

BIRDS AND AIRCRAFT RESEARCH NAMIBIA PROJECT (BARN-P)

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In collaboration with the Namibia Airports Company (NAC) and the National Museum of Namibia



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Get to know birds that may be a hazard to aircraft.

In every newsletter there is a picture of bird species that may pose a risk to aircraft safety at our airports. This issue it's the Rock Kestrel (*Falco rupicolus*).



Analysis of birdstrike reports for the last five years

NAC have been recording birdstrikes since 2006, providing us with the opportunity to analyse these records for the five year period 2006-2010 for Eros and Hosea Kutako airports.

55 birdstrike incidents were recorded at Hosea Kutako over this period, with nearly half (21) recorded in 2006, and between 7 and 10 in the following 4 years. This may mean that the problem was twice as bad in 2006 than in the other years, or that pilots and airport staff have become half as diligent in reporting and recording birdstrike incidents. Literature from around the world suggests that under 20% of incidents actually get reported.

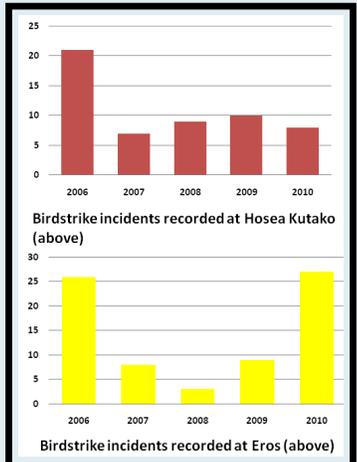
Species most often involved in incidents at HKIA are Crowned Lapwing (9 incidents) and Helmeted Guinea Fowl (5). Two mammal species (Black-backed Jackal and Scrub Hare) were involved in

five incidents each. Only one incident with White-backed Vulture (*Gyps africanus*) was recorded. In 25% of the incidents the bird or mammal could not be identified.

74 incidents occurred at Eros Airport over the 5 year period. There seems to be a steady increase in reported incidents since 2008 (see graph on the right in yellow) which is worrying in terms of risk going forward.

Crowned lapwing (plover or kiewiet) dominate incidents at Eros, being the offending bird in 69% of reports, followed by Helmeted Guinea-Fowl with 8%.

It is difficult to draw any certain conclusions from the records, as there is evidence that few incidents actually get reported. Pilots, airport staff and ATCs are encouraged to report all incidents as they provide valuable early warning of aircraft wildlife risks.



Cutting of grass as a measure to reduce bird numbers at airports

Although it reduces the fire risk at airports, there is some dispute over the effectiveness of mowing grass along airport runways to reduce wildlife occurrences. Some studies have found that although some wildlife species avoid short grass areas, others prefer it and then merely replace the replaced species.

BARN-P's research is measuring the diversity and abundance of small mammals (rodents) and insects in short and long grass areas.

Insects and rodents are important food sources for birds, and the occurrence and abundance of different types can tell us something about the health of the ecosystems in

which they occur.

Initial findings indicate that there is a far lower abundance of both rodents and insects in short grass areas, indicating that the measure is indeed effective in its objective of minimizing the occurrence of risk bird species at Eros and Hosea Kutako.



We would love to hear from you. Please do not hesitate to send any feedback on the newsletter or any observations which might help our research to the e-mail address on page 1.

Pilots comment on the birdstrike problem at Eros and Hosea Kutako

A survey was completed by 26 pilots who frequent Hosea Kutako and Eros Airports.

65% of these pilots have experienced or witnessed a birdstrike or wildlife collision although none led to serious damage. One quarter of these incidents were with lapwing (plover / kiewiet) and 18% were with Guinea Fowl. This trend corresponds with the analysis of birdstrike reports discussed on page 1.

Just more than 35% of the surveyed pilots thought that

the airports were not doing enough to minimize the risk of aircraft-wildlife collisions citing research and more frequent cutting of grass as measures that require attention.

Mowing of grass along runways as a measure to reduce wildlife risks is found to be successful in some international studies while others find that it has no significant effect. 40% of our interviewed pilots have seen a reduction in birds at airports since mowing was introduced while 28%

believe it has increased bird occurrences. The rest could not see a difference or were undecided.

Of the wildlife control measures used at Eros and Hosea Kutako, the scaring of birds through chasing with vehicles and noise is observed to be most effective, while reporting of collision incidents to raise awareness of possible hazards is seen as second most important. Training of airport staff on how to deal with the problem was also seen to be an important control measure.

thanks

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NAC to take BARN-P to the next level

The NAC recently acknowledged the value of bird and wildlife research at its airports by committing funding and support for continued research. The funding will be applied in four key areas:

- i) Capacity development and knowledge generation with the Polytechnic of Namibia by supporting two Nature Conservation students to conduct studies at NAC airports;
- ii) Equipment to establish a laboratory for wildlife research and analysis of birdstrikes at airports;

- iii) Logistics and equipment for small mammal monitoring; and
- iv) Satellite tracking equipment to track vultures breeding in the Sees Riverbed near Hosea Kutako.

The support will also allow BARN-P to be represented at the International Birdstrike Committee conference in Norway in 2012.

With this funding the project will establish a research station (hopefully at Eros Airport) to serve as a base for research and also as an information centre where bird-

strike incidents can be reported and responses to wildlife incidents can be coordinated.



BARN-P will be training NAC staff in the management and control of birds and other wildlife at airports. The training will be in line with the ICAO standards on wildlife control and reduction at airports.

Above a Fireman from Hosea Kutako is cautiously steering a porcupine away from Runway 26.

Comments from the industry and media

Nad Brain from Wilderness Air commented that he has frequently seen Black Mamba at Hosea Kutako and wonders why there are so many. Perhaps the analysis of our small-mammal survey will give some clues.

Three of Namibia's national newspapers carried stories about the project recently.

The Allegemeine Zeitung carried it as a headline on the 7th of march, reporting spe-

cifically on research concerning the vultures at Hosea Kutako. The Namibia Economist and Republikein carried more general articles which reported on the research carried out by the project over the past 2 years.

Marco Konings - Manager: Flight Safety at Air Namibia has commented on the inadequate reporting of birdstrike incidents. Although it takes some time and effort to fill out an incident report form, pilots

need to be more committed as reporting of collisions and also "near miss" incidents can help warn other pilots about potential hazards.

Will Dalling, who chairs the Inter Operators Safety Forum recently invited BARN-P to speak to members about the project's research. This forum consists of representatives of all airline companies using Eros frequently, where they discuss safety matters and learn from each other.