

## Three new bird species for Cocos Island, Costa Rica, and additional observations of other vagrants

Guillermo Blanco and Luis Sandoval

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En esta nota presentamos tres nuevos registros de especies en la isla del Coco, Costa Rica: Aguja Lomiblanca *Limosa haemastica*, Mosquerito de Traill *Empidonax traillii* / Mosquerito de Charral *E. alnorum* y Reinita de Costados Castaños *Setophaga pennsylvanica*. Además, presentamos nuevos registros de nueve especies accidentales en la isla. Toda la información proviene de encuentros fortuitos con las especies entre 2015 y 2016. Los tres nuevos registros aumentan la lista de las islas a 152 especies, la mayoría son registros accidentales (menos de cinco observaciones para cada especie).

The avifauna of Cocos Island and surrounding seas is a combination of resident ( $n = 13$ ), migratory ( $n = 80$ ) and accidental species ( $n = 56$ ), both terrestrial and aquatic<sup>9,19</sup>. This oceanic island is in the eastern Pacific (05°32'N 87°03'W) 495 km south-west of Cabo Blanco, Costa Rica<sup>2,7,10</sup>. Its location makes it a 'sink hole' for migratory bird species, especially terrestrial (e.g., warblers, tyrant-flycatchers, swallows or sparrows), which become lost during migration (September–November and March–May) to and from boreal latitudes. The majority of new bird records on the island probably occurs during migration periods<sup>3,5,10,11</sup>. Here we report three new species for Cocos Island, and present further records for nine accidental species.

### Methods

Observations were conducted opportunistically in 2015–16 on Cocos Island by GB, and photographs were taken of all new island records. We corroborated species identifications by comparing photographs of the birds in the field with specimens at the Museo de Zoología, Universidad de Costa Rica, San José, and with the text and illustrations in Stiles & Skutch<sup>23</sup>, Garrigues & Dean<sup>8</sup> and / or specialised monographs<sup>6,17,18,22</sup>.

### Species accounts

#### Purple Gallinule *Porphyrio martinica*

A juvenile in a grassy field on 6 July 2016 (Fig. 1). Distinguished from Azure Gallinule *P. flavirostris* in juvenile plumage by its reddish bill with yellow-green tip, vs. yellowish bill with green culmen<sup>24,25</sup>. The third record on the island<sup>14</sup>.

#### American Coot *Fulica americana*

An adult on 6 December 2016 in a grassland (Fig. 2). Separated from Common Gallinule *Gallinula galeata* by its white frontal shield (red in the gallinule)<sup>24,25</sup>. This is the second observation on the island and the first dated record<sup>13</sup>.

#### Killdeer *Charadrius vociferus*

One at a grassland on 18 November 2016 (Fig. 3) was identified by its double breast-band<sup>1,17,18</sup>. The second observation on the island, after a record in 2011<sup>16</sup>.

#### Hudsonian Godwit *Limosa haemastica*

One on a sandy beach on 5 May 2016, together with a Willet *Tringa semipalmata* (Fig. 4). It was an adult male in breeding plumage, with reddish breast and belly, dark wings and grey neck with black marks (Fig. 4). Nearly unmistakable among shorebirds by plumage alone, even from its congener, Marbled Godwit *L. fedoa*, with which it shares a long, bicoloured and upturned bill. Rare in Costa Rica, with only two previous records: one in 1975 and one on 26 April 2014 (P. O'Donnell pers. comm.), both at the Golfo de Nicoya<sup>18,23</sup>. This is the first record for the island<sup>9</sup>.

#### Willet *Tringa semipalmata*

One on 5–22 May 2016 on a sandy beach at the Genio estuary, Wafer Bay (Fig. 5). Showed a grey bill with black tip, bluish-grey legs, and a black-and-white upperwing pattern. Accidental on the island, with very few reports<sup>13</sup>.

#### Wilson's Phalarope *Phalaropus tricolor*

An adult in winter plumage in a grassy field on 22 May 2016 (Fig. 6). Separated from other phalaropes by its long pointed black bill, white supercilium, and plain grey cap and back. This is the second record on the island, after one in 2004<sup>15</sup>.

#### Willow / Alder Flycatcher *Empidonax traillii* / *E. alnorum*

One perched on a Melastomataceae bush in a grassy area at Wafer Bay on 16 October 2015 (Fig. 7). Identification of Alder *E. alnorum* and Willow Flycatchers *E. traillii* is impossible by plumage alone, even if photographed<sup>16,8,20,23</sup>. For a reliable identification, it is necessary to examine the bird

in the hand or hear the song, although this is rarely heard outside the breeding season<sup>8,23</sup>. The photographed individual had a brownish to olive back, white throat, brownish breast, yellowish belly and white wingbars (Fig. 7). Similar species include Acadian *E. virescens* (greenish back and buff wingbars), Least *E. minimus* (conspicuous eye-ring and short bill) and Yellow-bellied Flycatchers *E. flaviventris* (yellowish throat, breast and belly)<sup>8,20,23</sup>. Willow and Alder Flycatchers are abundant migrants throughout continental Costa Rica between August and November<sup>8,23</sup>; however, on Cocos Island neither had been recorded to date<sup>9</sup>.

### Great Crested Flycatcher *Myiarchus crinitus*

A single perched in a *Cecropia pittieri* (Cecropiaceae) tree on 23 October 2015 (Fig. 8). Distinguished from other *Myiarchus* by sharp contrast between the brighter yellow belly and grey breast, and a broad and large bill<sup>6,8,23</sup>. This is the second observation on the island after one in 1963<sup>21</sup>.

### Chestnut-sided Warbler *Setophaga pensylvanica*

An adult female foraging in a vine tangle on 23 March 2016 (Fig. 9) was in breeding plumage<sup>22</sup>. Diagnostic characters included the chestnut flanks stripe and yellow crown. Similar Bay-breasted Warbler *S. castanea* has a dark face and buffy collar, and breeding male Blackpoll Warbler *S. striata* a black cap, white cheeks and yellow legs<sup>22</sup>. One of the commonest migrant warblers in continental Costa Rica, from sea level to 2500 m<sup>8,23</sup>, but this is the first record for the island<sup>9</sup>.

### Palm Warbler *Setophaga palmarum*

A winter-plumaged male foraging in bushes and trees on 17 May 2016 (Fig. 10). Separated from resident Yellow Warbler *S. petechia aureola* by its long supercilium, long tail with yellow undertail-coverts, buffy wingbars, and reddish-speckled crown<sup>4,22</sup>. This is the third record on the island, after singles observed in 1963<sup>21</sup> and 2010<sup>10</sup>.

### Blue Grosbeak *Passerina caerulea*

A male on 17 October 2015 (Fig. 11). Distinguished from other blue grosbeaks or buntings by its cinnamon wingbars. This is the second observation after a male observed in 2010<sup>10</sup>.

### Indigo Bunting *Passerina cyanea*

A female on 24 October 2015 and two males, one on 4 May 2015 and one on 9 March 2016, at different grasslands near settlements (Fig. 12). Female recognised by faint streaks on breast, and wingbars; male by its indigo plumage and silvery bill. These observations are the third to fifth records for the island, where previously recorded in 1992<sup>12</sup> and 2008<sup>11</sup>.

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Figure 1. Juvenile Purple Gallinule *Porphyrio martinica*, Cocos Island, Costa Rica, 6 July 2016 (Guillermo Blanco)

Figure 2. American Coot *Fulica americana*, Cocos Island, Costa Rica, 6 December 2016 (Guillermo Blanco)

Figure 3. Killdeer *Charadrius vociferus*, Cocos Island, Costa Rica, 18 November 2016 (Guillermo Blanco)

Figure 4. Adult male Hudsonian Godwit *Limosa haemastica* in breeding plumage, Cocos Island, Costa Rica, 5 May 2016 (Guillermo Blanco)

Figure 5. Willet *Tringa semipalmata* (right), Cocos Island, Costa Rica, 22 May 2016 (Guillermo Blanco)

Figure 6. Winter-plumaged Wilson's Phalarope *Phalaropus tricolor*, Cocos Island, Costa Rica, 22 May 2016 (Guillermo Blanco)

Figure 7. Willow / Alder Flycatcher *Empidonax traillii / alnorum*, Cocos Island, Costa Rica, 16 October 2015 (Guillermo Blanco)

Figure 8. Great Crested Flycatcher *Myiarchus crinitus*, Cocos Island, Costa Rica, 23 October 2015 (Guillermo Blanco)

Figure 9. Adult female Chestnut-sided Warbler *Setophaga pensylvanica* in breeding plumage, Cocos Island, Costa Rica, 23 March 2016 (Guillermo Blanco)

Figure 10. Male Palm Warbler *Setophaga palmarum* in winter plumage, Cocos Island, Costa Rica, 17 May 2016 (Guillermo Blanco)

Figure 11. Male Blue Grosbeak *Passerina caerulea*, Cocos Island, Costa Rica, 17 October 2015 (Guillermo Blanco)

Figure 12. Female Indigo Bunting *Passerina cyanea*, Cocos Island, Costa Rica, 24 October 2015 (Guillermo Blanco)

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**Guillermo Blanco**

Oficina Isla del Coco, Antiguo Inbioparque, Santa Rosa, Santo Domingo, Heredia, Costa Rica. E-mail: [guillermo.blanco@gmail.com](mailto:guillermo.blanco@gmail.com).

**Luis Sandoval**

Escuela de Biología y Museo de Zoología, Universidad de Costa Rica, Montes de Oca, San José, Costa Rica, CP 11501-2060. E-mail: [biosandoval@hotmail.com](mailto:biosandoval@hotmail.com).