



This paper presents the first comprehensive taxonomic revision of the olingos, *Bassaricyon*, based on most available museum specimens, with data derived from anatomy, mitochondrial and nuclear DNA, fieldwork, and geographic range modeling. Olingos are forest-living, arboreal, nocturnal, frugivorous, and solitary, and have one young at a time. Four olingo species can be recognized, including a Central American species (*B. gabbi*) and lowland species with eastern, cis-Andean (*B. alleni*) and western, trans-Andean (*B. medius*) distributions. Surprisingly, the sister lineage to all previously described species of *Bassaricyon* is an Andean cloud forest species, which we call the Olinguito, that has never been previously described. *Bassaricyon neblina* sp. n., endemic to Colombia and Ecuador, is the smallest living member of the family Procyonidae and the first new species of Carnivora named in the American continents in 35 years. We describe four subspecies of Olinguito across the Northern Andes.

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TAXONOMIC REVISION OF THE OLINGOS (*BASSARICYON*), WITH DESCRIPTION OF A NEW SPECIES, THE OLINGUITO

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Bassaricyon neblina neblina, subsp. n.

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