



RAPTORS
MOU

6.3. Introducing the Concept of Migratory Raptor Safe Zones

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Background: Vulture Safe Zones



- Recommended action in the MsAP:
 - **Action 11.4.4.**
 - Develop VSZ criteria and promote application and implementation of this approach to address all critical threats throughout the Vulture MsAP range.

Vulture Safe Zones - background

- BirdLife International Review by Dr Rob Sheldon.
- Originated in South Asia – Asian Vulture Crisis.
- Primary focus on addressing the threat of Diclofenac and other NSAIDs.
- Implemented in 4 countries – Nepal, India, Pakistan & Bangladesh – 12 VSZ's in total.
- Pioneered in Nepal
- Bangladesh has afforded legal status to VSZ's.
- Criteria developed by the SAVE consortium.
- Until criteria are met, a VSZ is considered a Provisional VSZ.

A review and assessment of Vulture Safe Zones



Report prepared for BirdLife International



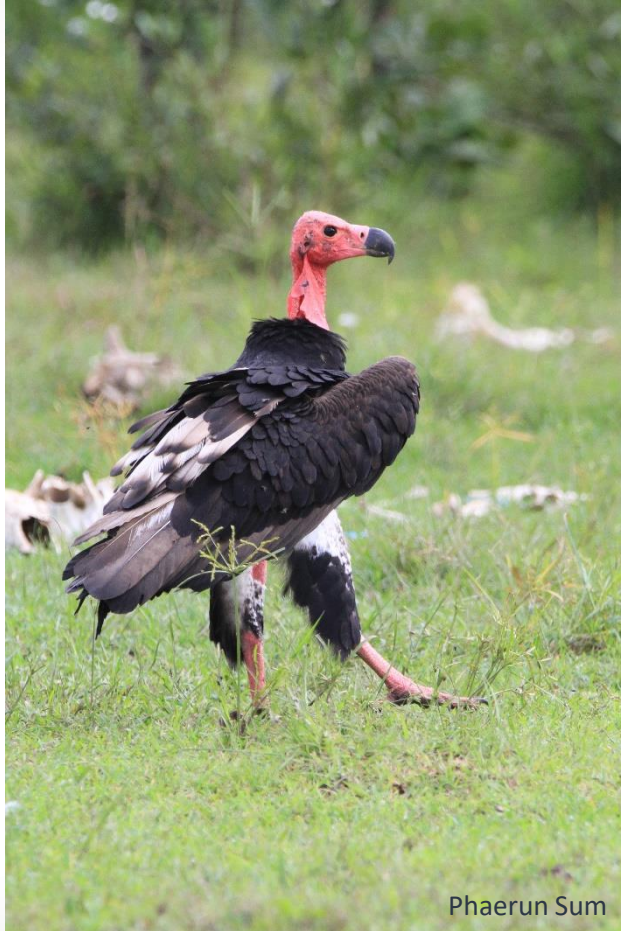
Dr Rob Sheldon, RDS Conservation, December 2018

RDS CONSERVATION

South Asian Definition & Criteria

- An area of approximately 30,000km² (circular area of 100km radius) where
- After 2 years of searching:
 - No diclofenac is present for veterinary use
 - No diclofenac is found in a minimum of 800 cattle carcass liver samples from VSZ
- Use of Tracked Vultures – no confirmed mortalities from diclofenac over a period of 2 years of tracking.
- After 5 years of intensive monitoring:
 - No diclofenac or visceral gout present in dead vultures within the area.
 - Vulture populations in area are stable to increasing

Key ingredients in a successful Asian VSZ



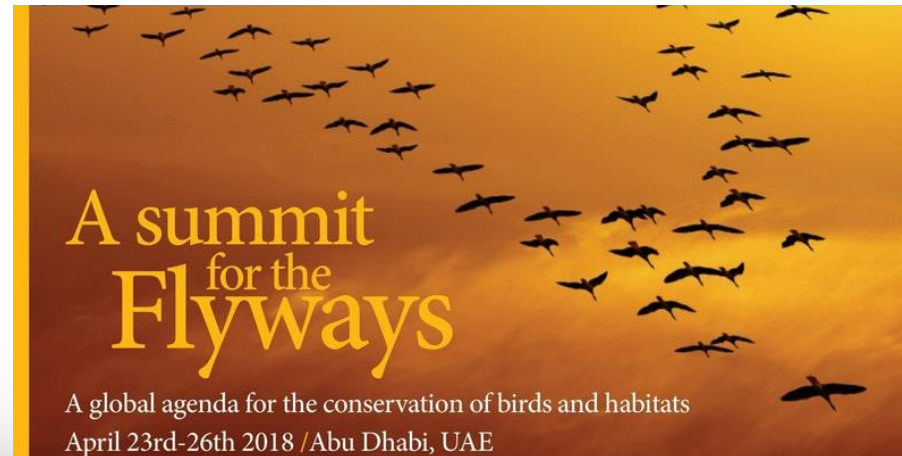
1. Focus on tackling the key threat of Diclofenac and removing it from the environment.
2. Focus on advocacy and awareness raising.
3. Need for collaboration and partnership at all levels.

Key lessons learnt from VSZ's in South Asia

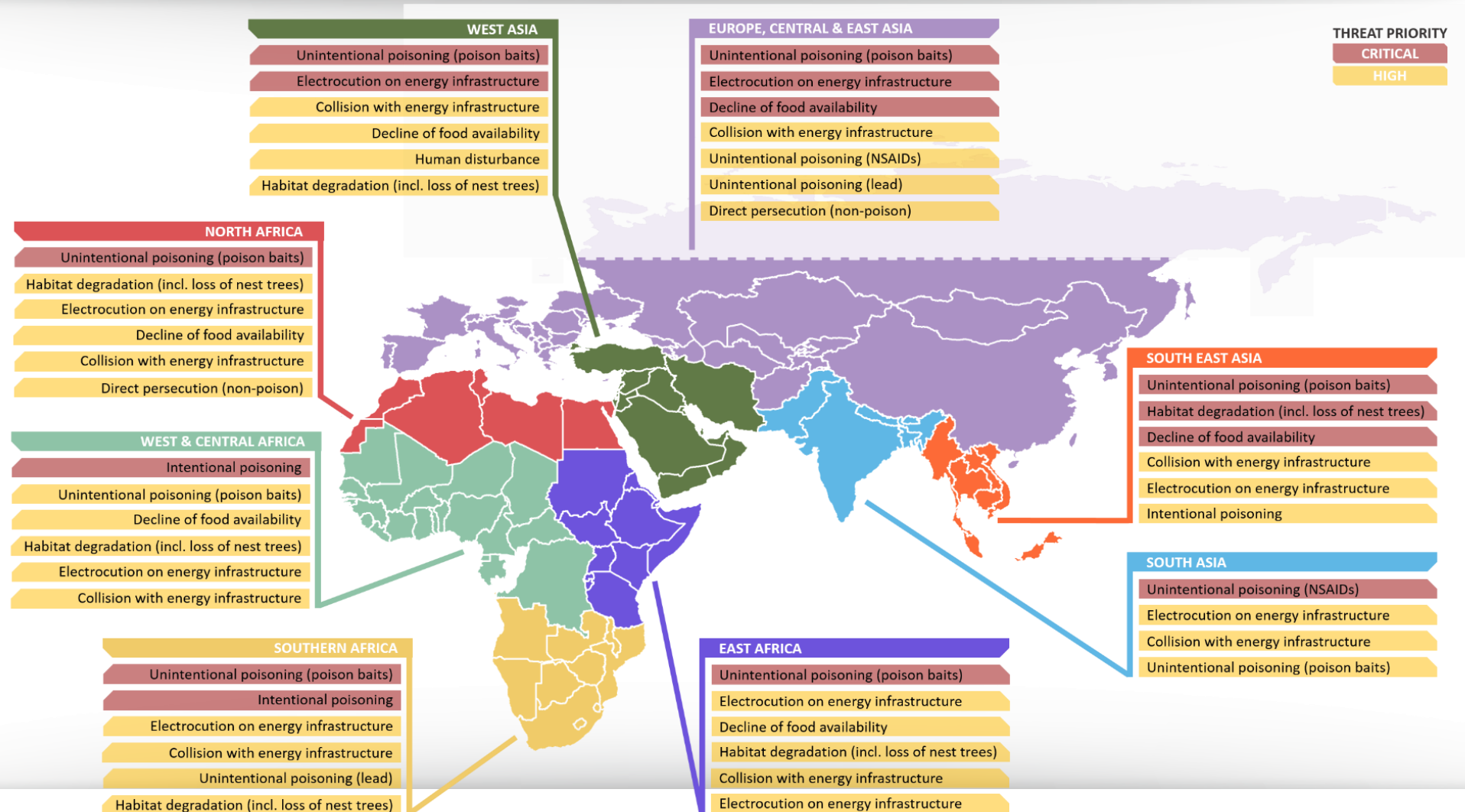
- Development and endorsement of overarching criteria
- Government adoption and legal status (Bangladesh) – faster action.
- Government endorsement = Government-level support.
- Objective criteria that allows flexibility to adapt to local circumstances.
- Focus on a single major threat in a large geographical area.
- Vital to establish well-coordinated teams and provide relevant training and resources.
- Existing teams can readily adapt to focus on other threats.
- VSZ approach is part of a wider conservation package.
- Transfers international and national policy into local initiatives and action.
- Long-term funding is vital!

Recent developments - VSZ's beyond South Asia

- BirdLife International Flyways Summit – April 2018
 - Europe – Not considered necessary or essential.
 - Africa – to be considered further and criteria developed.
 - South-east Asia – Cambodia considering the concept, but focused on the use of pesticides



VSZ concept beyond South Asia



RRF Conference – November 2018

SAVING SPACE FOR AFRICA'S VULTURES

Zoom in (Ctrl+Plus)

Where are Africa's vultures at risk?

This map reveals where Africa's vultures are at most risk to the different threats that they face.

Each of the seven principal threats facing vultures was assessed over the whole continent of Africa to a maximum of 100% and on a scale of 0-5 where 0 represents no risk, 1 represents low risk, 2 represents medium risk and 3 high risk. We also developed a weighted value for each threat which is added in proportion to the amount of vulture mortality that the threat is considered to account for. So for each of the habitat strongholds where most vultures now exist, we could sum all of the values for each threat multiplied by its weighted value and this sum is shown as a size in the pie diagrams for each stronghold and color-coded to identify the respective threat. The size of the three and the pie diagrams are added to the sum of values to the larger pie diagrams in southern, western and eastern Africa represent the greatest areas and highest risk vultures where the vultures occur in each stronghold, while the smaller pie diagrams to the north and south represent lower risk. The map reveals how the threat from poisoning for the bald-headed eagle reached its greatest across West, East and South Africa, that threat from poisoning by poachers is characteristic of the safer areas in southern and eastern Africa, while the threat from unintentional poisoning is most widespread.

Habitat Strongholds

Vultures need huge spaces and are known to regularly fly across countries and regions. They are truly transboundary.

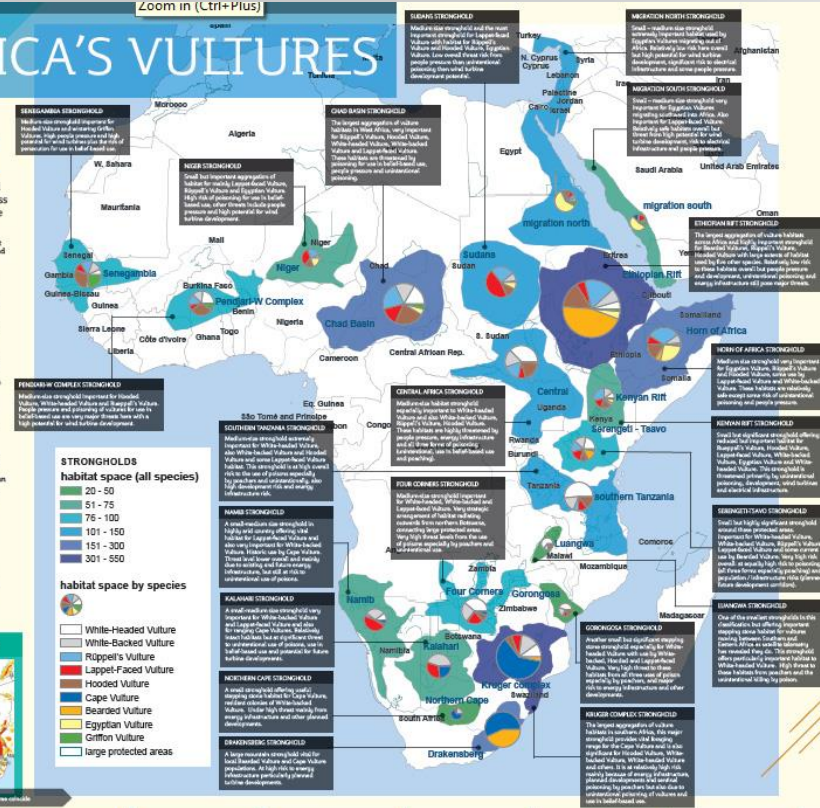
Sadly, we are losing large areas of their habitat as wild spaces give way to urban expansion and agricultural transformation.

Vultures are closely linked with livestock while providing vital ecosystem functions for both livestock and people by dispersing carcasses. But where carcasses are held with poison to kill carnivores, vultures are the first to arrive and the first to die. In large areas of Africa, vultures are also being deliberately poisoned either to obtain their body parts for use in bait-based use or by poachers who do not want carcasses drawn to their illegal elephant kills. At a single elephant carcass in Namibia 600 vultures were poisoned. Vultures are long-lived and slow-breeders, their populations cannot sustain these sorts of losses and are heading rapidly towards extinction.

Recently six species of African vulture were added on the IUCN Red List of Threatened Species. Africa cannot afford to lose these migratory and vital birds as the few reserves they provide have been shown to be very expensive to replace.

What can we do to stop the decline of vultures in Africa? We know the problem is geographic: it is a problem of space. As large mammals lose space, so do vultures. The African Rapid Database manages spatial information on African raptors and will soon be expanded globally.

For this poster we have combined database sightings of nine species of African vulture, habitat models, and satellite-tracking data to show where populations still exist, where vulture ranges, and where the remaining suitable habitat exists. This revealed 21 remaining habitat strongholds in Africa. This poster depicts these important vulture strongholds. By identifying these strongholds targeted conservation actions in the right locations can benefit not just one, but many vulture species, as well as a host of other wildlife species.



STRENGTHOLDS habitat space (all species)

- 20 - 50
- 51 - 75
- 76 - 100
- 101 - 150
- 151 - 300
- 301 - 850

habitat space by species

- White-Headed Vulture
- White-Backed Vulture
- Rüppell's Vulture
- Lappet-Faced Vulture
- Hooded Vulture
- Cape Vulture
- Bearded Vulture
- Egyptian Vulture
- Griffon Vulture
- Large protected areas

THREATS

POISONING

WILDLIFE TRADE

UNINTENTIONAL POISONING

POACHERS

LOSS OF HABITAT

Habitat strongholds identified by 3 lines of evidence

- Satellite tracking
- Direct sightings
- Habitat models

BEARDED VULTURE

IUCN: Near Threatened
Endangered from Least Concern in 2016
1200-4000 mature individuals globally, a few hundred pairs in the African sub-species
Suitable habitat: 0.5M km² in Africa & Arabia
Strongholds: Ethiopia, DR, DRC, Mozambique
Threats: unintentional poisoning, vulture, bait-based use

WHITE-BACKED VULTURE

IUCN: Critically Endangered
2015-2016
275,000 individuals
Suitable habitat space: 1.5M km²
Chad Basin, Kalbar, Pinger complex
Threats: bait-based use, unintentional poisoning, vulture, electrical infrastructure

RÜPPELL'S VULTURE

IUCN: Critically Endangered
2015
22,000 individuals
Suitable habitat space: 1.5M km²
Ethiopia, DR, Chad Basin, Horn of Africa
Threats: unintentional poisoning, people pressure, bait-based use

CAPE VULTURE

IUCN: Endangered
Endangered from vulnerable in 2015
4,400 mature individuals
Suitable habitat space: 0.2M km²
Savannah, Kalbar, DRC, Kalbar complex, DRC, Kalbar
Threats: bait-based use, vulture, unintentional poisoning, electrical infrastructure

GRIFFON VULTURE

IUCN: Least Concern
80,000 - 120,000 individuals globally
20% of range lost in Africa
0.5M km² (unprotected)
Savannah, Chad Basin, Pinger complex
Threats: bait-based use, vulture, unintentional poisoning

WHITE-HEADED VULTURE

IUCN: Critically Endangered
Endangered from vulnerable in 2015
3600 mature individuals
Suitable habitat space: 0.2M km²
Central, Chad Basin
Threats: poisoning, unintentional poisoning, people pressure

LAPPET-FACED VULTURE

IUCN: Endangered
Endangered from vulnerable in 2015
1000 mature individuals
Suitable habitat space: 1.7M km²
Savannah, Sudan, Chad Basin, Namibia
Threats: people pressure, unintentional poisoning, electrical infrastructure

HOODED VULTURE

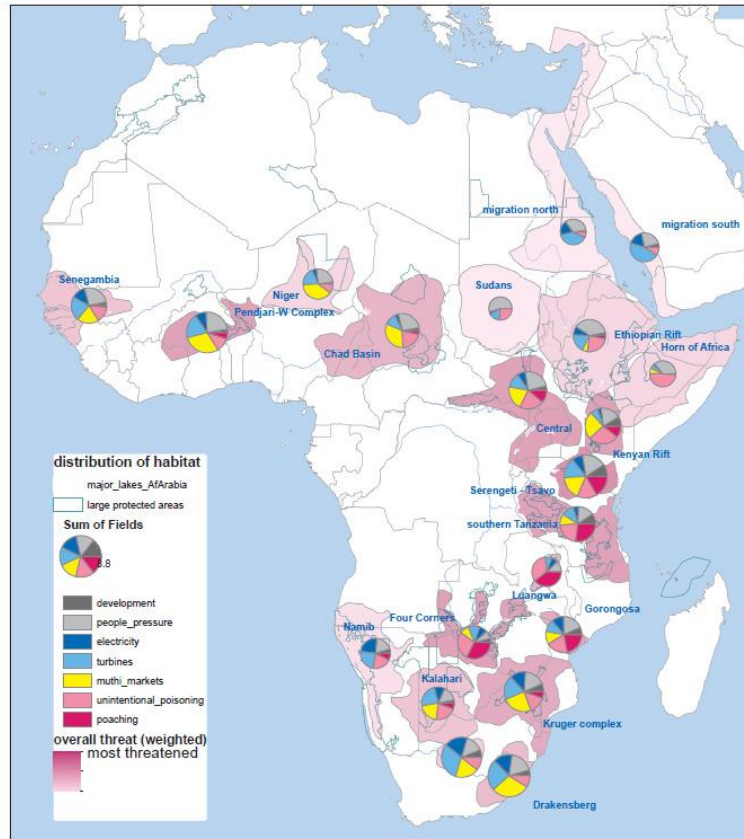
IUCN: Critically Endangered
Endangered from vulnerable in 2015
197,000 individuals
Suitable habitat space: 1.6M km²
Ethiopia, DR, Chad Basin, Senegal
Threats: unintentional poisoning, bait-based use, development

EGYPTIAN VULTURE

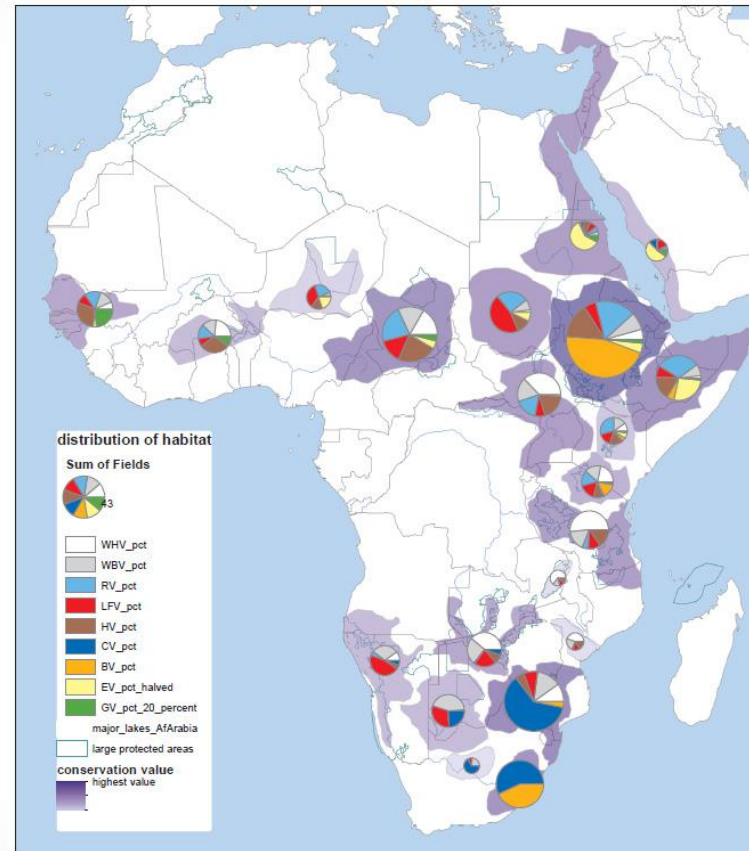
IUCN: Endangered
Endangered from vulnerable in 2015
1000-10000 mature individuals globally, 50% in Africa
Suitable habitat space: 0.5M km² in Africa & Arabia
Horn of Africa, Horn of Africa, Horn of Africa
Threats: unintentional poisoning, people pressure, vulture, electrical infrastructure

RRF Conference – November 2018

African strongholds for vultures showing the nature and magnitude of threats these face



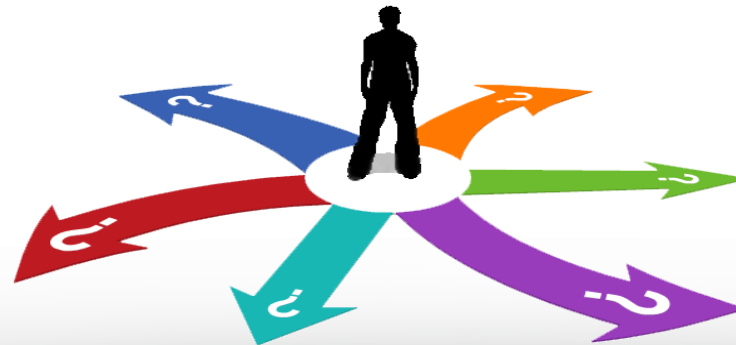
African strongholds for vultures showing which strongholds contain the greatest percentages of species habitat space



Vulture Safe Zones in Africa

Important factors to consider:

- Geography – size of the continent
- More complex suite of threats to consider
- Large home range of most sub-Saharan species
- Is a “one-size-fits-all” set of criteria appropriate considering the above?
- Vulture Safe Zones vs Vulture Strongholds
- Examples – Zambia, Kenya, Zimbabwe, etc.



Key considerations for adopting a VSZ approach in Africa



- Is the term VSZ the most appropriate for Africa?
- How would you define an African VSZ?
- How would VSZ criteria be developed and agreed upon?
- What are the key criteria for an African VSZ?
- How will VSZ's be coordinated at national and regional scale?
- How do we achieve formal government support for the concept?
- What mechanisms are in place in terms of resources and support to make VSZ's viable at the above levels?
- How will the VSZ system contribute towards the implement of National VCAP's and the Vulture MsAP in an African context?
- How will we measure the impact/success of VSZ's?

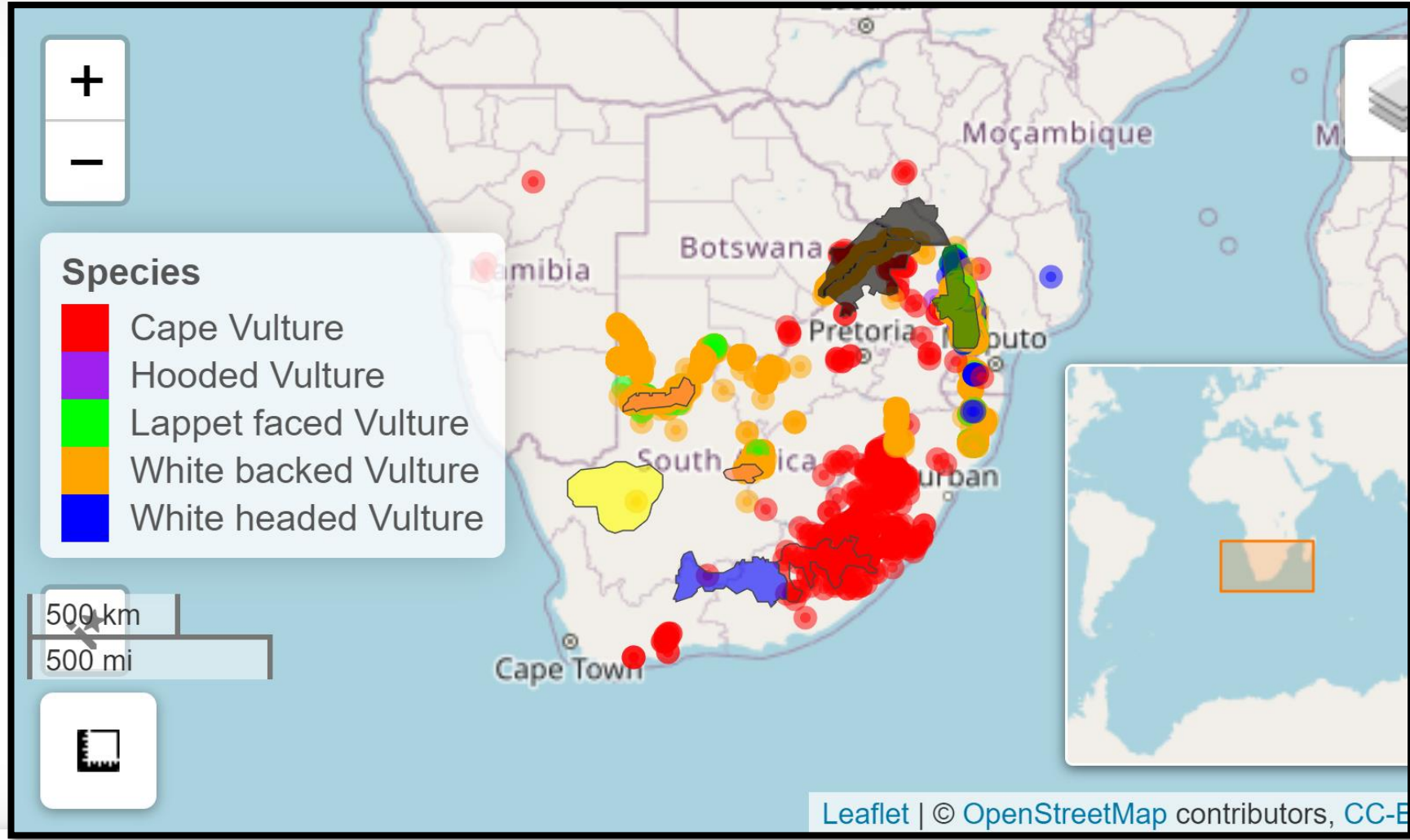
Vulture Safe Zones

Different concepts and principles apply across the range

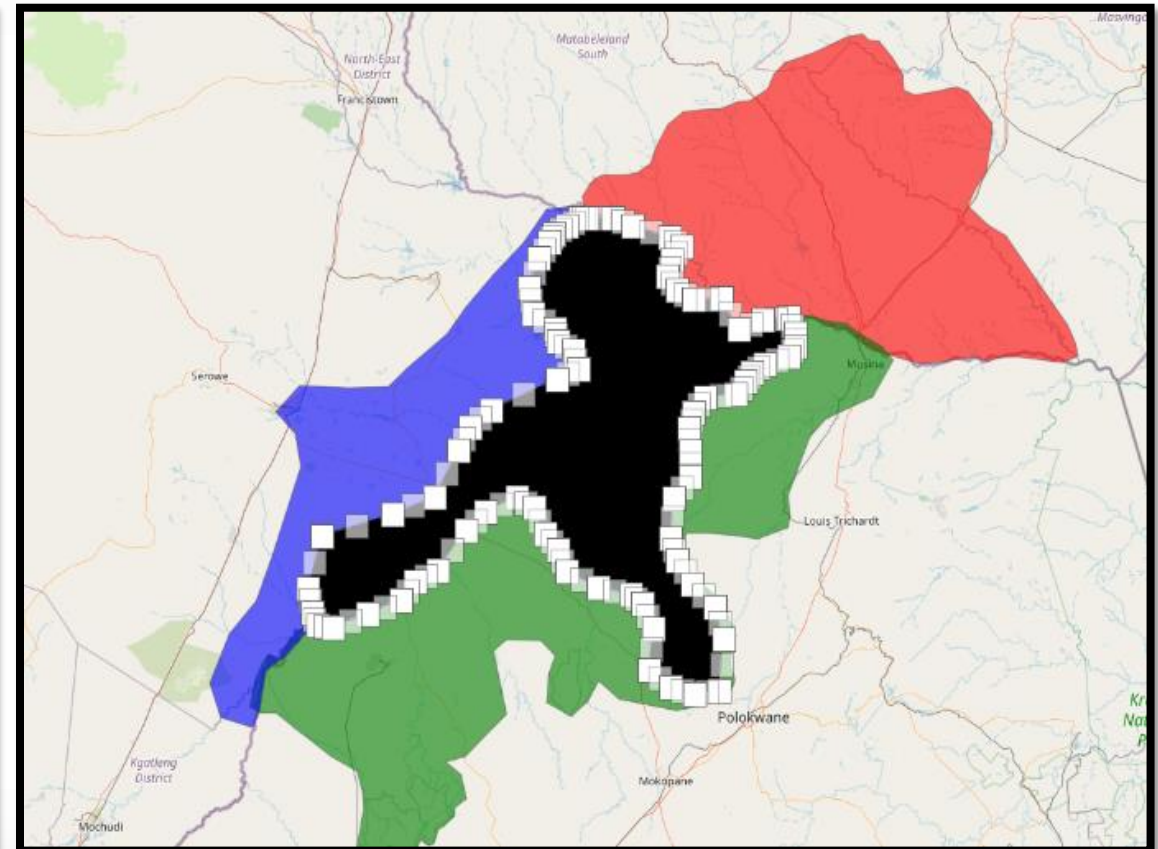
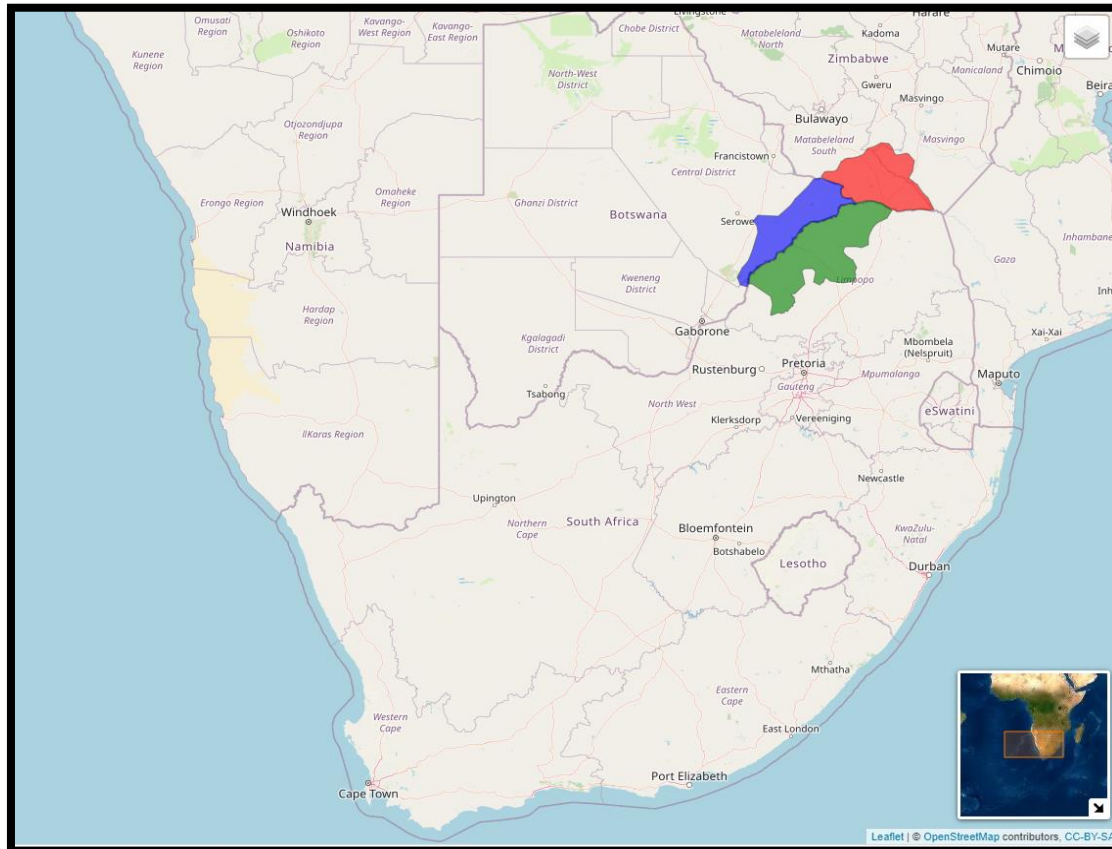
- January 2019 – Workshop involving various stakeholders
- **Existing VSZ's** – Zambia, Botswana, Zimbabwe
- Acknowledge different criteria for varying in-country scenarios
- Accommodate the life-style and great mobility exhibited by African vultures
- **Since Jan 2019** – South Africa (5), Mozambique
- **September 2021** – First cross-border African VSZ – Botswana-Zimbabwe-South Africa
- Still an evolving process that might not be effective everywhere



Vulture Safe Zone network – South Africa

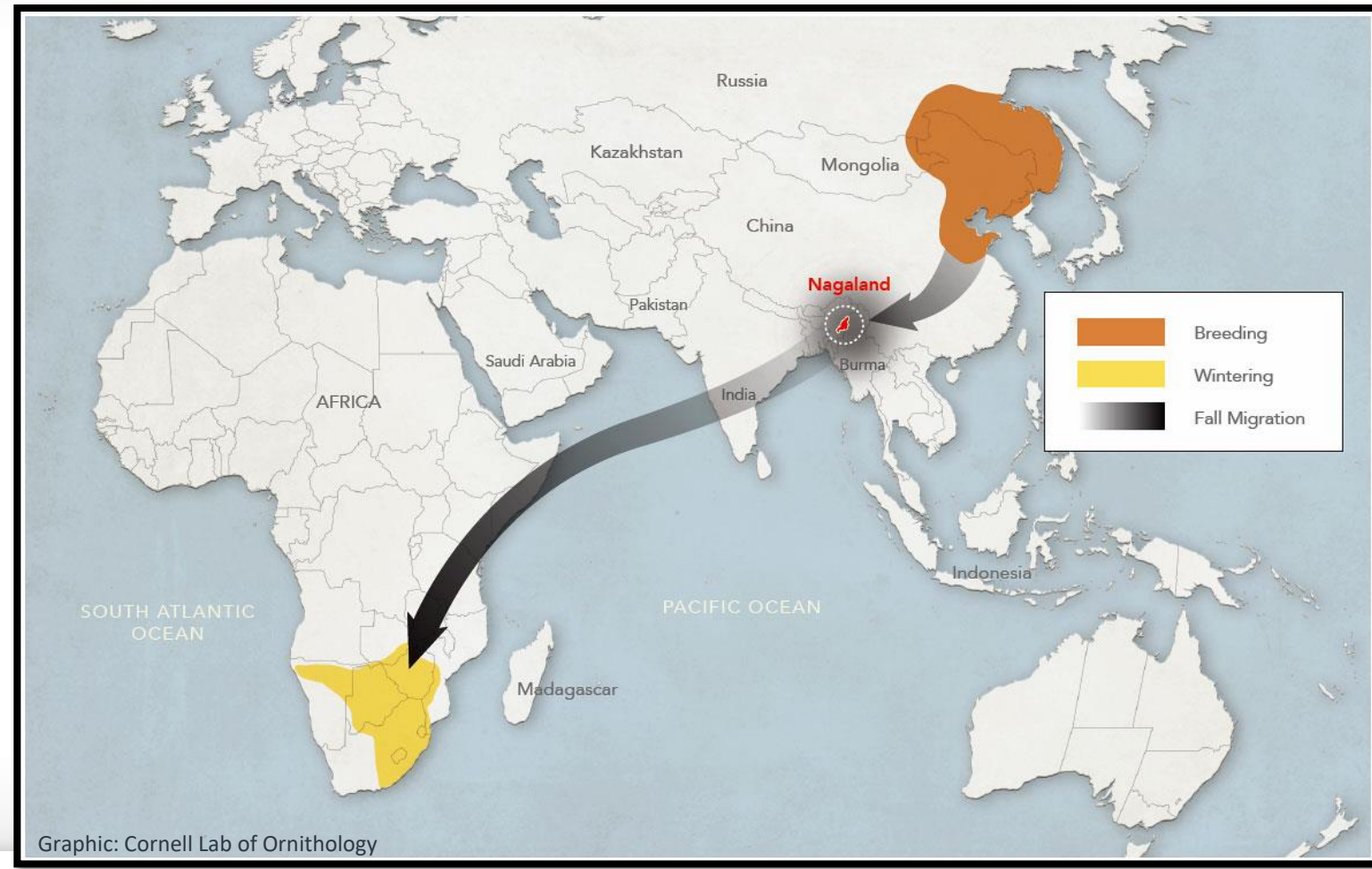


Africa's First Trans-boundary VSZ



What about Migratory Raptor Safe Zones?

Amur Falcon *Falco amurensis*



What about Migratory Raptor Safe Zones?

Aspects to Consider

- What is the purpose of MRSZ's?
- Is this a necessity/essential to promote the conservation of migratory raptors?
- How will it further enhance migratory raptor conservation efforts?
- How does this relate to the list of important sites for migratory raptors?
- Will it apply across the range or be limited to certain regions?
- What are the basic criteria for such MRSZ's?
- Who will promote and drive establishment and implementation of sites?
- Who will provide resources for the above?
- Will MRSZ's have formal/statutory status?
- Way forward – proposal to MoS, etc?

Thank you for your attention!

