First documented record of the Belted Kingfisher *Megaceryle alcyon* (Linnaeus, 1758) in mainland Ecuador

Diego F. Cisneros-Heredia

Universidad San Francisco de Quito USFQ, Colegio de Ciencias Biológicas y Ambientales COCIBA, Laboratorio de Zoología Terrestre, Casilla Postal 17-1200-841, Quito 170901, Ecuador | Aves y Conservación / BirdLife Ecuador, Quito, Ecuador | Museo Ecuatoriano de Ciencias Naturales del Instituto Nacional de Biodiversidad, Quito, Ecuador | King’s College London, Department of Geography, Strand, London, UK

Corresponding author. E-mail: diego.cisnerosheredia@gmail.com

**Abstract:** I present the first documented record of the Belted Kingfisher *Megaceryle alcyon* in mainland Ecuador. A young male *M. alcyon* was observed and photographed on the surroundings of Puerto López, province of Manabí, Ecuador in September 2005. A very rare vagrant in mainland Ecuador, *M. alcyon* was previously known from a single sighting in December 1995; remaining a hypothetical species pending corroborating evidence, which is now provided.

**Key words:** Alcedinidae; Coraciiformes; boreal migrant; new record; vagrant; Machalilla National Park; Manabí
INTRODUCTION

The Belted Kingfisher *Megaceryle alcyon* (Linnaeus, 1758) breeds from the Aleutian Islands and Alaska throughout Canada and USA, south to California, Texas, the northern coast of the Gulf of Mexico and Florida (Ridway 1914; Kelly et al. 2009; Woodall 2013). Its regular winter range extends throughout Mexico south to Panama and the Antilles (Ridway 1914; Howell and Webb 1995; Restall et al. 2006a; Kelly et al. 2009; Woodall 2013). It is a rare visitor to the northern areas of Colombia, Venezuela, and the Guianas (Ridway 1914; Meyer de Schauensee 1949; Hilty and Brown 1986; Restall et al. 2006a; Kelly et al. 2009; Renaudier et al. 2010), and vagrant individuals have been reported in several Pacific islands and northern Europe (Ridgway 1914; Kelly et al. 2009; Woodall 2013). The southernmost records of *M. alcyon* are from the Galapagos Archipelago, insular Ecuador, where it occurs as a migrant in small numbers but apparently not every year (Lévêque et al. 1966; Harris 1973; Wiedenfeld 2006).

In contrast, *Megaceryle alcyon* is a very rare vagrant to mainland Ecuador, known from one visual record at Ayampe, province of Manabí, Ecuador, by Clive Green on 31 December 1995 (Green 1996; Ridgely and Greenfield 2001, 2006). In the absence of strong evidence for the occurrence of *M. alcyon* in mainland Ecuador, it remains classified as a hypothetical species in all country’s ornithological references (Ridgely and Greenfield 2001, 2006; Freile et al. 2015). I present herein the first vouchered record of *M. alcyon* in mainland Ecuador.

MATERIALS AND METHODS

As part of an ornithological expedition to the Machalilla National Park in September 2005, I surveyed birds along the coastline of Puerto López, province of Manabí, Ecuador (Figure 1). The
climate of the study area is dry, with monthly average precipitation of 20 mm between June and November and 300 mm between December and May. Sandy beaches cover most of the coastline of Puerto López except for a rocky oceanic pool called “El Piedrero de Puerto López” located towards the southern extreme (1.561767° S, 80.821427° W, 0 m). Dry littoral shrubs grow amidst the bordering rocks of El Piedrero (sensu Cerón et al. 1999). Information reported in this article is based on field notes and photographs deposited at the DFCH archives of the Laboratorio de Zoología Terrestre of Universidad San Francisco de Quito USFQ (Ecuador).

<IDENTIFICATION>

On 16 September 2005 at 16h20, I observed and photographed a single young *Megaceryle alcyon* (Figure 2) at El Piedrero de Puerto López for almost 15 minutes under bright and propitious weather conditions. It was perched on a branch of a small shrub next to the coastline. It flew short distances along the rocky oceanic pool, perching on coastal rocks as well as other shrubs. Whole observed, it submerged into the water on two occasions, during which it apparently did not catch any prey.

Identification was based on several diagnostic characteristics (Ridgway 1914; Restall et al. 2006a, 2006b; Kelly et al. 2009): shaggy crest, white supraloral spot, dark bluish gray head and back, white collar, minute white markings on wing coverts and secondaries, extensive white below without any rufous, bluish gray breastband intermixed with cinnamon, bluish gray sides and flanks flecked with white and cinnamon, black bill with cream gray basal mandible, and stout bill with exposed culmen less than half as long as wing (Figure 2). Based on darker colouration and presence of cinnamon in the breast band, the bird was apparently in juvenal plumage (Kelly et al. 2009) and absence of rufous breastband suggests that the kingfisher was a
young male (Ridway 1914; Kelly et al. 2009; although rufous breastband can be subtle in young females, Restall et al. 2006a, 2006b).

The Ringed Kingfisher *Megaceryle torquata* is rather frequent in the area of Puerto López and is similar to *Megaceryle alcyon*, but they clearly differ by *M. torquata* having extensive rufous below and a larger body size (Ridgway 1914; Restall et al. 2006a, 2006b; Ridgely and Greenfield 2001, 2006). Kingfishers of the genus *Chloroceryle* differ from *M. alcyon* by their smaller body size, metallic bronze green dorsal colouration, short and blended crown, and proportionately longer and slender bill (exposed culmen equal or more than half as long as wing) (Ridgway 1914; Meyer de Schauensee 1949; Sibley 2000; Ridgely and Greenfield 2001, 2006; Restall et al. 2006a, 2006b).

<DISCUSSION>

This record confirms the presence of *Megaceryle alcyon* in mainland Ecuador. It is also the first evidence-based record for the Pacific coast of South America. No further records of *M. alcyon* have been obtained in the area, despite repeated surveys of the coasts and surrounding wetlands of Puerto Lopez and the Machalilla National Park in December 2005, November 2009, November 2010, November 2011, and January 2016. Puerto López lies at 13 km N of Ayampe, previous known Ecuadorian locality; 620 km S of Malpelo Island and 950 km E of Galapagos, the closest known localities where migratory *M. alcyon* have been reported; and ca. 1000 km S from the Panamanian coast, the closest areas where *M. alcyon* migrates regularly. The absence of *M. alcyon* from the coasts of Colombia but its presence in the Galápagos suggests that the records from mainland Ecuador probably correspond to vagrants involved in offshore movements, rather than coastline migration. Although offshore movements are rare in *M. alcyon*
(Kelly et al. 2009; Woodall 2013), vagrants have been reported at Cocos Island (550 km offshore Costa Rica), Malpelo Island (360 km offshore Panama), the Hawaii Archipelago (3700 km offshore USA), the Azores Archipelago (2200 km offshore Canada), Great Britain, Ireland and the Netherlands (Ridgway 1914; Lévêque et al. 1966; Slud 1967; Harris 1973; Pitman et al. 1995; Wiedenfeld 2006; López-Victoria and Estela 2007; Kelly et al. 2009; Woodall 2013).

ACKNOWLEDGEMENTS

I thank Paul Greenfield, Fabrice Schmitt and Galo Buitrón-Jurado for their comments on the identity of the kingfisher (in litt. March 2006); María Elena Heredia and Laura Heredia for financing the trip and their constant encouragement; Jonathan Guillemot for his comments on the manuscript; Jeffrey Arellano for his support in the field, and Aves y Conservación / BirdLife in Ecuador for their institutional support.

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FIGURE CAPTIONS

**Figure 1.** Known localities of Belted Kingfisher *Megaceryle alcyon* in Ecuador. Mainland: square, El Piedrero de Puerto López (first vouchered record in mreported herein); circle, Ayampe (Green 1996; Ridgely and Greenfield 2001, 2006). Insular: arrow, Galápagos Archipelago (Lévêque et al. 1966; Harris 1973, Wiedenfeld 2006).

**Figure 2.** Young males Belted Kingfisher *Megaceryle alcyon*. 1–2: At El Piedrero de Puerto López, province of Manabí, Ecuador, on 16 September 2005. Note shaggy crest, white supraloral spot, dark bluish gray above, white collar, minute white markings on wings, bluish gray breastband intermixed with cinnamon, white below breastband, bluish gray and cinnamon sides, and black, stout bill with cream gray basal mandible. Photos by Diego F. Cisneros-Heredia. For comparison, 3: At Morro Bay, CA, USA, on 28 September 2008, note bluish gray breastband intermixed with cinnamon, bluish gray sides and flanks flecked with white and cinnamon. Photo by Teddy Llovet, [CC BY 2.0](https://flic.kr/p/5u6kGK). 4: At Forest Park in St. Louis, MO, USA, on 25 June 2011, note dark gray colour and crest. Photo by Andy Reago & Chrissy McClarren, [CC BY 2.0](https://flic.kr/p/dLDwPa).
FIGURE 1

[Map of a region showing geographic coordinates and markers for locations.]
FIGURE 2