

# AIRPORT BIRD HAZARD AND WILDLIFE MANAGEMENT

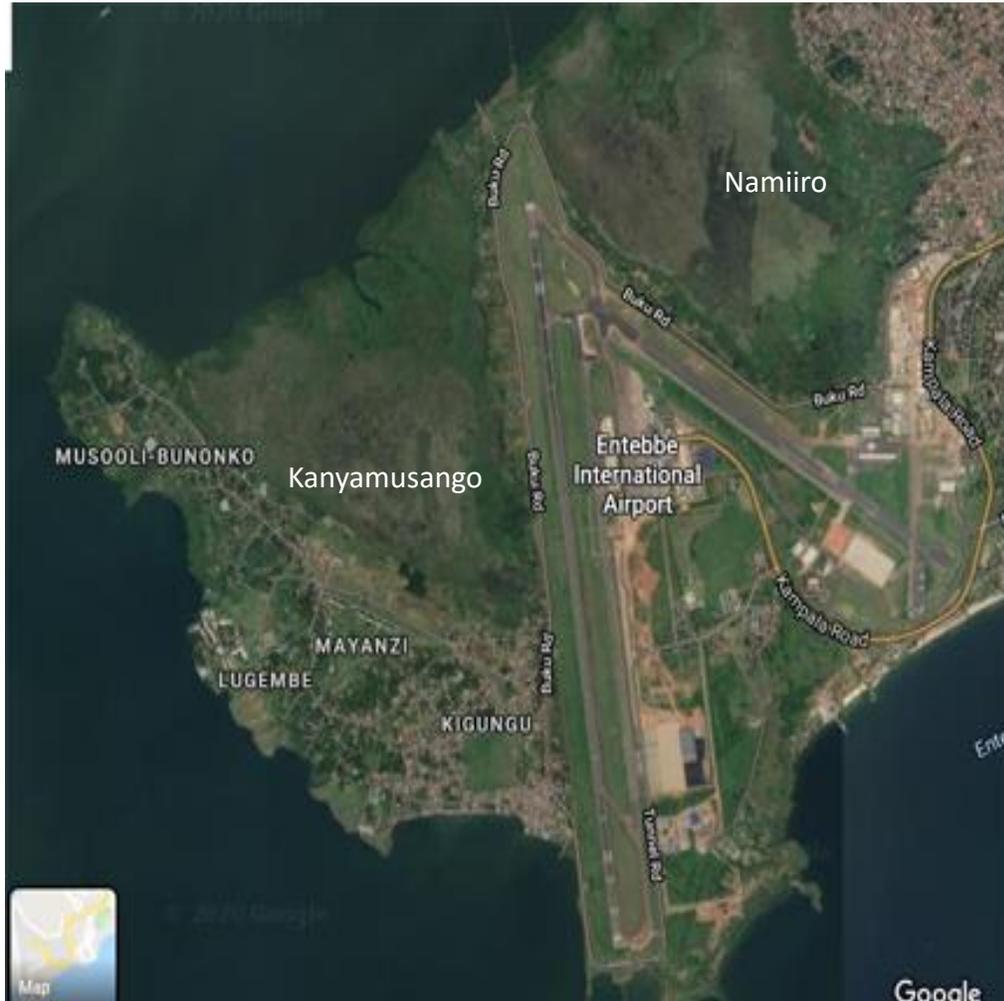
## *Entebbe International Airport*

- *Background*
- *Wildlife hazards*
- *Wildlife hazard management program*
- *Challenges*
- *Way Forward*



# BACKGROUND

## Entebbe



- Peninsula on Lake Victoria - a fresh water lake
- Surrounded by 2 large swamps
- Surrounded by some islands (some of which are habitats for a number of species.
- Lies between 2 designated Important Bird Areas (IBAs) -Lutembe and Mabamba bays which are also 2 of Uganda's Ramsar Sites.
- Migratory path of birds

# Four way approach to wildlife hazard management at EIA

- **Environmental/ Habitat Management**
- **Wildlife dispersal**
- **Community based activities around the aerodrome and**
- **Continuous research.**

- The 24-hr BHCW section is run by
  - A team of 28 staff, most of whom are shift workers.





- **Grass management** – Currently grass height is recommended at 30cm. The section monitors that this grass is left at that height.
- **Waste management:** BHCW section engages in monitoring of waste in and around the airfield to discourage bird accessibility to food.
  - Main waste dumpsite is about 13km away
- **Termite mound (Anthill) Management:** This is intended to discourage wildlife perching and feeding on termite *alates*.

## Wildlife Dispersal

- **The section has 2 bird scare vehicles.**
  - Runway sweeps/inspections are carried out about 10mins before landings and takeoffs:
  - ATC is also given Real Time conditions of the Runway in order to advise operators accordingly.
- **Use of bird scare pistols to disperse birds from the movement areas.**
- **Foot-patrolling:**
  - Offers the best dispersal method because it shows real danger to wildlife. We use catapults and clappers in the process.



- **Laser bird repellent system:**
  - **Visual repellent**



- **Distress calls:** Sound recorded when birds are in danger. The idea is to warn others of danger.

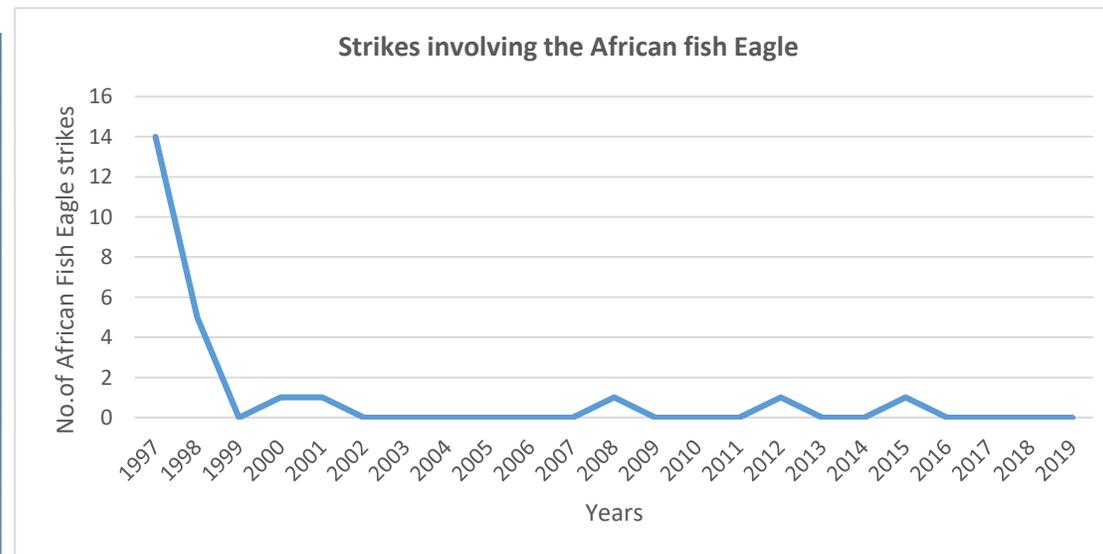
# INSTITUTIONAL ARRANGEMENTS

- **Airport Bird hazard and Wildlife Control Committee** composed of the following members.
  - General Manager – chair
  - Air Traffic Control
  - Airlines BAR/AOC
  - Ground Handlers
  - Airport Operations, SMS, MAM, MAEPD etc
  - Ministry of Agriculture, Animal Industry and Fisheries
  - Uganda Wildlife Authority
  - Entebbe Municipal Council
  - Local Council leaders
  - Aviation Police
  - Uganda People's Defense AirForces, etc
- A **National Committee on Wildlife hazard management** is in the process of being formulated to further improve EIA's wildlife hazard management program.

# Data management and Continuous research

- The Section engages in data collection, analysis and interpretation to improve the methods and processes of wildlife hazard management.
  - Wildlife strikes.
  - Wildlife activity.
  - Habitat management.

An example of the usefulness of data management. Below is an African fish Eagle – From the data analysis, there has been a reduction in incidents involving this species indicating that our methods to manage the species are generally effective.



# Annual Lake Victoria surveillance

- In an attempt to manage bird strike incidents, especially those at the approaches to Entebbe, UCAA together with UPDAF organized an aerial survey of some of the islands surrounding Entebbe Airport in 2021.
- Other surveys are carried out on the water using boats to understand bird activity, behaviour and their habitats



# Challenges and way forward

- Most of the methods used to manage wildlife involve continuous presence on the movement areas. As such can increase the risk of runway related incidences.
- Mitigation measures include:
  - Proper coordination between ATC and the WHM section during runway inspections.
  - Interaction between ATC and WHM to understand and appreciate each other's role in safety.
  - Training of WHM staff in runway safety – Radio telephony etc
  - Clear markings within the aerodrome
  - Continuous research to improve wildlife hazard management technologies.

**END**