#### **Birds of the Gloucester Tops**

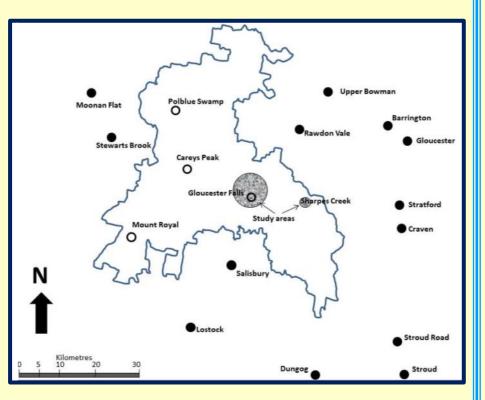




Alan Stuart October 2019

# Birds of the Gloucester Tops

- Low altitude birds
- On the climb
- High altitude birds
- High altitude specialists



#### **Data sources**

- Spring surveys by HBOC members since 2010
- My personal records
- Birdata (national database)

## About the Gloucester Tops

- Part of the Barrington Tops National Park
  - Celebrating 50 Year Anniversary next month
  - Some areas formerly logged
- Part of Gondwana Rainforests World Heritage Area
- Part of Barrington Tops & Gloucester Tops KBA (Key Biodiversity Area)
  - Based on presence of 7 rare or range-restricted bird species
  - Much of the Gloucester Tops is at altitudes of > 1,000m



Superb Lyrebird (southern limit of northern subspecies)

## Owls and other night birds

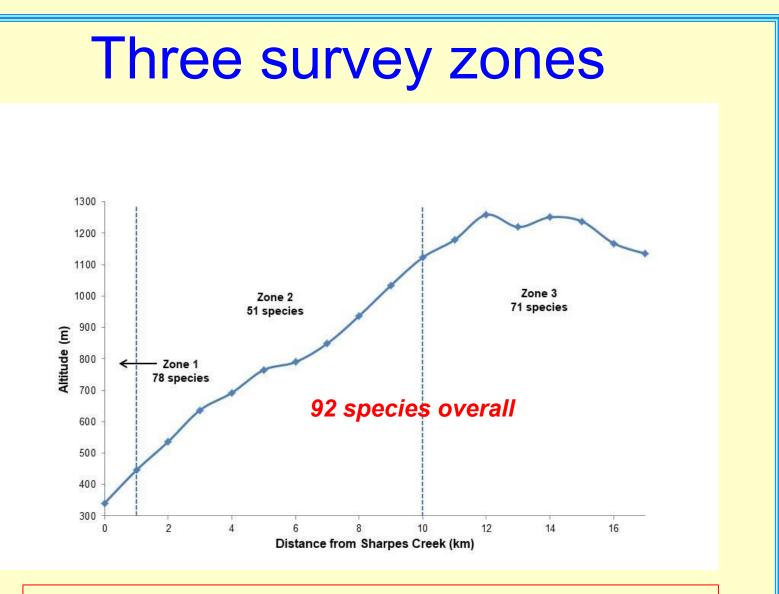
- Not often found in our daytime surveys!
- Southern Boobook and Tawny Frogmouth are often heard around the campsite
- Masked Owls and Greater Sooty Owls sometimes heard or seen at higher altitudes
- Powerful Owls are present at mid and high altitudes



Powerful Owl calls (female, male)



Powerful Owl (photo: Gary Tong)



Far more survey effort at high altitude (80% of surveys)

## **Gloucester Tops habitat**

#### **High altitude**

- A mosaic: patches of eucalyptus open woodland and Antarctic Beech rainforest
- Some areas of Snow Gum
- Woodlands: Dense understorey at 0.5-1.0m and very dense understorey at <20cm</li>

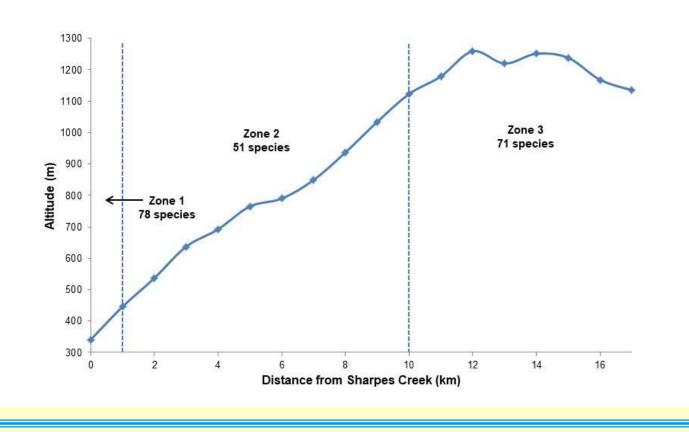


Open woodland with dense understorey

#### Low altitude

- Temperate rainforest, riparian areas, grassy picnic area
   Mid altitude
- Eucalypt woodland interspersed with temperate rainforest

#### **Birds at low altitude**



### Around the Sharpes Creek campsite

- 78 species
- 1 threatened species: Glossy Black-Cockatoo
- 11 summer migrants



Glossy Black-Cockatoos (photo: Rob Palazzi)

### Some summer migrants

Noisy Pitta



Noisy Pitta (photo: Alwyn Simple)



Spectacled Monarch (photo: Lorna Mee)



#### Black-faced Monarch (photo: Rob Palazzi)



Rose Robin (at all altitudes)

#### Some low altitude specialists



Green Catbird Brush-turkey (photo: Ray Burton) Superb Fairy-wrens (photo: Jim Thomson)



Green Catbird

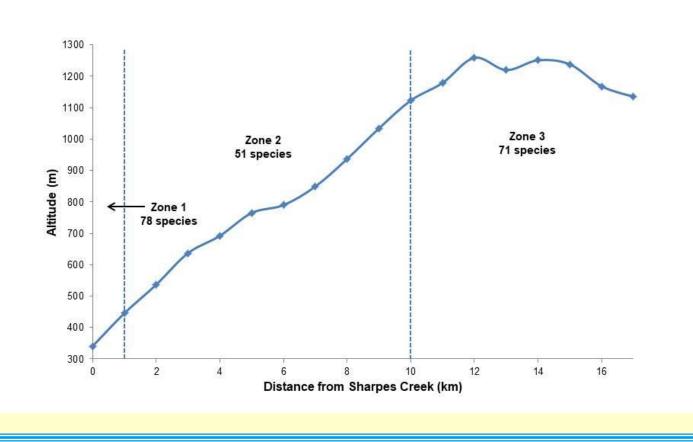


Red-browed Finch (photo: Rob Palazzi)



Australian Raven (photo: Jim Smart)

#### The 400m – 1100m zone



#### Mid altitude specialists



Paradise Riflebird (photo: Rob Palazzi)



Bell Miner (photo: Chris Herbert)



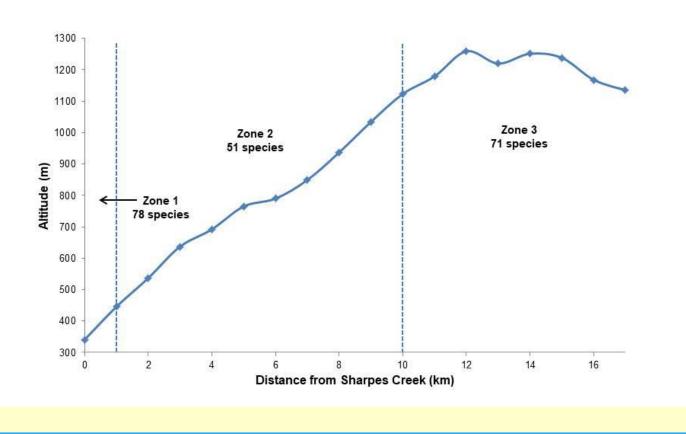


Paradise Riflebird



*The distribution driver is habitat, not altitude! There are low altitude locations elsewhere in our region.* 

### **Birds at high altitude**



### The high altitude areas

- 71 species
- 6 threatened species
- 7 summer migrants
- Summer altitudinal migrant (Bassian Thrush)
- Autumn honeyeater influx
- Five feature birds
  - Difficult or impossible to find elsewhere in the Hunter Region



**Bassian Thrush** 

### Honeyeaters in autumn

- Yellow-faced Honeyeaters and **Eastern Spinebills** 
  - Common all year at high altitude
  - Numbers swell in April-May when Banksias are in prolific flower
- Maye New Holland Honeyeaters arrive
  - Also, smaller numbers of other honeyeaters

New Holland Honeyeater



Yellow-faced Honeyeater



Annual autumn mass migration passage in lower Hunter of honeyeaters from southern Australia, dominated by Yellow-faced Honeyeaters.

The Gloucester Tops influx may involve a more localised movement.

### Threatened species at high altitude



Photos: David Stowe, Rob Palazzi (x 4), Alwyn Simple

## Five feature birds

- Rufous Scrub-bird
- Crescent Honeyeater
- Olive Whistler
- Red-browed Treecreeper
- Flame Robin





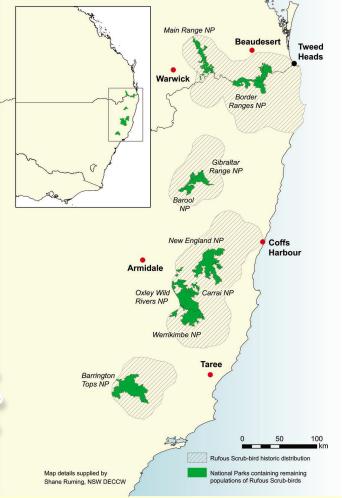
Red-browed Treecreeper (photo: Rob Palazzi)

### **Rufous Scrub-bird**



Photo: Allan Richardson

## Current & former range



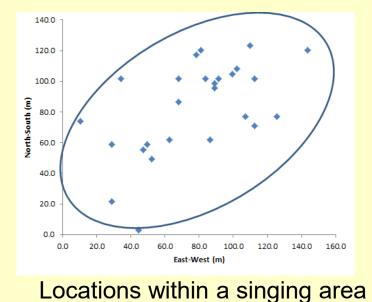
**Distribution in Hunter Region** 

### What we know about scrub-birds?

- Population stable in core habitat in the Gloucester Tops
  - Annual monitoring in Spring since 2010
  - ~4km radius site, ~5,000ha
  - 37 territories identified (~55% long-term occupancy)
- Birds not present at former territories below ~1,000m
- Singing areas are small (0.8-1.5 ha)



One of the spring survey teams

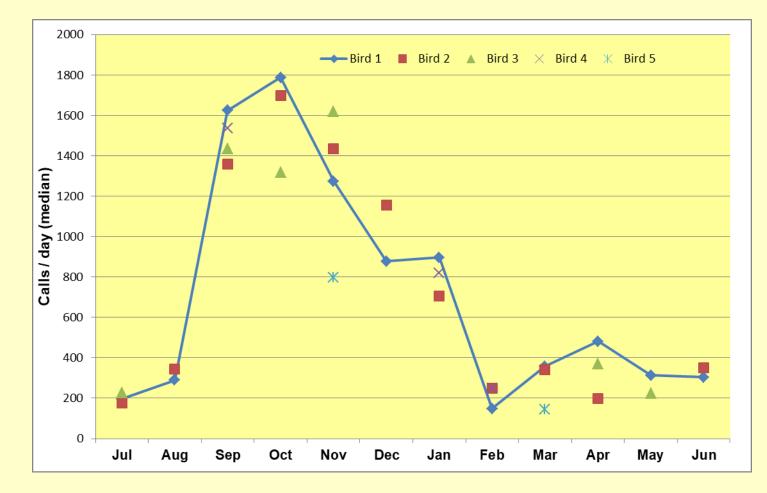


### What don't we know about scrub-birds?

- What are their specific habitat requirements?
- How long do they live?
- Are the males polygamous?
- Where are the females' territories?
- How do males and females interact?
- How do males and other males interact?
- What does a nest look like for the southern sub-species?
- What time of the year do they breed?
- What happens to the young birds?
- How do they cope with predators?



### How often does a Scrub-bird sing?



1000-1800 calls / day from mid-Sep for ~ 3 months
Behaviours were similar for 5 individual Scrub-birds

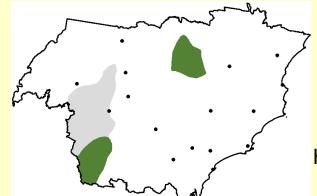
### **Crescent Honeyeater**





**Crescent Honeyeater** 

- Records from Barrington Tops / Gloucester Tops and Mt Coricudgy
- Associated with Banksia
- Some evidence for winter movement to lower altitudes?
- Breeding has never been recorded locally



Distribution in Hunter Region

## **Olive Whistler**

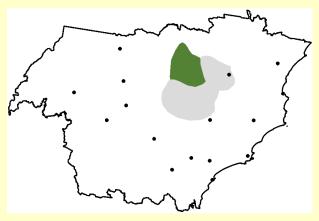


Olive Whistler (photo: Rob Palazzi)



**Olive Whistler** 

- Records from Barrington Tops / Gloucester Tops
- Associated with Beech forest
- Some evidence for winter movement to lower altitudes??
- Breeding has never been recorded locally



Distribution in Hunter Region

## Flame Robin

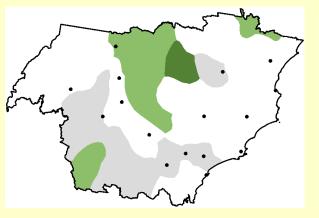
- Summer records from Barrington Tops / Gloucester Tops and Mt Coricudgy
- Winter movement to lower altitudes
- Regular breeding records in the Gloucester Tops



Timeline for low altitude records



Flame Robin

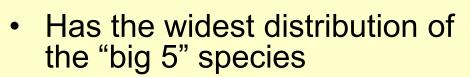


Distribution in Hunter Region

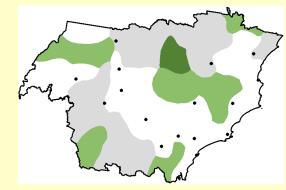
## **Red-browed Treecreeper**



Photo: Rob Palazzi



- Gloucester Tops the most convenient and reliable location
- Gloucester Tops breeding records
- Chatty and gregarious (unlike White-throated Treecreeper)
  - Territorial pairs can have 2-3 permanent helpers



Distribution in Hunter Region



Red-browed Treecreeper

### **Deserving special mention**





#### Lewin's Rail

- Uncommon waterbird at coastal wetlands
- Several Gloucester Tops records!

#### **Satin Flycatcher**

• Rare summer migrant to high altitude areas

## In conclusion

- 92 species recorded over 2010-2019
  - 71 of those species recorded at high altitude
- Possibly another *c*.10 uncommon species are present?
  - The ongoing survey work often turns up another "new" species
- Gloucester Tops hosts several threatened species
- Five of the high altitude species are "feature birds" for local birdwatchers
  - Easy to find them in the Gloucester Tops
  - Difficult or impossible to find elsewhere
- They are home for the endangered Rufous Scrub-bird

### Thanks for coming tonight!

#### If you want to know more

- www.thinkingaboutbirds.com
- www.hboc.org.au

#### Acknowledgements

- 40+ members of HBOC (spring surveys)
- Mike Newman, Margaret O'Leary
- NPWS Gloucester office
- Numerous photographers
- Distribution maps: Dan Williams