

OCCURRENCE OF THE FORK-TAILED HUMMINGBIRD *Eupetionema macroura* (GMELIN, 1788) IN THE CENTRAL SOUTHERN PARANÁ STATE, BRAZIL: OBSERVATIONS OF DISPERSION

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RESUMO

O presente estudo trata do primeiro registro em literatura do beija-flor-tesoura *Eupetionema macroura* (Gmelin, 1788), espécie localizada em Guarapuava e na região Centro-Sul do Paraná. A espécie apresenta rápida capacidade para colonizar novos ambientes, principalmente áreas urbanas e ou fragmentadas, obtendo vantagens na utilização da vegetação alterada ou exótica. Mais estudos são necessários sobre a ecologia do mesmo e o papel deste na estruturação de comunidades regionais de beija-flores do Estado do Paraná.

Palavras-chave: *ecologia, dispersão, beija-flor-tesoura, Trochilidae.*

ABSTRACT

This report is the first documented record in literature concerning to Fork-tailed Hummingbird *Eupetionema macroura* (Gmelin, 1788), a species located in Guarapuava city and South-Central region of Paraná State. This species has the ability to rapidly colonize new environments, mainly in urban and fragmented areas, by taking advantage of its ability to explore modified and exotic vegetation. Further researches are needed to investigate its recent role in the regional community structure of the hummingbirds from the Paraná State.

Key words: *ecology, dispersion, hummingbirds, Trochilidae.*

The Fork-tailed Hummingbird *Eupetionema macroura* (Gmelin, 1788) is a nectarivorous species of the family Trochilidae, which is very common to Brazil (1). It is a widely distributed species belonging to a monotypic genus. Its average size varies between 15-18 cm long and bears a very conspicuous forked tail. In Brazil, this species is distributed from the southern track of Atlantic Forest, to the states of Rio Grande do Sul (2), Paraná and Santa Catarina (3), Mato Grosso do Sul, Mato Grosso, Minas Gerais, Goiás and Pará (2). This species is commonly found in

urban areas.

Because it is a relatively large species compared to other hummingbird species, its interaction with them is interesting and antagonistic, given that Trochilidae has specific defense strategies of floral resources and foraging areas (1).

In the Paraná State, the species has wide but discontinuous distribution, and is commonly reported in such urban centers as Londrina (4) and Maringá (5). It may also appear on farms, such as the Private Natural

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Heritage Reserve (PRNP) Fazenda Matão in Loanda - PR (6). Its presence in the south-central region of the Paraná State is not discussed yet and there is nothing known about its occurrence in areas of Araucaria Forest (7). In accordance with a detailed proposal by Straube et al. (2006) (3), the records of this species in Paraná State is a recent colonization and may have involved a process of ecological release, thus a positive response to the forest fragmentation process.

This document aims to report the probable recent occurrence *E. macroura* to the south-central Paraná State. Recordings were made in two different places, the first register date were 02/2008 in the vicinity of the campus Center of Technological Development of Guarapuava (CEDETEG) (25° 22'59.74"S, 51° 29'15.93" W) from the Universidade Estadual do Centro-Oeste, in Guarapuava city. The second record was at an urban area near the CEDETEG campus in 06/2009. These two events were both recorded in an area of mixed vegetation interspersed among remnants of native fields, pastures, woods and a small fragment of forest.

An additional record occurred in the Parque Municipal das Araucárias (PMA; 25° 21'04.74 "S, 51° 27'55.94" W) in 07/2009. *Euptomena macroura* was observed by the authors in PMA interacting with other species of hummingbirds, such as the White-throated Hummingbird *Leucochloris albicollis* (Vieillot, 1818) and the Glittering-bellied Emerald *Chlorostilbon aureoventris* (Shaw, 1812) during foraging from flowers of the flame vine (*Pyrostegia venusta* Miers; Bignonaceae). This area is a fragment of preserved Araucaria Montana Forest.

Considering that the one year inventory of Belin (2003) (9) in the area of PMA had not reported the presence of *E. macroura*. And also Vogel et al. (in press) (8) carried out an

avian survey during 2006 and 2007 in the CEDETEG campus and did not record *E. macroura*. These two studies reinforces the statement of a first documented record of the species in Guarapuava-PR.

The species usually has rapid dispersion taking advantages of the processes of forest fragmentation. A study by Philippsen et al. (2010) (5) in the campus the Universidade Estadual de Maringá (UEM), northern Paraná compared data from a previous inventory, and found that within ten years, this species, which was formerly occasional, became constant. Thus, highlighting the ability of *E. macroura* to use and reproduce successfully in disturbed habitats.

Apparently, this hummingbird has developed more suitable skills in order to explore environments with secondary vegetation and rich floral resources even in winter (10). These aspects suggest a high adaptive plasticity of the populations of *E. macroura* in the Paraná State.

Local studies on the ecology of hummingbirds are necessary for understanding the role of *E. macroura* in community structure, since processes of interspecific competition, which over the course of evolutionary time, can result in cases of character displacement or competitive exclusion (11). Thus, our document emphasizes the need for monitoring the fork-tailed hummingbird in the Paraná State, in order to understand its dispersal process, and whether it fits a pattern related to forest fragmentation.

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