The role of citizen science & collaboration in bird conservation

Dr Vicki Stokes
BirdLife Australia
www.birdlife.org.au

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“Backing Bitterns”
A collaborative effort

BirdLife: P. Barratt, R. Pickering, A. Silcocks, V. Stokes

DBCA: S. Comer, A. Clarke, A. Burbidge

GOVERNMENT OF WESTERN AUSTRALIA
natural resource management program

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Department of **Biodiversity, Conservation and Attractions**

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Meet the elusive Australasian Bittern “Boordenitj”

- A heavy-set heron (waterbird)
- Secretive and well camouflaged in its preferred tall dense sedge habitats
- Lives in freshwater wetlands where they feed on frogs, insects, crayfish, fish

Booming call of male in spring

Collective concern for Australasian Bittern

- Surveys 2008-2012 by DBCA & BirdLife revealed 25-50% decline in bittern numbers in WA since 1980's
- Now estimate <150 birds in WA (listed as "Endangered")
- DBCA '*South West Wetland Monitoring Program*' over past 30+ years revealing:
  - Significant declines in water levels
  - Increases in salinities
- Continuing threats to bittern:
  - Loss of and changes in wetland habitat
  - Predators (e.g. foxes)
  - CLIMATE CHANGE
  - Still much we do not KNOW

Issues for Bitterns in WA

CHANGING WETLANDS
↓ water levels
↑ salinity
Acidification

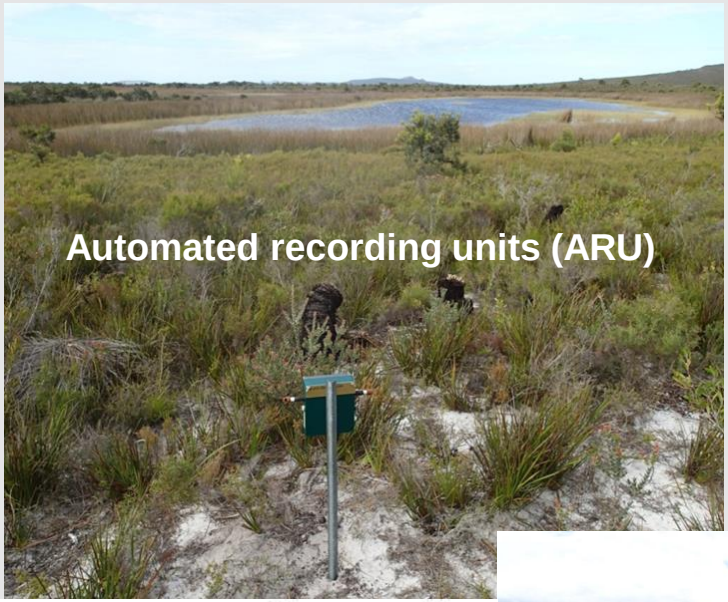
ALL COMPOUNDED BY DRYING CLIMATE!

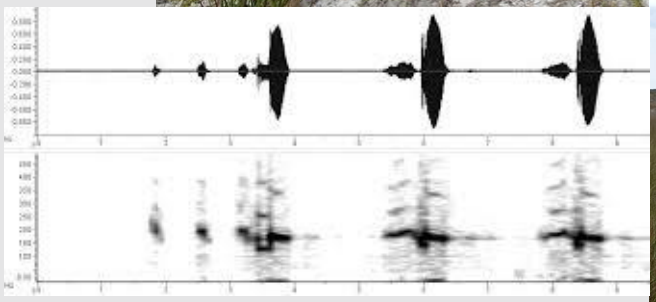
Benefits of collaboration

- Combining expertise
- Sharing knowledge, data and resources
- Coordinated and standardised monitoring
- Larger scale monitoring of wetlands (both reserves and private properties)
- Developing and trialling new research methods (trapping and satellite tracking birds)
- Identifying and prioritising conservation actions
- Improving conservation outcomes

Add in map of sites

Addressing the challenge of finding Bittern





Volunteers help analyse ARU data

Photos: A. Clarke

What we hope to achieve

- Continued monitoring of wetlands important for breeding
- Location of yet unknown wetlands bitterns use for breeding and/or feeding (during non-breeding season)
- Understanding bird movements between wetlands
- Understanding how use of wetlands changes over time and in response to wetland conditions
- Greater community and landholder awareness of the importance of wetlands
- Supporting and engaging landholders to protect and improve wetlands for bittern and biodiversity

“Citizen-Scientists” Critical in the fight to conserve our birds and their habitats

BirdLife

Cocanarup Convervation Alliance

Volunteers across the State

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Citizen Science – "Great Cocky Count"

Estimated trend in Albany region for white-tailed species

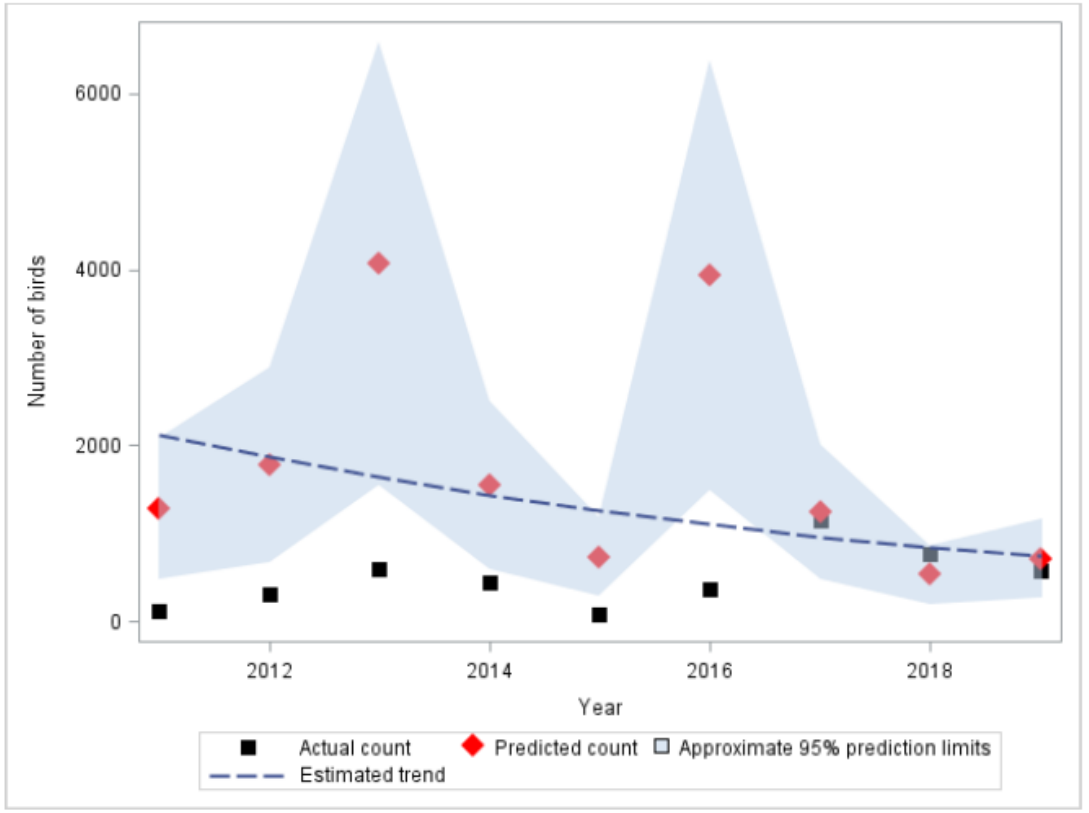

Figure 5: Change in the estimated abundance of White-tailed Black-Cockatoo in the Albany region 2011–2019 based on results of the Great Cocky Counts. The estimated trend in abundance (dashed line) is based on the predicted total count (red diamonds, with approximate 95% prediction limits) after accounting for roosts that were not surveyed or had been cleared. The actual roost counts for each year are shown as black squares.

Thank you for your time

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lotterywest supported

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SWCC south west catchments council

Vicki Stokes – WA Program Manager
Email: vicki.stokes@birdlife.org.au

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