

# Specialist avifaunal studies for EIAs





## This presentation

- When to include an ornithologist on the EIA team?
- What are the challenges for avifaunal studies?
- What approach should be applied?
- The need to contribute to the national avifaunal information system

# When to include a bird specialist?



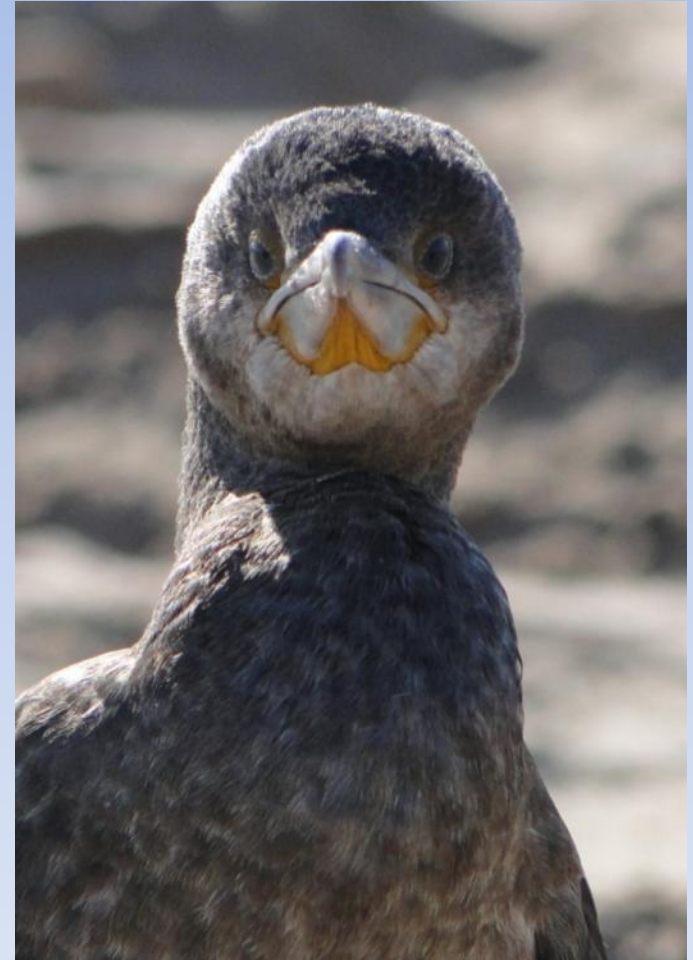
This is a guideline only. Developments that:

- impact on wetlands (both ephemeral & perennial)
- impact on coastal areas and islands
- have a landscape impact (i.e. not a small site-specific footprint)
- together with other developments have a potentially cumulative impact on birds and their habitat (should ideally be addressed at a SEA level)
- have known impacts on birds, e.g. power lines, airports, wind farms
- birds have known impacts upon, e.g. power lines, agricultural projects, fish farms
- are in areas with sensitive species, e.g. Lappet-faced Vultures in Namib

Lead Practitioner needs to apply intellect, experience & wisdom to make this decision on a case-by case basis.

# Some challenges in avifaunal studies

- Birds are highly mobile – Palearctic and intra-African migrants are present only in summer
- The majority of arid zone birds are highly nomadic – they might be absent for part of a year and even for some years, then be super-abundant
- Birds cover huge ranges – wetland birds (not migrants) follow episodic events and may move over much of Africa. Similarly vultures and other large spp move around southern Africa
- Thus one-off visits to project areas without the above understanding and access to long-term data / info provide are of limited value



# Some challenges ... continued



- Many species are cryptic and difficult to find
- Many of the more difficult species to identify are endemic to Namibia or to the south-west arid zoo-geographic region
- Some larger species are at naturally very low density – with inter-nest distances of many km – thus difficult to pick up on short survey visits
- Some species visit particular areas only at certain times, and these areas are critical to the survival of populations, e.g. flamingos in Etosha

# What approach should be applied?



- In addition to site visit(s) need to use long-term data sets.
- May also need to draw on data from surrounding area with same / similar habitat to ensure sample size
- Fortunately Namibia has a public domain “avifaunal database” that contains
  - Bird atlas data (covering a period of 20 years)
  - Museum specimen data (held worldwide, from late 1800s)
  - Raptor road count data (>30 years)
  - Nest record data (>50 years)
  - Wetland count data (30 years)
- Determine the national/international and local status of each species
- Assess the potential impact that the proposed project will have on each species (directly and indirectly – e.g. on habitat, feeding, breeding, disturbance, change in predation , ...)

# What approach ... continued

- Lift out endemic species (to Namibia and to southern Africa) for special scrutiny
- Lift out Red Data species for special assessment – try and quantify impacts, e.g. number of breeding pairs that will be lost
- Consolidate ratings

SIGNIFICANCE RATING				
	LIKELIHOOD	Unlikely	Likely	Definite
MAGNITUDE	Negligible			
	Low			
	Medium			
	High			

- Assess for cumulative impacts
- Mitigation and recommendations



# Contribute to the national avifaunal information system



- Taking data and info free of charge
- Need to put data into the system
- Every field trip should result in contributions to
  - Bird Atlas project 2
  - Raptor road counts
  - Nest record cards
  - If possible, species abundance / densities
- Lead Practitioners – build into your specialist contracts
- Ditto other groups (e.g. mammals)

Thank you!