

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Eighteenth meeting of the Conference of the Parties
Colombo (Sri Lanka), 23 May – 3 June 2019

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal:

To include the species *Parides burchellanus* in Appendix I, in accordance with Article II, paragraph 1 of the Convention and satisfying Criteria A i,ii, v; B i,iii, iv and C ii of Resolution Conf. 9.24 (Rev. CoP17).

B. Proponent

Brazil

C. Supporting statement:

1. Taxonomy

1.1 Class: Insecta

1.2 Order: Lepidoptera

1.3 Family: Papilionidae

1.4 Species: *Parides burchellanus* (Westwood, 1872)

1.5 Synonymies: *Papilio jaguarae* Foetterle, 1902; *Papilio numa* Boisduval, 1836; *Parides socama* Schaus, 1902.

1.6 Common names:

English: Swallowtail

Portuguese: Borboleta-ribeirinha

2. Overview

The present proposal is based on the current knowledge about the species *Parides burchellanus*, well presented in Volume 7 of the Red Book of the Brazilian Fauna Threatened with Extinction¹ and in present data on the supply of specimens for sale in the international market. The species has a restricted distribution² with populations in the condition of decline as a consequence of anthropic actions in their habitat. It is categorized in Brazil as Critically Endangered (CR), according to criterion C2a(i) of the International Union for Conservation of Nature – IUCN. This criterion implies small and declining populations. In addition, these populations are also hundreds of kilometers apart from each other. The present proposal therefore seeks to reduce the pressure exerted by illegal trade on this species through its inclusion in Annex I to the Convention.

3. Species characteristics

3.1 Distribution

The current distribution of the species includes only Planaltina (DF), Planaltina de Goiás (upper Maranhão river) (GO), the region around Brumadinho, near Belo Horizonte (MG) and the area around Serra da Canastra National Park^{2,9}. There are historical records in areas that are now much altered, such as the municipalities of Sobradinho (DF), Anápolis (GO), Carmo do Rio Claro, Matosinhos (Rio das Velhas) and Uberaba (Farinha Podre) (MG)^{2,3,4,5,6}, Batatais and Bauru (SP)^{3,4,7,8}. Despite several attempts at localization, there is no recent record in any of these locations (ICMBIO/MMA 2018).

3.2. Habitat

River margins at the slopes of gallery forests in the Cerrado region at altitudes between 800 m and 1,100 m.

3.3 Biological characteristics

The species is multivoltine. In Brumadinho, adults are sighted during the whole year, with peaks from March to May and from October to December⁹. The host plant, *Aristolochia chamissonis* (Klotzsch) Duch. (Aristolochiaceae), is distributed in a small strip along streams at the same habitat of the butterfly.

3.4 Morphological characteristics

Both genders are similar, the male being differentiated from the female by the presence of whitish odor scales along the anal margin of the dorsal surface of the posterior wing⁴. Racheli⁸ gives a detailed description of the species' morphology.

3.5 Role of the species in the ecosystem

The species is at the base of the food chain and a pollinator of riverside plants.

4. Status and trends

The species is classified as Critically Endangered (CR) C2a(i) according to the present Brazilian Red List of Threatened Species⁽¹⁾. It has recently been reassessed by IUCN as Endangered (EN)B2ab(iii) considering a new subpopulation was found at the North of Minas Gerais around Serra da Canastra National Park⁽¹²⁾.

4.1 Habitat trends

Its habitat is under reduction and degraded, especially the populations near the cities of Brasília (DF) and Brumadinho (MG).

4.2 Population size

It is estimated that the local population size in Brumadinho is 10 to 40 mature individuals over an area of 1.5 km x 30 m and in Planaltina (DF) from 10 to 40 individuals over an area of 2.2 km x 30 m (4 to 34 ind/ha)⁽²⁾. In Brumadinho, the studied population is slightly larger, with numbers reaching about 100 individuals in an area of 1 km x 30 m⁽⁹⁾.

4.3 Population structure

Multivoltine with two annual peaks. It moves only a few hundred meters along the rivers being unable to cross large distances. There is no natural connection between the three known subpopulations.

4.4 Population trend

Declining⁽⁹⁾.

4.5 Geographic trends

Generalized reduction in its Extension of Occurrence (EOO) due to the local extinction of the populations formerly known from the North of São Paulo and Southwest of Minas Gerais. Localized reduction of its Area of Occupancy (AOO) due to habitat degradation in two of the three known localities (Planaltina and Brumadinho).

5. Threats

Fragmentation and change of its natural habitat and deforestation of gallery forests represent the main threats^(10,4), mainly caused by agricultural activities, fire use and urban occupation. Pollution of streams is also a strong threat, as the occurrence of the species is associated with water courses, depending on the host plant⁽⁴⁾. Recently there has been an increase in the supply of these butterflies on trade websites such as www.theinsectcollector.com and www.ebay.com. The conservation status of its host plant, *A. chamissonis*, should also be evaluated, since it is rare and associated with fragile environments.

6. Utilization and trade

6.1 National utilization

The offer for sale of specimens of the species *Parides burchellanus* is observed only outside Brazil, on international market sites. The number of specimens found in sales portals has increased, especially in the last year.

6.2 Legal trade

The Brazilian Administrative Authority (IBAMA) has no record of authorized exports in the last ten years (January 1, 2008 to December 17, 2018).

6.3 Parts and derivatives in trade

There is no legal trade of parts or derivatives of this species. There were a few non-commercial transactions with scientific purposes. Pined specimens have been found for sale in international sites.

6.4 Illegal trade

Illegal trade is evidenced by the supply of specimens for sale outside Brazil, according to Table 1.

Table 1: Number of individuals offered for sale in the international market in December 2018

Portal	Date of consultation	Amount of specimens for sale	Country where it is sold	Price
theinsectcollector.com	17 December, 2018	13 (7 males, 5 females, 1 unidentified)	Spain	€850.00 to €2,950.00
ebay.ph	17 December, 2018	5	Spain	€795.00 to €2,400.00
ebay.com.my	17 December, 2018	1	Argentina	U\$455,10

6.5 Real impacts or potential impacts of trade

Considering population sizes, population decline, restricted and degraded habitats, the number of specimens offered for sale indicate potential damage to the natural populations of *Parides burchellanus*, which is already under pressure for habitat reduction.

7. Legal instruments

7.1 National

The native fauna is protected by provisions of the Brazilian legislation derived mainly from Article 225 of the Federal Constitution, which expressly states that it is the duty of the Government and the collectivity: "VII - to protect fauna and flora, prohibited under the law practices that jeopardize their ecological function, cause the extinction of species or subject animals to cruelty". Other provisions exist, such as Law No. 5,197 from 1967, Law No. 9,605 from 1998 and Decree No. 6,514 from 2008, and amendments given by Decree No. 6.686 also from 2008, which provides for and regulates criminal and administrative sanctions derived from conducts and activities harmful to the environment. However, there is no legal device in the country specifically designed to protect *Parides burchellanus*.

7.2 International

To date there is no international instrument of specific legal protection for *Parides burchellanus*.

8. Species management

8.1 Management measures

Several actions for the conservation of this species were developed from 2010 to 2015 under the National Action Plan for the Conservation of Lepidoptera Threatened with Extinction⁽¹¹⁾. The actions taken involved the conservation of its habitat and water courses, as well as proposals for the creation of protected areas in Brumadinho (MG) and the amendment of the management plan of the Area de Proteção Ambiental do Planalto Central in Planaltina (DF). It is necessary to increase the habitat for the species and increase the connectivity of the landscape through the restoration of riparian forests.

8.2 Population monitoring

All three known populations have been haphazardly checked by researchers since 2010. A continuous monitoring program should be established.

8.3 Control measures

The species is nationally listed as threatened and its commerce is forbidden in Brazil. State environmental police, IBAMA and the Federal Police are responsible for the enforcement of the law.

8.3.1 International

None until now

8.3.2 Domestic

The capture of specimens is subject to Brazilian legislation, which allows only research and conservation actions both authorized by the environmental agencies.

8.4 Captive breeding and artificial propagation

Belo Horizonte Zoo had a conservation program in which it developed the *ex-situ* reproduction techniques of *Parides burchellanus*. However, this program was discontinued in 2012 after the end of the project funded by the National Environment Fund. There are currently no *ex-situ* breeding programs for *Parides burchellanus*. Reintroduction and population supplementation actions in the former areas of occurrence were considered difficult considering that the habitat is in advanced stage of degradation⁽¹¹⁾.

8.5 Habitat conservation

Presence in protected areas: Federal District – APA do Planalto Central; Minas Gerais – Serra do Rola-Moça State Park⁽⁴⁾.

8.6 Safeguards

APA do Planalto Central reported actions to prevent further degradation of gallery forests in one of the main areas of occurrence of the species.

9. Information on similar species

There is no species so similar as to be confused with *Parides burchellanus*. Other species on the *Parides panthonus* group are marginally similar, although occur in widely separated areas.

10. Consultations

The species is endemic to Brazil.

11. Additional remarks

Considering its small populations, this is probably one of the few species of Brazilian butterflies for which the control of its removal from nature is likely to benefit the conservation of the species.

12. References

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