## First description of the nest and eggs of the Spot-throated Hummingbird Thaumasius taczanowskii

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Aunque es una especie localmente común, la biología reproductiva del Colibrí de Taczanowski  $Thaumasius\ taczanowskii$  sigue siendo prácticamente desconocida. No existe descripción hasta la fecha del nido ni huevos. En este trabajo, presentamos la primera descripción formal del nido y de un huevo basada en un conjunto colectado por Oscar Theodor Baron presumiblemente en una localidad San Pedro, en Perú, cuya ubicación precisa es incerta, o en sus vecindades, y conservado en la colección de Historia Natural de Berlín, Alemania. Proporcionamos aquí los primeros detalles sobre la morfología del nido, las características del huevo y el tamaño de la nidada. El nido es una taza diminuta compuesta internamente de plumón y fibras vegetales finas, y decorada exteriormente con líquenes y pequeñas ramitas. El único huevo presente es blanco y midió  $13,84 \times 8,61$  mm, pero el tamaño de puesta probablemente consistió en dos huevos. Además, revisamos datos de ciencia ciudadana para ampliar la información disponible sobre la biología reproductiva de la especie.

Egg collections represent a delicate, under-used repository of natural history data that can be useful for investigating the breeding ecology of bird species and for setting ecological hypotheses<sup>4</sup>. Oscar Theodor Baron, an engineer with a keen interest in nature, spent a substantial amount of time collecting insect and bird specimens in South America, primarily in the Andes of Peru, and had a particular interest in hummingbirds (Trochilidae)<sup>1,8</sup>. As well as collecting the holotypes of numerous taxa that were later described as new avian species<sup>8</sup>, Baron's private collection comprised other natural history data, such as the nest and eggs of species, including some that remain poorly known today.

Baron¹ briefly described some field observations from northern Peru, documenting what was presumably the first-known nest (with two nestlings) of Black Metaltail *Metallura phoebe*, along with some anecdotal observations on the foraging, occurrence and nesting of several trochilids confined to the region. However, several nests and eggs that Baron had collected, and later traded with private collectors, remained unpublished.

One of the largest private egg collections, containing over 5,000 avian species<sup>5,6,9</sup>, was accrued by Adolph Nehrkorn: this included several eggs and nests collected by Baron. Nehrkorn's collection was posthumously donated to the Natural History Museum of Berlin (ZMB) in Germany<sup>5,9</sup>. A comprehensive list of the eggs was concurrently described in the associated catalogue published by Nehrkorn himself<sup>5,6</sup> and later covered in more detail in the oological monograph by Max Schönwetter (later continued by Wilhelm Meise)<sup>9</sup>, but label data such as locality, clutch size and other information remained unpublished.

Spot-throated Hummingbird Thaumasius taczanowskii was described over 150 years ago<sup>11</sup>. Hitherto considered endemic to the Andes of Peru, recent observations indicate that the species also occurs in the extreme southern part of Ecuador. close to the Chinchipe River drainage<sup>3,10</sup>. The species is abundant at 900-1,900 m altitude along the western slope of the Peruvian Andes, locally descending to 200 m, while in the Marañón Valley it occurs at 350-2,800 m<sup>10</sup>. The species prefers deciduous forest and arid scrub, and has been reported taking nectar from flowering Inga spp. and visiting cultivated plants such as agave and banana<sup>7,10</sup>. Even so, little information exists about its natural history and breeding biology<sup>10</sup>, with the nest and eggs still undescribed in the literature<sup>10</sup>.

Here we provide the first description of Spot-throated Hummingbird's nest and egg, based on a nest and egg preserved in the A. Nehrkorn collection at the ZMB. In addition, we review citizen science data to expand the information available about the species' breeding biology.

## **Location and description**

The following description is based on a single nest (ZMB 2000/58762) and egg set (ZMB 2000/75741) of Spot-throated Hummingbird, which are preserved in the A. Nehrkorn collection. Both were collected by O. T. Baron in a locality named "San Pedro", in the area between Pacasmayo (7°24'S 79°34'W) and Cajamarca (7°10'S 78°31'W), likely in Cajamarca department, Peru, where Baron had obtained specimens of this species<sup>8</sup>.

Although San Pedro de Lloc (7°25'S 79°30'W), La Libertad department, is mentioned on a printed specimen label, it is unlikely to represent the actual collecting locality, since this label was attached to the specimen in 2022 as part of efforts to improve