

## Distribution of *Polioptila gnatcatchers* on the western slope of the Andes in central Peru

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En la literatura existente, el rango de distribución de la Perlita Tropical *Polioptila plumbea bilineata* se extiende hasta el centro del departamento de Lima, Perú, mientras que la subespecie *P. p. maior* se restringe al valle del río Marañón. La presencia de *P. p. bilineata* en la vertiente occidental de los Andes en Lima, Ancash y La Libertad se sustenta en tres especímenes colectados por Maria Koepcke en 1956 y 1962. Sin embargo, observaciones de campo en [www.ebird.org](http://www.ebird.org) muestran inconsistencias con esta distribución. En el presente estudio, reevalúo los especímenes de Koepcke y los comparo con fotografías tomadas en el campo. Demuestro que los especímenes fueron identificados de manera equivocada y que existe una población de *P. p. maior* en la vertiente occidental de los Andes entre 500 y 2.700 m, mientras que no hay evidencia de que *P. p. bilineata* habite al sur del valle de Chicama, en La Libertad. Propongo redefinir la distribución de ambas subespecies en Perú, restringiendo la de *P. p. bilineata* desde la frontera con Ecuador hasta el norte de La Libertad y extendiendo la de *P. p. maior* a la vertiente occidental de los Andes desde por lo menos el norte de La Libertad hasta el centro del departamento de Lima.

A study of phylogenetic relationships recently showed that the Tropical Gnatcatcher *P. plumbea* complex is polyphyletic<sup>14</sup>. As a result, the populations on the western side of the Andes are now generally recognised as a separate species: White-browed Gnatcatcher *P. bilineata*<sup>2,4</sup>. Most subspecies found further east of the Andes should probably also be recognised as species-level taxa<sup>14</sup>, but to date they are still considered subspecies of the widespread and polytypic *P. plumbea*<sup>2,4,11</sup>. The most distinctive subspecies, in terms of plumage, voice and genetic divergence, is *P. p. maior*<sup>13,14</sup>, which has been recognised as a separate species by BirdLife International: Marañon Gnatcatcher *P. maior*<sup>5</sup>. In Peru, *P. p. bilineata* occurs in the north-west and *P. p. maior* in the Marañón Valley, while a third taxon, *P. p. parvirostris*, occurs only in Amazonia<sup>13</sup>.

Subspecies distribution of *Polioptila* gnatcatchers in Lima, Ancash and La Libertad has been addressed by several authors. Bond<sup>1</sup> established Cartavio in the Chicama valley (north La Libertad) as the southernmost locality for *P. p. bilineata*, and mentioned Samne, in La Libertad, as the southernmost locality for *P. p. maior* on the western slope of the Andes. Maria Koepcke extended the range of *P. p. bilineata* further south, first to Ancash<sup>7</sup>, and later to central Lima<sup>8</sup>. She based her distribution on three specimens housed in Lima's Museo de Historia Natural (T. S. Schulenberg pers. comm.): two from Ancash (collected in 1956, MUSM 3739 and MUSM 3732) and one from Lima (collected in 1962, MUSM 3733). In *Las aves del departamento de Lima*<sup>8</sup> she included this subspecies as “very rare” on the “low Andean slopes”. Schulenberg *et al.*<sup>13</sup>

followed Koepcke regarding the distribution of *P. p. bilineata*. According to them, it occurs in dry forest and scrub in north-western Peru, south to central Lima, between sea level and 700 m, whereas *P. p. maior* occurs in similar habitats in the Marañón Valley, from 200–2,700 m.

Recent observations of gnatcatchers in Lima, Ancash and La Libertad show inconsistencies with the aforementioned distribution. In 2010, Stephen Gast photographed an individual in Valle Tinajas, Lima, that appeared to be a male *P. p. maior*. In 2017, he uploaded the photo to eBird<sup>3</sup> (checklist S38354301). At the time, *P. p. maior* was considered conspecific with *P. p. bilineata*, so the record did not raise much attention. However, records of *Polioptila* species in western Peru have received renewed scrutiny following the recognition of *P. p. bilineata* as a full species<sup>2,14</sup>. In this paper I reevaluate the distribution of gnatcatchers on the western slope of the Peruvian Andes in Lima, Ancash and La Libertad by contrasting what is known from literature with the specimens collected by Maria Koepcke and documented field observations on eBird.

### Methods

I studied the three specimens in the MUSM and eBird records with photographic evidence for which the location could be verified. I searched for gnatcatchers at two localities in Lima and Ancash. Subspecies identification of specimens, photographs and my own field observations followed Schulenberg *et al.*<sup>13</sup>, and HBW and BirdLife International<sup>5</sup>.

I limited my study geographically to the departments of Lima, Ancash and La Libertad,