Conservation actions for African wild dogs

Dedan Ngatia
IUCN/SSC Canid Specialist Group

African wild dogs
Obligate carnivores
Very wide ranging
Very low population density
Highly social

Distribution & status

Tackling threats *in situ*

- *Habitat loss*
- *Habitat degradation*
- *Human-wildlife conflict*
- *Infectious disease*
- *Snaring*
- *Road accidents*
- *Climate change*

Reintroductions

Monitoring

Nel

Distribution & status

Tackling threats *in situ*

- *Habitat loss*
- *Habitat degradation*
- *Human-wildlife conflict*
- *Infectious disease*
- *Snaring*
- *Road accidents*
- *Climate change*

Reintroductions

Monitoring

North Africa: probably extinct

West Africa: one tiny population

Central Africa: status uncertain

Eastern Africa: declining

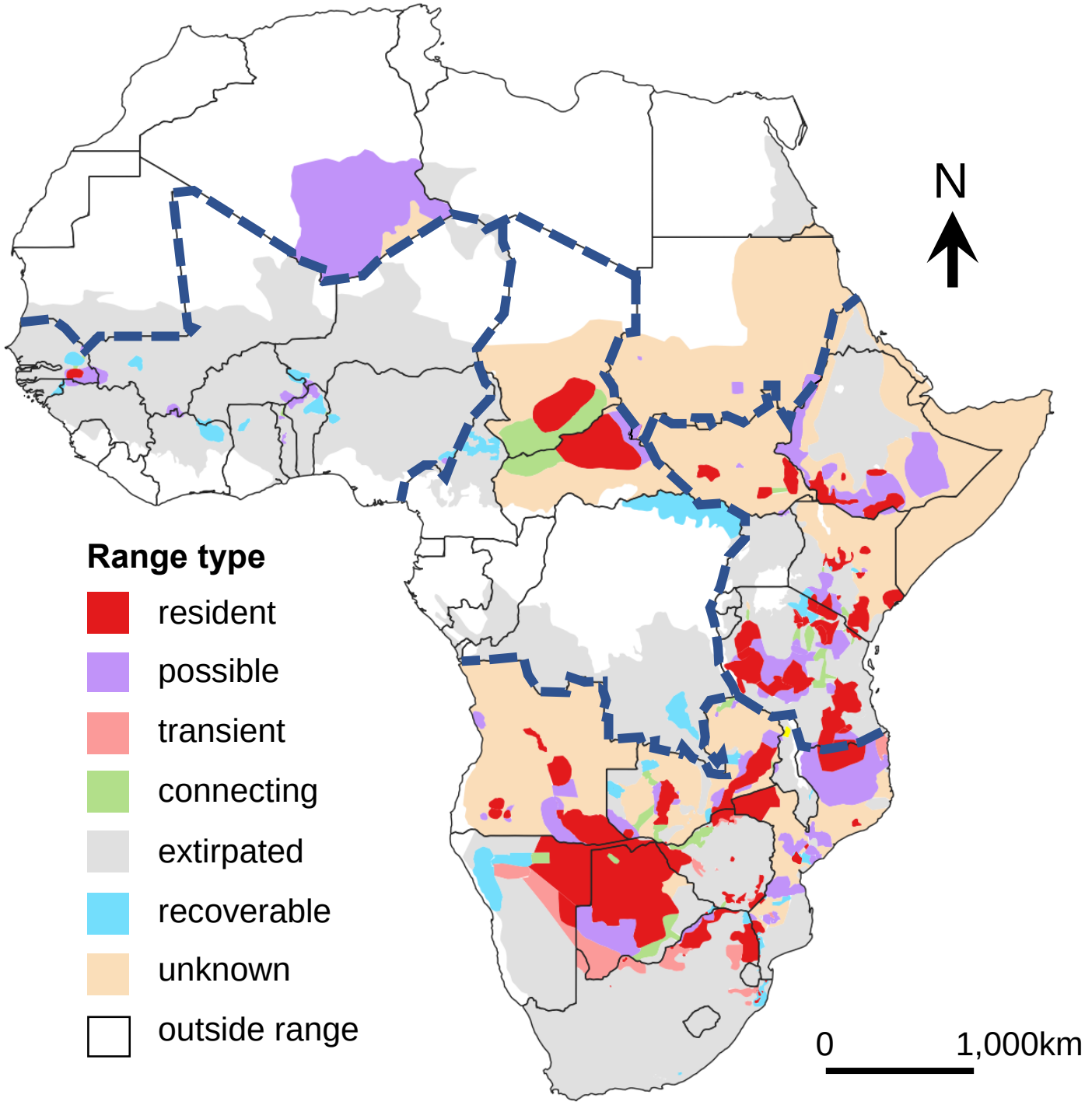
Southern Africa: declining

Global population 708 packs N_e=1,646

Of 32 populations 20 are ≤10 packs

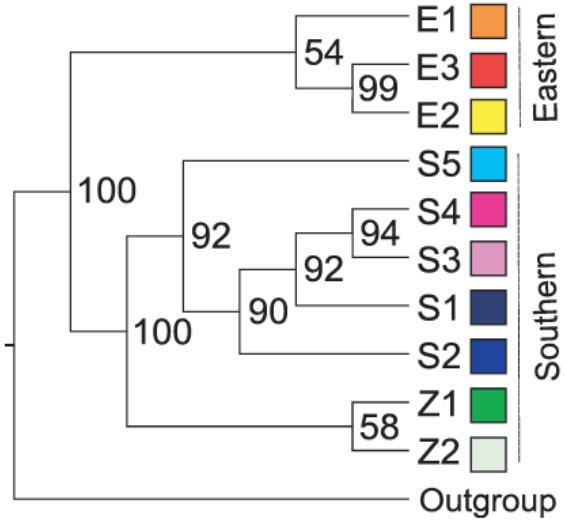
No populations with N_e=500

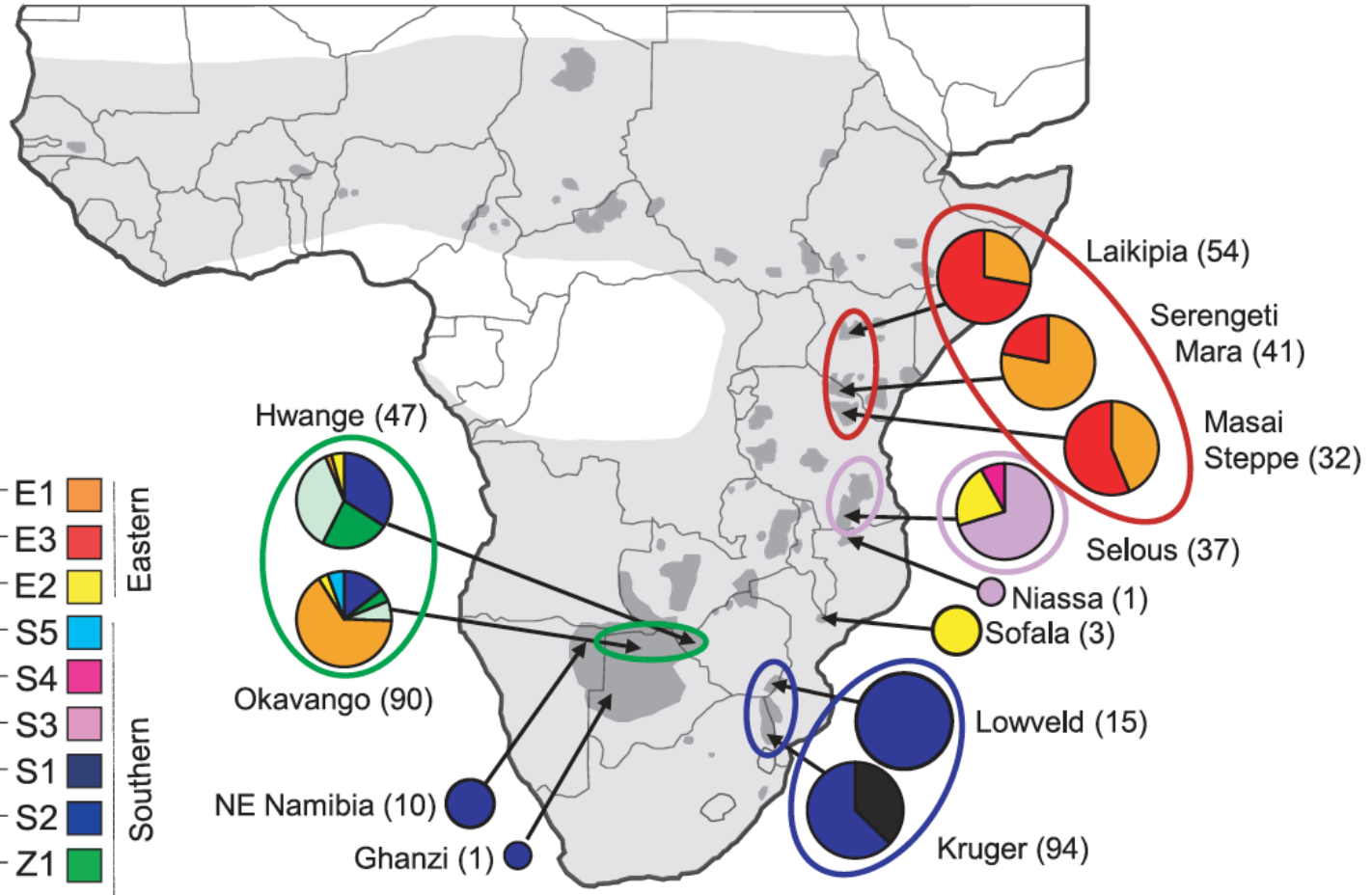
i.e. no population maintains evolutionary potential



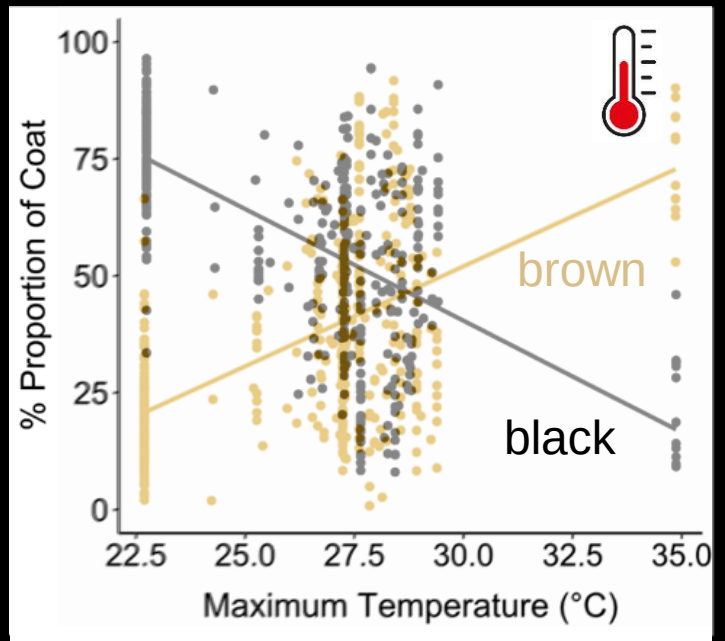
Genetic studies show

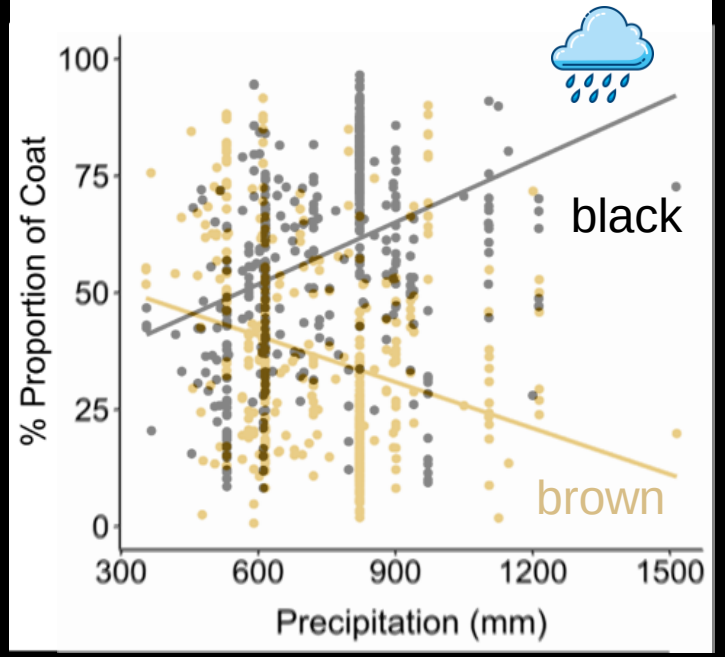
- differences between regions
- declining genetic variability even in larger populations





Marsden et al. (2012) Molecular Ecology 21: 1379-1393





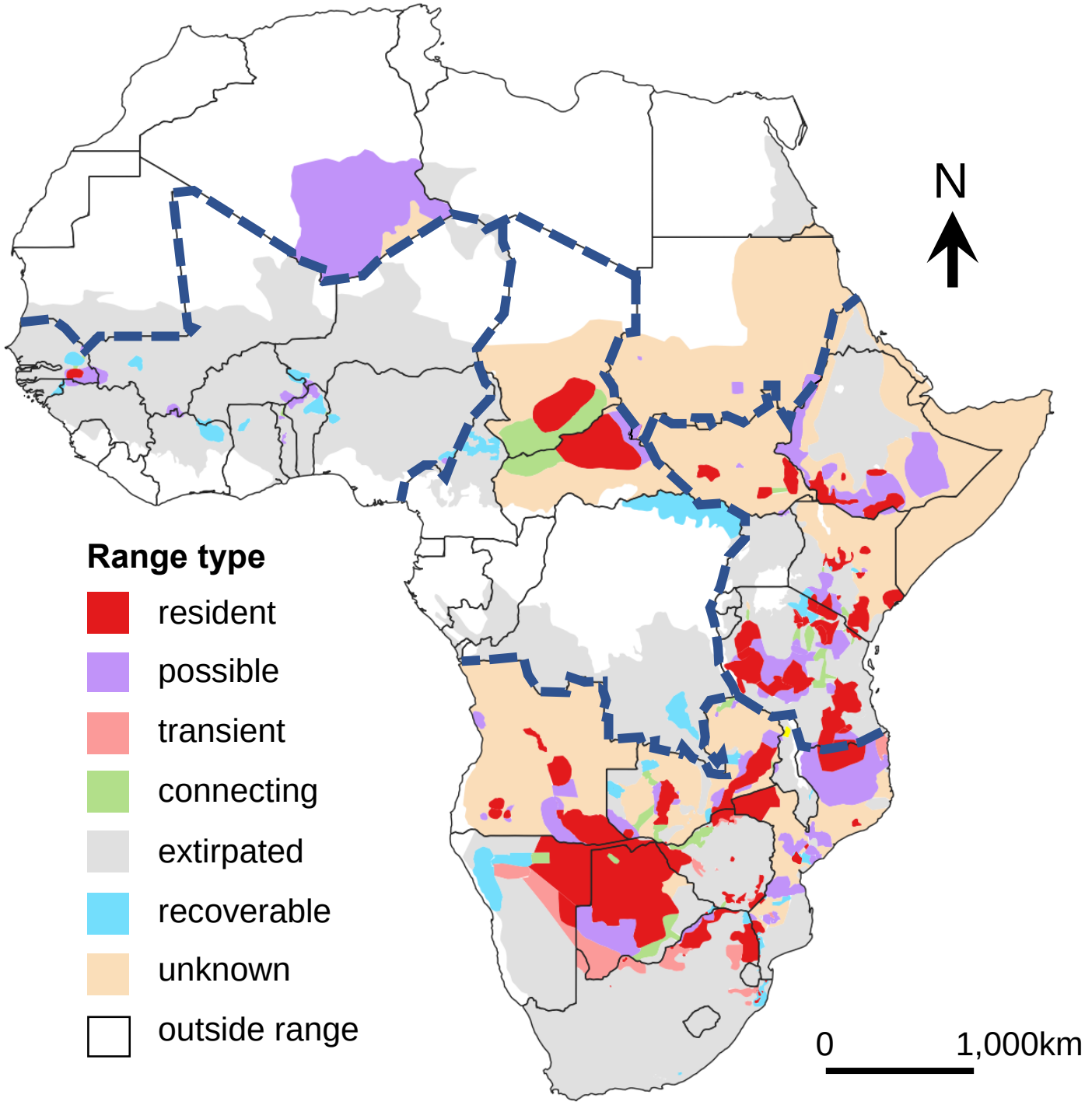
Genetic differences between regions may indicate local adaptation

For example, the amount of black, brown, and white fur varies…

… wild dogs are less black, and more brown & white, in climates which are hotter and drier

If there is local adaptation, wild dogs remaining in regions with few remaining populations (e.g. West & Central Africa) may be irreplaceable

Where reintroductions are planned, these should ideally use animals with local genotypes



Distribution & status

Tackling threats *in situ*

- *Habitat loss*
- *Habitat degradation*
- *Human-wildlife conflict*
- *Infectious disease*
- *Snaring*
- *Road accidents*
- *Climate change*

Reintroductions

Monitoring

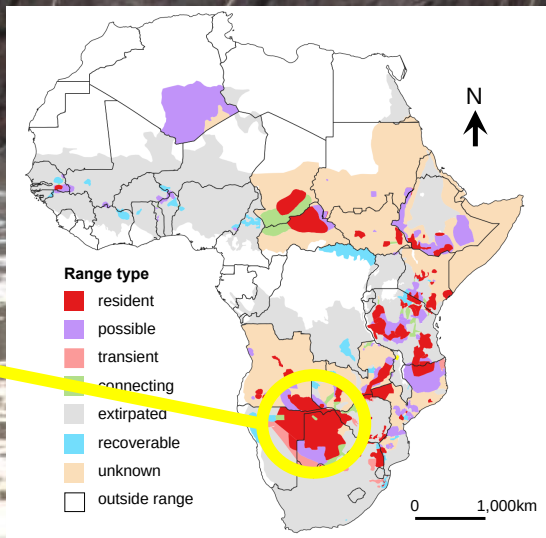
Nel

Habitat loss

Wild dogs require very large areas of wildlife-friendly habitat, so they need

- very large protected areas to be maintained
- PAs to be connected (eg through TFCAs)
- wildlife fencing avoided where possible
- supportive communities & landowners

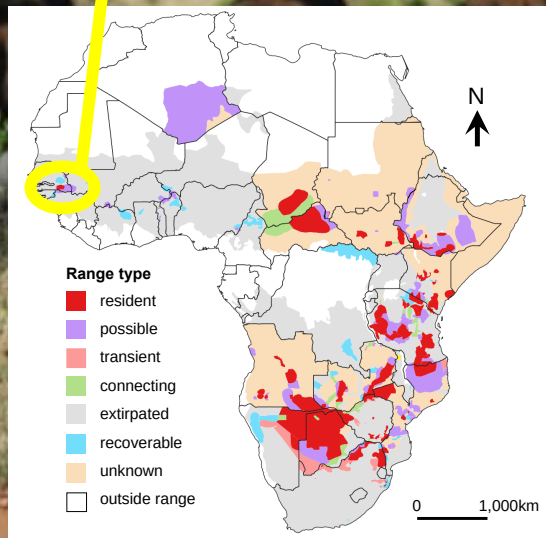
e.g. Kavango-Zambezi TFCA



Habitat degradation

Prey loss is a key threat in some areas; restoring prey can be critical to wild dog recovery

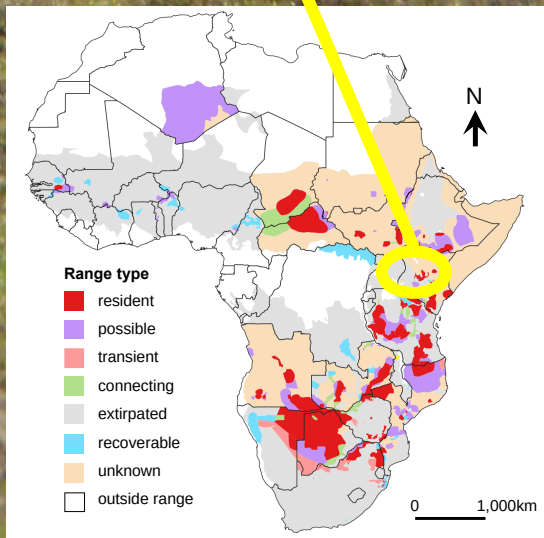
e.g., Senegal's DPN is working to recover prey for West Africa's last wild dogs



Human-wildlife conflict

Wild dogs are NOT dangerous to people!
Livestock killing can be avoided by
- conserving wild prey
- traditional herding

e.g., Participatory theatre to encourage coexistence in Kenya



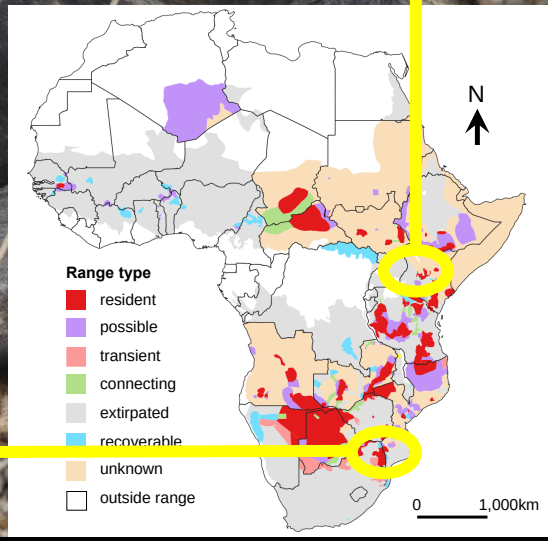
Infectious disease

Rabies and canine distemper have both caused catastrophic population crashes

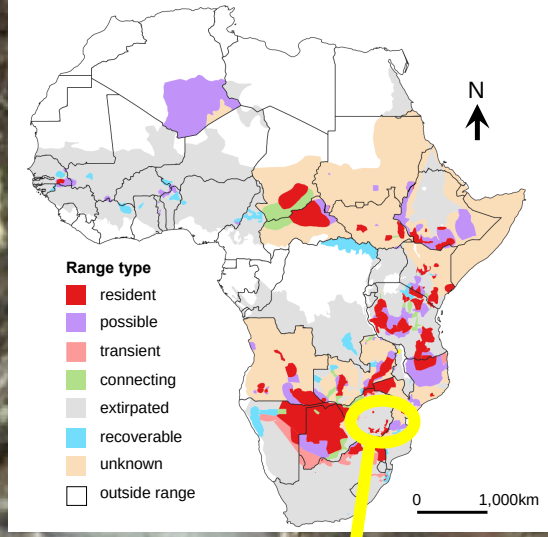
Rabies persists in domestic dogs & can be eradicated by dog vaccination, but canine distemper virus probably cannot

e.g., Wild dog distemper vaccination trial in Kruger NP, South Africa

e.g., Domestic dog vaccination campaign in Laikipia, Kenya



Accidental snaring

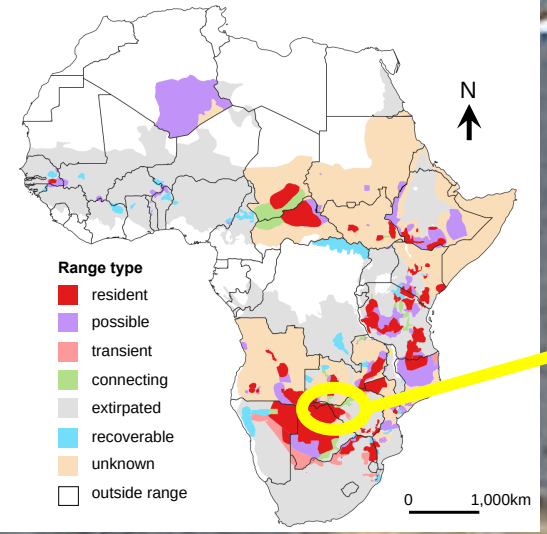


e.g., anti-snaring campaign in Zimbabwe's lowveld

Snaring has a huge impact on wild dogs where ungulates are targeted for bushmeat. Wild dogs need

- de-snaring of affected wild dogs
- holistic anti-snaring campaigns

Road accidents



e.g., road signs outside Hwange NP Zimbabwe

Wild dogs like to use roads so are prone to road accidents. They need

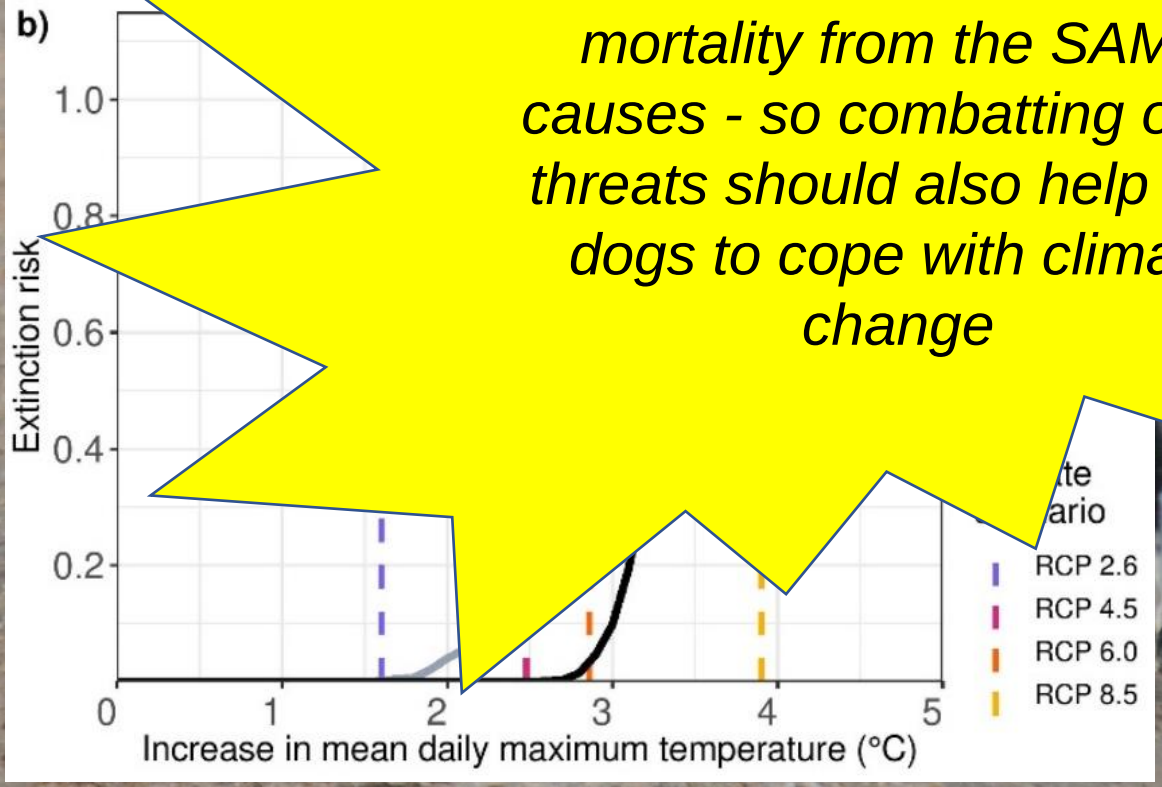
- traffic calming
- under/overpasses?

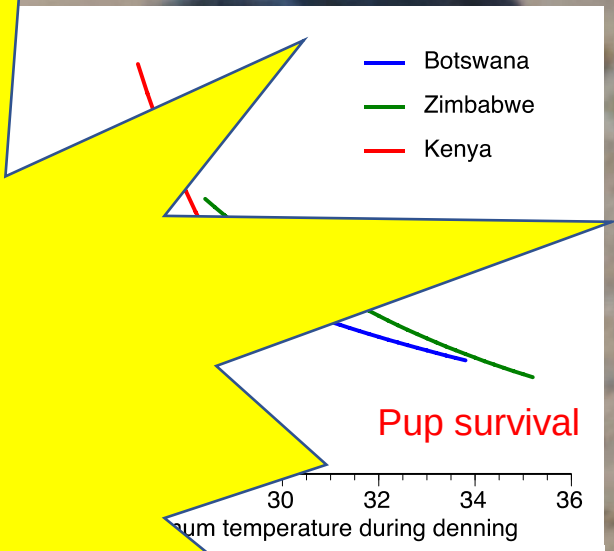
Climate change

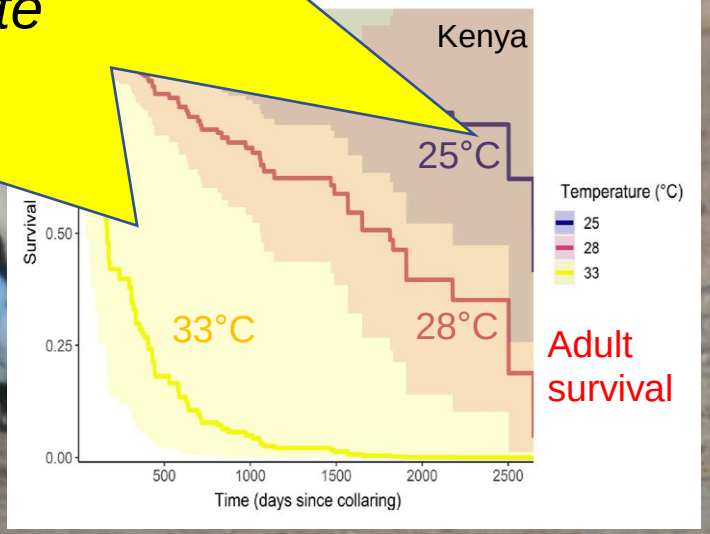
Both adult wild dogs and pups are more lik[illegible] to die in hot weather

In combination, the [illegible] population collapse

Hot weather leads to MORE mortality from the SAME causes - so combatting other threats should also help wild dogs to cope with climate change








Distribution & status
Tackling threats *in situ*
Habitat loss
Habitat degradation
Human-wildlife conflict
Infectious disease
Snaring
Road accidents
Climate change
Reintroductions
Monitoring
Nel

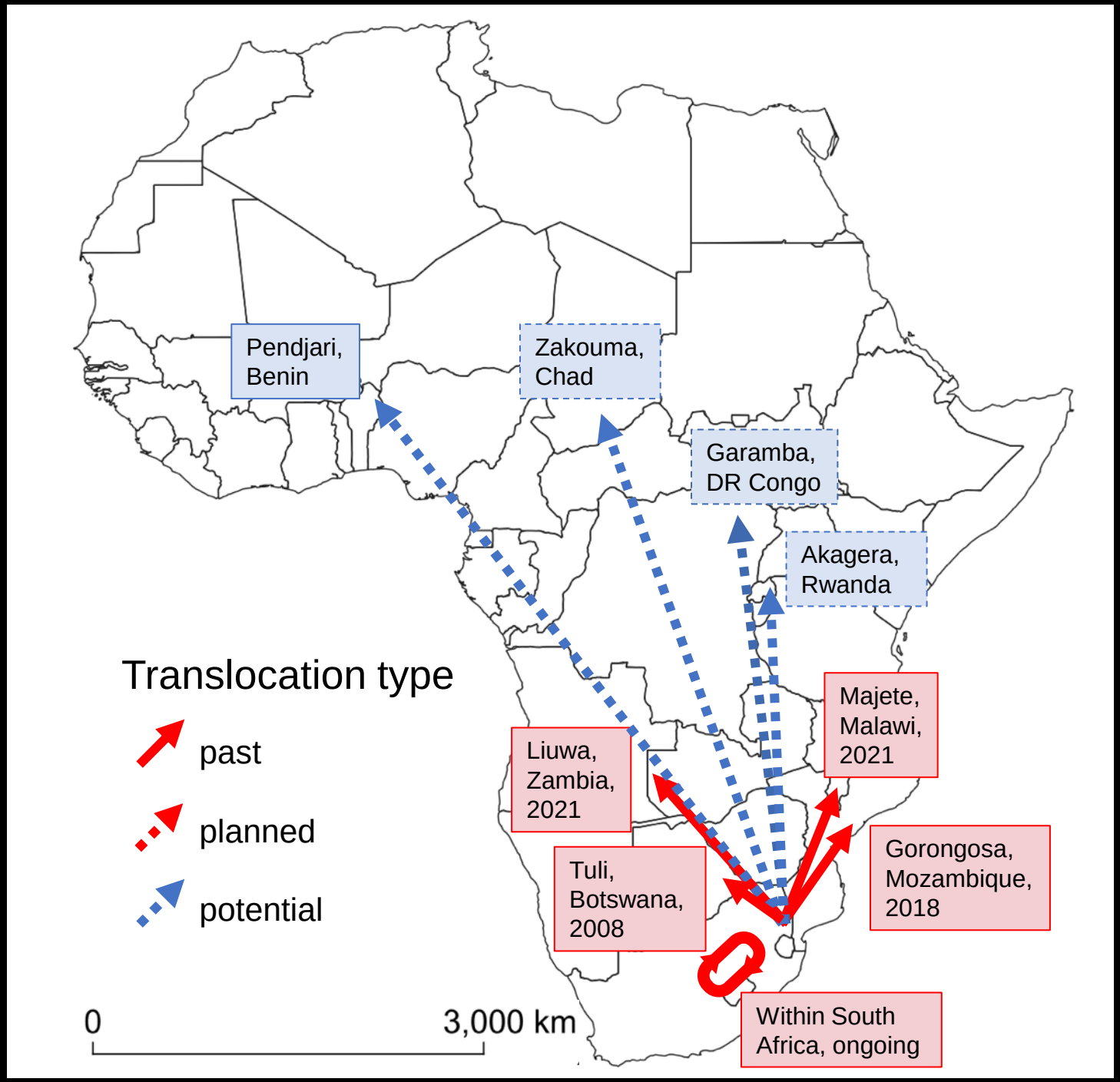
Reintroductions

There have been several successful wild dog reintroductions… BUT

Reintroduction to new areas should not eclipse conservation of existing populations

Wild dog reintroductions should use animals with appropriate local genotypes wherever possible

Animals from South Africa have been used in several successful recent reintroductions but it is important to avoid losing regional genotypes which may provide local adaptation e.g. to climate



Distribution & status

Tackling threats *in situ*

Habitat loss
Habitat degradation
Human-wildlife conflict
Infectious disease
Snaring
Road accidents
Climate change

Reintroductions

Monitoring

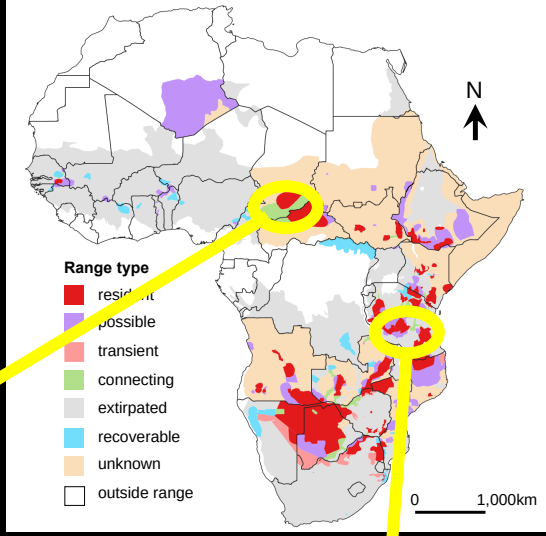
Nel

Monitoring

Wild dog monitoring is essential to

- detect problems in time to respond
- identify new threats
- measure success

e.g., camera trapping in Chinko, CAR



e.g., GPS-collaring in Selous GR, Tanzania

photo: Panthera/DPN