

Field Studies Day – Columbey National Park 29/09/2009

Reported by: Mike Newman

Columbey National Park, previously known as Uffington State Forest, is between Seaham and Clarendtown. It is an area of relatively open re-growth woodland dominated by Spotted Gum and rough barked species of eucalypt. The primary purpose of the day was to survey the area for Speckled Warblers and Buff-rumped Thornbills. Both of these species are ground feeders which favour woodland where there is limited mid-storey shrub growth leaving open ground with extensive leaf litter and decaying branches. There are patches of dense melaleucas along the dry creek beds. Extensive areas of Columbey National Park were considered potentially suitable for the target species which had been previously recorded in the area. The secondary objective was to provide an inventory of the birds of this recently declared national park.

Eagleton Road which is approximately 3 km long runs through the centre of Columbey National Park. The habitat along either side of the road is fairly uniform and four survey sites (1 to 4 in Table 1) were established at 0.5, 1.25, 2.0 and 2.7 km along this road measured from the entrance to the park on the Seaham/Clarendtown Rd. A further two survey sites (5 and 6 in Table 1) were established at 0.6 and 1.2 km along Pathfinder Rd. which joins Eagleton Rd. at the 2km mark, the centre of survey site 3. Each survey lasted either 30 minutes (surveys 1 and 2) or 40 minutes (surveys 4 to 6). Surveys were conducted by a team of either 3 or 4 people. Each survey covered an area of approximately 250m radius with the team of observers splitting up and covering separate sectors. Experience during the first two surveys suggested that 40 min was necessary for each survey, particularly when habitat details were collected for the target species.

When the target species were encountered the micro-habitat in the immediate vicinity of the birds was assessed with respect to the extent and type of ground cover. In addition any associated species were recorded.

After the six surveys were completed an additional survey (#7 in Table 2) was conducted over an extended area on the Clarendtown side of the national park. This survey involved all seven participants and involved a range of habitat types ranging from rainforest vegetation along the Wallaroo Creek, which although not flowing contained extensive water holes, to open woodland with varying amounts of under storey vegetation. The conditions were favourable to bird observation throughout the visit with light wind and temperatures in the low 20's.

Table 1 Survey Details

Survey	Name	S	E	Area	Start	Finish	# people
1	Eagleton Rd. 0.5 km	32/35/50	151/43/41	250m	8:00	8:30	4
2	Eagleton Rd. 1.25 km	32/35/29	151/40/48	250 m	8:00	8:30	3
3	Eagleton Rd. 2.0 km	32/35/03	151/43/51	250 m	8:45	9:25	4
4	Eagleton Rd. 2.75 km	32/34/42	151/44/05	250 m	8:45	9:25	3
5	Pathfinder Rd. 0.6 km	32/35/06	151/44/15	250 m	9:50	10:30	4
6	Pathfinder Rd. 1.2 km	32/35/07	151/44/36	250 m	9:50	10:30	3
7	Wallaroo Creek	32/35/52	151/44/56	5 km	12:10	13:30	7

Details of the survey results are provided in Table 2 where P denotes the presence of a species.

Table 2 Columbey NP HBOC Field Studies Day Surveys 29/09/2009

	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Survey 6	Survey 7	RR (1)
Wedge-tailed Eagle			P		P			33
Wonga Pigeon						P		17
Yellow-tailed Black-Cockatoo	P							17
Fan-tailed Cuckoo	P				P	P	P	50
Shining Bronze-Cuckoo	P							17
Channel-billed Cuckoo			P					17
Laughing Kookaburra	P	P	P	P			P	67
Sacred Kingfisher							P	0
Rainbow Bee-eater	P	P						33
White-throated Treecreeper		P	P	P	P	P		100
Superb Fairy-wren	P	P			P	P	P	83
Variigated Fairy-wren	P	P	P		P	P	P	83
Spotted Pardalote	P	P	P	P	P	P	P	100
White-browed Scrub-wren	P	P		P	P	P	P	83
Brown Gerygone							P	0
Speckled Warbler							1	0
White-throated Gerygone						P	P	17
Brown Thornbill	P	P	P	P	P	P	P	100
Buff-rumped Thornbill	1 group	4groups	2groups	1 group		2groups	2groups	83
Yellow-rumped Thornbill						P		17
Yellow Thornbill		P	P	P	P	P	P	83
Striated Thornbill	P	P	P	P		P		83
Noisy Friarbird	P		P	P	P	P		83
Lewin's Honeyeater.							P	0
Yellow-faced Honeyeater.	P	P	P	P	P	P	P	100
Brown-headed Honeyeater.							P	0
White-naped Honeyeater	P		P				P	33
Eastern Spinebill	P				P		P	33
Scarlet Honeyeater.		P	P	P	P	P	P	83
Jacky Winter							P	0
Eastern Yellow Robin	P		P	P	P	P		83
Spotted Quail-thrush						P		17
Crested Shrike-tit							P	0
Golden Whistler	P				P	P	P	50
Rufous Whistler	P		P		P	P	P	67
GreyShrike-thrush	P			P	P	P	P	67
Black-faced Monarch							P	0
Leaden Flycatcher		P		P	P	P	P	67
Grey Fantail	P	P	P	P	P	P	P	100
Black-faced Cuckoo Shrike		P	P		P	P		67
Olive-backed Oriole			P					17
Grey Butcherbird			P					17
Australian Magpie	P		P		P	P		67
Pied Currawong	P				P			33
Australian Raven			P			P	P	33
Red.browed Finch					P		P	17
Mistletoebird	P	P				P	P	50
Silvereye					P			17
Number of Species/survey	19	17	22	15	24	27	30	
Total Species	43							

(1) Reporting Rate Surveys 1 to 6.

Buff-rumped Thornbills were recorded in five of the six 250 m radius surveys with a total of ten groups of birds encountered. The distinctive calls of the species helped the location of foraging groups. The number of birds in a group varied from 1 to about 5 to 7. As discussed further below the Buff-rumped Thornbills were frequently in the presence of other species and it was difficult to determine how many individual were present. The nominal area surveyed was 1.18 km². However it is thought that the effective coverage of the surveyed areas was only c. 50%. On this basis the density of groups of Buff-rumped Thornbills was approximately 17/km². Assuming three birds/group during the breeding season, this is equivalent to 51 birds/km².

The micro-habitat assessment of the areas where the Buff-rumped Thornbills were found suggests that they favour areas where there is some mid-storey shrub growth interspersed with patches of relatively open ground covered by leaf litter and a number of fallen branches, usually quite small timber because this is a re-growth woodland. The shrub layer was typically either about one or two metres high, often a combination of the two heights. Buff-rumped Thornbills were absent from areas where there was no shrub layer and were less frequently observed where the shrub layer was dense (e.g. survey site 5). However one group was located in dense shrub by their calls and remained in cover throughout the period of observation.

The results of the surveys suggest that Buff-rumped Thornbills are fairly uniformly distributed throughout the woodland on either side of Eagleton Road (survey sites 1 to 4). Based on the calculated density of 17 foraging groups/km² it is predicted that the probability of observing a Buff-rumped Thornbill at a randomly selected 2ha survey site in this area is 34%. On this basis it would be expected to record Buff-rumped Thornbills at 5 of a set of 15 2ha sites searched for 20 minutes (the preferred BA Atlas method). It is suggested that this prediction is tested during a future breeding season visit to Columbey National Park. Outside the breeding season it is anticipated that the Buff-rumped Thornbills may form mixed species foraging flocks and become less dispersed; another hypothesis which could be tested.

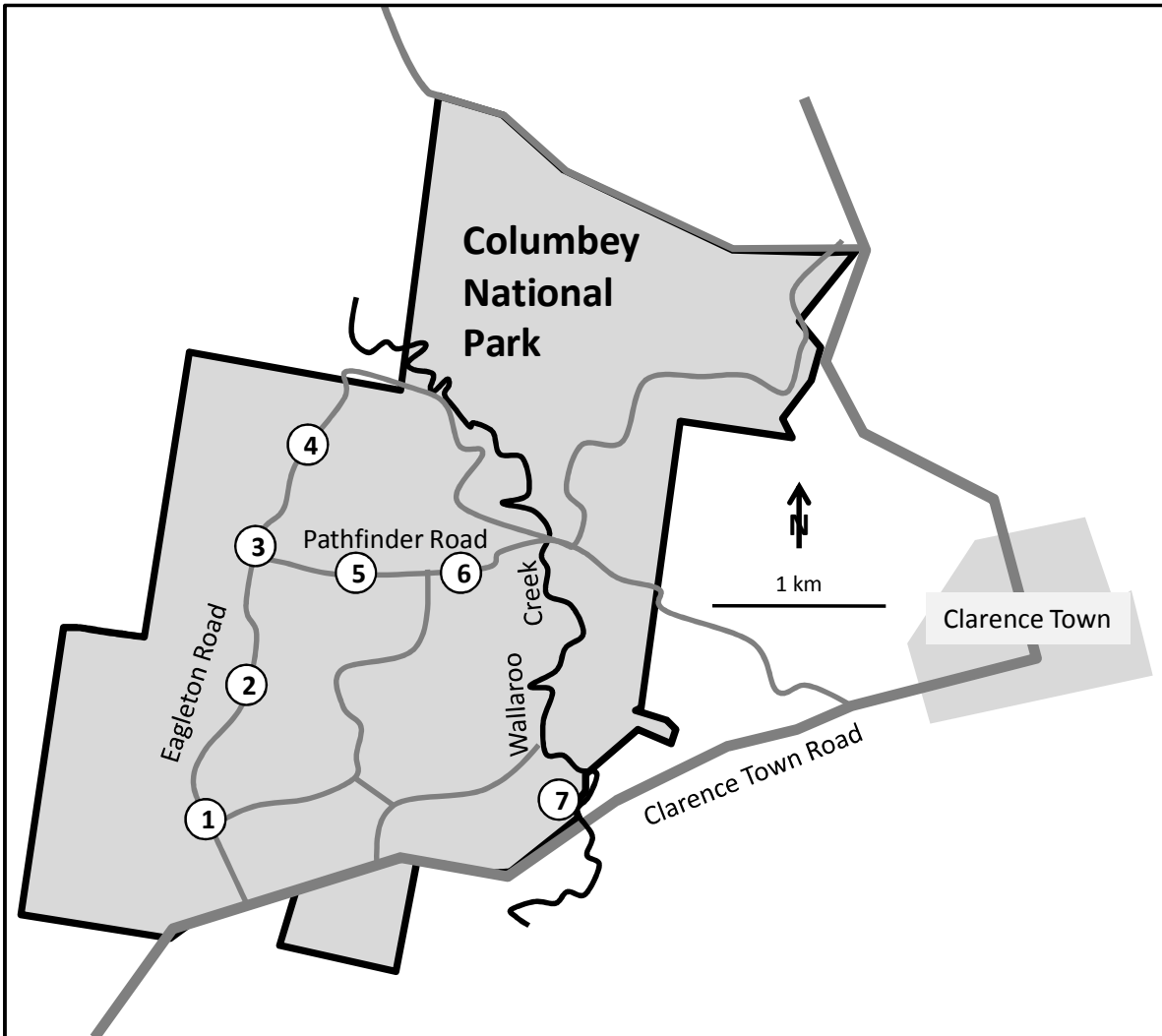
While Buff-rumped Thornbills are normally considered to prefer foraging on the ground this was not observed. In many instances the Buff-rumped Thornbills were noted in the shrub layer often associated with other thornbill species and White-browed Scrubwrens. However, this may be because they joined other thornbill species and scrubwrens which had been disturbed and were giving alarm calls.

The Speckled Warbler was not recorded at any of the first six survey sites. A seventh survey was conducted over an extended area adjacent to Wallaroo Creek where the species had been recorded in previous years. Eventually the one bird was located at the edge of an area which superficially appeared more open and grassy than the habit adjacent to Eagleton Rd. Further investigation is required to determine the status of Speckled Warblers in this area and to quantify any differences in habitat between it and the Eagleton Rd. area.

In all 43 species were recorded within the Columbey National Park boundaries. Thornbills (Brown, Striated, Buff-rumped and Yellow) are the signature species of the re-growth woodland, which is generally impoverished in birds other than Yellow-faced Honeyeaters, Grey Fantails, White-browed Scrubwrens and Spotted Pardalotes. However, a Spotted Quail-thrush was recorded confirming a historical sighting of this elusive species.

The edges of Wallaroo Creek where there is rainforest type vegetation provided a significant boost to the bird diversity and warrants further investigation.

Map of Columbey National Park showing surveys points.



Two pictures showing typical regrowth woodland along Eagleton Rd where the surveys were made are attached.

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