

**Late Cretaceous avian footprints from the Angostura Colorada Formation
(Río Negro province, Patagonia, Argentina)**

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In the seventies, R. Casamiquela found and collected one small slab with footprints close to the town of Ingeniero Jacobacci, in Northwestern Patagonia (Río Negro province, Argentina). The footprints were published succinctly without a concrete geographical and geological location. Casamiquela named an isolated track as *Tridigitichnus inopinatus*, originally related to hadrosaurids, and nearly 25 tracks as *Patagonichornis venetiorum*, with avian affinity. The footprints have never been studied in detail and both ichnotaxa are currently considered *nomina nuda*. The slab was transferred to the Museo di Storia Naturale of Venice, Italy, where it is exposed to the public. Recent fieldworks around Jacobacci have yielded new avian footprints bearing levels from the Angostura Colorada Formation (Campanian-Maastrichtian; Upper Cretaceous). The palaeoenvironment of the unit has been interpreted as alluvial fan, braided river and flood plain systems. There are two different morphologies of footprints, but in general they are tridactyl, mesaxonic, with the slender digits directed forward, with no evidence of webbing trace or digit I impressions. One of the types is composed by two small, asymmetric isolated footprints (averaging 38.2 mm long and 41.3 mm width). The average divarication angle between digit impressions II-IV is 109°. The second type includes three isolated symmetric tracks, wider than long (averaging 81.0 mm long and 108.4 mm width). The average divarication angle between digit impressions II and IV is 150°. Up to date, there are few Campanian-Maastrichtian avian tracksites from Gondwana. Therefore, Jacobacci record represents an excellent example of avian ichnodiversity just before the Cretaceous-Paleogene extinction.

Keywords: avian footprints, Upper Cretaceous, Angostura Colorada Formation, Argentina.