

# THE IMPACT OF BENGALURU INTERNATIONAL AIRPORT ON NATIVE BIODIVERSITY



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Urbanized setup with concrete structures

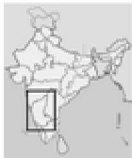
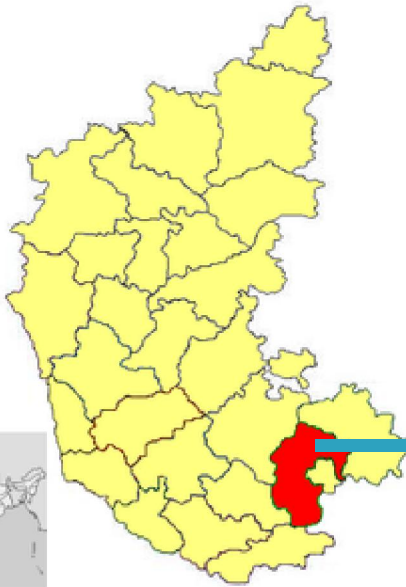


# Objectives

- **Document the Select biodiversity elements**
- **Comparing biodiversity elements with past records**
- **Measures to conserve Biodiversity**

# Study locations

1. Anneshwara
2. Bettakote lake
3. Bettakote state forest
4. Ramanahalli
5. Nallur tamarind groove
6. Sadahalli Aerogarden



40 Km towards north from Bengaluru



# Vegetation around Devanahalli



# Impact on vegetation due to BIAL



# Impact on Vegetation Due to BIAL around Devanahalli

Area	Before 2002	After 2008
Arasinakuntae	Crop land	Barren
Yartiganahalli state forest	Forest	Run way
Gangamuttenahalli lake	Lake	Barren (filled up)
Anneswara	Eucalyptus	Buildings
Yartiganahalli	Village	Runway extension
Bettakote state forest	Eucalyptus, acacia, crop land	Barren, evacuated

Bird diversity .....

**Indian roller**





# Bee eater



# House crow



# Rose ringed parakeet



# Jungle Myna

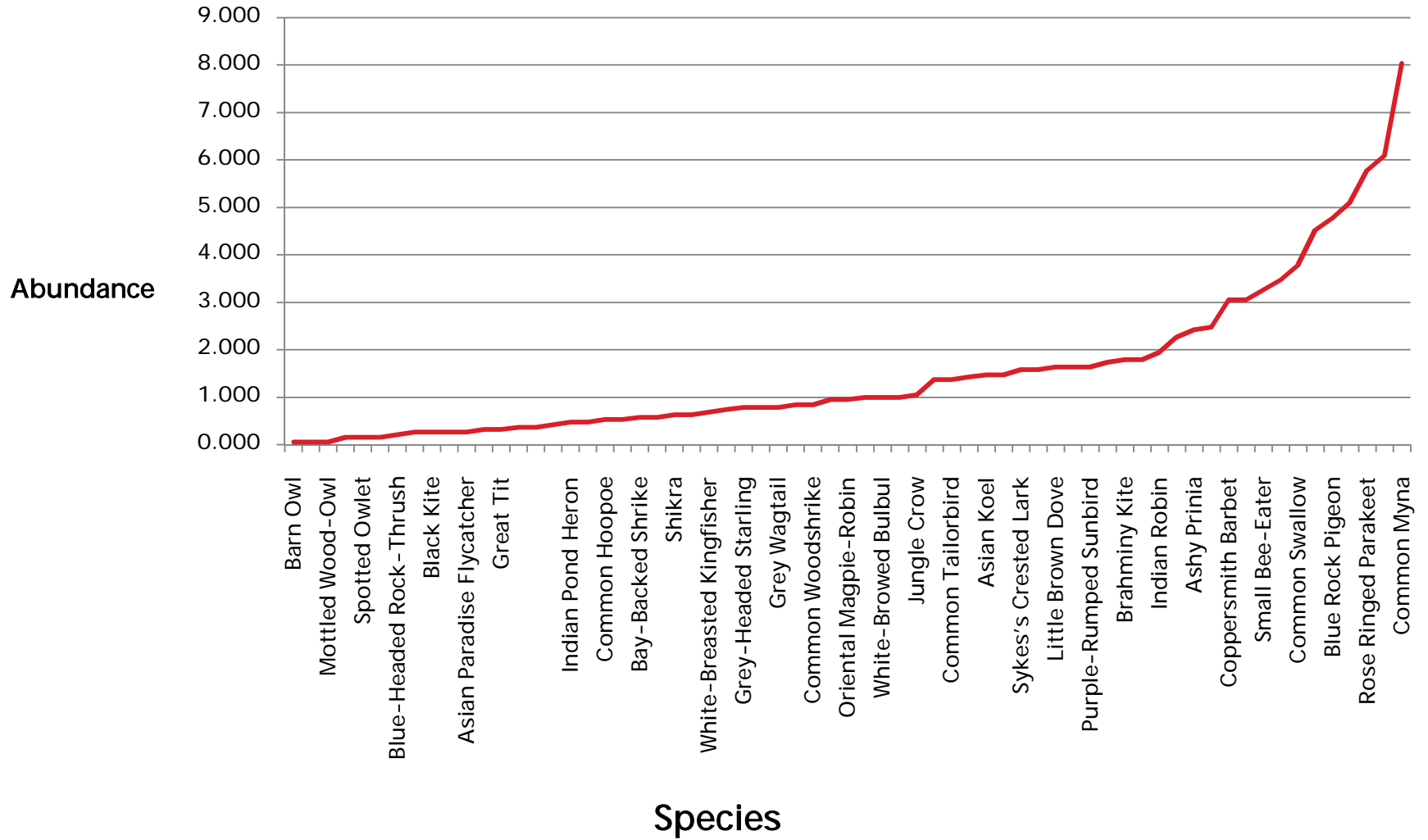




**Paraiah kite**

# House sparrow





**Rank abundance of Birds in study locations**



Butterflies diversity.....

Plain Tiger





# Blue Tiger



Common sailor



# Common Mormon



# Common Evening Brown

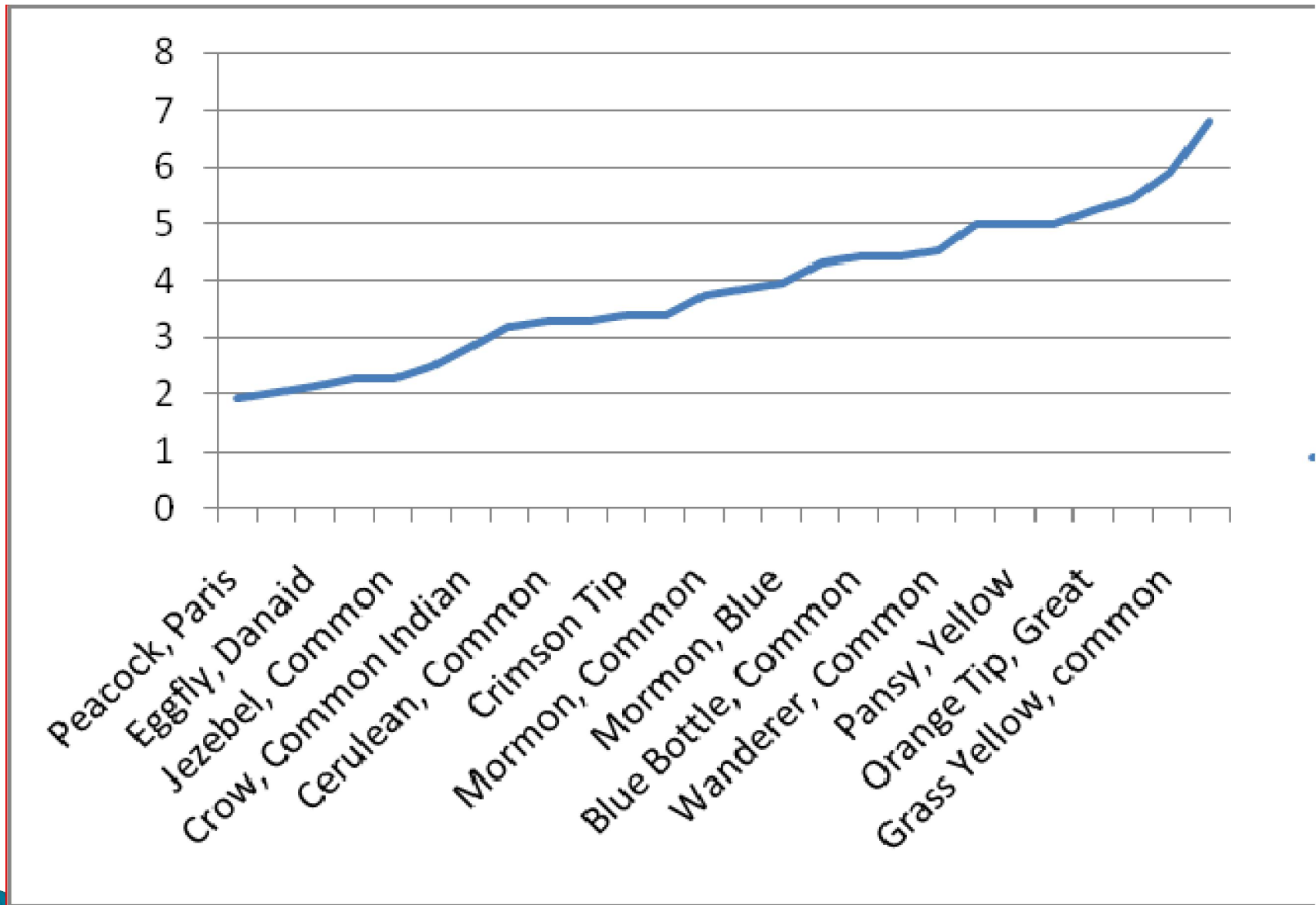


# Common grass yellow



# Striped Tiger





**Rank abundance of Butterflies in study locations**

**Mammals diversity**

**Slender Loris**





# Fruit Bats



Hare



# Wild pigs



# Squirrel



# Mongoose



# Impact due to BIAL

- **Drastic landscape changes**
- **Local people displaced-lost family occupation**
- **Compensation –too low**
- **Take-up no new occupation**
- **Vehicular traffic congestion, Number 2,3 and 4 wheelers increased**
- **Noise pollution increased**



# Noise pollution

**Propeller plane flyover at 1000 ft . . . 88 dB**

**Above 85 is the limit for human ear**

**Bell J-2A helicopter at 100 ft . . . 100 dB**

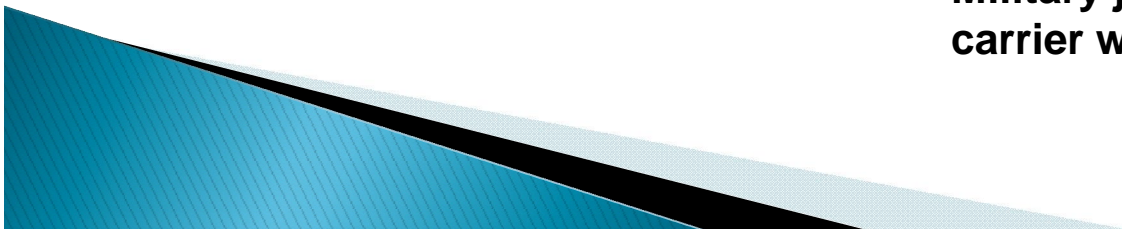
**Boeing 737 or DC-9 aircraft at one nautical  
mile (6080 ft) before landing . . . 97 dB**

**Jet flyover at 1000 feet . . . 103 dB**

**Boeing 707 or DC-8 aircraft at one nautical  
mile (6080 ft) before landing . . . 106 dB**

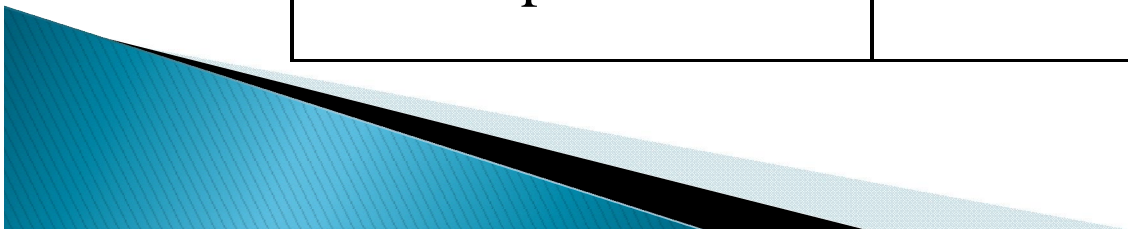
**Turbo-fan aircraft at takeoff power at 200 ft . .  
. 118 dB**

**Military jet aircraft take-off from aircraft  
carrier with afterburner at 50 ft . . . 130 dB**



## Impact of BIA on local biodiversity elements

Select Biodiversity Elements	Percentage Reduction
Mammals	75.00
Birds	35.10
Butterflies	04.96
Reptiles	15.00
Amphibians	08.00





## **Conservation measures**

**üTamarind groove preserve as it is**

**üPlant indigenous species of trees**

**üMaintains open lands with local vegetations**

**üNandi hills biotopes is unique and should be preserved**

THANK YOU

