

# Expanding the potential of the Lowveld for Southern Ground-hornbill conservation

Kemp, L., Shito, P., Swemmer, L. Monama, N., L. & Thompson, S.  
SNWM 2025, Skukuza



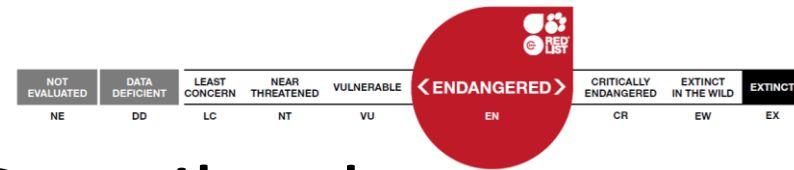
# Global: Vulnerable

## Regional Status:

South Africa, Namibia & Swaziland

**Data deficient:** Other range states

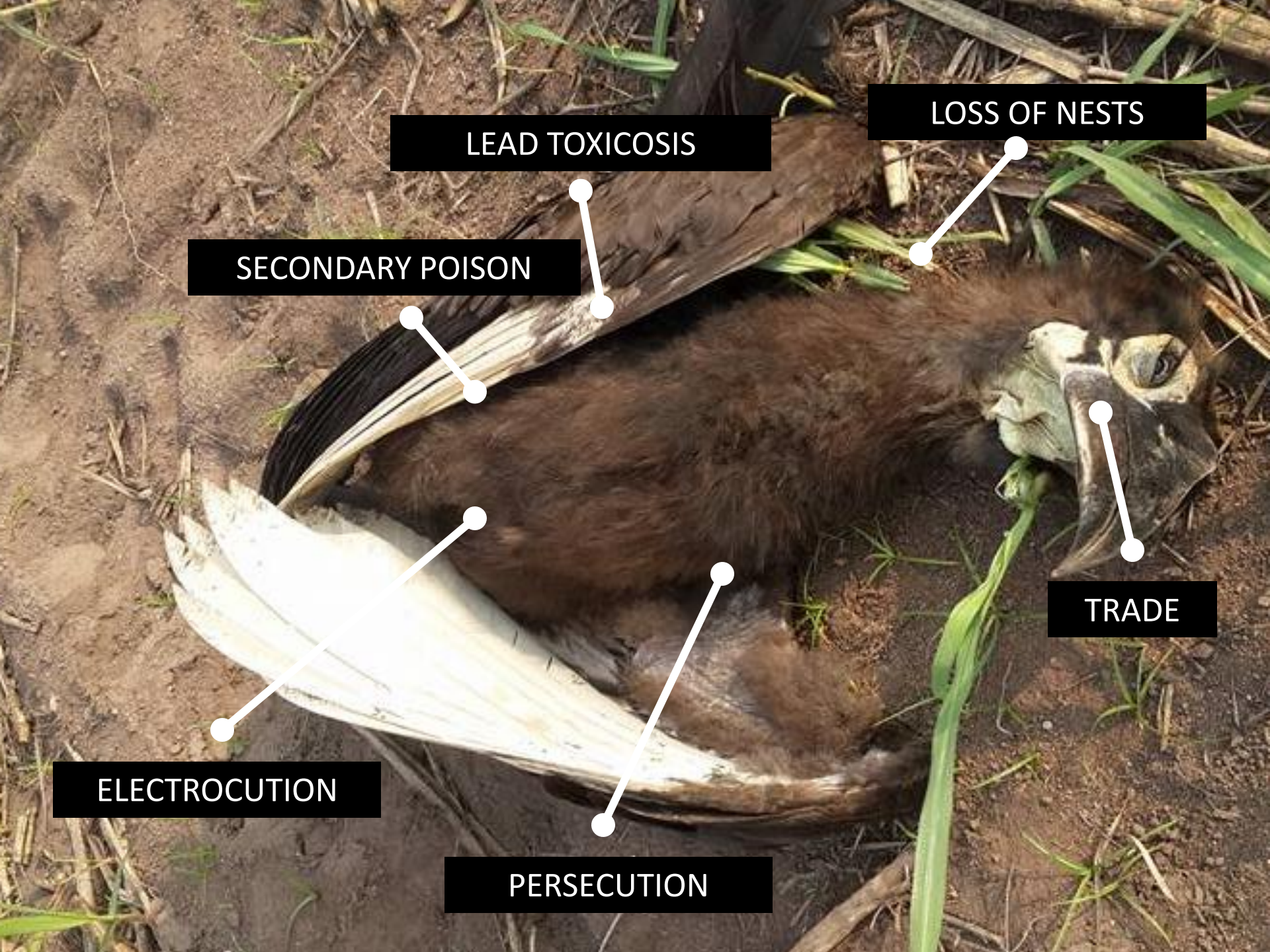
**Likely OK:** Zambia and Tanzania



## Threats

**Intrinsic:** life-history

**Extrinsic:** mostly anthropogenic



LEAD TOXICOSIS

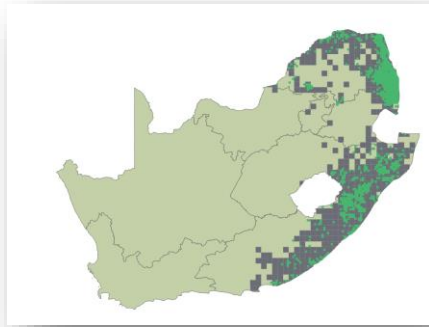
LOSS OF NESTS

SECONDARY POISON

TRADE

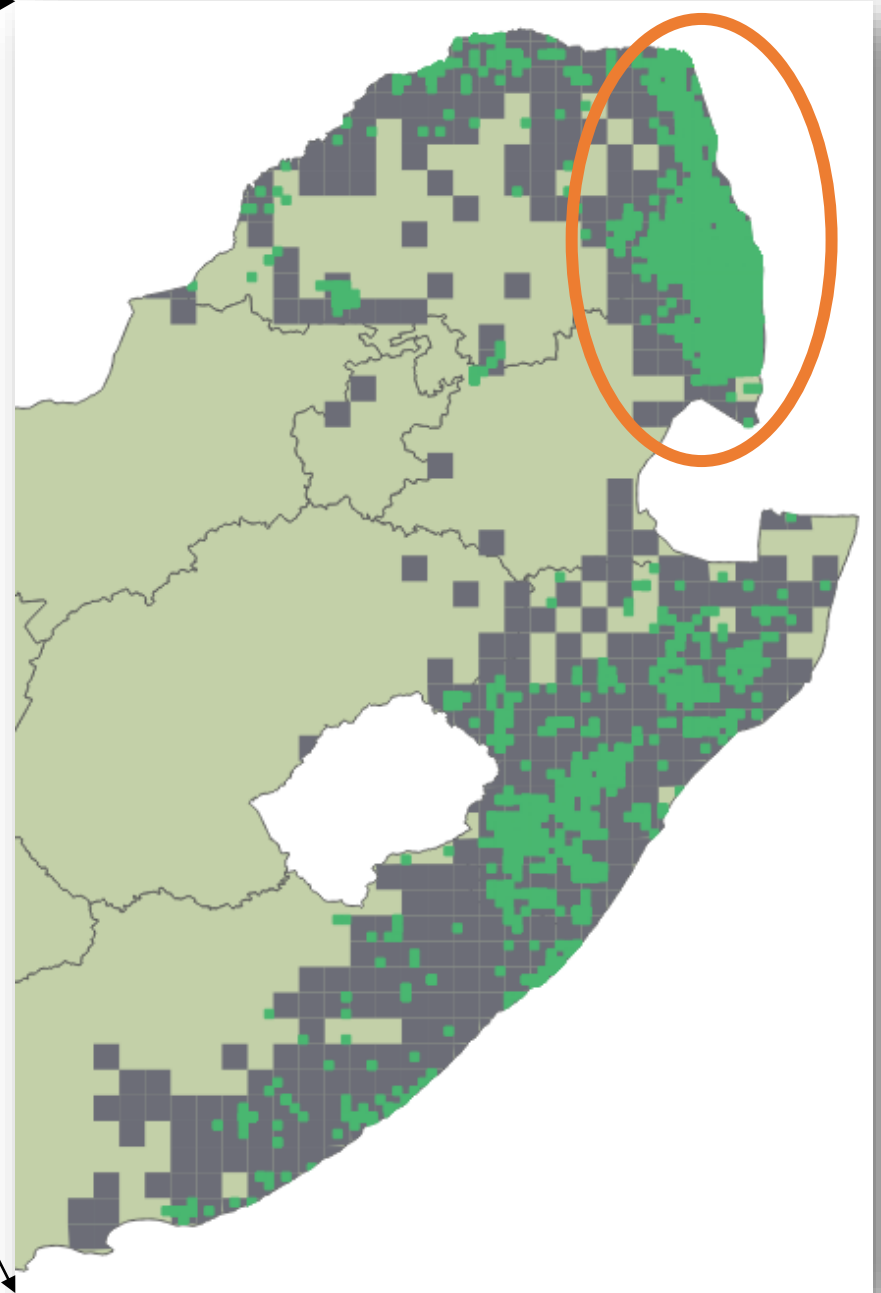
ELECTROCUTION

PERSECUTION

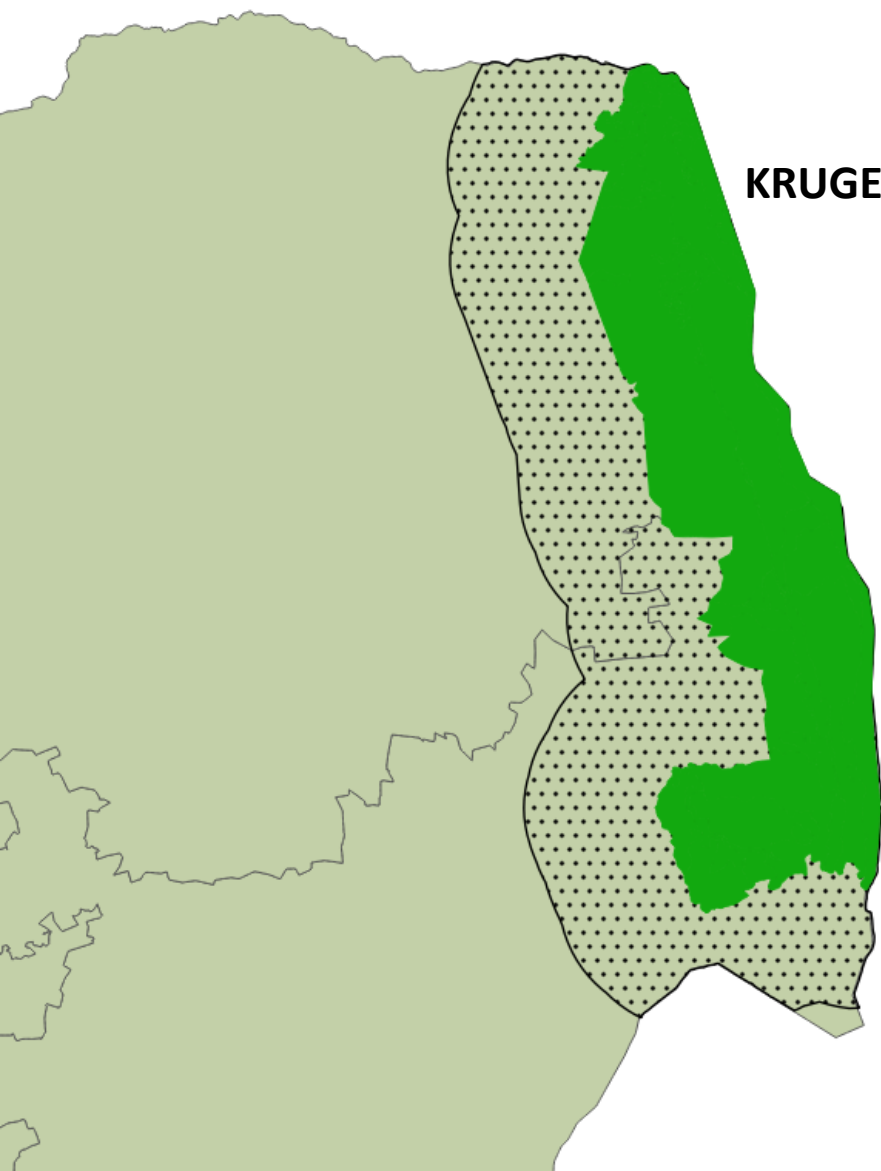


**■ THEN**  
**■ NOW**

**Community/citizen science:  
420 pentads to 868 pentads  
Still Endangered.**



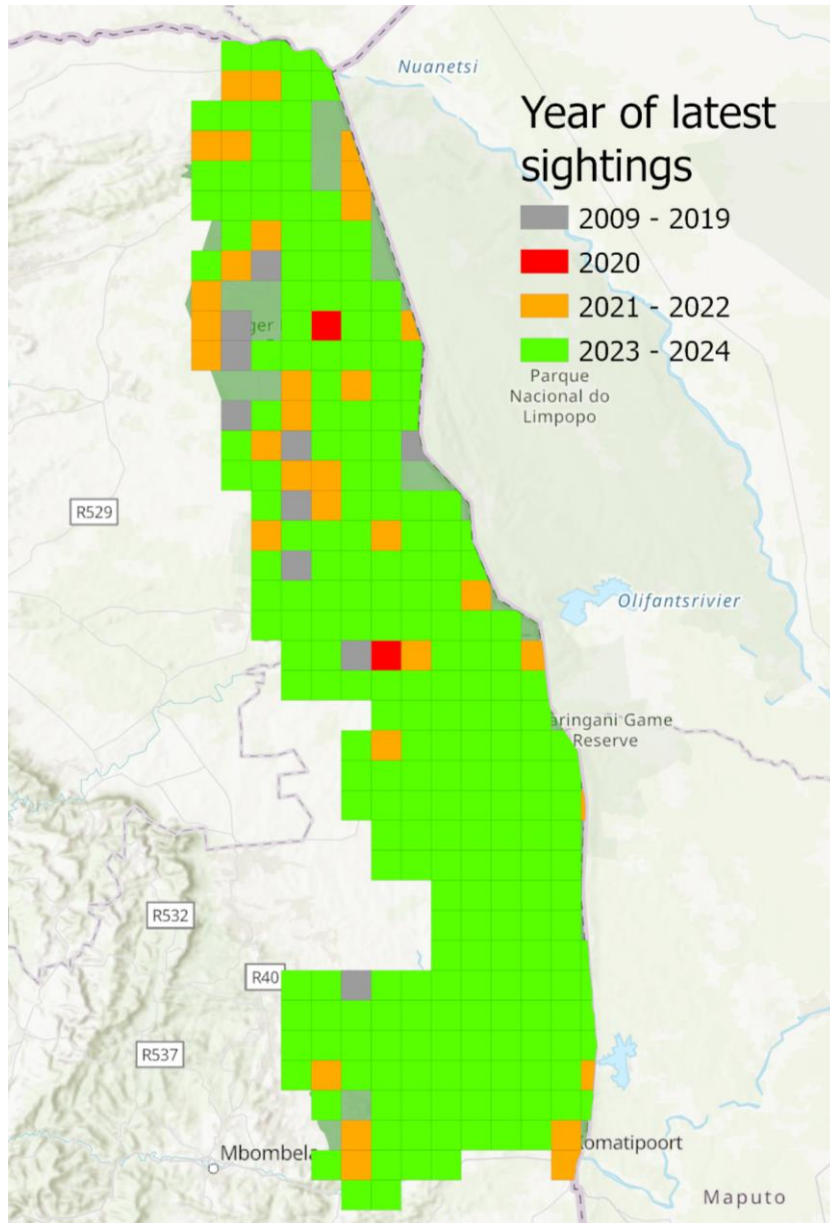
# So what is happening in the Lowveld?



**KRUGER NATIONAL PARK**

**BEYOND FORMAL PROTECTED AREA BOUNDARIES  
(50 km buffer = 5 potential territories across)**

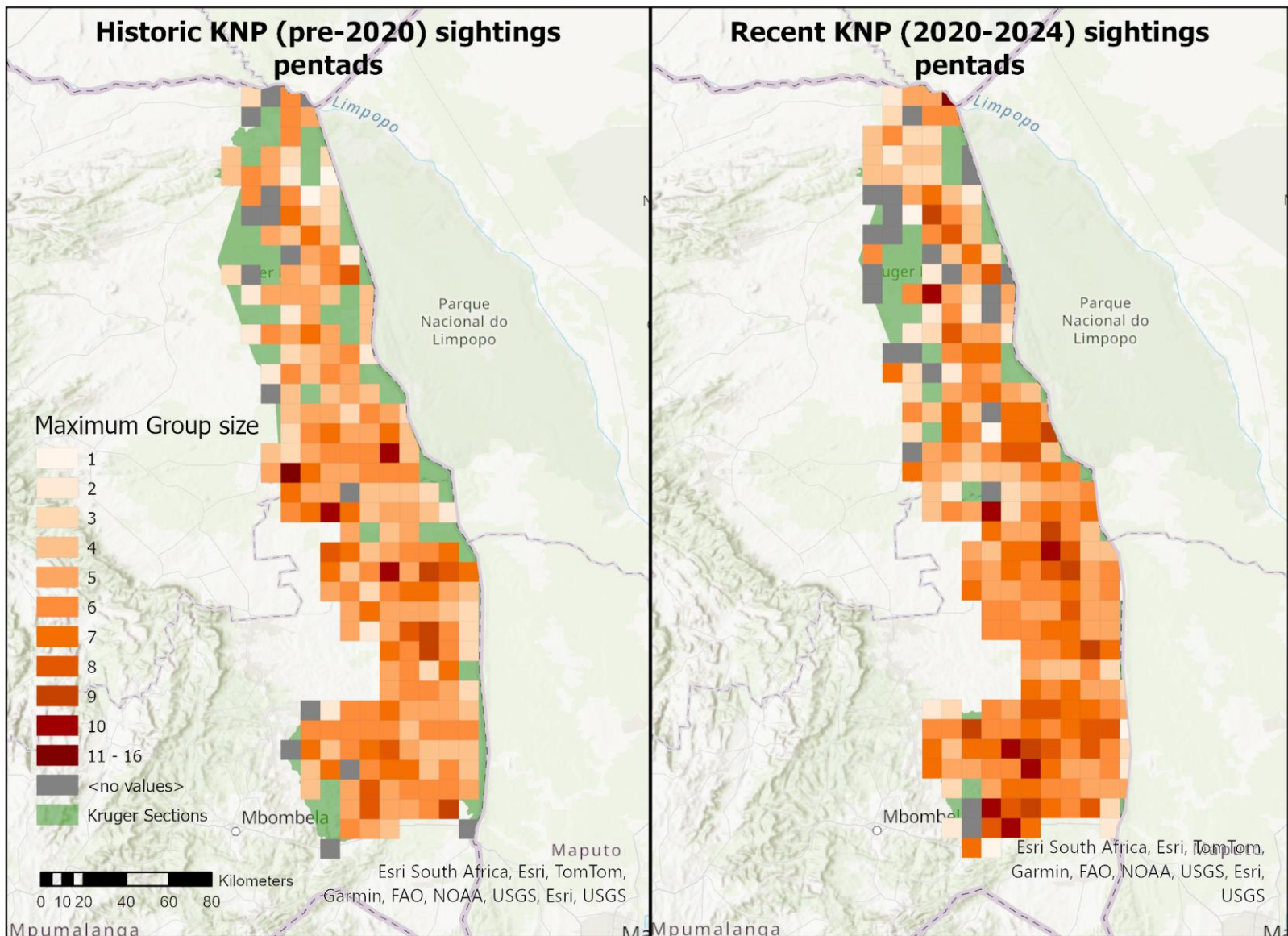
# Kruger National Park



Citizen science yielded 25 new nests  
> 15 000 data points

85% of 20 'empty pentads' are in wilderness zones


- = pretty much full (262 pentads)
- = 30% of national population
- = urgent need for expansion zones so dispersals have a safe place to go
- = closing of artificial water points had no impact



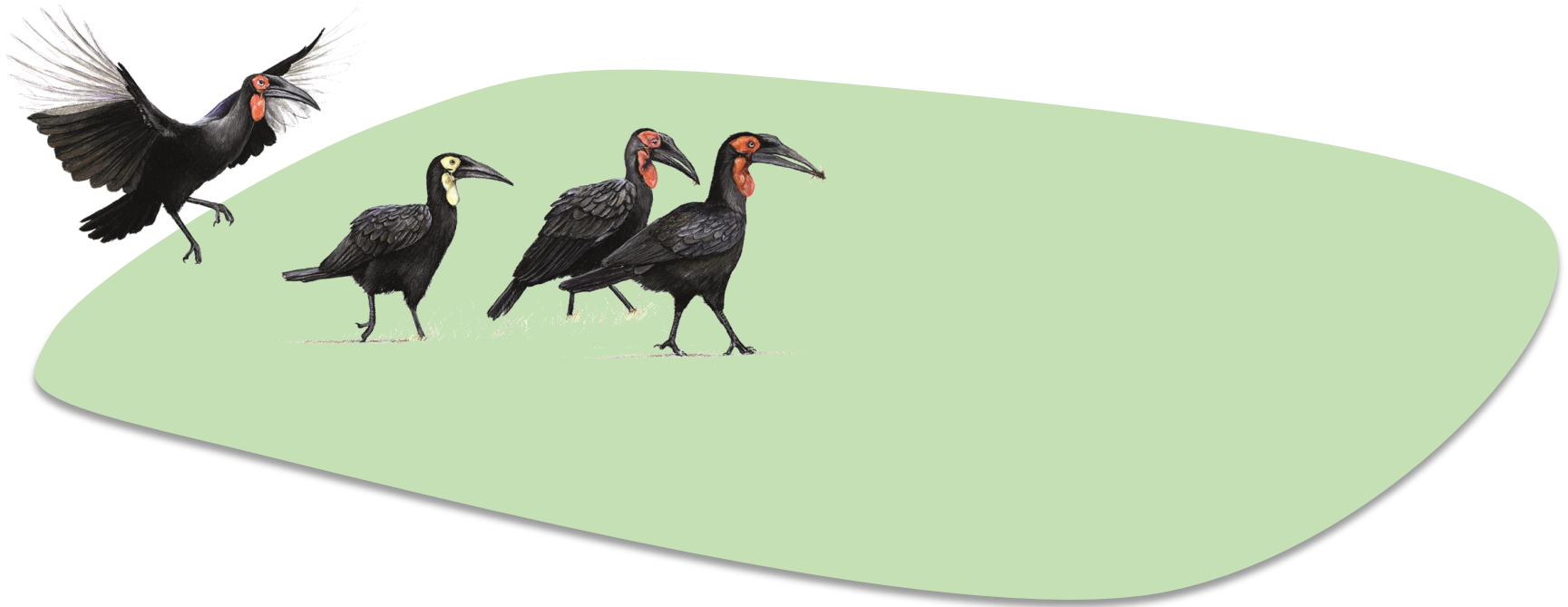
Average group size of the birds has increased over the years: 3.6 to 5.3



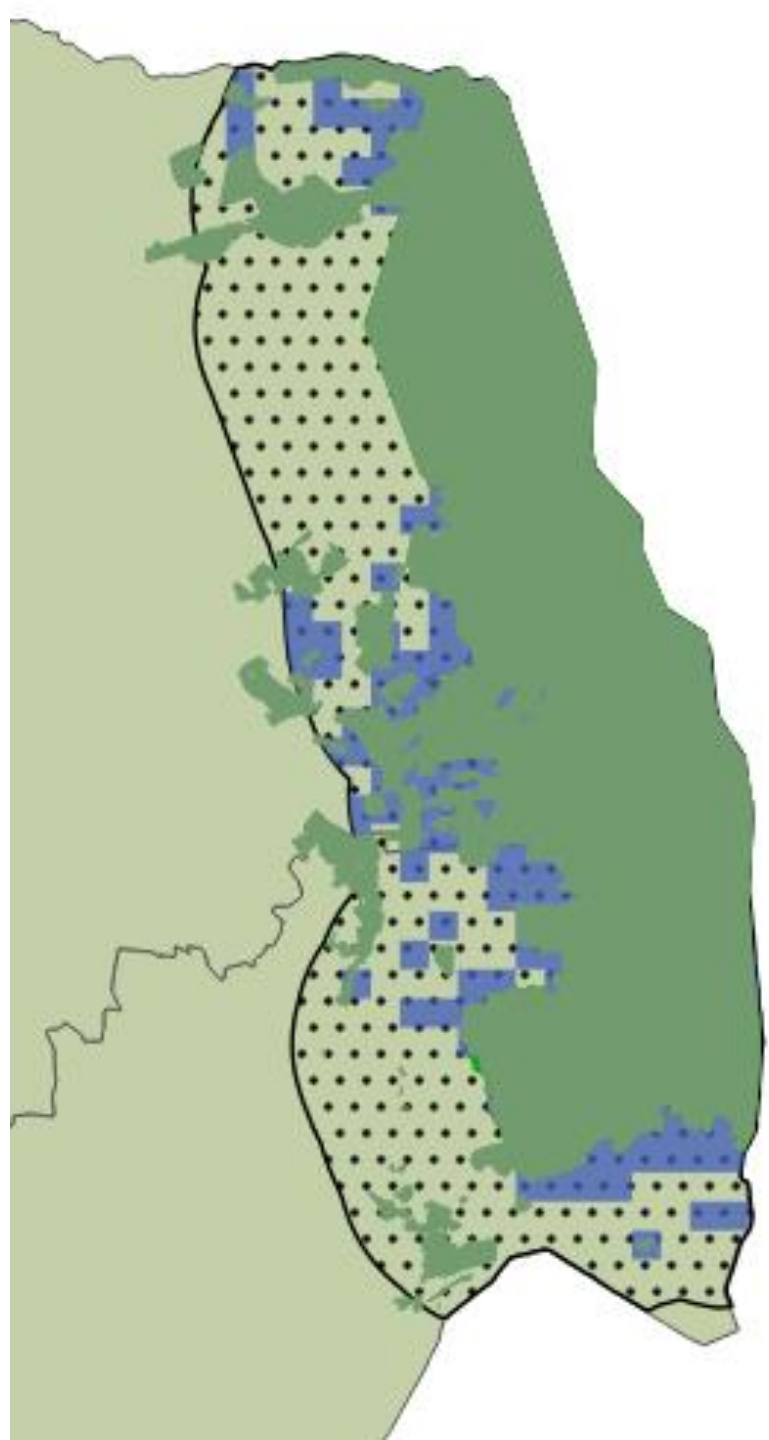
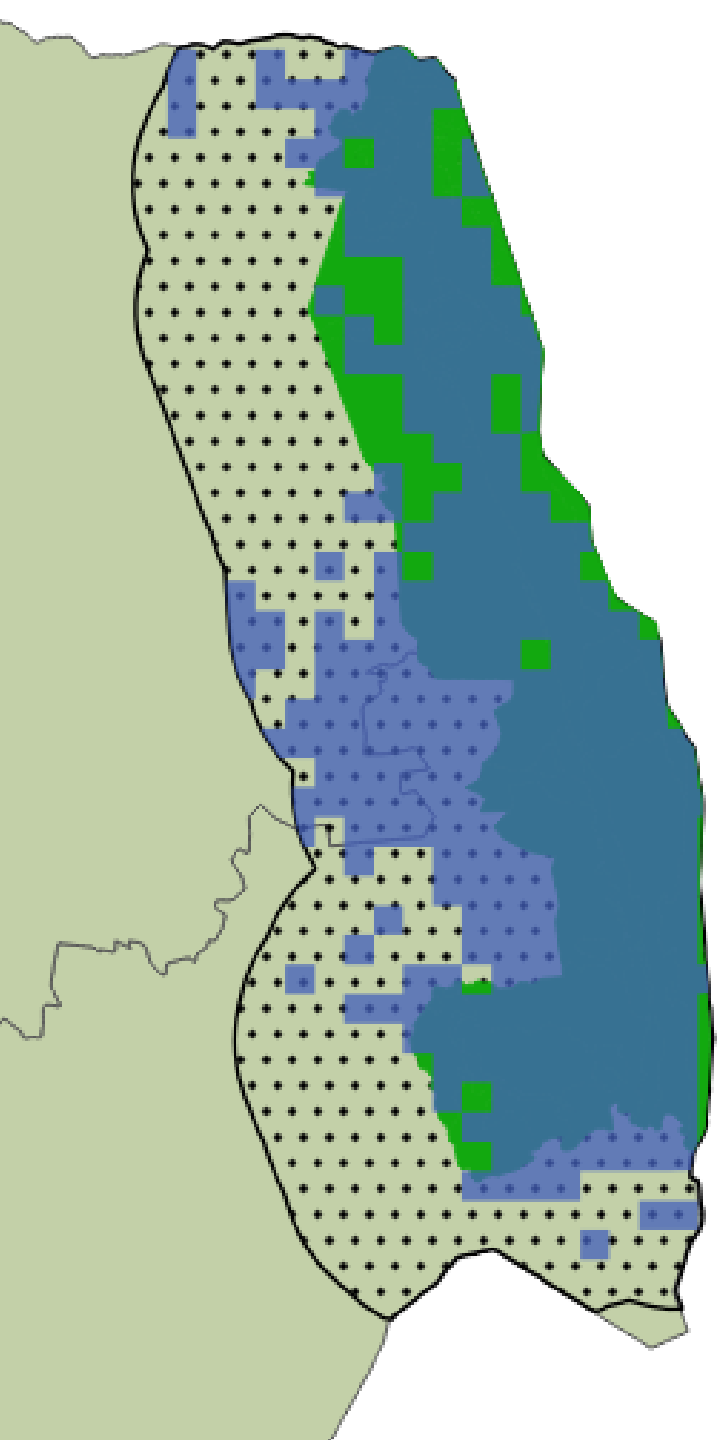
**BEYOND FORMAL PROTECTED AREA BOUNDARIES**

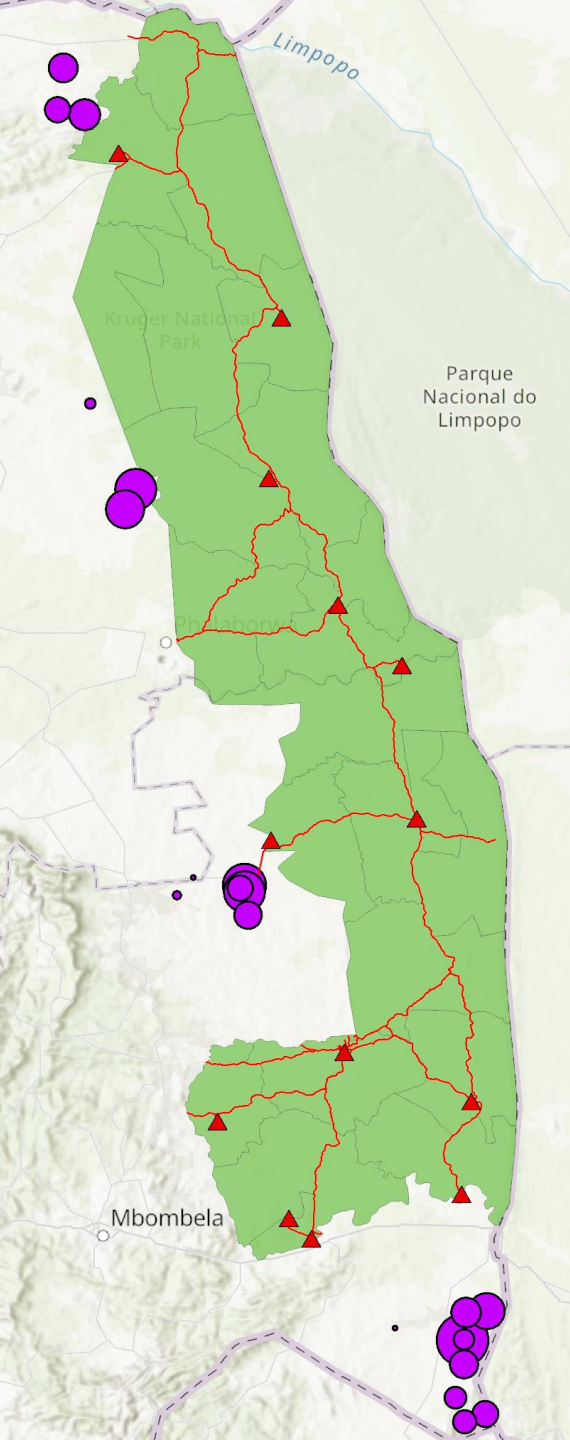
A black cow with small horns stands in the foreground, facing left. Behind it, a black bird with a bright red face and a long, dark beak stands in a field of dry, yellowish grass and scattered brown rocks. The scene is brightly lit, suggesting a sunny day.

**SHARING THE LANDSCAPE  
WITH MANY MORE PEOPLE  
AND LAND-USES**



- Conservation outside protected areas is people-dependent (territoriality)
- SGH are culturally significant
- Negative/positive beliefs determine persecution levels vs cultural protection





# Positivity index

+1

Interest: They eat  
pests

None left: Loss to  
nature

See: rain is coming

Hear: Good Luck

0

Interest: nothing,  
just a bird

-

-

-

-1

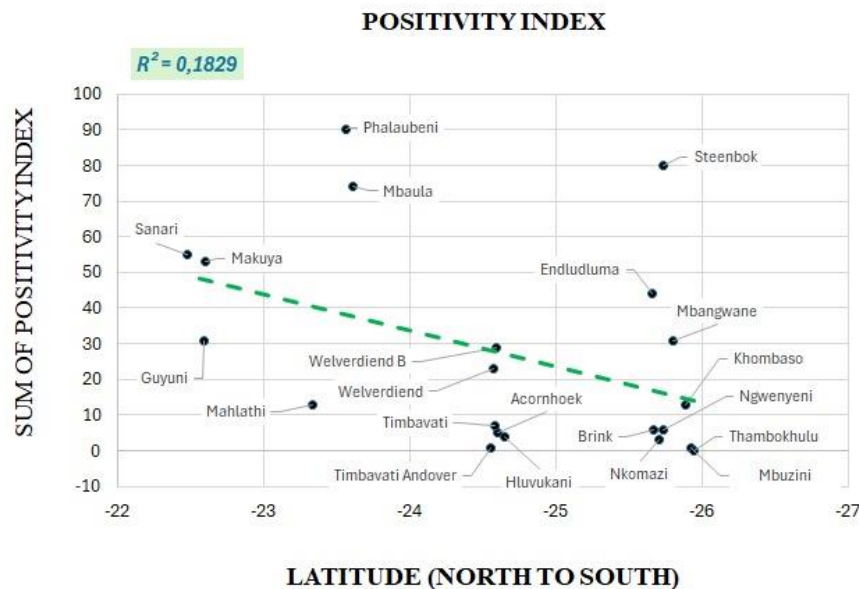
Interest: Problem  
animal - breaks  
windows

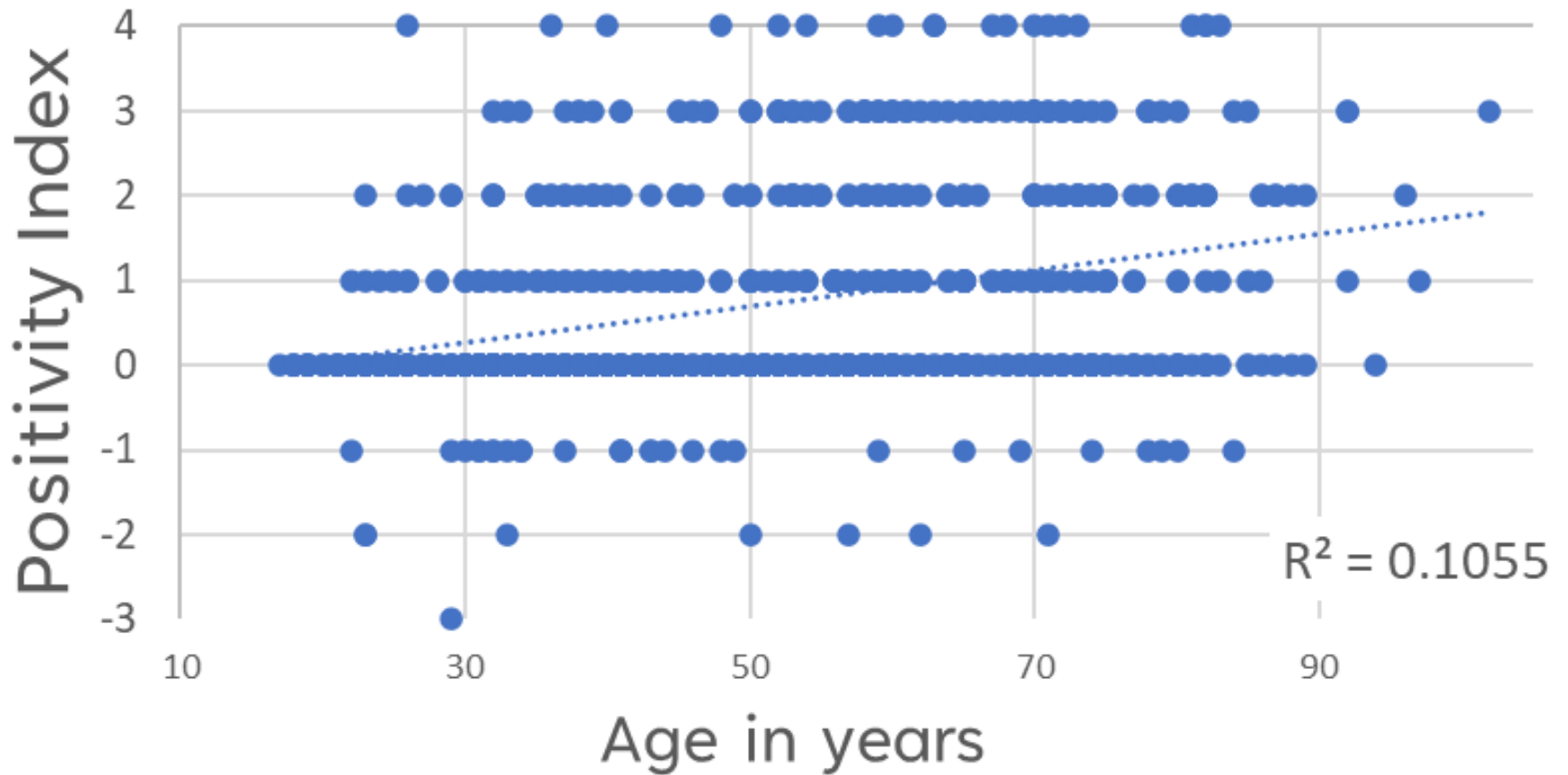
None left : No more  
ingredients for  
medicine

Hear: Death in my  
family

# Positivity Index x Variables

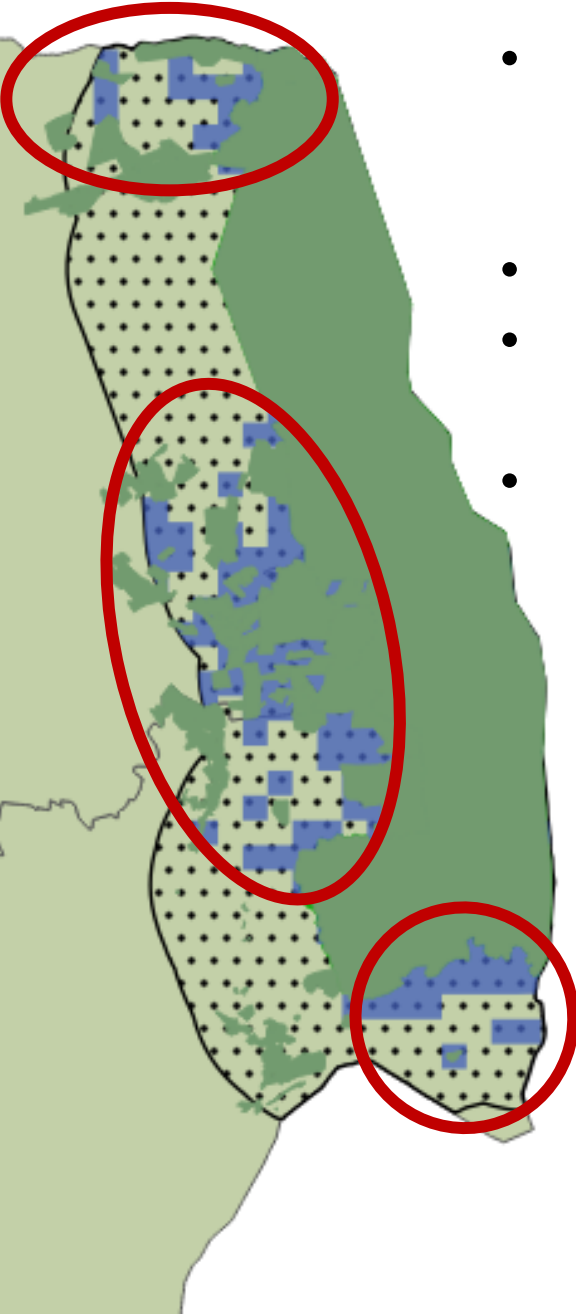
- Perceptions towards SGH are similar between genders but differ spatially.
- Significant difference in knowledge between men and women overall.
- Majority are ambivalent, more are positive than negative.
- A lot of variation between language groups.





Weak + correlation between age and positivity index

# Conclusion



- Kruger population is looking great and reaffirms that most threats are anthropogenic.
- Need more focus in wilderness areas.
- Ongoing surveillance needed (AI/ elephant + flood impact on nest trees)
- People outside the park have generally positive perceptions.



Provision of artificial nests,  
threat mitigation and bespoke  
education & awareness (youth)

# Acknowledgements

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WhatsApp contact

