Climate Change Threatens the Agricultural Landscape Important for Blue Cranes in South Africa

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IUCN Crane Specialist Group
International Crane Workshop
Muraviovka Park 2010
Blue Crane Distribution
(South African Bird Atlas Project)

Karoo
Climate change predictions

- Average temperature will increase
- Precipitation will decrease
- Rainfall season extend into summer
- Increase in extreme weather events, e.g. droughts and flooding
Impact on Blue Cranes

- Suitable area for wheat and pastures will decrease
  - Less suitable habitat for breeding = lower breeding success
    - Population will remain, but slowly decrease over time
    - Cranes will start moving into neighbouring Karoo
  - New wheat cultivars found and cranes stay (at least for suitable breeding habitat)
Impact on Blue Cranes

- Decrease in precipitation
  - Landowners will depend more on artificial water points = management crucial for cranes
– Greater crane movements in search of water
  • entanglement in fences
  • dehydration
BUT

- Climate change not the only driver
- **AND** low confidence and scale not at farm level
- **SO** Land cover change now is likely most critical
  - changes in subsidies
  - small scale farming incentives
  - Socio-Economic factors not well understood
Way forward

1. Long term monitoring

2. Review of activities

3. Adaptive management
More questions now than answers
Acknowledgements

• Background information
  – Bronwyn Botha

• Photographs
  – Kerryn Morrison
  – Wicus Leeuwner
  – Bronwyn Botha
  – Kevin McCann