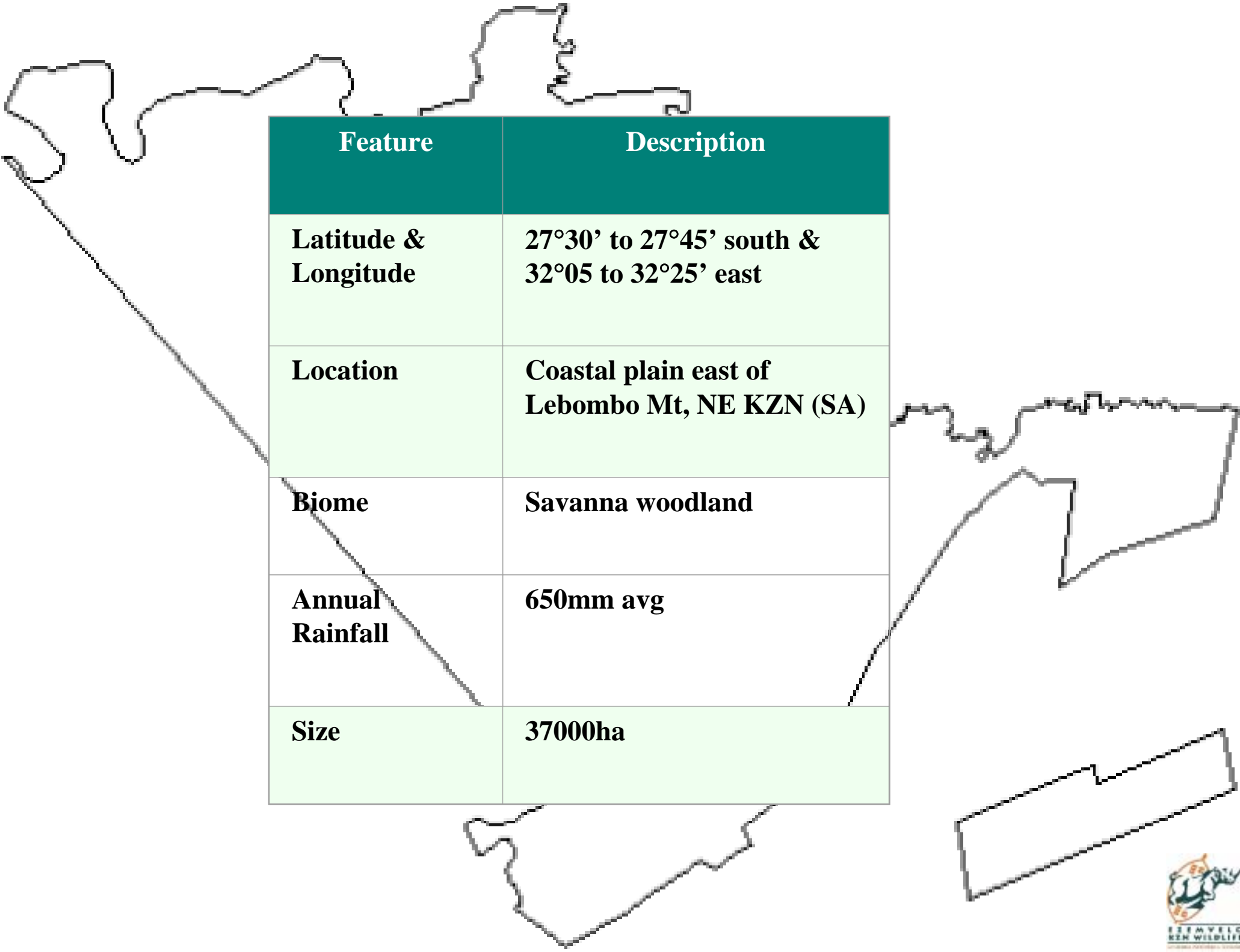


Community Structure & Temporal Dynamics of Large Herbivores in Mkhuze Game Reserve

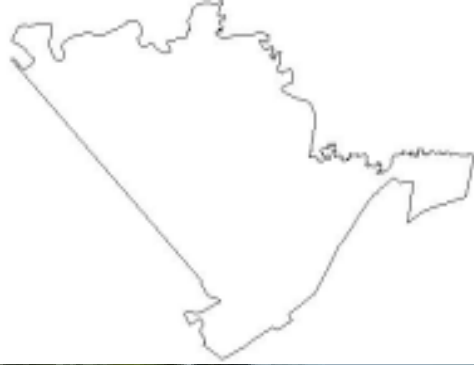
By Beka J. Nxele





| Feature | Description |
|---------------------------------|--|
| Latitude & Longitude | 27°30' to 27°45' south & 32°05 to 32°25' east |
| Location | Coastal plain east of Lebombo Mt, NE KZN (SA) |
| Biome | Savanna woodland |
| Annual Rainfall | 650mm avg |
| Size | 37000ha |

Background History



Proclaimed in 1912



Fenced in 2004

Five-Neighboring TA's

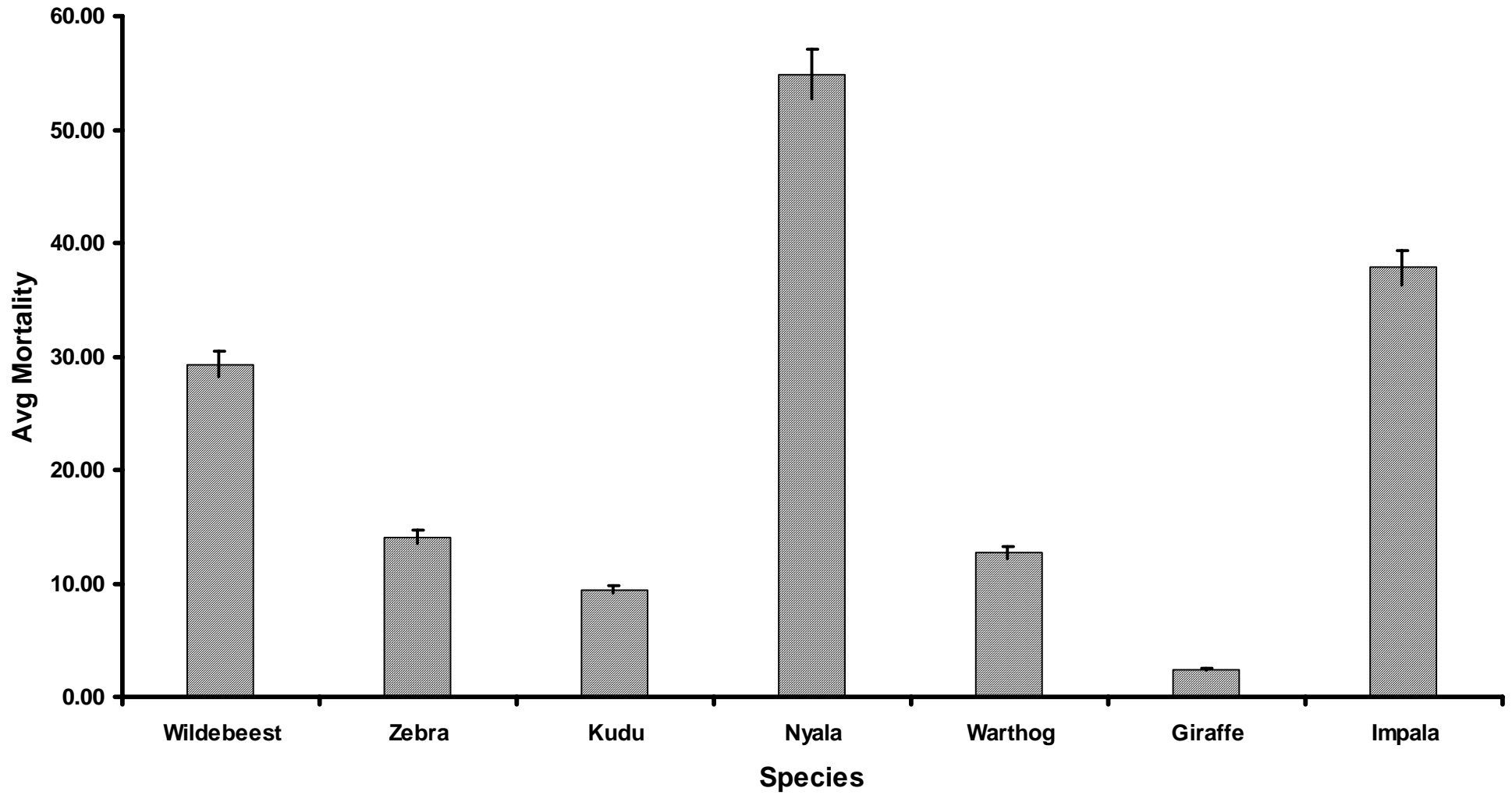
1. Nsinde, north
2. Kwa-Jobe, north-east
3. Mngobokazi, south-east
4. Mduku, south
5. Ngwenya, north-west

Inevitable Conflicts

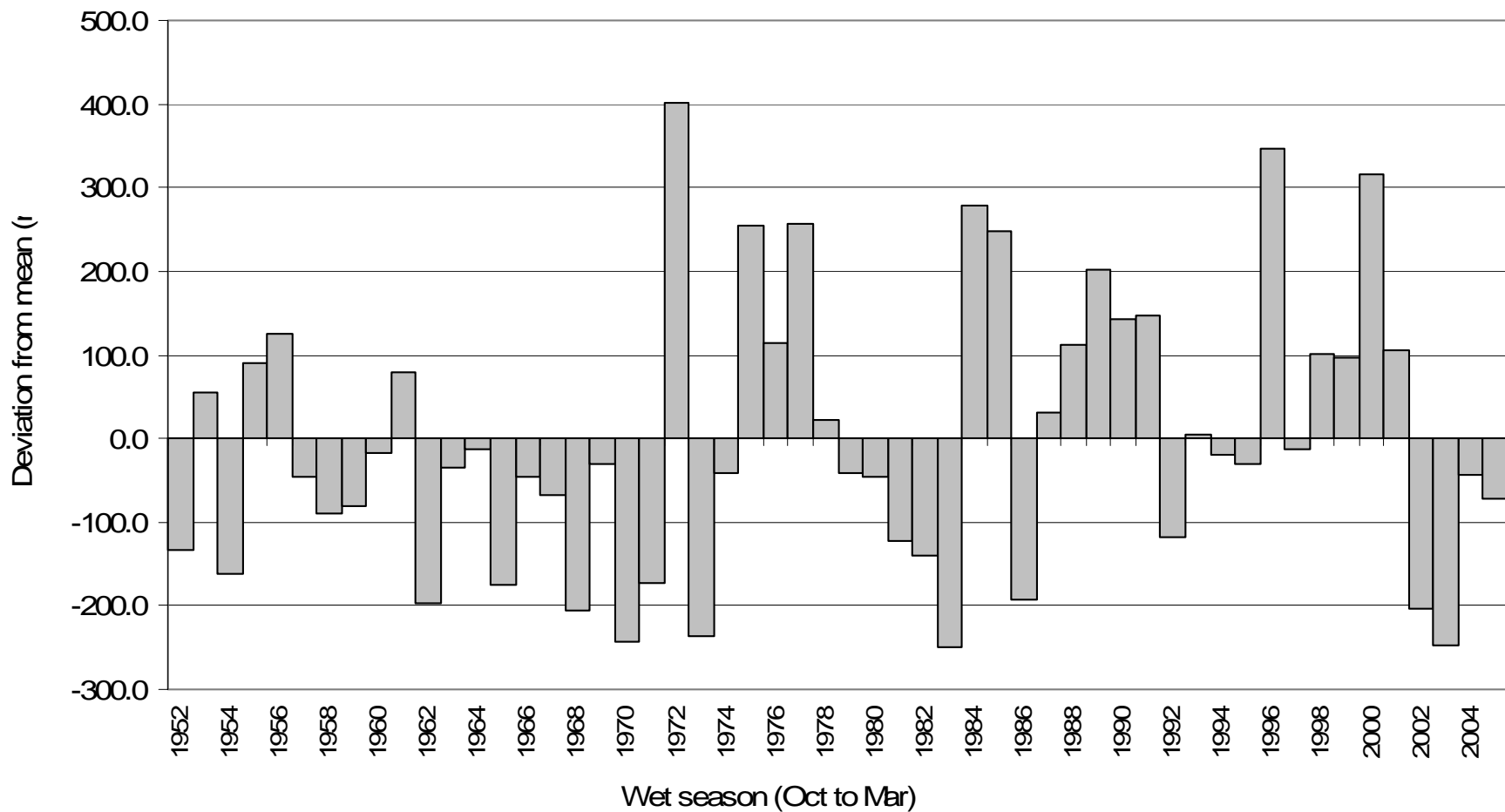
1. Game escapes
2. Livestock incursions
3. Pedestrian
4. **Poachers!!!**



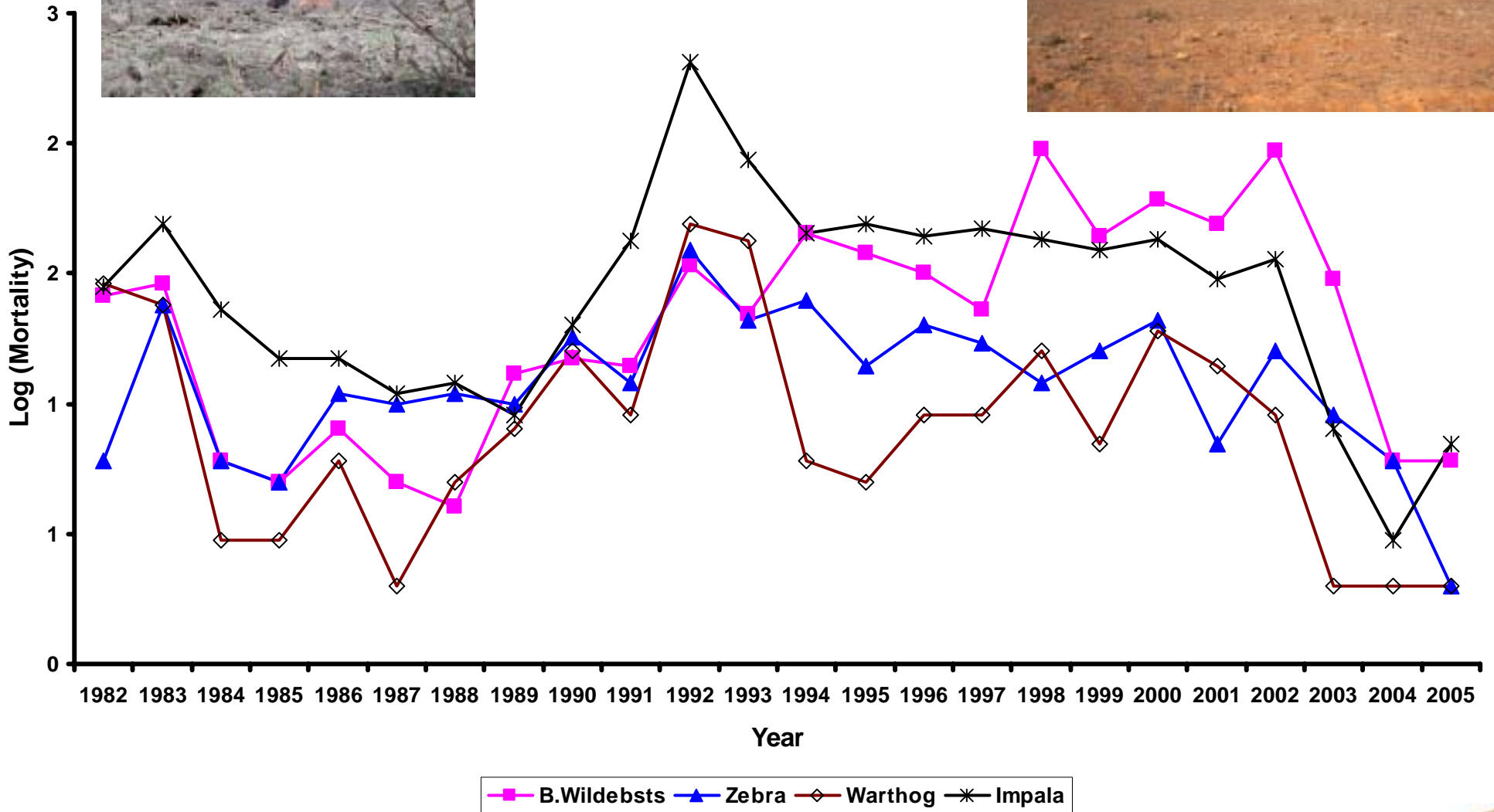
Game Mortalities



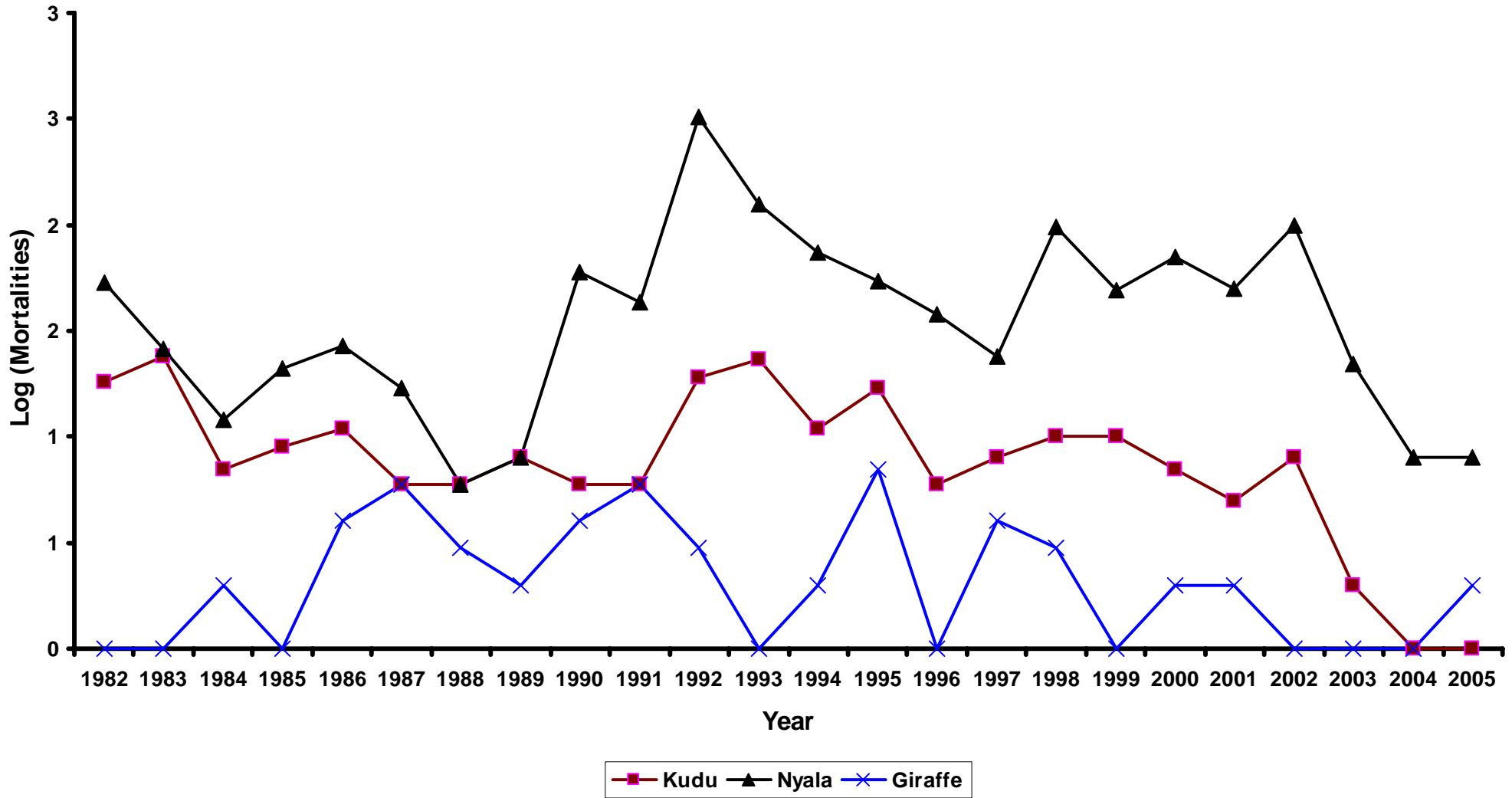
Rainfall - Mantuma
Deviation from wet season mean



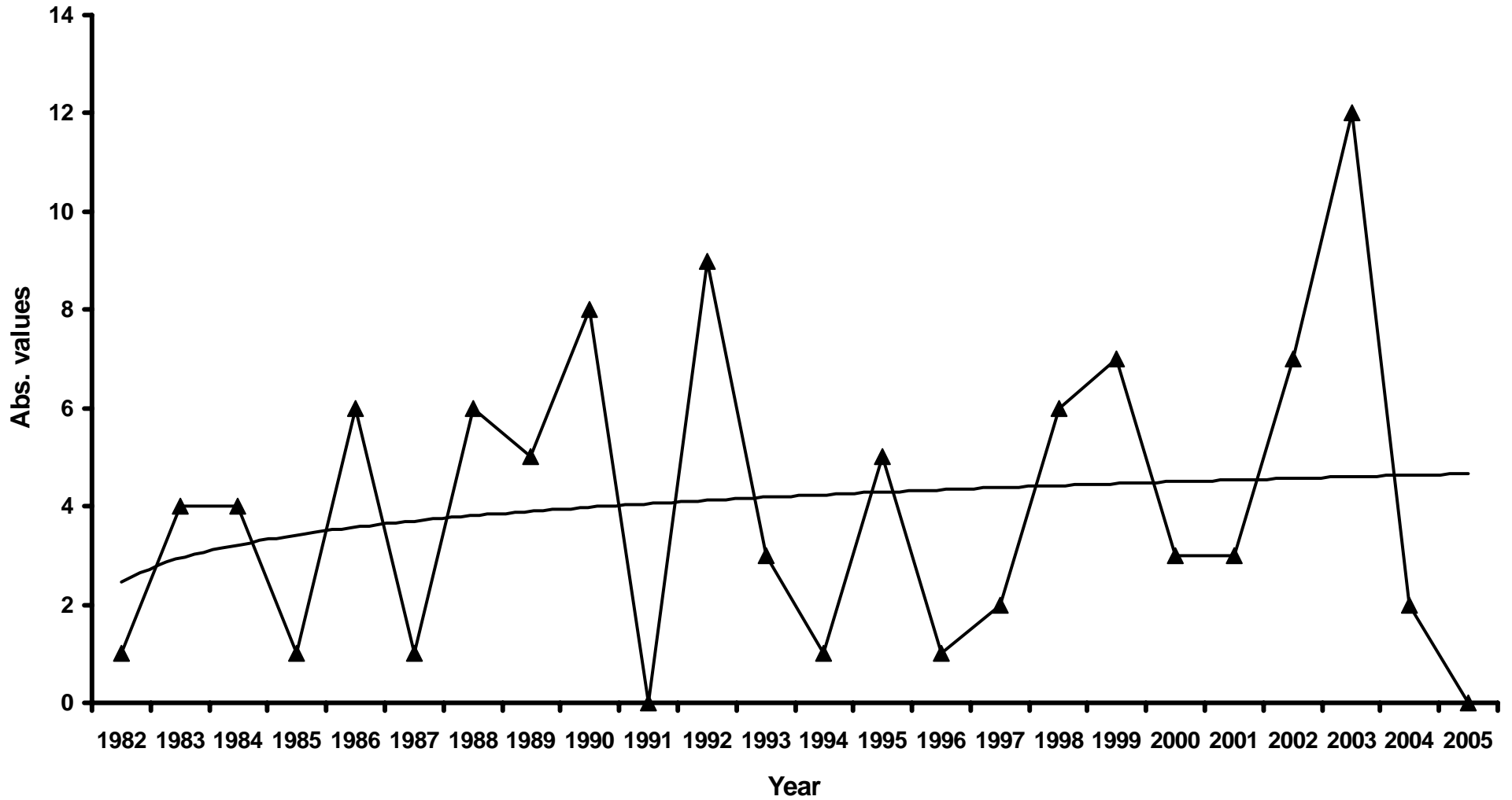
Species Mortality



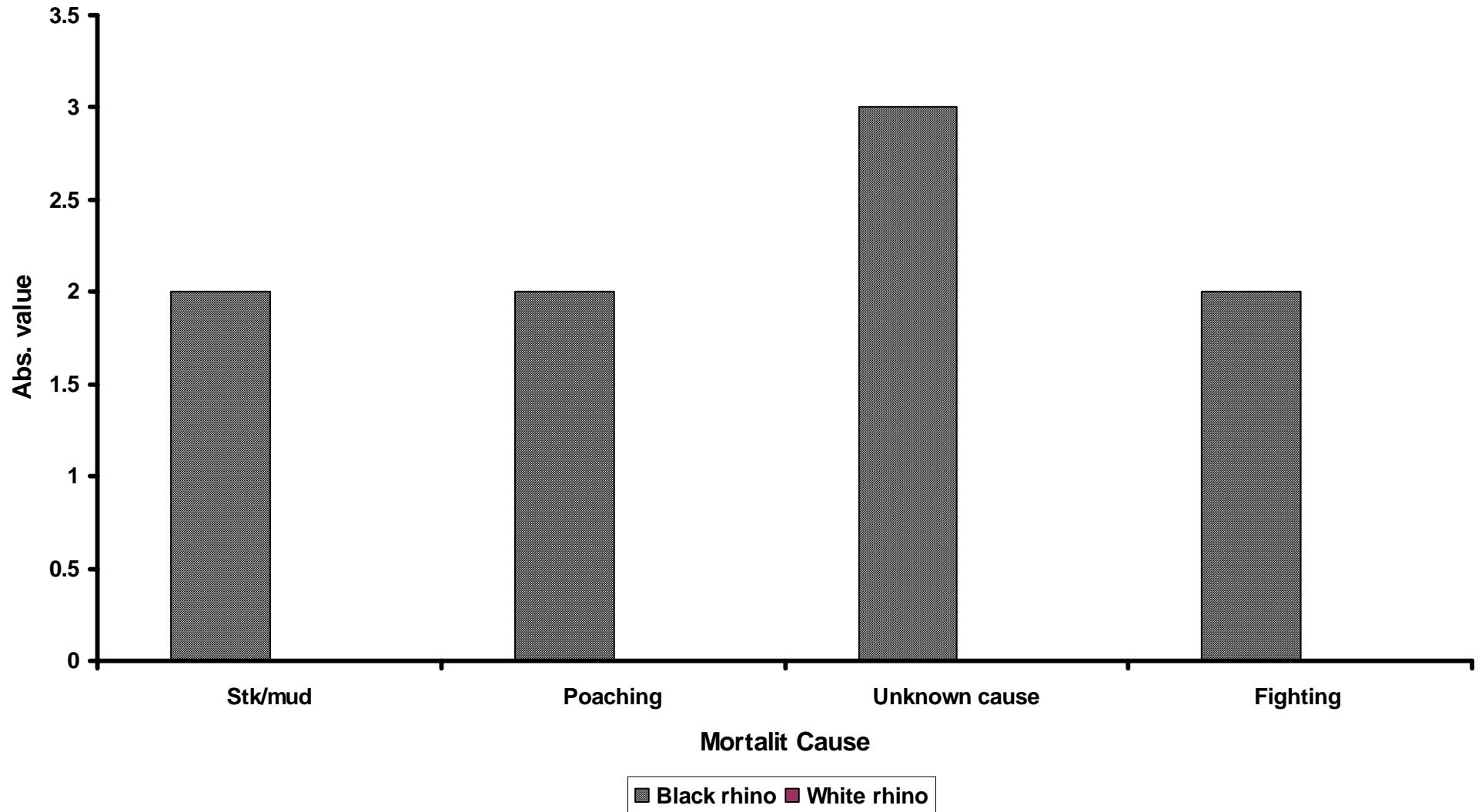
Species Mortality, *cont'd*



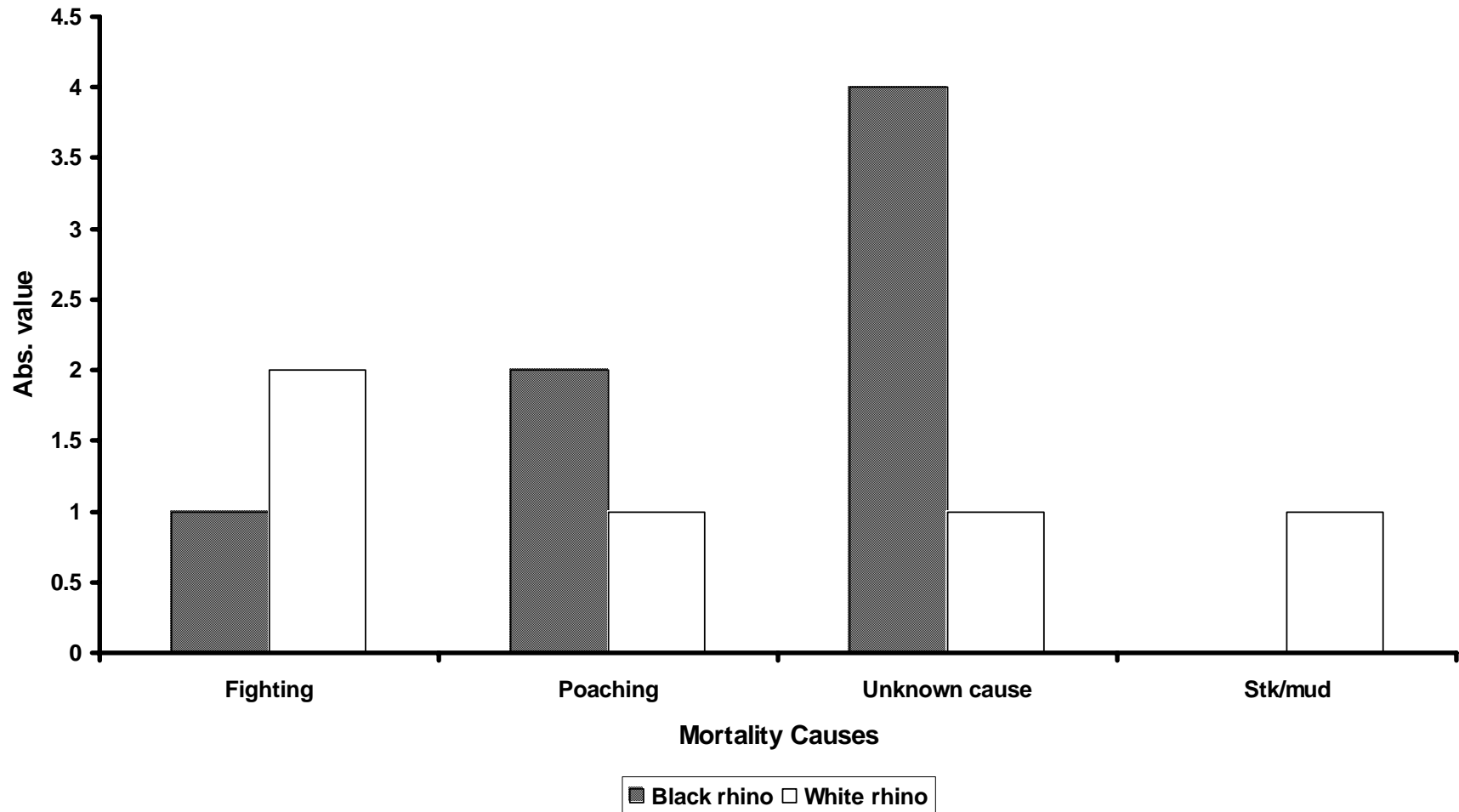
Black Rhino Mortalities



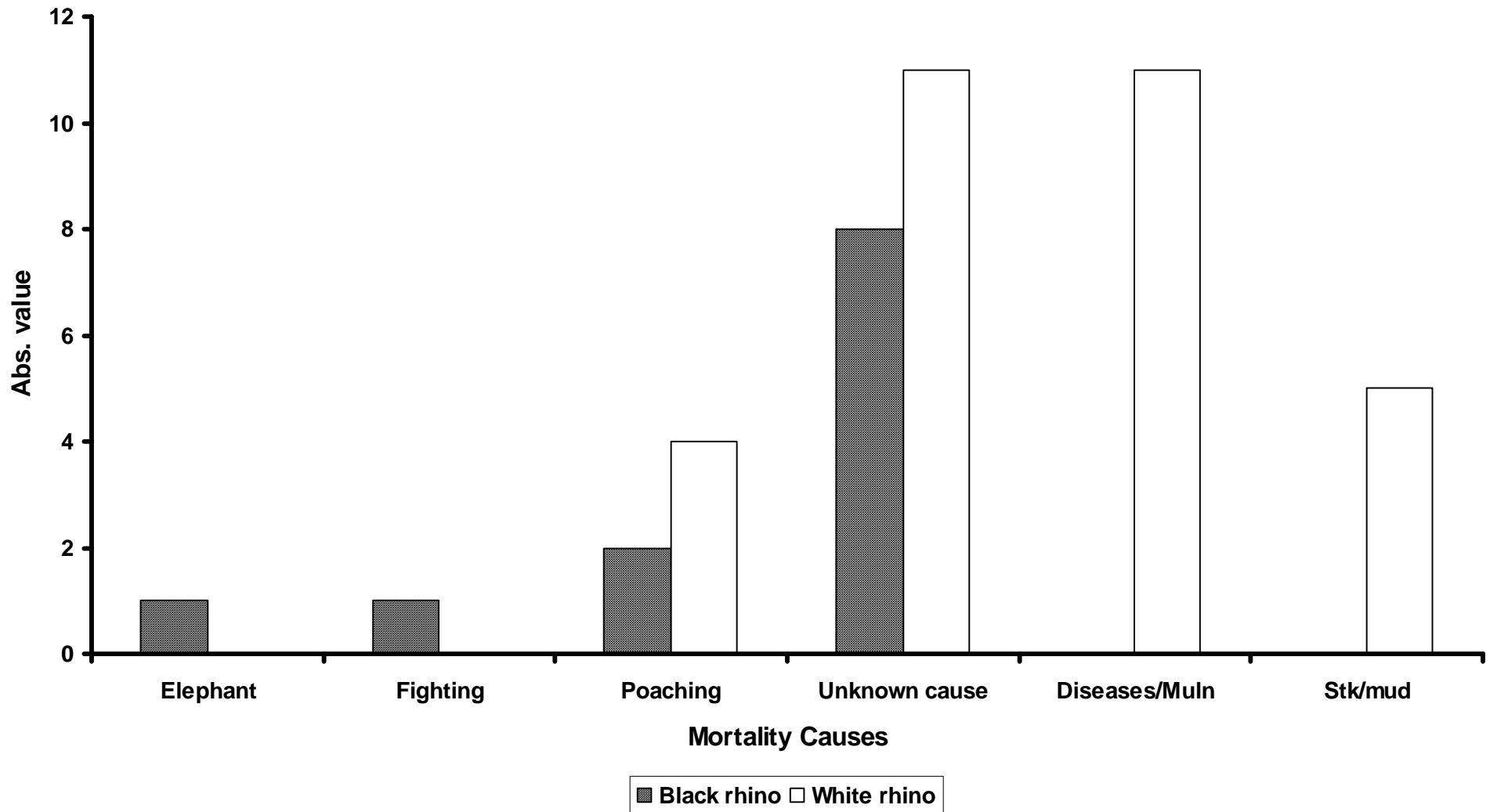
Rhino Mortalities of 1992



Pre-drought Rhino Mortalities (2002)



Rhino Mortalities During 2003 Drought



MGR Game Census

| | |
|---------------------------------------|---|
| Line Transects (24) | Aerial Counts |
| Land mammals | Aquatic species |
| <i>Anything from elephant to suni</i> | <i>Hippopotamus, crocodiles & pelican nests</i> |

Predators

- Leopard
- Cheetah?
- Wild dogs
- Crocodiles
- Jackal

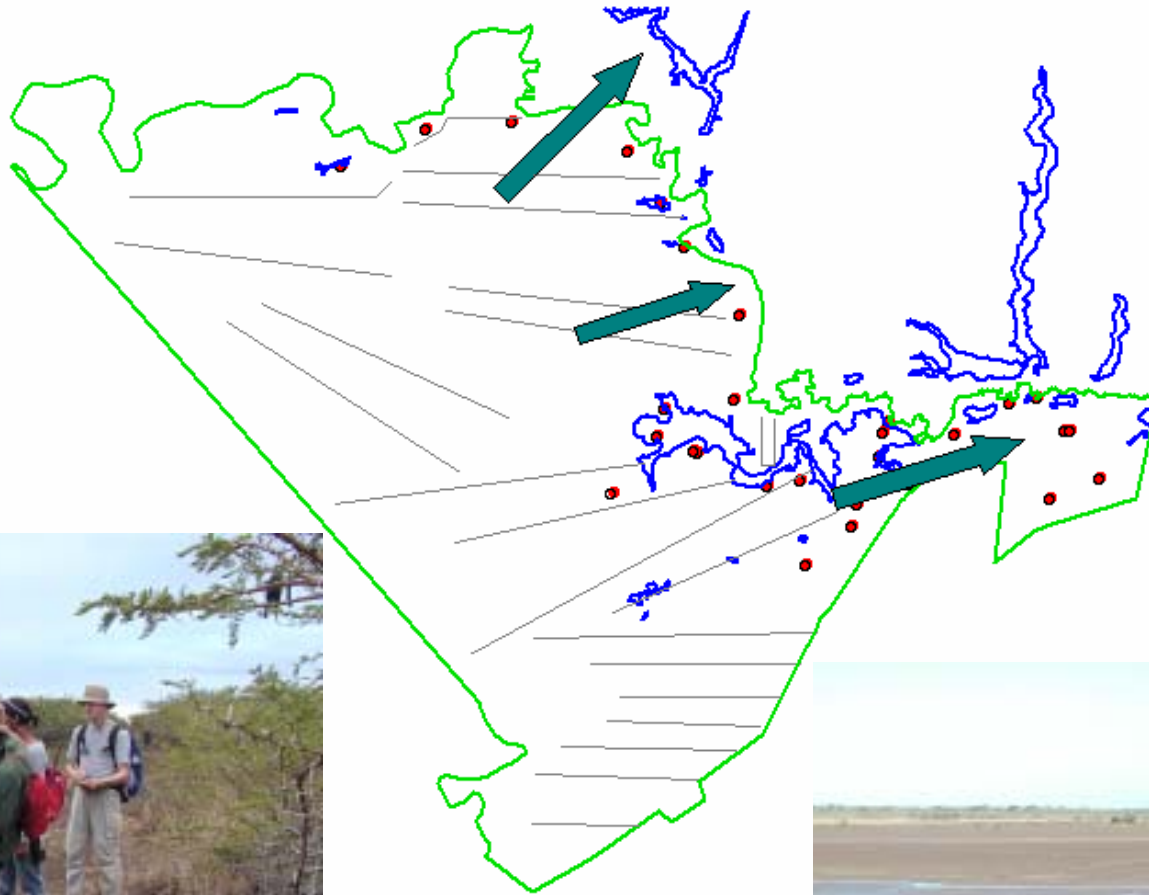
Scavengers

- Hyena
- **Vultures**

Poachers!!!!

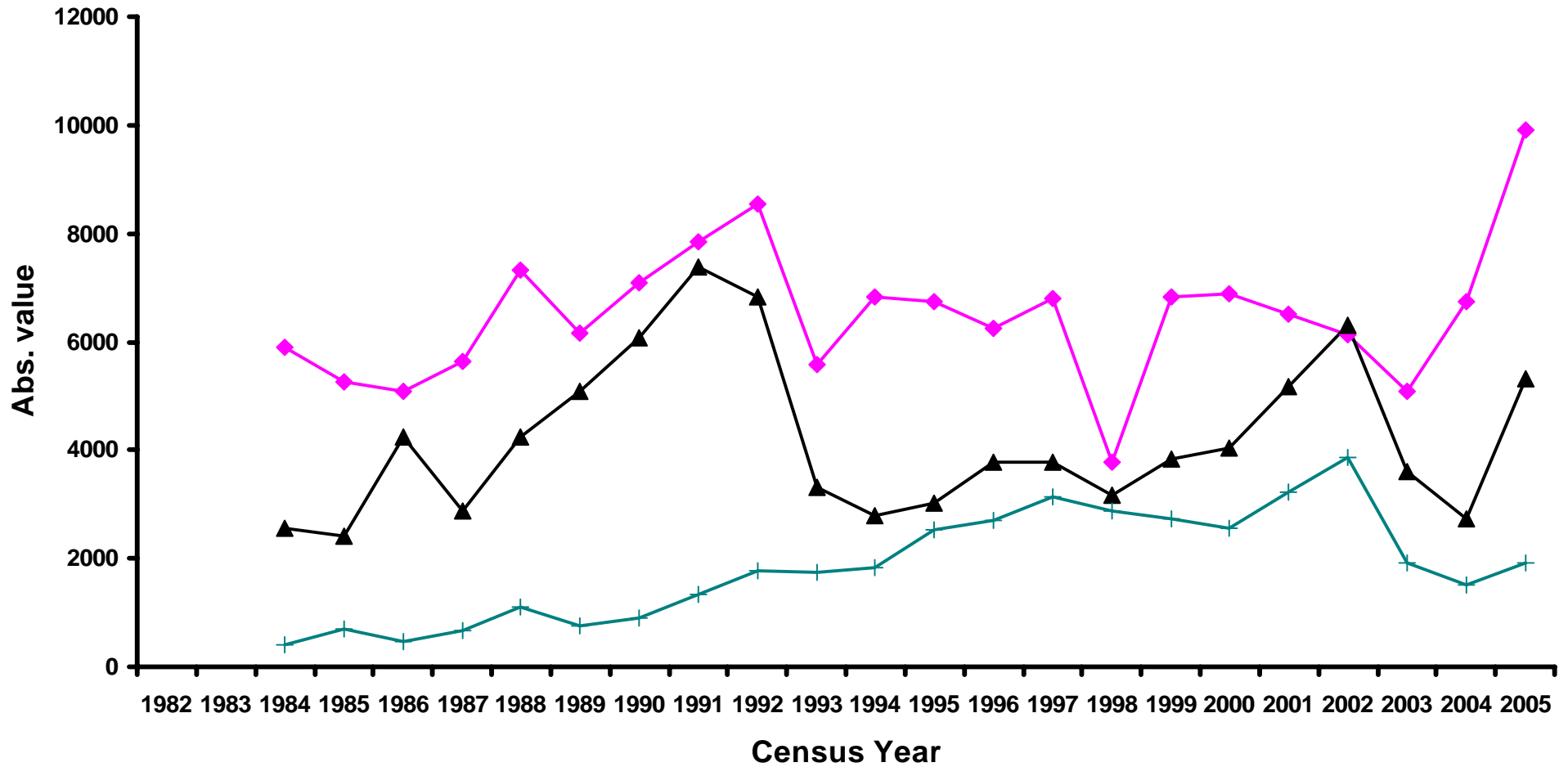


MGR Line Transects



5 0 5 10 Kilometers

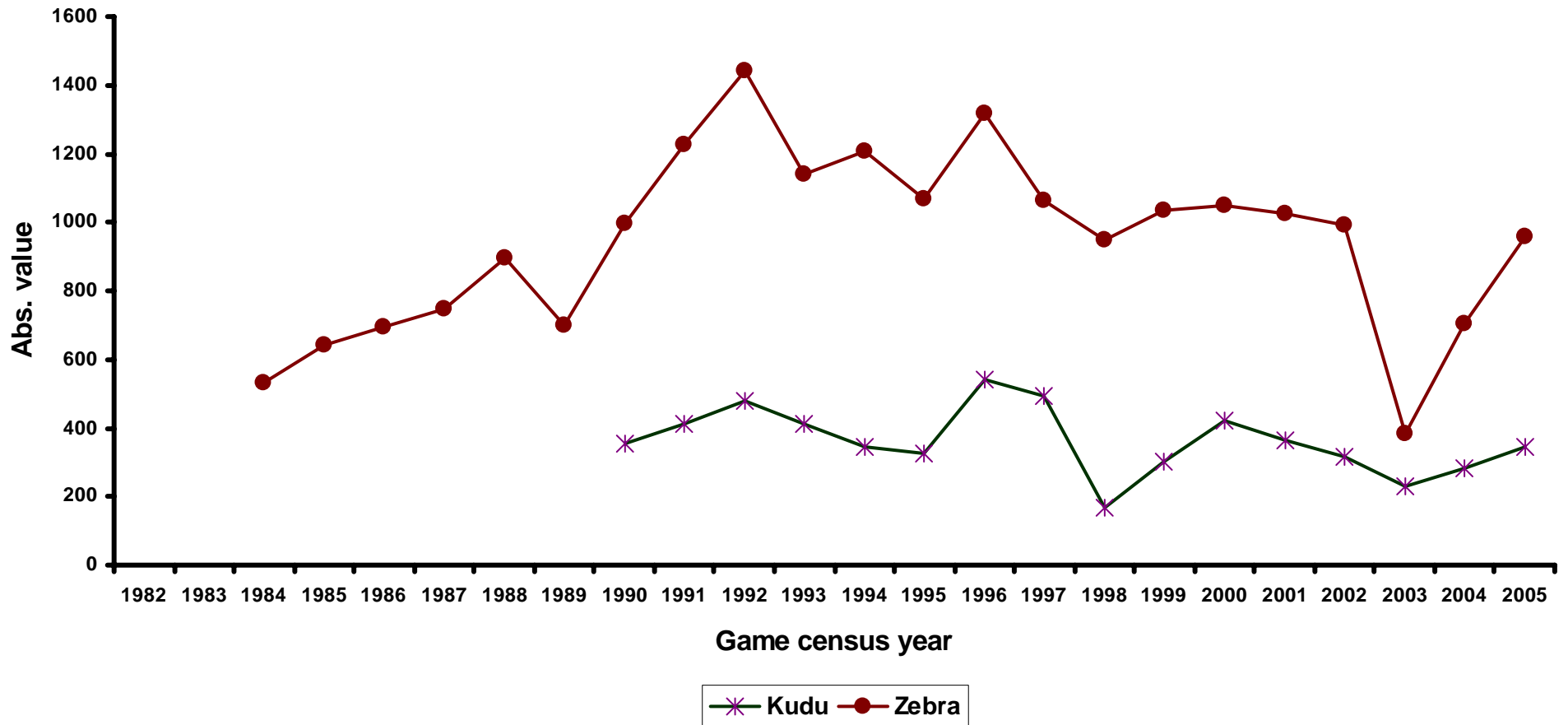
Game Census



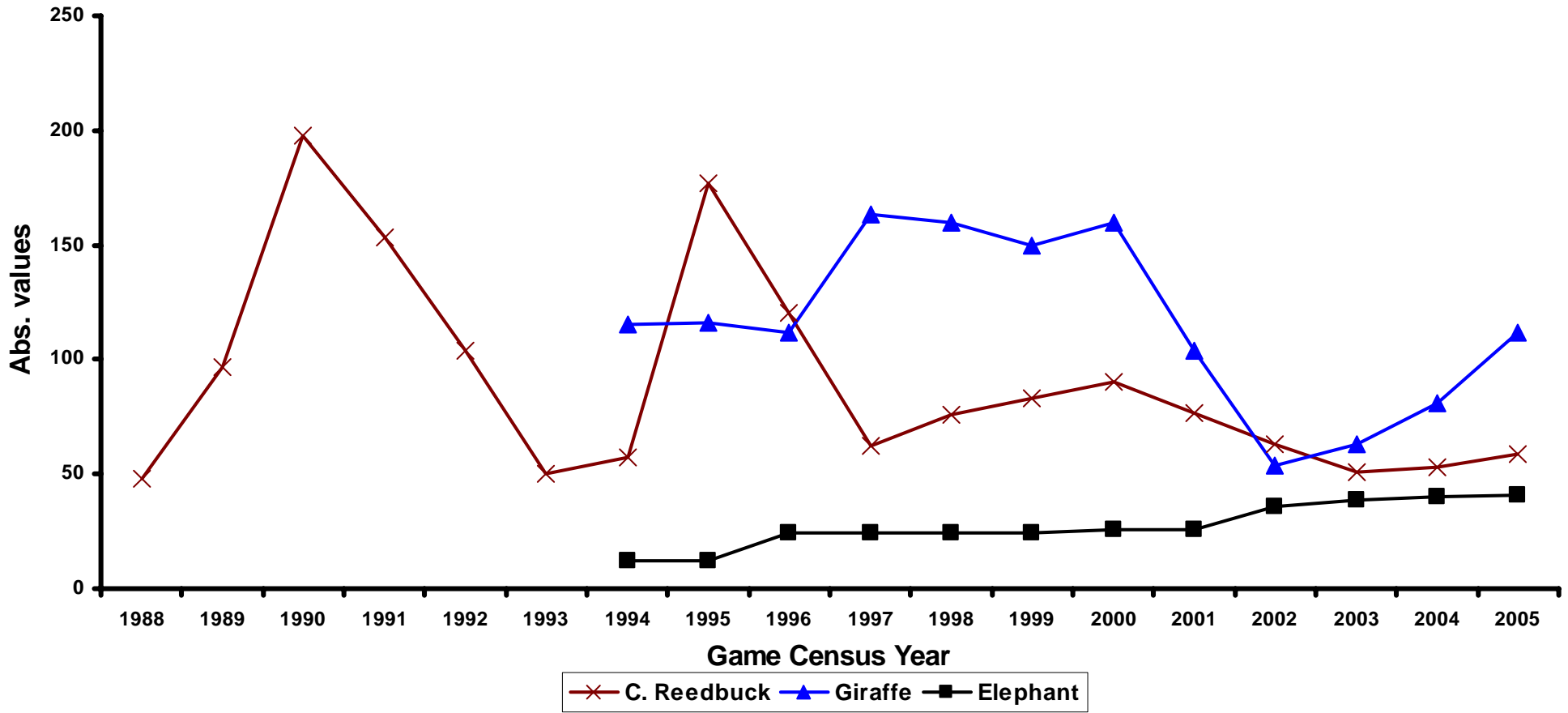
◆ Impala ▲ Nyala + Blue Wildbst



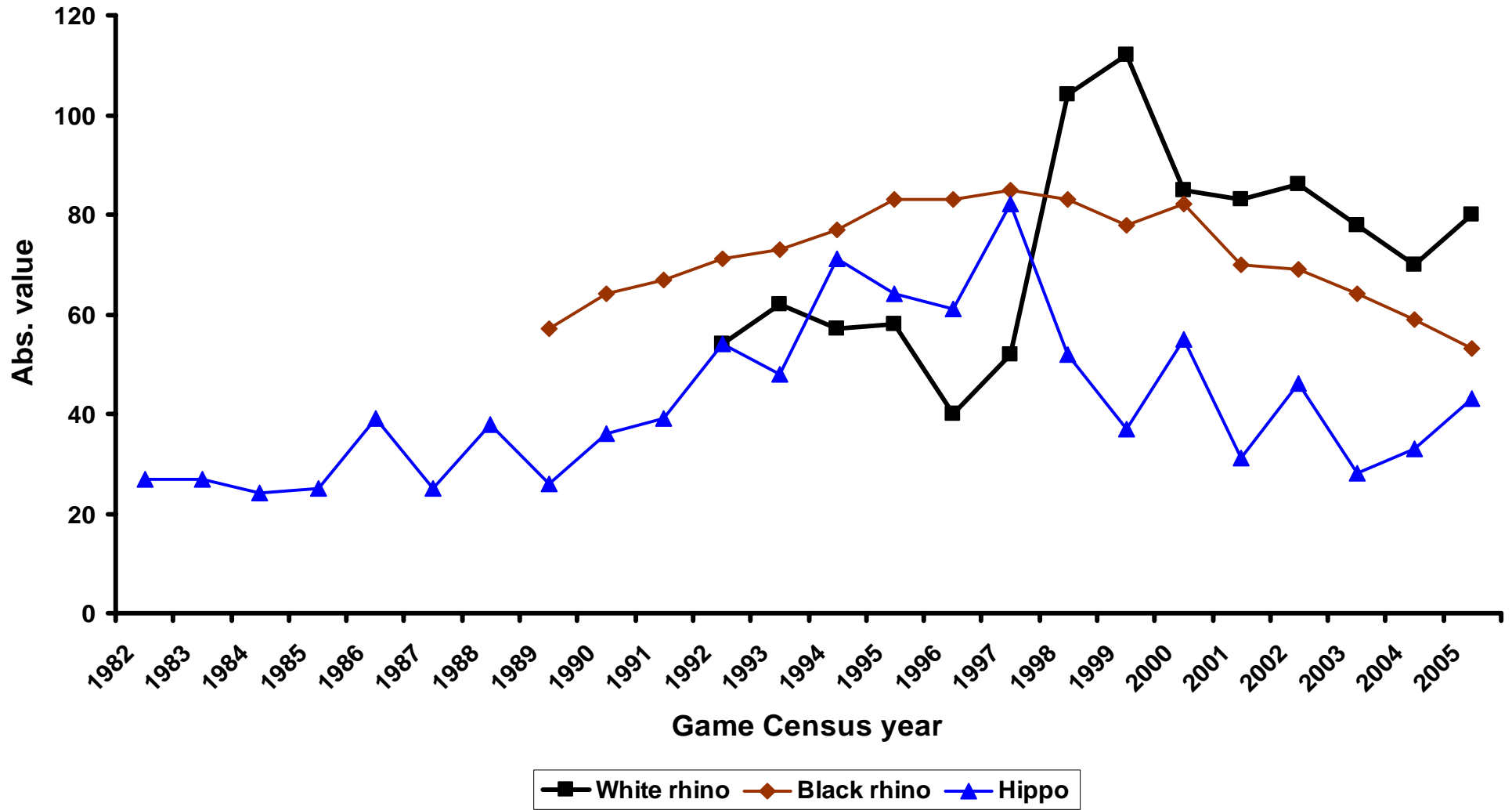
Game Census, *cont'd*



Game Census, *cont'd*



Game Census, *cont'd*



Homeward....

- **Decades of no definite boundary**
- **High unexplained game mortalities**
- **Drought effects**

- **Fence boundary**
- **Change in wildlife crime management at gov. level**
- **Drop in game mortalities**
- **.....time!!!**

Acknowledgements:

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Jerry Gumbi

MGR Managers & Field Rangers

The End!!!