How does a major taxonomic revision of the world's birds impact Neotropical conservation?

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In this exciting assessment for the Neotropics on how recent taxonomic changes might justifiably impact conservation priorities, eastern Amazonia looks to be a new source of concern.

re taxonomy and conservation at odds? Species are often used as the basic units of conservation, either as the direct target of management intervention or as the means to define important areas to which action is directed. Stability in lists of species would therefore seem to be important for well-planned conservation work. However, such lists are ever changing, not only through the discovery of wholly new species but also, more frequently in recent decades, through redefining species limits. This latter occurs through the 'splitting' of one species into two or more species, or the 'lumping' of two or more species into one (for which see the latest instalment of Tom Schulenberg's series 'Splits, lumps and shuffles, p60).

Such changes are prompted by new information and have been happening at increasing speed this century as molecular insights have been generated in laboratories and behavioural (especially vocal) data have been gathered in the field. Changes have also been proposed in the light of evolving opinions on how to define species ('species concepts'), modifying or

entirely rejecting the long-established Biological Species Concept, whose key criterion to determine taxonomic rank is reproductive incompatibility between the taxa under review (but which is hard to apply with confidence to taxa that are allopatric, i.e. not in geographical contact and therefore reproductively untestable).

In an attempt to bring consistency, robustness and transparency to the process of judging these many proposed changes, BirdLife International helped develop and then adopted a taxonomic scoring system (Tobias et al. 2010) that was calibrated to reflect the degree of difference shown by sympatric 'biological species' in order to be applied to allopatric taxa. So great was the need for catch-up that BirdLife formed a partnership with the team that had just finished the Handbook of the birds of the world to undertake a major review of published evidence in a relatively narrow timeframe, adding into the mix as many otherwise unaddressed cases as possible where it was felt the criteria could produce a significant taxonomic change. This review (del Hoyo & Collar 2014, 2016) resulted in the identification of over 1,000



1 BirdLife International's new taxonomy splits what was Bearded Helmetcrest Oxypogon guerinii into four species, resulting in one being listed Critically Endangered (CR) and another Vulnerable (VU). Left to right: White-bearded O. lindenii (LC), Green-bearded O. guerinii (LC), Blue-bearded O. cyanolaemus (CR) and Buffy Helmetcrest O. stuebelii (VU); note especially the 'beard', underpart and undertail patterns. (Nigel Collar/BirdLife International, by kind permission of the American Museum of Natural History).