

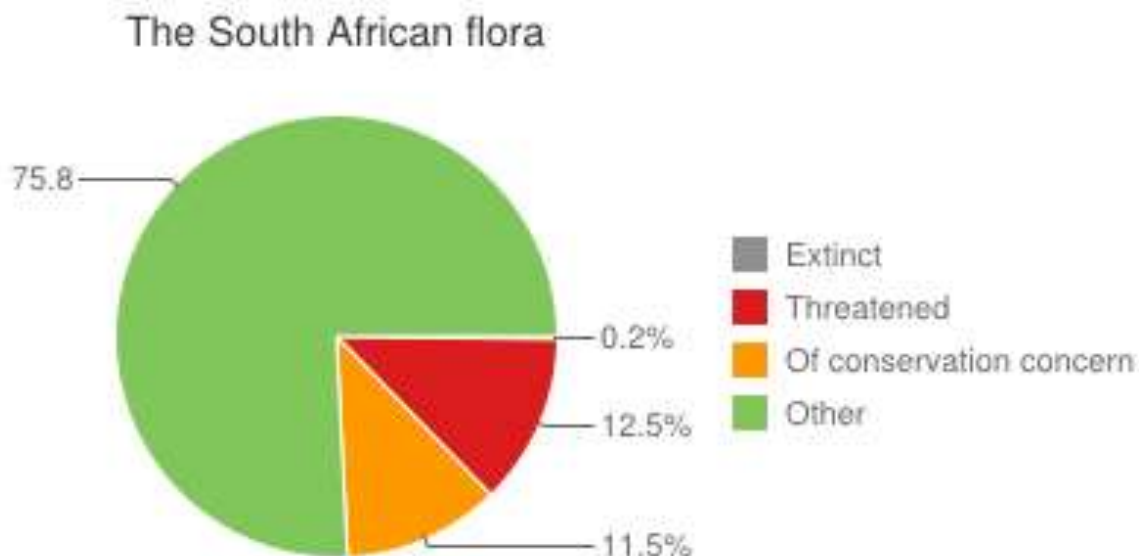


**2014 Biodiversity Planning Forum**  
13–16 May, Mpekweni Beach Resort, Eastern Cape

# Protected area expansion priorities for threatened plants in South Africa

Lize von Staden

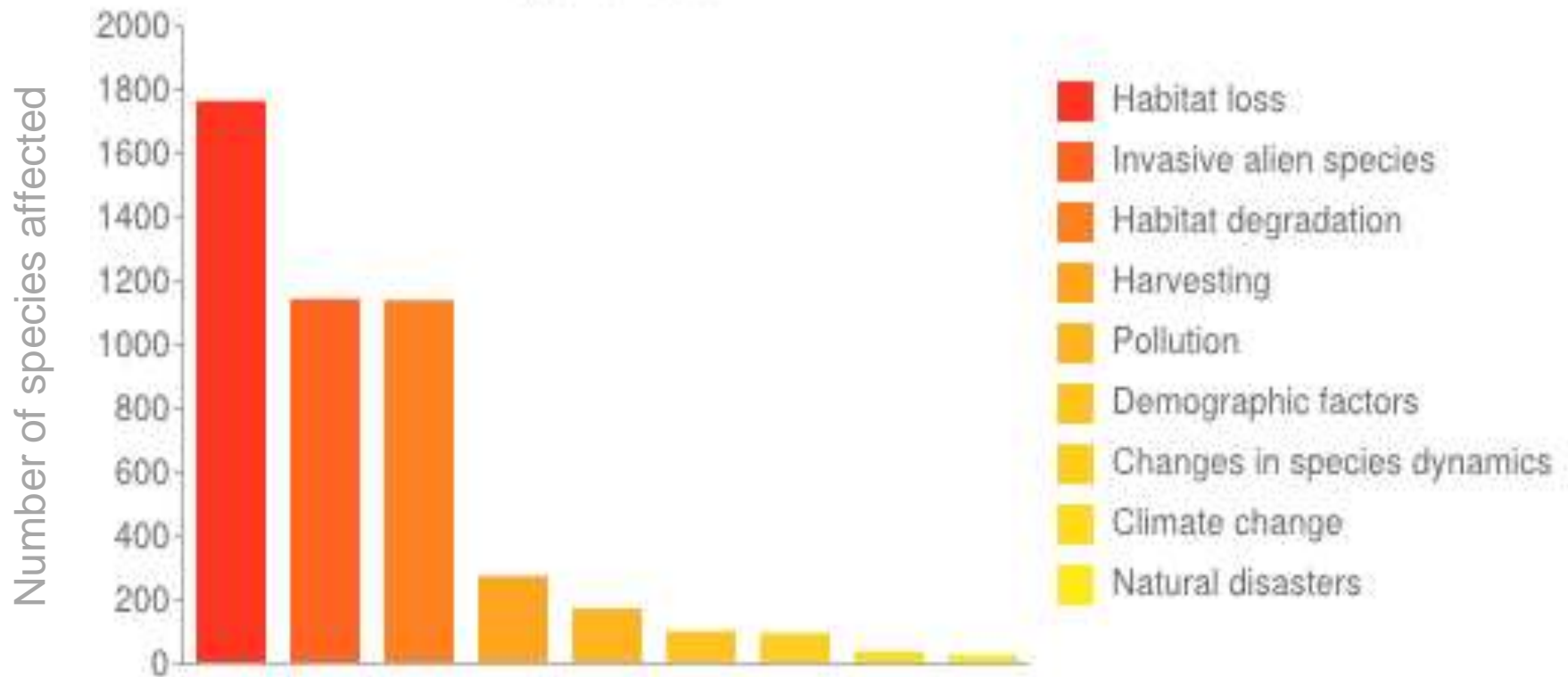
SANBI Threatened Species Programme



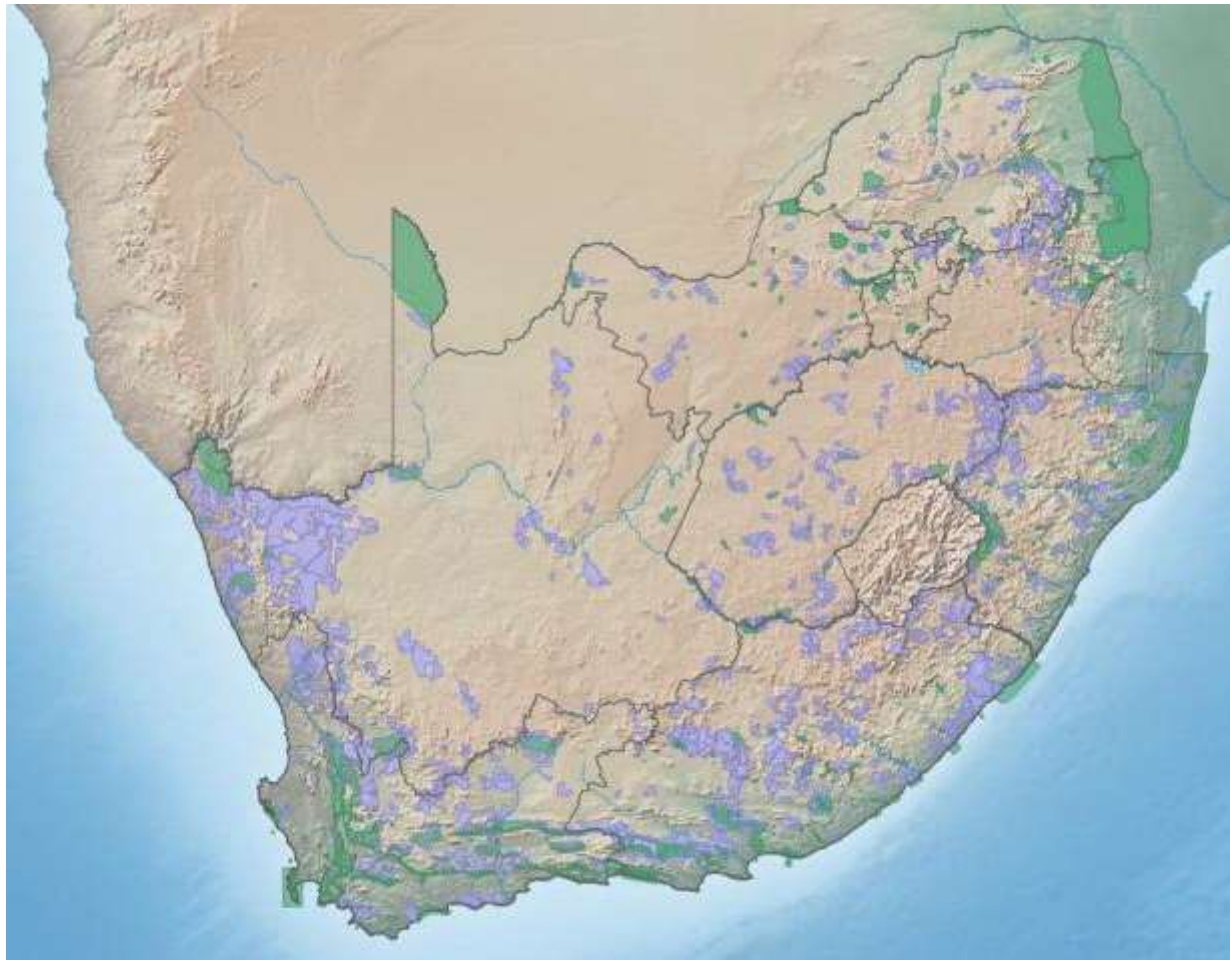
South Africa currently has  
~**2500** plant species  
threatened  
with extinction



# Habitat destruction #1 cause

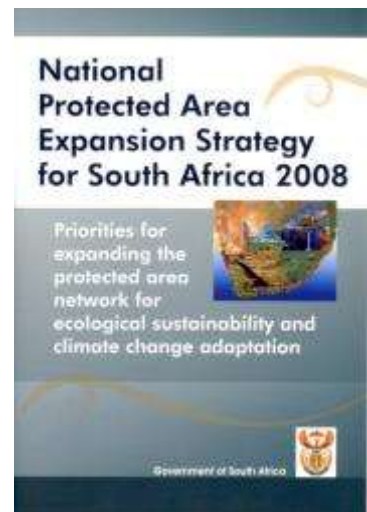
Major threats



# Protected area expansion in South Africa



-  Proposed expansion areas
-  Existing formally protected areas



# Project objectives

- Evaluate the efficiency of the existing protected area network and protected area expansion strategy to conserve threatened plants.
- Identify key gap areas and set priorities for protected area expansion for unprotected threatened species.



Convention on  
Biological Diversity

## Plants 2020

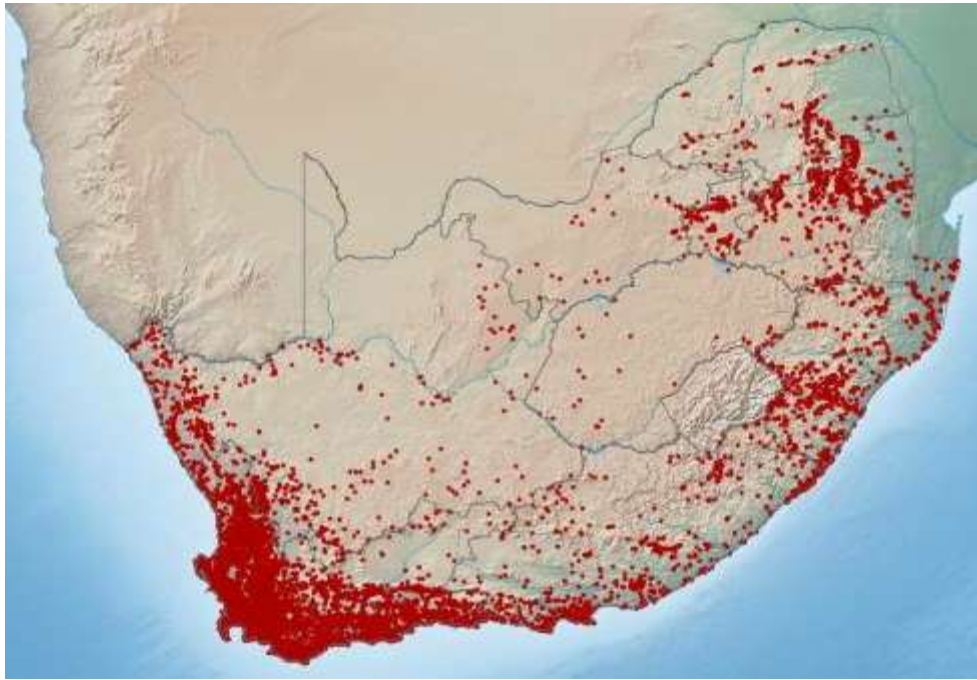
Supporting the implementation of the  
Global Strategy for Plant Conservation



# Target 7:

At least 75% of known  
threatened plant species  
conserved in situ.





**Ilva  
Rogers**

> 70 000 digitised  
herbarium records  
georeferenced

## Thank you to our data providers:

- Andrew Young
- Anne Lise Vlok/CapeNature
- Bolus Herbarium
- Buffelskloof Herbarium
- CREW Volunteers
- Ezemvelo KZN Wildlife
- Gauteng Department of Agriculture and Rural Development
- iSpot
- Lydenburg Herbarium
- Millennium Seed Bank Project
- Mpumalanga Parks and Tourism Agency
- Nick Helme
- North West Province Department of Agriculture, Conservation and Environment
- Odette Curtis
- Protea Atlas Project
- SANParks

# Threatened species in formally protected areas



**66%**

of threatened species have at least one record  
within a formally protected area

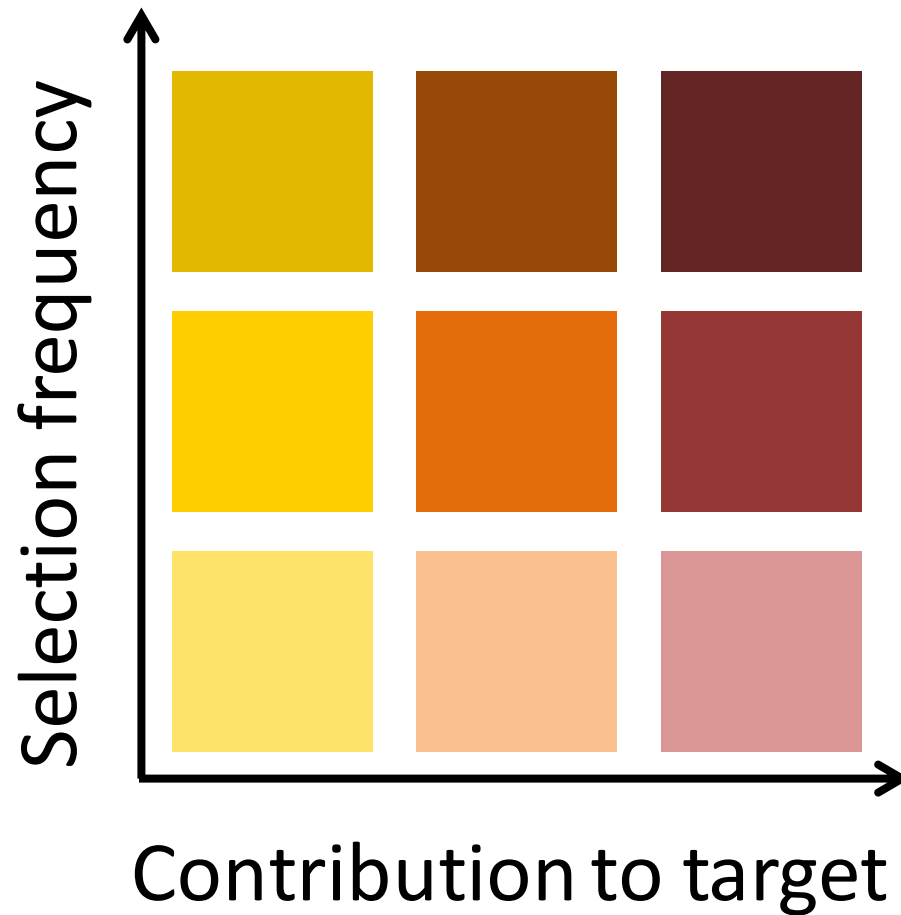


# Methods

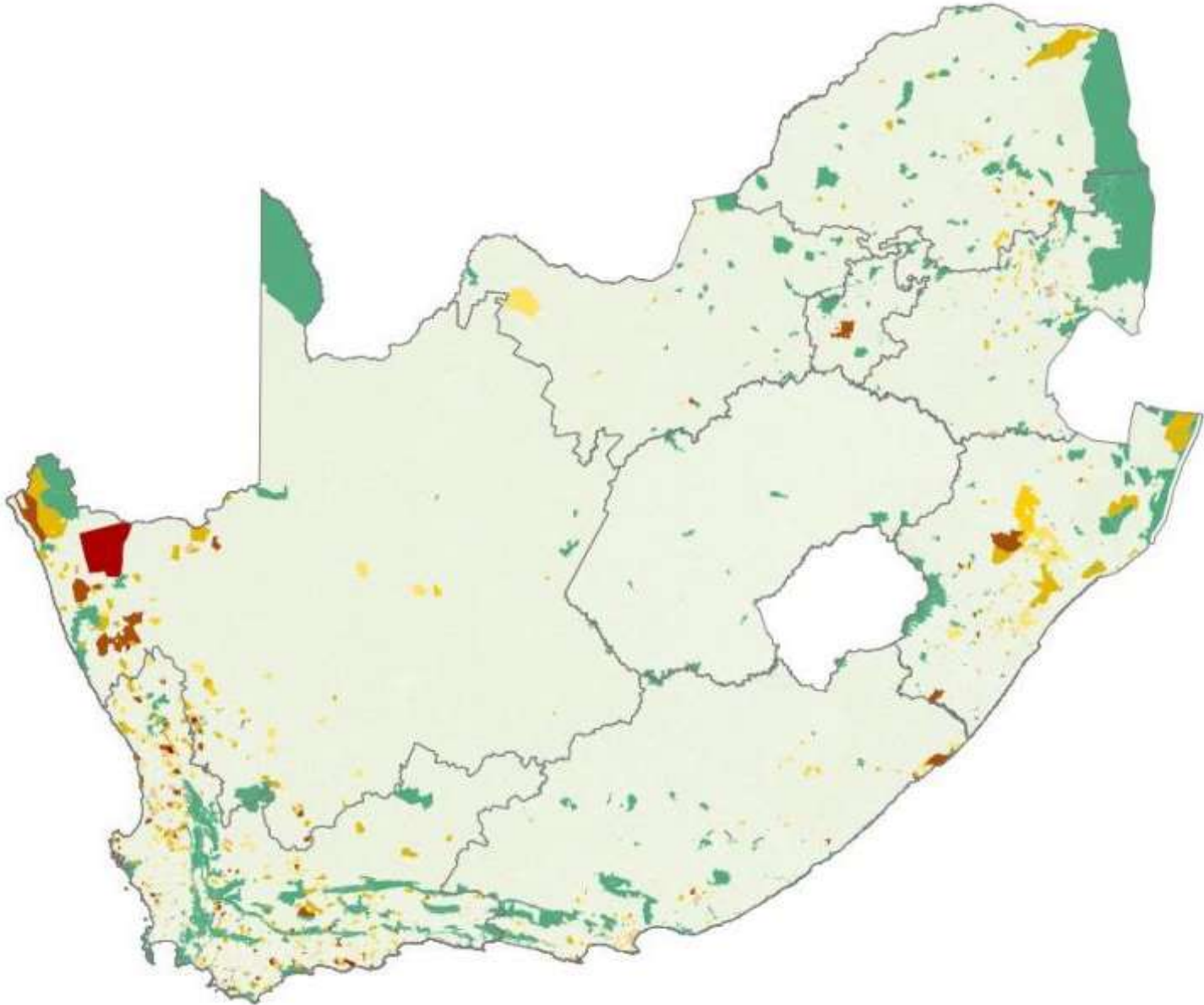
- Marxan input:
  - **Planning units** – property boundaries
  - **Cost** – habitat modification
  - **Conservation target** – one population per species
  - **Species penalty factor** – according to Red List status
- Output:
  - **Selection frequency**
  - **Greedy heuristic ranking**

# Results

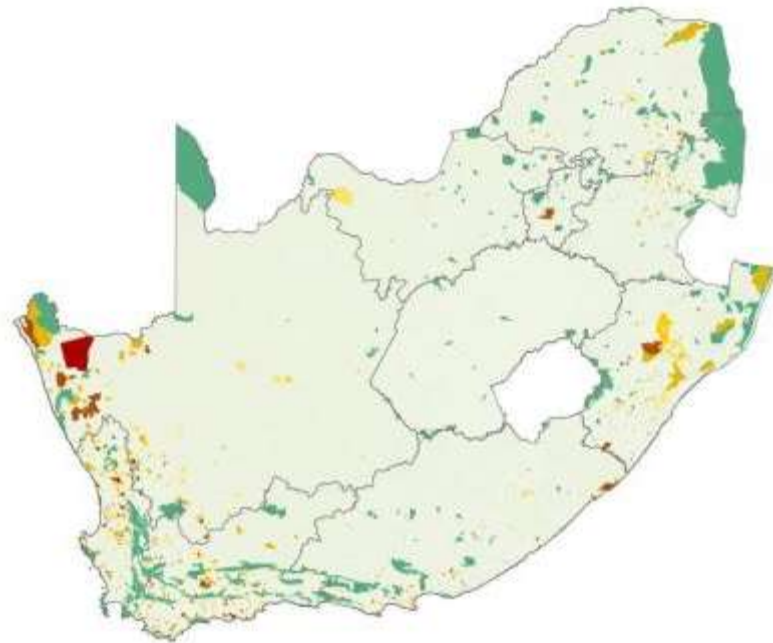
## Priority matrix



# Results



# Summary



- Number of prioritised sites: **877**
- **Under ideal scenario (best solution):**
  - Number of sites needed to reach Target 7: **27**
  - Number of sites for 100% representation: **505**
- Overlap with NPAES: **21%**

# Conclusion

- 👍 With a strategic approach, South Africa can reach GSPC Target 7 by 2020
- 👎 Ecosystem representivity is a poor surrogate for threatened species: need to assimilate priority sites for threatened species into the National Protected Area Expansion Strategy







Thank you

