

Three-wattled Bellbird: celebrating the bird behind the Neotropical Bird Club logo

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At the invitation of Neotropical Birding, Graeme Green – member of the NBC launch committee and co-author (with NBC co-instigator and long-time Cotinga editor Guy Kirwan) of the family monograph Cotingas and manakins – offers a personal perspective on the bird that features in the NBC logo.

The offer could not have been more timely or appropriate. When the *Neotropical Birding* editor suggested that I contribute an article about Three-wattled Bellbird *Procnias*

tricarunculatus to the issue celebrating the Neotropical Bird Club's 25th anniversary, I had just returned from Costa Rica where I had finally managed some field time with this charismatic



All photos are of Three-wattled Bellbird *Procnias tricarunculatus*.

1 Adult male, Angeles Norte, San Ramón, Alajuela, Costa Rica, April 2016 (Jorge Chinchilla A.).



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2–3 Adult male(s), Angeles Norte, San Ramón, Alajuela, Costa Rica, April 2016 (Jorge Chinchilla A.).

4 Adult males, Costa Rica, February 2019 (Alex Vargas/📷 birdphotoworld.com).

5 Vocalising
adult male, Los
Angeles Norte,
San Ramón,
Alajuela, Costa
Rica, March
2017 (Eduardo
Mena/emena
Photography;
flickr.
com/photos/
eduardomena).



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and globally threatened species. This success came after failing to see the species in 1989, nearly 30 years earlier! The following is a personal account of this long-desired experience, rather than an in-depth study of the species; for this Snow (1982) and Kirwan & Green (2011) are the essential references. That said, a few titbits are always worthwhile as context!

Bellbirds *Procnias* comprise a genus of four easily recognisable and fairly large cotingas. They are best known for their remarkable (loud and far-carrying) vocalisations, as well as their incredible plumage and adornments. Given the male's trio of long and flexible worm-like wattles, perhaps the most extravagant in appearance is Three-wattled Bellbird. It is also the sole representative of the genus in Central America, ranging from Honduras to Panama; all the others occur east of the Andes.

Three-wattled Bellbird was also the subject of groundbreaking research using radiotelemetry (news 'broken' in *Cotinga* 2: 11, but formally published in Powell & Bjork 2004). This revealed "the most complex migratory pattern recorded for a tropical species". The annual migration cycle was found to include stopovers of 2–5 months "in four distinct life zones: two middle-elevation and two lowland sites separated by as much as 200km". Powell and Bjork's findings had significance way beyond the family Cotingidae: "Our findings," they wrote, "demonstrate the complicated ecological

integration of geographically dispersed tropical ecosystems and the need for comprehensive conservation strategies that include representation of the full array of regional habitats and a greater emphasis on maintaining connectivity". This was important stuff from a glorious and widely sought-after bird. Talking of which...

My first attempt

In 1989 I travelled to the Neotropics for the first time. I visited Venezuela and then, three weeks later, flew to San José (Costa Rica) to spend a further two weeks taking in many of the sites frequented by birders at that time. I was aware that late January/early February was not the ideal time of year to see Three-wattled Bellbird at the regular birding stomping ground of Monteverde, although I had hoped to see an individual in the lowlands at La Selva. Indeed, there were birds present and vocalising at the latter locality. The problem was that they were just not viewable from any of the trails. Monteverde, meanwhile, was cool and windy and there were no bellbirds present. Fail.

The return quest

Nearly three decades later, in late 2018, I organised a 12-night trip for a group of friends which followed an itinerary adopted by many tour companies: Tortuguero, Arenal, Monteverde



6 Unaged immature male, Volcancito Arriba, Boquete, Panama, June 2013 (Kay Wade).

7 Immature male thought to be in its fourth calendar-year, Santa Elena, Puntarenas, Costa Rica, December 2018 (Berni Picado).

8 Presumed juvenile, unsexed, Santa Elena, Puntarenas, Costa Rica, December 2018 (Berni Picado).

and then Manuel Antonio. My wife and I were then going to travel to the south for an extra seven nights to search for other cotingas such as Yellow-billed *Carpodectes antoniae* and Turquoise *Cotinga ridgwayi*. Unfortunately, this trip had to be timed to coincide with the UK's long school holidays (August), which I suspected would not be ideal for bellbirds at Monteverde.

Our party duly arrived at Monteverde Lodge Hotel from Arenal mid-morning on a Saturday. Whilst waiting for our rooms to be ready, a hotel guest came into reception with what was obviously a local birding guide, enabling me to ascertain that there were neither bellbirds nor quetzals in the Monteverde Cloud Forest Biological Reserve (which lies at 1,600–1,800 m). Although no surprise, this was still a massive disappointment. Foiled again!

The following morning, our party was picked up by a local guide, Berni Picado, who drove us to the reserve entrance. Here I was surprised to find at least 15 tour groups waiting for the gates to open. This was a great contrast to 1989, when Phil Whittington and I had the reserve to ourselves at times! However, the morning was excellent and we saw most of our target species, including the first Resplendent Quetzal *Pharomachrus mocinno* to be seen here for a fortnight. I was particularly pleased to find Spangle-cheeked Tanager *Tangara dowii*, which I had missed all those years ago.

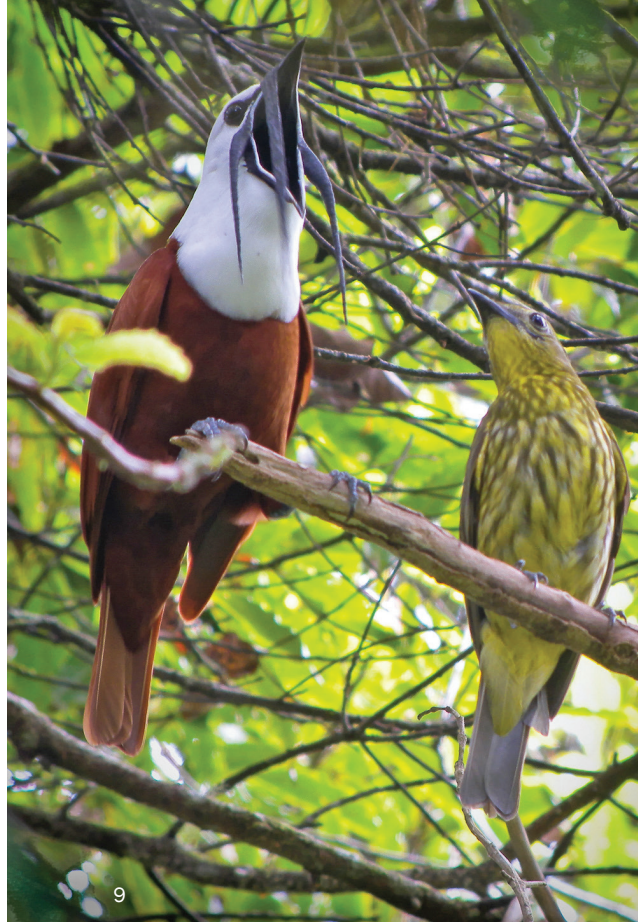
I spent some time chatting to Berni and mentioned my frustration at the lack of bellbirds. To my delight, he stated with great confidence that he could show me bellbirds “just down the

mountain”. Of course, I jumped at this. Once Berni had rearranged an afternoon appointment, he picked me up from the hotel at 13h30.

The first surprise was that “just down the mountain” was exactly that. I had presumed we would need to drive at least 30–60 minutes but the area we searched was just outside Santa Elena, on the road southbound opposite the petrol station at c.1,300 m altitude. Berni turned off the main road onto a wide dirt road and said, simply: “there they are”. I must admit I was somewhat nonplussed as the area was what would be termed suburbia in the UK; scattered houses within relatively extensive wooded areas.

Upon alighting from the vehicle, however, the very first bird we saw was a full adult male Three-wattled Bellbird! The individual was flying at head height away from us following the track (or so it appeared). For the following two hours we moved no more than 400 m from where we started and saw at least six different birds, ranging from immatures to definitive-plumaged adult males. It was simply joyous!

There were males vocalising all round us from every scrap of woodland. The first bird that we watched properly was an immature male (Fig. 7). Berni referred to this as a fourth calendar-year bird. This precision was a surprise. Although ‘delayed’ plumage maturation is well known for manakins and cotingas (see below), Berni’s assertion regarding the exact age of this bird suggested a keen understanding of the process involved, as this individual showed few signs of maturity other than some white on the head and



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9 Vocalising adult male (left) and female (right), Horqueta, Boquete, Panama, April 2010 (Lloyd Cripe/© lloydcripephotos.com).

fully-developed wattles. It was also obvious that this immature's vocalisations were not as proficient as the full adult male we could hear in the distance.

Speaking of which... I was really keen to see the plumage that is depicted on the NBC logo. The adult male was calling from an area of woodland in Finca Los Americas that, to my untrained eye, looked in better condition with more mature trees and a sparser understorey. This individual was very difficult to see – frustratingly so. Eventually we managed good views through the 'scope as the bird perched in a fruiting wild avocado *Ocotea* sp. The bird was vocalising constantly which prompted me to speculate that it was 'defending' an excellent food source.

In fact, as time went on and we saw more bellbirds, it was clear that each individual was closely associated with wild avocado trees. We saw immature males and noted variation in both the length of their wattles and extent of white feathering around the head. All vocalising birds were located in the sub-canopy and remained largely concealed. The only bird perched in the

open was a bird of indeterminate sex in juvenile plumage (Fig. 8). The fresh feather fringes would suggest that this individual had probably recently fledged. This was a great way to spend a Sunday afternoon – and within sight (and sound) of the town of Santa Elena!

Of ageing and avocados

It was clear that these individuals are closely associated with wild avocados (as noted by Moermond & Denslow 1985, and Kirwan & Green 2011), at least at this time of year, during which the birds are leaving the Monteverde area and commencing their migrations either northwest to the Gulf of Nicoya or northeast to Nicaragua via Arenal and Cano Negro. Corredor Biológico Pájaro Campana, a local NGO, is very actively identifying areas containing wild avocados. It is also reforesting these areas and native species and leading educational activities designed to help conservation of this flagship species.

As regards the ageing of the individuals we observed, the development of plumage in Three-wattled Bellbird is described in Snow (1973) and subsequently in Kirwan & Green (2011), but the earliest reference I have located is in Skutch (1969), who writes that "the young males evidently take more than one year, and possibly several years, to acquire their full adult regalia". Delayed plumage maturation has been recorded in 33 bird families (including widely in Cotingidae, the cotingas, and Pipridae, the manakins), with at least 15 potential explanations suggested but no single one-size-fits-all answer agreed (e.g. Cucco & Malacarne 2000). In bellbirds, delayed plumage maturation is presumably connected with the time taken for an individual male to reach its full vocal potential as highlighted with Bare-throated Bellbird *Procnias nudicollis* (Kirwan & Green 2011). Complicating the situation is that individual Three-wattled Bellbirds from different populations have different 'dialects'. Nevertheless, to my ear, it did seem that the 4th calendar-year male lacked the vocal prowess of the nearby full adult male.

Final thoughts

Finally spending time with Three-wattled Bellbirds was a clear birding highlight for me. But the experience of seeing any rare species is always tinged with concern. Three-wattled Bellbird has been officially classified as globally Vulnerable since 1994, when the NBC was born. Forest loss across its range has been extensive and, coupled with the species's altitudinal migrations which entails it finding forest with the desirable



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10 Adult male and presumed juvenile male, location to be confirmed, Costa Rica, February 2019 (Alex Vargas/🐦 birdphotoworld.com).

fruiting trees at many different altitudes, serves to create a difficult environment in which to manage the species's survival. As the logo for the Neotropical Bird Club it is to be hoped that all NGOs and individuals working for the Three-wattled Bellbird's future are successful. I am sure that readers will agree with me that this amazing species deserves to be appreciated by many more generations of birdwatchers.

ACKNOWLEDGMENTS

I was pleased to be invited to write this article for one main reason. I was on the original 'launch committee' of the Neotropical Bird Club (and subsequently joined Council for a short time). As I type this I can look at my bookshelf and see the result of a quarter century of endeavour; *Cotinga* and *Neotropical Birding* are publications of which the NBC and its members and supporters should be justifiably proud. I would like to thank Berni Picado of Ocotea Tours for providing photographs and altitudinal information, for discussing ageing and avocados with me, and for alerting me to work on bellbirds by the NGO Corredor Biológico Pajaro Campana (🐦 cbpc.org). This article would not have been possible without Berni's considerable input. I also thank the following for offering images, whether or not they were used: Lloyd Cripe (🐦 lloydcripephotos.com), Eduardo Mena/emena Photography (🐦 flickr.com/photos/eduardomena), David Rodríguez Arias (🐦 thebirdingexperience.com), Alex Vargas (🐦 birdphotoworld.com) and Kay Wade. I also thank Bill Adsett for furnishing contacts. Finally, best wishes to the Neotropical Bird Club and here's to the next 25 years!

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