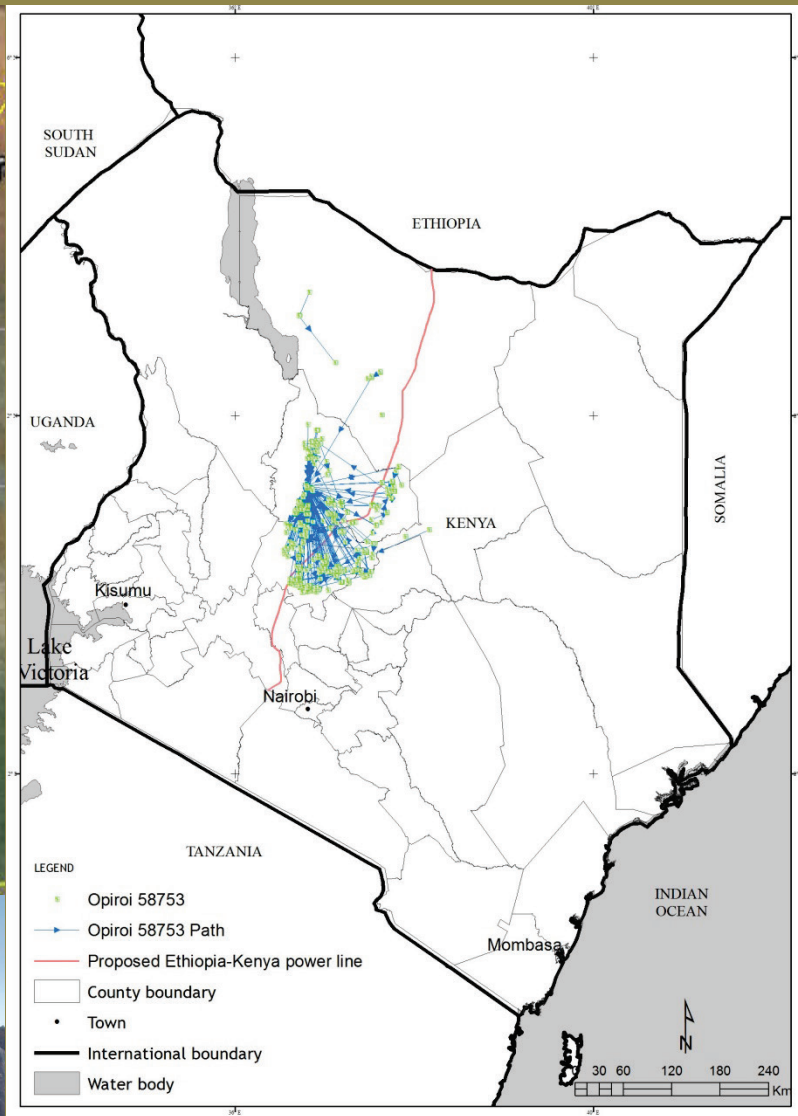
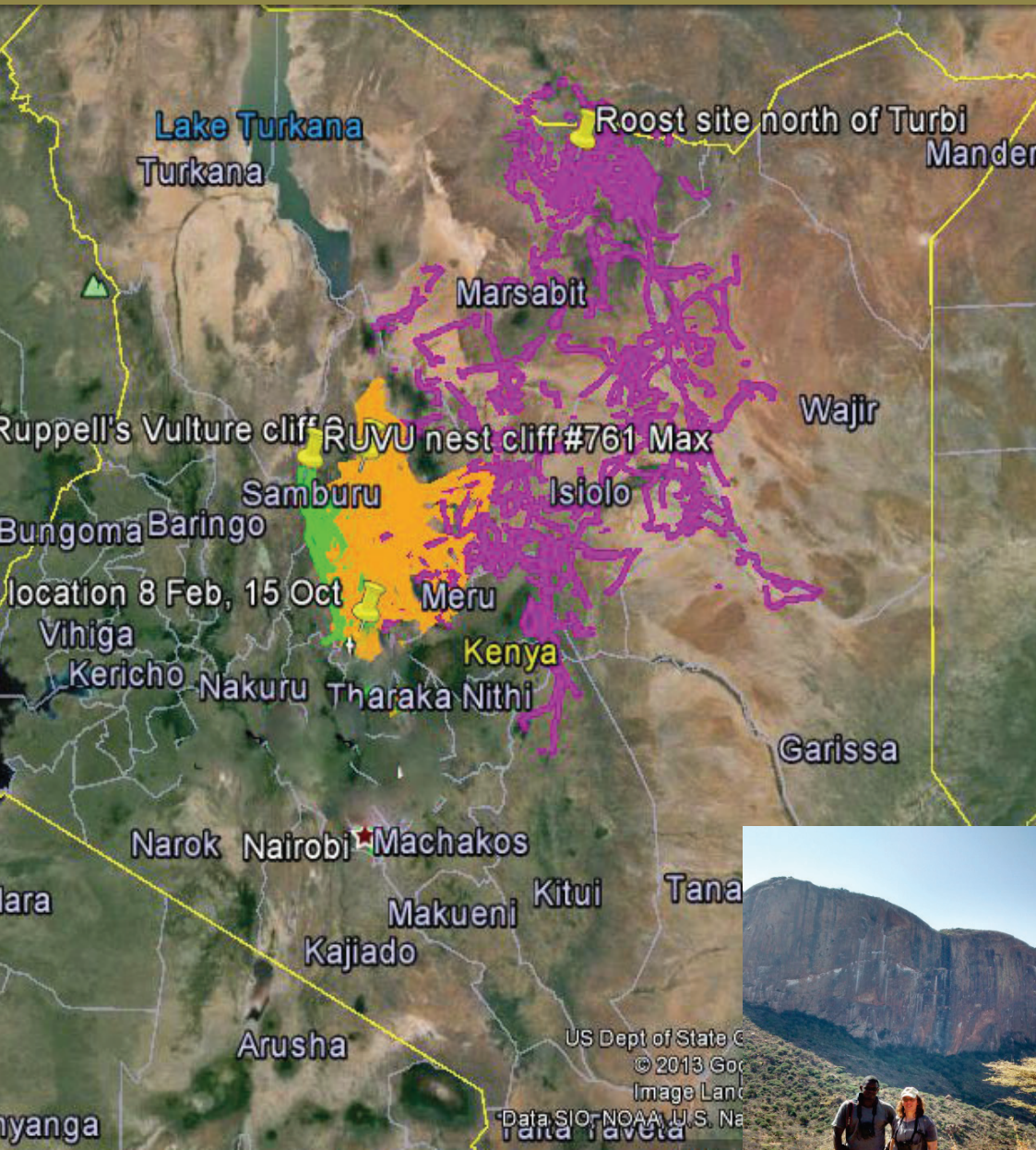




Ongoing Conservation
Actions in East Africa

Northern Kenya Vulture Project







Raptor surveys in Kenya, Uganda and Ethiopia





**PAN-AFRICAN
VULTURE
SUMMIT**

2012

2012 Participants Masai Mara, Kenya



2016 Summit to be held at Pan-African Ornithological Congress in Dakar, Senegal

Vulture Awareness Day Celebrations





Major challenges for African vulture conservation

- Convincing African governments to enforce tighter regulation of highly toxic pesticides and other poisons
- Strengthening the legal framework to prosecute offenders
- Improving laboratory testing facilities
- Education with regards to pesticide regulations, e.g. law enforcement officers and lawyers/judges
- Training field personnel to effectively manage poisoning incidents

Conservation gaps and research needs

- Research priorities based on individual species and ecosystem services provided by vultures
- Establishing and funding long-term monitoring programs in each region
- Raising public awareness about the decline of African vulture populations
- Educating the public about the importance of vultures
- Creating educational opportunities and developing international links to train African nationals in vulture conservation, research and education

Thank you!



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Mpala Research Centre
Raptor Working Group of Nature Kenya
Ol Pejeta Conservancy
Halycon Media

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Useful links and resources

2012 Proceedings of the Pan-African Vulture Summit
<https://www.ewt.org.za/BOP/PAVS%20PROCEEDINGS.pdf>

Ogada, D.L., Shaw, P., Beyers, R.L., Buij, R., Murn, C., et. al. 2015. Another continental vulture crisis: Africa's vultures collapsing toward extinction. *Conservation Letters* DOI: [10.1111/conl.12182](https://doi.org/10.1111/conl.12182).

TED talk by Dr. Munir Virani

http://www.ted.com/talks/munir_virani_why_i_love_vultures