OPENNING PANDORA´S BOX: INTRASPECIFIC DIVERSITY OF SOUTH AMERICAN *EQUUS* (EQUIDAE: PERISSODACTYLA: MAMMALIA) REVEALED

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One of evolutionary sciences goals is to reveal diversity, but outside of genetics, intraspecific diversity remains neglected. The unique South American caballoid, *Equus neogeus*, is a case in point. The species as presently understood is polymorphic. Its metatarsal III morphometric analyses revealed total length and width positively correlated — almost isometrical — and, total length and altitude negatively correlated: the higher the altitude, the shorter the metatarsal (possibly Allen's rule). Additionally, bivariate, PCA and CVA analyses of metatarsal measurements of *E. neogeus*,stout-legged caballoids and the North American stilt-legged horse *Haringtonhippus*, resulted in their strong separation (95% accuracy). However, some *E.* *neogeus* specimens grouped with *Haringtonhippus*, which might be a new morphotype within the polymorphic *E.* *neogeus*: The South American stilt-legged *Equus* (SAStilt). Gracility index differentiated two *E. neogeus* morphotypes: a more gracile/cursorial (SAStilt); and a more robust/less cursorial (stout-legged *E. neogeus,* SAStout). The SAStilt is rarer, found mainly at Andean high altitudes. Although SAStout and SAStilt records co-occur, SAStilt has not been recorded in isolation. Potential niches estimated for both *Equus neogeus* morphotypes suggest that SAStilt would be better adapted to higher altitudes. Moreover, SAStilt exhibits longer limbs, suggesting increased cursoriality and adaptation to high Andean grasslands. Contra, the SAStout from same localities exhibits shorter limbs, perhaps less cursorial, and possibly occupying more rocky areas. Consequently, these morphotypes likely avoided intraspecific competition. Our results recognize two distinct morphotypes within *Equus neogeus*, confirming its polymorphic nature, increasing the known diversity of horses and revealing another chapter of horses’ evolutionary history in Americas.