



Multi-stakeholder hazard management

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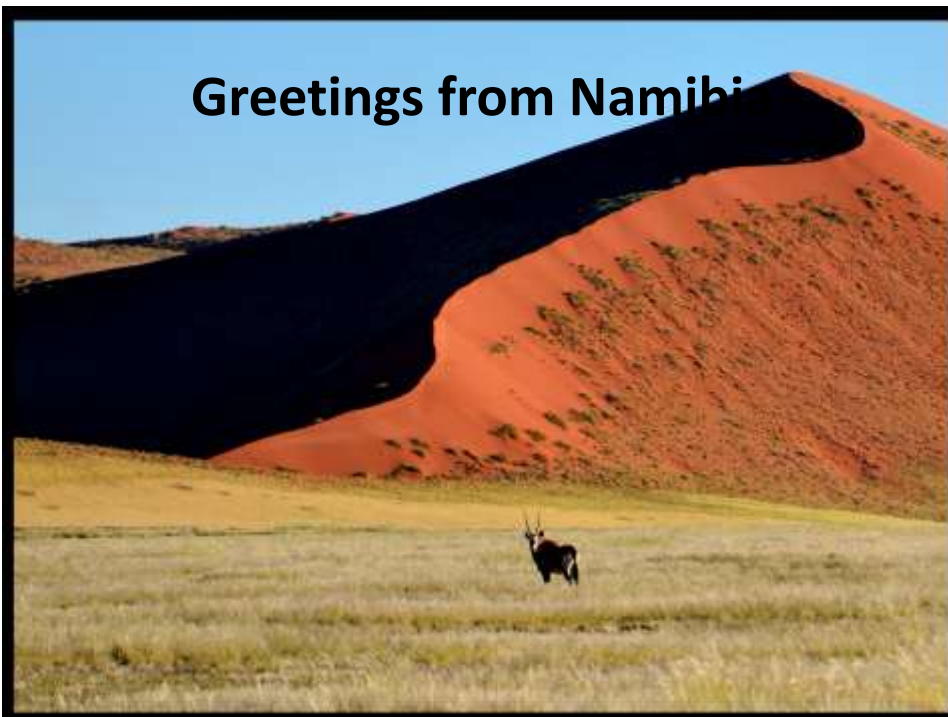
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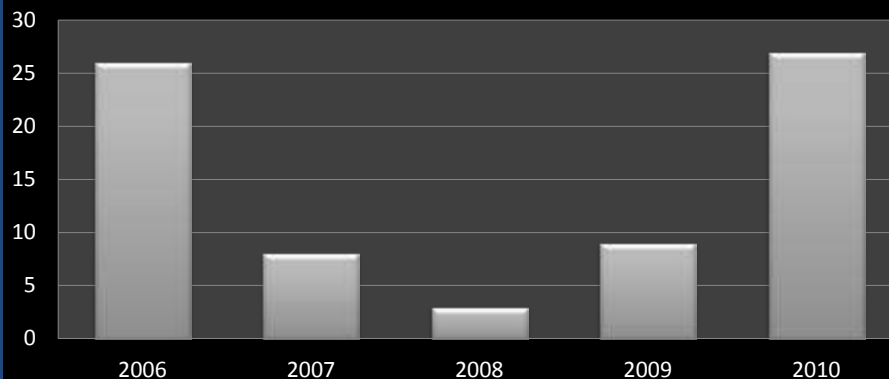
Greetings from Namibia





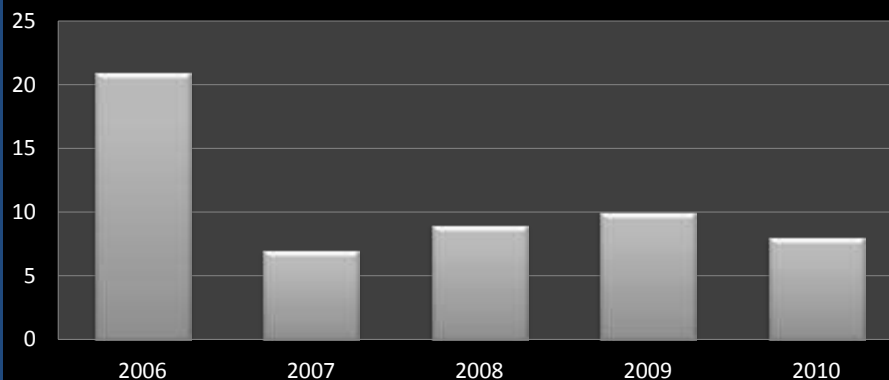
Setting the scene

Number of Aircraft Wildlife Collision Incidents at Eros Airport (2006-2010)



Setting the scene

Number of Aircraft Wildlife Collision Incidents at Hosea Kutako International Airport (2006-2010)



Setting the scene

- Average “collision” rate:
 - Eros 11 (per 10 000)
 - Hosea Kutako 4.6 (per 10 000)
- Three serious incidents in Namibia in the last 5 years
 - R 27 Million
 - R 1 M
 - Undetermined (737 turbine engine severely damaged)



Study sites

Hosea Kutako International Airport	Eros Aerodrome
Rural setting	Urban setting
Predominantly jet-turbine aircraft	Predominantly propeller engined aircraft
Low aircraft traffic volume	High aircraft traffic volume
Game and cattle ranching and as dominant surrounding land-use	Urban and recreational (golf) surrounding land-use



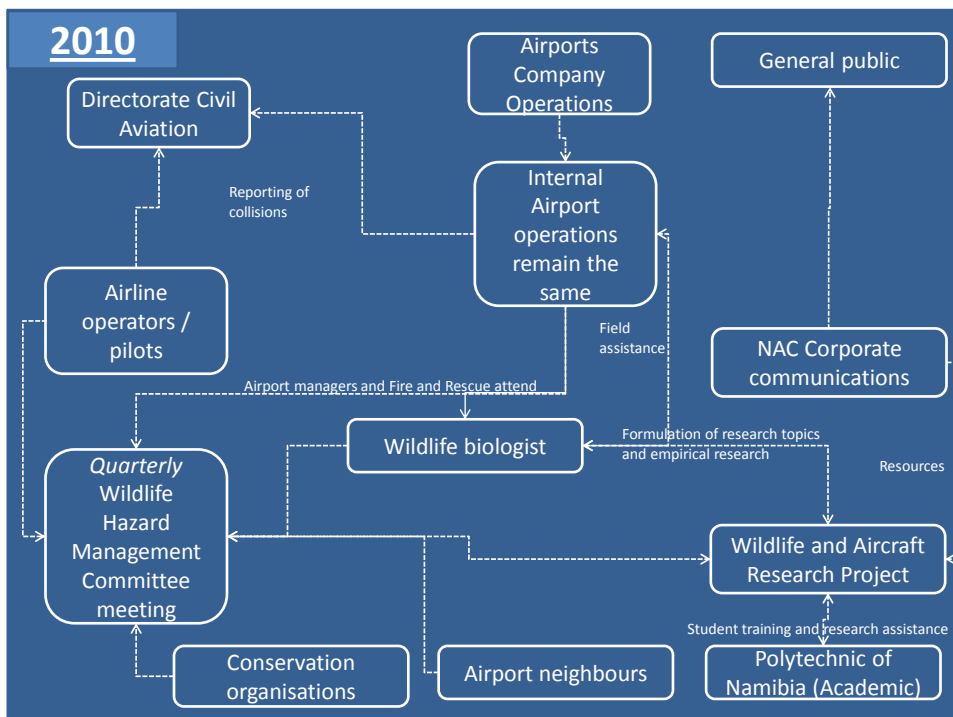
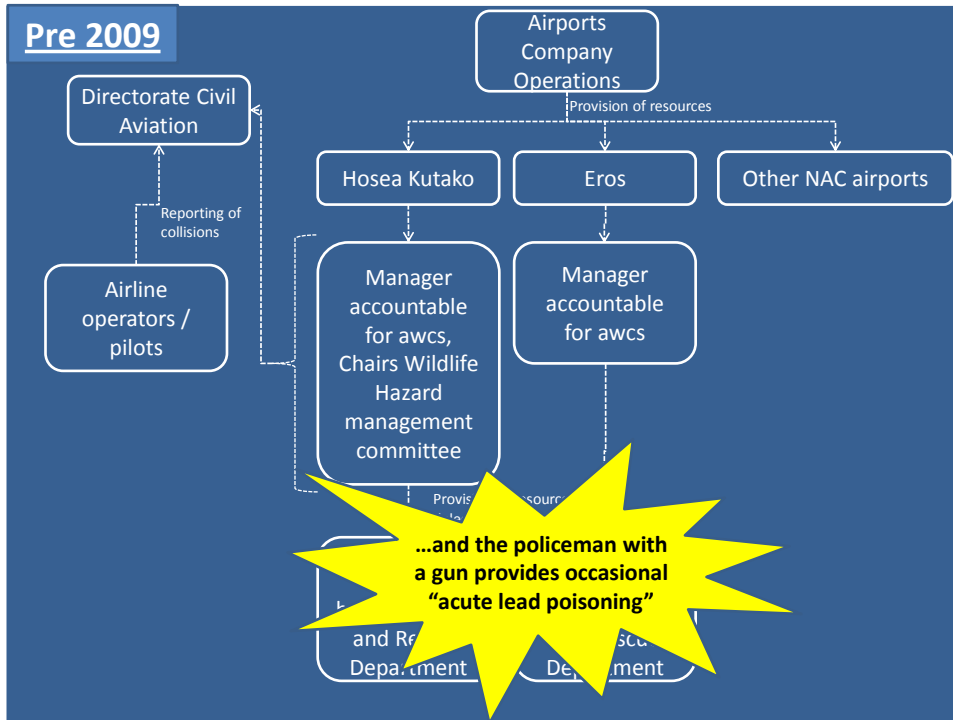
Challenges in managing Aircraft-Wildlife Collisions



Challenges cont.....

- High biodiversity
- Low capacity to manage the problem (firemen)
- Identified these and other problems when designing a WHMP for eight Namibian airports
- One mitigation measure was to include more bodies (and brains) in managing the problem.





What changed?



Addressed root causes of problems



Addressed root causes of problems



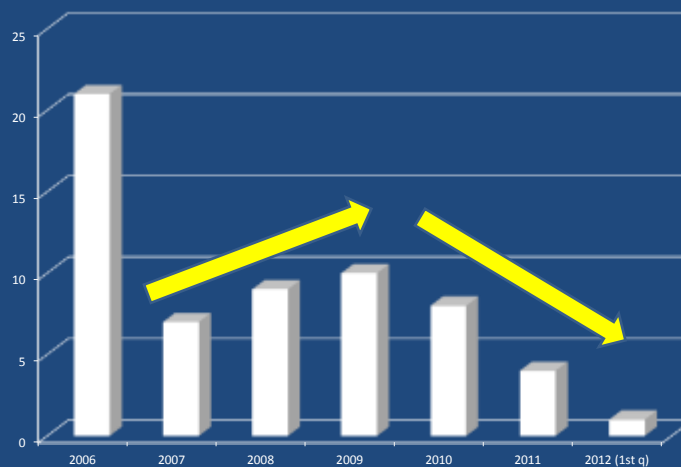
Airports as Ecosystems

- Ecosystem services provided by airports include:
 - Food (airline food waste, gardens, grazing)
 - nesting sites & roosts (hangars, windsocks, antennae, radar beacons)
 - safety from predators (fenced off)



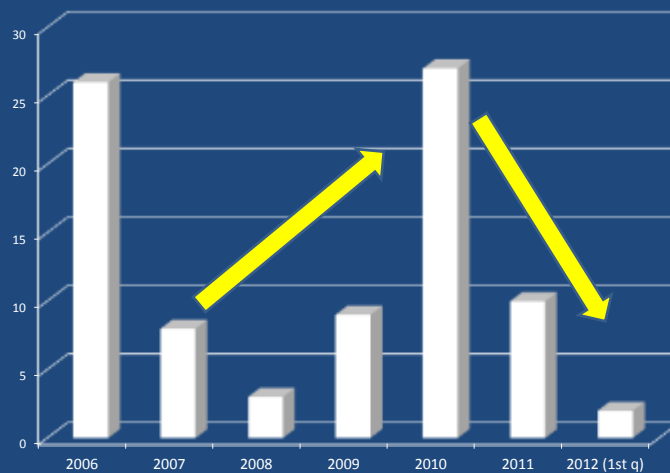
Review of “birdstrike” reports

Hosea Kutako



Review of “birdstrike” reports

Eros



Capacity Building

- Build capacity for young Namibian scientists to solve this and other problems to achieve Vision 2030

4x Polytech students completed internships



Airport Toolkit

- A toolkit was produced for Airport Management on the management of wildlife conflict:
 - Training programme based on ICAO best practice
 - Monitoring system
 - Management plan framework
 - Risk assessment



Birdstrike centre



Thank you for your attention

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