

## Kaempfer's Tody-tyrant

### *Hemitriccus kaempferi*



Kaempfer's Tody-tyrant *Hemitriccus kaempferi* is a globally threatened species known from three present-day localities in north-east Santa Catarina<sup>2-4</sup> and south-east Paraná (B. Reinert<sup>1</sup>), in south-east Brazil. Until recently it was known from only the type-specimen, collected by E. Kaempfer at Salto do Pirai, in 1929<sup>6</sup>, and a second specimen, a juvenile, taken by H. F. Berla at Brusque, in 1950, and located recently at Museu Nacional de Rio de Janeiro<sup>8</sup>. The species was rediscovered by M. Pearman near the type-locality, in 1991<sup>3,4</sup>, with subsequent observations from the same area, and at Reserva Particular do Patrimônio Natural de Volta Velha, Itapoá<sup>4</sup>.

Very little is known of the species' ecology. A pair, at Volta Velha, had a feeding territory along a c.100 m stretch of road. They usually foraged 0.5–1.0 m above ground, rarely reaching 3.5 m, and maintained a distance of c.5 m between each other. Prey items include insects taken by sally-gleaning from leaves, once a Lepidopteran caterpillar. The species was observed foraging in close proximity to Ruby-crowned Tanager *Tachyphonus coronatus* and Lesser Woodcreeper *Xiphorhynchus fuscus*, but not within a mixed flock. In response to playback, what appeared to be the male chased the female, producing a notable wing-slurring reminiscent of Rufous Gnateater *Conopophaga lineata*, though much softer. The photographs presented here, taken at Volta Velha, are probably the first available of the species.

The species' peculiar plumage pattern has already been noted and is well illustrated in the accompanying photographs. The salient features that aid its identification from Eye-ringed Tody-tyrant *H. orbitatum* (which inhabits the same forests at Volta Velha) are the brownish tones to the head and neck region. More striking is the pattern of the outer rectrices in one member of each pair we have observed, presumably the male. These feathers are slightly longer, and broader tipped, resulting in a slight tail notch. They have a pale yellowish outer fringe and tip, and a blackish subterminal band. We recently suggested that these features probably point to a closer relationship with Fork-tailed Tody-tyrant *H. furcatus* than to other tody-tyrants<sup>4</sup>. If such a relationship is confirmed through phylogenetic analysis, the genus *Ceratotriccus* appears to be available for these species. For comparison, we include a picture of the latter species. Both species share not only the striking tail pattern but also the brown-tinged head,

contrasting with a greener mantle (more evident in *H. furcatus*), and pale (buffy) loreal area. They differ mainly in their underpart and iris coloration. Vocal similarities also appear to suggest this, though we have not performed any definitive analysis.

Kaempfer's Tody-tyrant occurs in lowland forests. The sites where we found the species comprise two characteristic physiognomies. The reserve at Volta Velha represents Atlantic Dense Ombrophilous Forest<sup>7</sup>, and *H. kaempferi* was found in areas of 10–12 m-tall forest on sandy soils, with *Euterpe edulis*, *Bactris* sp., tree ferns, and a large number of epiphytes and vines, mainly bromeliads and *Phyllodendrum*, with a dense cover of ground bromeliads. Birds were also seen in a lower type of vegetation (c.5 m), partially waterlogged, with predominance of a Melastomataceae. The region has a mean elevation of 9 m, is located 5 km from the coast and 10 km from the foothills of the Serra do Mar, and further details of its floristic composition are provided by Negrelle<sup>7</sup>. At Salto do Pirai, further inland, the species occurs in secondary foothill forest and degraded edge, <10 m tall, with a predominance of *Cecropia* sp., and it was assumed that the species survived only in a small area as most of the valley bottom vegetation in the area had been cleared<sup>4</sup>.

We earlier advocated that thorough surveys were needed at Pirai, and searches around Brusque were also required, initially to locate suitable habitat. On 29–30 November 2002 JMB, GMK, Jeremy Minns and Heinz Remold visited Brusque—thus partially covering the targets set for the species' conservation<sup>2</sup>—and found a situation similar to that at Salto do Pirai, namely that lowland and valley-bottom areas have been cleared or are being cleared for housing development, and this is also encroaching hillsides, which are still forest-covered. We found much habitat resembling the areas where the species was found at Salto do Pirai along the road to Brusque (from São João Batista and further south), as well as around Planície Alta, Guabiruba (27°06'S 49°03'W), near Brusque. However, a random stop along the above-mentioned road and two visits to Planície Alta failed to locate Kaempfer's Tody-tyrant, despite use of playback. Similarly, all earlier work at Salto do Pirai concentrated in a small area around the CELESC station<sup>4</sup>. We surveyed other access roads east of this area and located patches of habitat similar to that at Volta Velha, but also failed to find the species in these areas. However, all of our visits were brief and to a degree negatively influenced by bad weather.

We estimate that the season was appropriate, as we found *H. kaempferi* responsive to playback at Volta Velha on 1 December 2002.

We suggest that more intensive surveys are required of the restricted region detailed above, which has a good network of access roads, between south of Brusque and north to Volta Velha. We predict such work will result in the discovery of new areas of suitable habitat, and possibly new populations of the species (as has been the case in southern Paraná state), thus better establishing its range, conservation status and priorities for its conservation.

RPPN Volta Velha covers 1,500 ha, and >80% is pristine forest<sup>7</sup>. Other threatened species have been found in the reserve<sup>5</sup>, resulting in the area ('Baía de Babitonga') being designated one of the 15 priority Important Bird Areas (IBAs) identified in the Brazilian Atlantic Forest<sup>1</sup>. The area where the species was recorded in Paraná ('APA Guaratuba') has also been designated a priority IBA<sup>1</sup>. The Estação Ecológica de Bracinho protects the forests at Salto do Pirai and is also a designated IBA<sup>1</sup>, but it covers no suitable habitat for this species.

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Figures 1–2. Kaempfer's Tody-tyrant *Hemitriccus kaempferi*, Volta Velha, Santa Catarina, July 2000 (Dante R. C. Buzzetti)



Figure 3. Fork-tailed Tody-tyrant *Hemitriccus furcatus*, Boa Nova, Bahia, July 2002 (Arthur Grosset)