Camera traps confirm southward range extension and first records of Red-winged Wood Rail *Aramides calopterus* in Madre de Dios, Peru

Red-winged Wood Rail Aramides calopterus is a little-known bird of the upper Amazon basin of Brazil, Ecuador and Peru, found in both the foothills of the eastern Andes and the Amazon lowlands^{2,6,7}. In Peru it has been recorded at a few localities along the east slope in the north and centre of the country, and in the lowlands of Loreto and Ucayali away from the Andes⁷. The species' voice is known only from Ecuador (www.xeno-canto.org: XC264400, XC257451 and XC257450) and records throughout its range are few. Despite being listed as Least Concern, the species is thought to be declining and relatively little is known of its ecology⁸.

In 2007, RSRW observed a Red-winged Wood Rail cross a dirt road at c.12°47'54'S 71°22'33"W, c.2 km north of the village of Salvación in Madre de Dios. On 24 July 2011, RSRW had another brief but better sighting at the same location, in secondary forest near a permanent stream at an altitude of 530 m.

At 07h09 on 8 August 2011 two Red-winged Wood Rails were photographed by a camera-trap in the Mascoitania Reserve, owned and operated by the Crees Foundation. The photo was taken by a Cuddeback Capture camera trap (model 1125) sited along a small tributary stream that runs from a nearby mammal and bird clay lick in little-disturbed old-growth forest at 12°48'17"S 71°24'22"W; elevation 560 m (Fig. 1a). Although distinguishable from the commoner Grey-necked Wood Rail A. cajaneus by the clear red patch on the back and sides of the neck, the photo quality was relatively poor.

On 30 June 2016 at c.11h00, a video of a single Red-winged Wood Rail drinking at the same clay lick was captured. The high-definition video was taken by a Bushnell Natureview camera (model 119739) and is



Figure 1a. Photographs of two Red-winged Wood Rails Aramides calopterus taken by a Cuddeback Capture camera trap, Mascoitania Reserve, Madre de Dios, Peru, August 2011 and (b) a video still from a Bushnell Natureview camera trap of a single Red-winged Wood Rail drinking at a forest interior clay lick, in same area, June 2016.

of significantly better quality than the photograph from 2011, demonstrating the considerable improvement in camera-trap image quality within just five years (see Fig. 1b; the full video is available at https://www.youtube. com/watch?v=aHDGUmQ8g E). Since 2011, camera traps have been used regularly at Mascoitania Reserve (a mean ten cameras across the site each year throughout five months of the dry season; accumulating at least 1,500 camera trap days per year, with just one of these ten cameras used intermittently at the clay lick). Only these two records of Red-winged Wood Rail have been gathered despite considerable survey effort across the site, displaying both the rarity of the species and its affiliation with small streams surrounding the mineral-rich natural clay lick. Previous habitat descriptions for the species include seasonally flooded igapó forest, as well forest in hilly terrain with streams⁴, as in the case described here, in the lower foothills of the Andes. Permanent monitoring of this clay lick might have detected the species more regularly, especially given the evidence of drinking behaviour

While clay licks are known to be important resources for many rainforest animals³, thought to be associated with sodium supplementation for a wide array of herbivores⁵, and easily located along riverbanks where



Figure 2. Distribution of Red-winged Wood Rail *Aramides calopterus* (after BirdLife International²), with the open star marking the location of the new records in Madre de Dios, Peru, reported herein.

large flocks of parrots gather to feed⁵, interior forest licks are more difficult to detect. Future surveys of such habitats once detected, with an emphasis on remote sensing and playback, could help fill knowledge gaps in the distribution of this and other elusive species. Our records add to the growing potential for camera traps to detect and monitor relatively large but cryptic and rarely encountered birds¹, making an important contribution to the ornithological conservation toolbox.

The visual sighting and camera trap records were made at locations c.4.7 km apart east and west of the upper Madre de Dios River. Our records are the first for Madre de Dios region, Manu Biosphere Reserve and represent a southward range extension for the species of >250 km south from the Purus River, Ucayali (Fig. 2).

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