Grey-headed Warbler *Basileuterus griseiceps* in danger of extinction?

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Resumen

Durante trabajo de campo en el area del Cerro Negro en el nor-este de Venezuela, se descubrió una pequeña población de Chivi Cabecigris *Basileuterus griseiceps*, uno de las especies mas amenazadas de las especies endémicas en esta parte de Venezuela, y además se observaron Diglossa negra *Diglossa venezuelensis* y Fafao Gargantiblanco *Premnoplex tatei tatei*, los cuales también están en peligro de extinción. Gran parte del Cerro Negro y la Cordillera de Caripe ha sido desforestada desde hace mucho tiempo, y por lo tanto la situación de estas especies es crítica. Los autores describen el hábitat, comportamiento, biología de nidificación, canto y plumaje juvenil de esta ya que esta información era inexistente hasta realizarse este estudio. El *B. griseiceps* necesita vegetación baja y densa en selva nublada natural, y por lo tanto no puede sobrevivir en plantaciónes de cafe, las cuales abundan en la zona. Se propone seguir investigando esta area y además la Serranía de Turumiquire y Los Cumbres de Bonifacio para determinar el tamaño de las poblaciones existentes y asi poder definir medidas que favorezcan, la proteccion de estas especies.

Introduction

Grey-headed Warbler Basileuterus griseiceps is one of six threatened species endemic to the mountains of north-eastern Venezuela (Cordillera de Caripe and Paria peninsula), and is one of the least-known of all the woodwarblers Parulinae. Virtually nothing has been written about this species, Ridgely & Tudor⁵ describing it as "essentially unknown in life". This and the apparent dearth of recent records as highlighted by Collar et al.², prompted the authors to make an attempt to discover more about this species in the field.

B. griseiceps was discovered in 1868 when Sclater and Salvin collected the type-specimen from the "neighbourhood of Caripe" (probably Cerro Negro, which is c.10 km north-west of Caripe and has produced many of the records of this species)². Since then 42 specimens have been taken, between 1898 and 1963, all but three of them from just two mountains: Cerro Negro and Cerro Turumiquire, some 40 km apart. The other specimens were taken from Cerro Peonia (two in 1941) about 70 km west of Caripe, and from near San Antonio (in 1898), c.40 km west of Caripe and just to the north of Cerro Turumiquire. Ridgely & Tudor⁵ were correct in their assessment of this species as until 1993 there had been just one sighting of a single bird since the last ones were collected in 1963. The statement in Collar et al.² that B. griseiceps had been recorded fairly frequently on Cerro Negro is incorrect and in fact refers to a single bird seen on Cerro Negro in 1987 during the rainy season (probably June) (M. L. Goodwin verbally 1993).

Recent observations

During a field trip to Venezuela in early 1993 David Beadle and JC surveyed the area of Cerro Negro and after a two day search found two birds. After moving from Valencia to Maturín PB continued this search in 1994 and found birds in the same area. Considering the paucity of records and lack of information about *B. griseiceps*, full details of these records are given below (see Map):

*February 1993, observers: David Beadle and Jon Curson.

Two adults, possibly a pair, in dense brushy understorey above a coffee plantation, feeding low in the undergrowth (1-2 m from the ground) in association with a small mixed flock of Stripe-breasted Spinetails *Synallaxis cinnamomea* and Ochre-breasted Brushfinches *Atlapetes semirufus*.

*December 1993, observers: Brian Cox, John Flynn, Graham Spinks and Bob Watts.

A single bird was seen (on two consecutive days), along with an individual of the threatened Venezuelan Flowerpiercer *Diglossa venezuelensis*², in a finger of semi-degraded forest in an area dominated by coffee plantations along a tributary of the Río Caripe, 12 km east of Teresén (= 17 km east of Caripe), in Los Cumbres de San Bonifacio (see *Cotinga* 2: 30-31, 1994).

*February 1994, observers: Peter Boesman and

Leila Kurbage.

One adult at 09h00 in a small flock with Oleaginous Hemispingus *Hemispingus frontalis* slowly moving in the lower tier of the trees inside the forest. Two adults, probably a pair, were seen at 10h30, slowly moving in dense understorey at the forest edge. No observations were made lower on the slope.

"April 1994, observer: Peter Boesman.

Two adults at 07h00, c.8 m high in the upper parts of a small tree, apparently following some *H. frontalis*, very close to the location of the previous observation. Some soft contact calls were heard and taped. No observations lower on the slope but interestingly a female plumage *D. venezuelensis* was recorded (and the song taped) in some *Heliconia* thickets.

*May 1994, observers: Howard Laidlaw, Brian Finch and Peter Boesman.

A probable observation of an individual at 11h00 in thickets at the edge of forest in the same place as the two previous records.

*August 1994, observer: Peter Boesman.

Two adults with two juveniles at 06h30 low in *Heliconia* thickets and brushy undergrowth just above the coffee plantation. Alarm calls and juvenile calls were heard and taped. No observations were made in the forest.

*August 1994, observers: Steve Hilty and Peter Boesman.

One pair inside the forest at 09h30 apparently feeding in association with White-throated Barbtail *Margarornis latei*, another threatened species of which there have been no mainland records (subspecies *tatei*) since 1963² (both species were taped). Apparently the same pair (one individual had a conspicuous moult-pattern in the tail) at forest-edge around 11h00 with Stripeheaded Brush-finch A. torquatus.

Behaviour and ecology

Meyer de Schauensee & Phelps⁴ state that *B.* griseiceps occurs in "cloud-forest, second growth and clearings", where it "forages in the lower tier of the forest". From the recent observations it appears that the species is basically one of dense understorey at the edge of undisturbed subtropical forest and natural



Map: Grey-headed Warbler *B. griseiceps* in north-east Venezuela

clearings in the forest. It also seems to frequently wander inside forest with mixed-species flocks and apparently survives in rather disturbed forest if there is a dense understorey (of, e.g. *Heliconia*). The understorey in the forest on Cerro Negro consists of palms, *Clusia* sp., ferns etc.

Grev-headed Warbler

These first field observations suggest that birds actively forage in the undergrowth during the first hours after light and eventually follow flocks somewhat higher into the trees. When solitary, birds tend to move much more slowly in very dense undergrowth and are much more difficult to observe. Pairs forage close together, normally one bird hopping to another plant, followed by the other after uttering some soft *tsip* contact calls. They mostly search the upper surface of foliage but less frequently they hang almost upside down to investigate the underside of leaves and birds were also seen picking food from twigs and branches. The species with which they associate to feed are mostly typical of the low understorey with Atlapetes spp. and Margarornis tatei nearly terrestrial species. This clearly illustrates the affinity of B. griseiceps for this level of the forest. Breeding seems to occur from May to July, which might explain the paucity of observations during the May visit. Juveniles fledge in August and follow their parents in the first weeks.

Identification and voice

The juvenile plumage and voice were previously unknown³ but are now briefly described below. The plumage of the observed juvenile comprised a completely dark-grey hood and upper breast and a brownish body contrasting with paler underparts. The pale legs, loose feathers, stubby tail and yellow gape suggested that the two individuals had only recently fledged. When foraging the adult birds uttered soft *tsip* contact-calls but when excited they repeated a relatively harsh *tseck* call. The song was a lively, slurred, melodic (*hu*)wee-che*tseew* repeated several times, during which a second bird apparently responded with a quickly repeated single call note *tseng*.

Conservation

If *B. griseiceps* is indeed dependent on original forest with an undisturbed understorey then it would appear to be in serious trouble. The Cordillera de Caripe, which forms the

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centre of its historic range, was largely deforested a long time ago (Caripe was founded in 1734 and has a long agricultural tradition). The mountains are generally bare with occasional very small patches of remnant forest in inaccessible gullies. Deforestation still continues and in the dry season numerous fires caused by local farmers reduce daily the patches of natural habitat. The few slopes around Caripe which still support forest leave some hope. However, under closer inspection this "forest" on Cerro Negro was in fact coffee plantation with shade trees left forming a 30-40% canopy cover. The whole slope had been converted to coffee causing the destruction of the understorey on which the warblers appear to be dependent. White-tailed Sabrewing Campylopterus ensipennis (another threatened endemic of this region²), however, was common in the coffee (see below). Only at the top of the slope close to the ridge-top did we find a patch of undisturbed forest, an area of $c.2 \text{ km}^2$.

We investigated several other apparently forested slopes around Caripe and every time we found coffee instead of natural undergrowth. None of the threatened endemics were present except for C. ensipennis which apparently adapts well to coffee plantations if there is enough canopy and preferably some Heliconia thickets (which is certainly the case on the Paria Peninsula¹). We have not vet visited Cerro Turumiquire, the other historic stronghold of this species², and have no information on the extent of remaining forest there. Although large stretches have been deforested. and the area is generally known for its coffee some places may still be untouched due to the difficult access.

These recent observations suggest that *B.* griseiceps (and probably also *D. venezuelensis*) is more seriously threatened than was previously realised and could be in danger of extinction. In the surveyed patch on Cerro Negro we estimate the population to be c.2-5 pairs (the cluster of observations in Fig. 1 might suggest there is only one pair involved). Around Caripe no more than 10 similar patches remain. Some of these patches, including those on Cerro Negro, are within El Guácharo National Park and should therefore be protected although the reality is that habitat destruction continues and current levels of interventions are insufficient to stop it com-



Grey-headed Warbler Basileuterus griseiceps (David D. Beadle)

pletely.

However, the possibility of a previously undiscovered population of B. griseiceps on Los Cumbres de San Bonifacio, the mountainchain running east-west along the border of Monagas and Sucre states, was realized in December 1993 when a bird was seen east of Teresén (along with D. venezuelensis: see above). These mountains apparently still support extensive forest on the southern slopes and the humid northern slope appears untouched (when seen from the Cariaco-Caripito road) although with only two peaks above 1,400 m (the historical altitude range of the species is 1,200-2,400 m²) the extent of suitable habitat may be quite small. Elsewhere within this chain a visit to the "Río Colorado" road (which runs through Los Cumbres) revealed coffee plantations, C. ensipennis, but the only Basileuterus was Golden-crowned Warbler B. culicivorus.

Apart from this recently discovered population (of unknown size) in Los Cumbres de San Bonifacio, other hopes for the species are that although our survey included the complete eastern part of Cerro Negro, the western slope has still to be investigated. It seems possible that there is more undisturbed habitat on these unsurveyed slopes which would increase the extent of continuous habitat available to the warblers. However, maps and conversations with locals suggest that the human population is quite high on the western slopes and the resultant habitat destruction quite severe. The Serranía de Turumiquire is another area that has avoided scrutiny in recent years and may also support areas of suitable habitat but is in urgent need of surveys to confirm this.

There are several actions which urgently



White-throated Barbtail *Margarornis tatei* (David D. Beadle)

need to be taken to help develop a conservation strategy for this species.

Considering there is now evidence that all four threatened species (namely *B. griseiceps*, D. venezuelensis, M. tatei and C. ensipennis) found on the north-eastern "mainland" still survive within El Guácharo National Park on Cerro Negro, every effort should be made to halt the encroachment of coffee cultivation and fire damage on Cerro Negro and to allow the forest to regenerate as much as possible. This is far from evident as many farmers are realising coffee is more profitable than orange. another traditional agriculture of the region and due to increasing international coffee prices (C. Sharpe in litt. 1994) the government is promoting the cultivation of coffee (an activity that admittedly leaves some trees, causes less soil erosion and thus protects the watershed). Equally threatening is the increase of campesinos who settle on the slopes and burn numerous small patches every year to cultivate vegetables.

Now that vocalisations of *B. griseiceps* are sufficiently known a thorough survey should be made of the complete El Guácharo National Park in order to propose clear actions for the park administration. Also, Los Cumbres de San Bonifacio and ultimately the Serranía de Turumiquire should be thoroughly surveyed to determine the species's status in these mountains and if viable populations are found some form of protection should be considered. As these areas are far less populated (by humans) than the Caripe region and the Serranía de Turumiquire is a valued source of water for the entire north-east (and Margarita Island) such protection could be feasible. Naturally, all surveys should include systematic searches for *D. venezuelensis* and *M. tatei*, as

it seems that these species have similar habitat requirements and would benefit from any subsequent conservation actions.

Thirty years after the last specimen was collected there is finally proof that B. griseiceps survives on the Cerro Negro and within Los Cumbres de San Bonifacio although its status is apparently critical. The population is evidently tiny and on Cerro Negro the available habitat is probably little more than 2 km² and still diminishing through forest destruction. Little intact habitat is left anywhere within its historic range but there is a possibility that a viable population survives in Los Cumbres de Bonifacio and the hope that a similar situation exists within the Serranía de Turumiquire. Further survey work is urgently needed in order to develop a coherent conservation strategy for this species, which would also benefit three other north-east Venezuelan threatened birds.

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