

Peer Review Plan: Fluminense Swallowtail, Harris' Mimic Swallowtail, and Hahnel's Amazonian Swallowtail Species Status Assessment Report

Timeline of the Peer review: February 2, 2023 – March 10, 2023

Draft documents to be disseminated: February 2, 2023

Peer review to be initiated: February 2, 2023

Peer review to be completed by: March 10, 2023

Determination regarding species' status expected: This report informed a decision on whether to propose to list the : Fluminense Swallowtail, Harris' Mimic Swallowtail, and Hahnel's Amazonian Swallowtail under the Endangered Species Act. This decision is expected in FY23.

About the Peer Review Process:

In accordance with our July 1, 1994 peer review policy (59 FR 34270), the Service's August 22, 2016 Director's Memo on the Peer Review Process, and the Office of Management and Budget's December 16, 2004 Final Information Quality Bulletin for Peer Review, we solicited independent scientific reviews of the information contained in our Species Status Assessment Report for the Fluminense, Harris' mimic, and Hahnel's Amazonian swallowtails.

The U.S. Fish and Wildlife Service (Service) requested peer review from seven independent experts and received reviews from four of the seven. We considered the following criteria:

- **Expertise:** The reviewer should have knowledge of or experience with the Fluminense, Harris' mimic, and Hahnel's Amazonian swallowtails or similar species biology and/or the threats acting on the butterflies and/or their habitats.
- **Independence:** The reviewer should not be employed by the Service. Academic, consulting or government scientists should have sufficient independence from the Service if the government supports their work.
- **Objectivity:** The reviewer should be recognized by their peers as being objective, open-minded, and thoughtful. In addition, the reviewer should be comfortable sharing their knowledge and perspectives and openly identifying their knowledge gaps.
- **Conflict of Interest:** The reviewer should not have any financial or other interest that conflicts or that could impair their objectivity or create an unfair competitive advantage. If an otherwise qualified reviewer has an unavoidable conflict of interest, the Service may publicly disclose the conflict.

While expertise was the primary consideration, the Service selected peer reviewers (considering, but not limited to, these selections) that added to a diversity of scientific perspectives relevant to the Species Status Assessment Report for the Fluminense, Harris' mimic, and Hahnel's Amazonian swallowtails. We did not provide financial compensation to peer reviewers.

The Service provided each peer reviewer with information explaining their role and instructions for fulfilling that role, the Species Status Assessment Report, and a list of citations as necessary. The purpose

of seeking independent peer review was to ensure use of the best scientific and commercial information available; and to ensure and maximize the quality, objectivity, utility, and integrity of the information upon which the report is based, as well as to ensure that reviews by recognized experts are incorporated into the Species Status Assessment process. Peer reviewers were advised that they were not to provide advice on policy. Rather, they should focus their review on identifying and characterizing scientific uncertainties. Peer reviewers were asked to answer questions pertaining to the logic of our assumptions, arguments, and conclusions and to provide any other relevant comments, criticisms, or thoughts. Specific questions put to the reviewers included the following:

1. Does the report accurately and adequately describe the species' life history characteristics, distribution, habitat requirements, and population abundance, trends, or estimates?
2. Does the report provide an accurate and adequate review and analysis of potential threats to the species?
3. Do the analyses of present and future conditions adequately represent the current and projected status of the species and where important uncertainties exist?
4. Are our analyses logical and supported by the evidence we provide?
5. Do we cite all necessary and pertinent literature to support our scientific analyses?

Peer reviewers provided individual, written responses to the Service. Peer reviewers were advised that their reviews, including their names and affiliations, will: (1) be included in the decisional record of our determinations regarding this species' status (i.e., ESA listing rules or not-warranted findings); and, (2) be available to the public upon request once all reviews are completed. We summarized and responded to the issues raised by the peer reviewers in the record supporting our determinations.

About Public Participation

This peer review plan is made available to allow the public to monitor our compliance with the Office of Management and Budget's Final Information Quality Bulletin for Peer Review. The Species Status Assessment Report informed our decision to propose to list the Fluminense, Harris' mimic, and Hahnel's Amazonian swallowtails under the Endangered Species Act. We are publishing a proposed rule to list the species with appropriate opportunities for public review and comment. If appropriate, we will follow our proposed rule by publishing a final rule to list the Fluminense, Harris' mimic, and Hahnel's Amazonian swallowtails after consideration of all comments received from the public.

Contact

For more information, contact Rachel Londonf at 703-358-2171 for additional information regarding this peer review plan.