An update on the inventory, distribution and residency status of bird species in Guatemala

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Summary.—We present an update on the status and distribution of birds in Guatemala relative to a previous summary (Eisermann & Avendaño 2007) and based upon a review of new published and unpublished records. During the period 2006 to 2017, 50 species were first documented in Guatemala. Another 11 species were reported for the first time but without verifiable documentation. Breeding was newly confirmed for 58 species. Noteworthy observations, including range extensions, are summarised for 131 species. The Guatemalan avifauna now comprises 758 species of which 23 lack documentation. Of the 758 species, 509 breed in Guatemala, 240 are non-breeding visitors, transients or vagrants, and the status of nine is uncertain.

Thorough avifaunal research in Guatemala began in the 19th century following independence, when travel and immigration were facilitated for foreigners. The most noteworthy ornithological collections were compiled by Velásquez de León, Adolphe Delattre, George Ure Skinner, Adolphe Boucard, Robert Owen, Juan & Cipriano Prado, Felipe Sierra, José Vicente Constancia, Arthur Morelet, Florent Prevost, Joseph Leyland, Osbert Salvin, Frederick Ducane Godman, Nathaniel Stickney Goss, William Wyld, Henry Hague, Gustav Bernoulli, Enrique Arcé, Georg C. Champion, William B. Richardson, Edward W. Nelson, Edward A. Goldman, Franz Sarg and numerous local hunters employed by these naturalists (reviewed in Eisermann & Avendaño 2006). The four volumes on birds in the Biología Centrali-Americana, compiled by Osbert Salvin and Fredrick Ducane Godman (Salvin & Godman 1879–87, 1879–1904, 1888–97, 1897–1904), represent the baseline of avifaunal knowledge in Guatemala. Additional collections by Dearborn (1907) and Alfred Webster Anthony laid the base for the second avifaunal compilation, Griscom’s (1932) Distribution of bird-life in Guatemala. The first field guide to Guatemalan birds (Land 1970) additionally relied on collections by Wetmore (1941), van Tyne (1935), Saunders (1950), Tashian (1953), Taibel (1955), Baepler (1962), Smithe & Paynter (1963), Land (1962a,b, 1963) and Land & Wolf (1961). Little ornithological field research was carried out during the civil war in Guatemala that lasted for more than 30 years between the 1960s and 1990s (Howell & Webb 1992, Wendelken & Martin 1986, 1989, Dickerman 2007). Howell & Webb’s (1995) field guide to Mexican and north Central American birds summarised knowledge of bird distribution to that date. Much of the avifaunal research in the 1990s and first years of the 21st century in Guatemala is unpublished, the results having been presented only in reports. Noteworthy data from this ‘grey literature’ were included in the last compilation on the Guatemalan avifauna by Eisermann & Avendaño (2006, 2007). In the early 21st century, noteworthy observations by Guatemalan ornithologists and birdwatchers, as well as by foreign visitors, became more readily accessible via the quarterly compilations of records in North American Birds (Jones 2002–2005, Jones & Komar 2007–15, Jones et al. 2016a,b) and the online database eBird (Sullivan et al. 2009), with some observations documented photographically. Here we provide an updated compilation on the distribution and...
residency status of birds in Guatemala. A total of 725 bird species was reported for Guatemala up to 2006 (Eisermann & Avendaño 2007). Reports were hypothetical for 42 of these species, i.e. without specimen, photographic or audio documentation. Breeding had been reported for 380 species, and for an additional 107 species breeding was assumed but undocumented in the country. We present here new information for 215 species.

**Methods**

To identify changes to the status of Guatemalan bird species since the publication of *Lista comentada de las aves de Guatemala / Annotated checklist of the birds of Guatemala* (Eisermann & Avendaño 2007), we reviewed our own unpublished notes up to May 2018, as well as published records and online databases from the period 2005–17. Observations are the authors’ own unless otherwise stated.

In the species accounts, a code in each subheading indicates the type of update: (A) first documented country record, (B) first report for the country without documentation, (C) first breeding record for Guatemala, (D) records representing range extensions or noteworthy records of rare species. Following these codes is another indicating the species’ current status in Guatemala: R—breeding resident, r—resident, breeding suspected, RM—breeding resident, partially migratory, rm—resident, partially migratory, breeding suspected, RV—breeding visitor, rv—visitor, breeding suspected, V—non-breeding visitor; T—transient, vagM—migratory vagrant, vagR—non-migratory vagrant, H—hypothetical record (without verifiable documentation involving a specimen, photograph or voice recording), and ?—status uncertain.

**Figure 1.** Map of Guatemala showing altitudinal zones and major geographic features. Interior valleys: 1—Nentón, 2—rí Chixoy, 3—ría Motagua. Major lakes: 4—Petén Itzá, 5—Izabal, 6—Güija, 7—Atitlán. The inset map shows the departments of Guatemala: AV—Alta Verapaz, BV—Baja Verapaz, CQ—Chiquimula, CH—Chimaltenango, ES—Escuintla, GU—Guatemala, HU—Huehuetenango, IZ—Izabal, JA—Jalapa, JU—Jutiapa, PE—Petén, PR—El Progreso, QU—Quiché, RE—Retalhuleu, SA—Sacatepéquez, SM—San Marcos, SO—Sololá, SR—Santa Rosa, SU—Suchitepéquez, TO—Totonicapán, XE—Quetzaltenango, ZA—Zacapa.
Fig. 1 shows the biogeographic units mentioned in the text. Geographic coordinates for all localities listed in the text appear in Appendix 1. Taxonomy and nomenclature follow AOU (1998) and supplements through 2017 (Chesser et al. 2017) with two exceptions. In the species complex Sharp-shinned Hawk *Accipiter striatus*, we include two taxa within our statistics—Sharp-shinned Hawk *A. striatus*, which is a winter visitor to Guatemala, and White-breasted Hawk *A. chionogaster*, which is a resident breeder in the highlands. In the species complex Yellow-rumped Warbler *Setophaga coronata sensu lato* we list three taxa: resident Goldman’s Warbler *S. goldmani* and northern Myrtle *S. coronata* and Audubon’s Warblers *S. auduboni*, which are both winter visitors to Guatemala. We used software ESRI ArcView 3.2 to conduct spatial analyses. Ornithological collections mentioned in the text: AMNH—American Museum of Natural History, New York; DMNH—Delaware Museum of Natural History, Wilmington, DE; FMNH—Field Museum of Natural History, Chicago; LACM—Natural History Museum of Los Angeles County; MCZ—Museum of Comparative Zoology, Harvard University, Cambridge, MA; MVZ—Museum of Vertebrate Zoology, Berkeley, CA; NHMUK—Natural History Museum, Tring, UK; USNM—National Museum of Natural History, Smithsonian Institution, Washington DC; UWBM—University of Washington Burke Museum, Seattle, WA; and WFVZ—Western Foundation of Vertebrate Zoology, Camarillo, CA.

Species accounts

**FULVOUS WHISTLING DUCK** *Dendrocygna bicolor* (D; rm)

Pantropical and has recently colonised Central America (Carboneras & Kirwan 2017). First reported in Guatemala by hunters in the early 1950s at Laguna de Retana, dpto. Jutiapa (Tashian 1953) and in the 1970s at Laguna de Ayarza, dpto. Santa Rosa and Lago de Güija, dpto. Jutiapa (Thurber et al. 1987). Subsequently, also reported from Lago Amatitlán, dpto. Guatemala, near Tilapa, dpto. San Marcos (including the first documented country record by J. Berry in July 2001), and Monterrico, dpto. Santa Rosa (Eisermann & Avendaño 2007). Most records in winter, including concentrations (>5,000) of presumed migrants at Lago de Güija in 2001–02 (Eisermann & Avendaño 2007). Breeds in El Salvador (Gómez Ventura & de Mendoza 1982, Thurber et al. 1987) and Honduras (Monroe 1968). We suspect breeding in Guatemala based on summer records at Lago de Güija (Thurber et al. 1987) and three seen in July 2000 (Eisermann & Avendaño 2007) and 15 on 4 July 2015 near Manchón-Guamuchal, dpto. Retalhuleu.

**CINNAMON TEAL** *Spatula cyanoptera* (A, D; vagM)

Rare in Central America but reported with increasing frequency since 2011 (Jones & Komar 2012b, 2013c, 2015a). First listed by Land (1970) without details. Unreported again until one at Finca Cataluña, dpto. Retalhuleu, in December 2010 (Jones & Komar 2011c). A male photographed in Manchón-Guamuchal on 1–2 February 2016 (Fig. 2) is the first documented record.

![Male Cinnamon Teal Spatula cyanoptera with male Blue-winged Teal S. discors, Manchón-Guamuchal, dpto. Retalhuleu, 1 February 2016 (Knut Eisermann)](https://bioone.org/journals/Bulletin-of-the-British-Ornithologists'-Club)
NORTHERN SHOVELER *Spatula clypeata* (D; V)
Most reports from the Pacific slope (Howell & Webb 1995) but records from Atlantic lowlands and foothills including a male photographed in Sayaxché, dpto. Petén, on 15 December 2011, three near El Estor on Lago Izabal, dpto. Izabal, on 13 December 2012 (J. Berry pers. comm.) and several records including 35 on 6 February 2012 and 19 on 22 January 2015 in San Cristóbal Verapaz, dpto. Alta Verapaz (J. Cahill & J. Kvarnbäck, eBird S9784290, S21498308) demonstrate it can be expected throughout the country.

GADWALL *Mareca strepera* (A; vagM)
Rare winter visitor. Four seen at Reserva Natural Privada Finca AA, dpto. Petén, in February 2014 (Jones & Komar 2015a) were the first report. Six photographed in Manchón-Guamuchal, dpto. Retalhuleu, on 22 January 2016 (J. Cahill, eBird S27376429) were the first documented record. A record from the Atlantic slope highlands near San Cristóbal Verapaz, dpto. Alta Verapaz, on 21 November 2016 (J. Cahill, eBird S32678207) shows it can be expected throughout the country.

AMERICAN WIGEON *Mareca americana* (D; V)
Rare winter visitor. Recent records from the Atlantic slope lowlands include the delta of the río Polochic, dpto. Izabal, in December 2012 (Jones & Komar 2013d), ten near Puerto Barrios, dpto. Izabal, on 1 February 2015 (Jones *et al.* 2016a), five at Laguna Lachuá, dpto. Alta Verapaz, on 4 January 2014 (J. Cahill, eBird S16244242) and repeated records in San Cristóbal Verapaz, dpto. Alta Verapaz, since November 2012 (J. Cahill, eBird S25997735, S12070044) indicate that it can be expected throughout the country.

GREEN-WINGED TEAL *Anas crecca* (D; vagM)
Rare visitor first reported by Saunders (1950) from coastal marshes in dpto. Santa Rosa and subsequently by Tashian (1953) at Laguna de Retana, dpto. Jutiapa. The first documented record was a male photographed at Lago de Güija, dpto. Jutiapa (Pineda *et al.* 2006) where another was seen in December 2012 (Jones & Komar 2013d). Other records include a male photographed in Manchón-Guamuchal, dpto. Retalhuleu, in December 2009 (Jones & Komar 2010c), with ten in December 2012 (Jones & Komar 2013d), five in December 2014 (Jones *et al.* 2016a) and at least three there on 2 February 2016. A pair photographed in the Atlantic highlands at San Cristóbal Verapaz, dpto. Alta Verapaz, on 4 February 2012 (Jones & Komar 2012b) shows that it may occur throughout the country.

CANVASBACK *Aythya valisineria* (D; vagM)
Rare winter visitor. Two females at Lago Amatitlán, dpto. Guatemala, on 16 December 2014 (L. Trujillo, eBird S39129718, photo ML68605761) was the first since an historical record of an immature male taken in San Miguel Dueñas, dpto. Sacatepéquez (Salvin 1866).

REDHEAD *Aythya americana* (A, D; vagM)
Rare winter visitor. A female photographed at El Remate, Lago Petén Itzá, dpto. Petén, in December 2011 (Jones & Komar 2012b) was the first documented record. Records from Lago Atitlán, dpto. Sololá, in March and December 2011 (Jones & Komar 2011d, 2012b), Lago de Güija, dpto. Jutiapa, in December 2012 (Jones & Komar 2013d), San Cristóbal Verapaz, dpto. Alta Verapaz, in November 2014 (Jones & Komar 2015d) and a pair photographed at El Golfete, dpto. Izabal, on 17 December 2015 (M. Ovando, eBird S26351267) reveal that it may occur throughout the country.
RING-NECKED DUCK *Aythya collaris* (D; V)
Uncommon but regular and widespread visitor. Recent records include nine at Lago Atitlán, dpto. Sololá, in December 2009 (Jones & Komar 2011c), with 42 there in March 2011 (Jones & Komar 2011d), three in the delta of the río Polochic, dpto. Izabal, in March 2012 (Jones & Komar 2013a), two in Cobán, dpto. Alta Verapaz, on 6 November 2014 (J. Cahill & R. Botzoc, eBird S20682632), nine in San Cristóbal Verapaz, dpto. Alta Verapaz, in November 2012 (Jones & Komar 2013d) with four there on 8, 16 and 26 November 2014 (J. Cahill & K. Vande Vusse, eBird S20756577, S20754714, S21333654, S20688709), and 20 at Lago Petén Itzá, dpto. Petén, in December 2011 (Jones & Komar 2012b) with 26 there in December 2012 (Jones & Komar 2013d) and six on 21 March 2013.

MASKED DUCK *Nomonyx dominicus* (D; R)
Rarely reported due to its cryptic behaviour and very local distribution. Two were seen near El Ramonal, dpto. Petén, on 13 December 2010 (K. Easley pers. comm.).

RUDDY DUCK *Oxyura jamaicensis* (D; RM)
Local winter visitor but also breeds at Lago Atitlán, dpto. Sololá, where adults with juveniles were seen in July–September 2011 (Escobar Anleu 2012), and at Laguna Chichoj, San Cristóbal Verapaz, dpto. Alta Verapaz, where adults with juveniles were seen in October 2011 and August 2012 (Jones & Komar 2012a, 2013c).

PLAIN CHACHALACA *Ortalis vetula* (D; R)
Common in the Atlantic slope lowlands and foothills below 1,500 m, but rarely reported above 2,000 m (Eisermann & Schulz 2005, Renner *et al*. 2006). At Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, it has been seen to 2,200 m. A nest with three eggs found there on 3 June 2015 at 2,050 m (Fig. 3) is the first documented high-elevation nesting record.

Figure 3. Nest of Plain Chachalaca *Ortalis vetula* in Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, at 2,050 m, 3 June 2015: (a) lateral view showing nest in tree-fern, the white arrow indicating the bill of an incubating adult; (b) clutch of three eggs in centre of tree-fern (Knut Eisermann)

HIGHLAND GUAN *Penelopina nigra* (D; R)
Considered Vulnerable (IUCN 2017). Recent records in Guatemala were compiled by González-García *et al*. (2001), Eisermann *et al*. (2006) and Eisermann & Avendaño (2007). New site records were established in dptos. San Marcos, Quetzaltenango, Suchitepéquez, Sololá, Chimaltenango, Sacatepéquez, Quiché, Alta Verapaz, Baja Verapaz and Huehuetenango as follows.
• Dpto. San Marcos: four on 14 August 2009, three on 1 March 2010, two each on 16 March 2011 and 11 February 2012 at Refugio del Quetzal, 4 km east of San Rafael Pie de la Cuesta, with a female on 16 January 2011 and an active nest on 28 March 2015 (O. Bravo pers. comm.) at Unión Reforma, a male at Volcán del Cuchón on 31 March 2015, and several observations at Finca Dos Marías (Cooper 2003).

• Dpto. Quetzaltenango: singles at Volcán Siete Orejas on 7 January 2011 and 7 December 2014, three at Loma Linda on 11 January 2011, one at Volcán Chicabal on 23 August 2000 (J. Berry, eBird S5105738) and also mentioned for Volcán Lacandón (Tenez 2005).

• Dpto. Suchitepéquez: one at Finca Las Nubes on Volcán Santo Tomás on 16 August 2009.

• Dpto. Sololá: one at Volcán San Pedro on 4 March 2007 (A. Jaramillo, eBird S23689016), at least one at Volcán Tolimán on 24 February 2001 (P. Kaestner pers. comm.), one at Cerro Paquisís on 12 November 2015 (M. Ovando, eBird S25806123), one near Panajachel on 30 March 2015 (M. Rodríguez, eBird S22637732), one at Cerro Chuiraxamoló on 30 July 2015 (E. Buchán, eBird S25151196) and mentioned for Cerro Iquitiú (Valdez et al. 1999).

• Dpto. Chimaltenango: a male at Cerro Tecpán on 3 January 2006.

• Dpto. Sacatepéquez: four at Volcán Acatenango on 5 January 2011, one at Cerro El Hato on 14 March 2015 (T. Mitzen, eBird S22479635) and at Finca Filadelfia on 25 February 2006 (A. Jaramillo, eBird S23688647).

• Dpto. Quiché: Cerro El Amay (Eisermann et al. 2013), three 2 km east of Acul on 21 March 2017 (L. Wright, eBird S35613494) and one 8 km east of Chajul on 9 May 2017 (S. Rosales, eBird S37120112).

• Dpto. Alta Verapaz: first report at Montaña Xucaneb, one on 12 June 2010 in Finca Rubel Chahim (J. Cahill, eBird S8631435), first report for Finca Las Nubes, 8 km south-east of Cubilhuitz, one on 11 March 2012 (J. Cahill, eBird S10159044), first report for Finca Chajbaoc, one on 3 April 2007 (M. Noack, eBird S14625886), with three males at Finca La Aurora on 10 August 2017.

• Dpto. Huehuetenango: two males 2 km south of Yalambojoch on 12 April 2017, two 6 km north-east of Barillas on 7 May 2017 (M. Ramírez, eBird S36887805) and one in Chaculá on 3 February 2015.

Records in Guatemala are from 500–3,000 m, with most above 1,000 m. A female seen at 500 m near Coatepeque, dpto. Quetzaltenango, on 26 April 2014 was vocalising excitedly (M. Rodríguez pers. comm.), perhaps indicating the presence of dependent young. This is the lowest-elevation record in Guatemala. Based on records from the past 30 years, Highland Guan is widespread in humid foothill and highland forest on the Atlantic slope including the foothills of the Sierra Los Cuchumatanes, greater Sierra de Chamá (including Cerro El Amay, Montañas Sacranix, Xucaneb, Caquipec and Yalijux), Sierra de las Minas, and in the Pacific volcanic highlands. With records from, for example, different sites on Volcán Atitlán pooled as a single topographic unit, Highland Guan has been reported from a total of 57 sites in Guatemala.
HORNED GUAN Oreophasis derbianus (D; R)
Considered Endangered (IUCN 2017). Reliably recorded at 15 sites in Guatemala during the period 1998–2017 (Fig. 4), most (n = 13) in the Pacific slope highlands, with two from the Atlantic slope highlands. Pacific reports include Volcán Acatenango, dpto. Sacatepéquez (Véliz Pérez 2000, Rivas Romero 2006a), Volcán Tolimán, dpto. Sololá (Méndez 2000), Volcán

Figure 4. Distribution of Horned Guan Oreophasis derbianus in Guatemala, including sites with recent records, unconfirmed reports, and historical records (see text for references). Sites: 1 = Volcán Tacaná, dpto. San Marcos, 2 = Sibinal, dpto. San Marcos, 3 = Volcán Tajumulco, dpto. San Marcos, 4 = Parque Regional Municipal de San Marcos, dpto. San Marcos, 5 = Volcán Lacandón, dpto. Quetzaltenango, 6 = Cerro La Campana, dpto. Quetzaltenango, 7 = Volcán Chicabal, dpto. Quetzaltenango, 8 = Volcán Santa María, dpto. Quetzaltenango, 9 = Parque Regional Municipal Zunil including Fuentes Georginas, dpto. Quetzaltenango, 10 = Volcán Santo Tomás, dpto. Quetzaltenango, 11 = cloud forest patches north of Totonicapán, dpto. Totonicapán, 12 = Parque Regional Municipal Los Altos de San Miguel Totonicapán, dpto. Totonicapán, 13 = Santa Catarina Ixtahuacán, dpto. Sololá, 14 = Cerro Panán/Paquisis, dpto. Sololá, 15 = Volcán San Pedro, dpto. Sololá, 16 = Cerro Tecpán, dpto. Chimaltenango, 17 = Volcán Atitlán, dpto. Sololá, 18 = Volcán Tolimán, dpto. Sololá, 19 = Cerro Iquituí, dpto. Sololá, 20 = Volcán Acatenango, dpto. Sacatepéquez, 21 = Volcán Fuego, dpto. Sacatepéquez, 22 = Cerro Yaxcalanté, dpto. Huehuetenango, 23 = Cerro Cruz Malin, dpto. Huehuetenango, 24 = cloud forests north of Nebaj, dpto. Quiché, 25 = cloud forests north-east of Chajul, dpto. Quiché, 26 = cloud forest east of San Juan Cotzal, dpto. Quiché, 27 = cloud forest north of Cunén, dpto. Quiché, 28 = Cerro El Amay, dpto. Quiché, 29 = Sierra de las Minas, dpto. El Progreso, Zacapa, Izabal and Alta Verapaz. Country codes: BZ = Belize, GT = Guatemala, HN = Honduras, MX = Mexico, SV = El Salvador.
Atitlán, dpto. Sololá (Rivas Romero 2006a, Eisermann et al. 2007), Volcán San Pedro, dpto. Sololá (Rivas Romero 2006a, 2008), Cerro Panán / Paquisí, dpto. Sololá (Rivas Romero 2006a), Parque Regional Municipal Los Altos de San Miguel Totonicapán, dpto. Totonicapán (Rivas Romero 2006a), Volcán Santo Tomás and the adjacent Parque Regional Municipal Zunil including Fuentes Georginas, dpto. Quetzaltenango (Brooks & Gee 2006), Volcán Tacaná, dpto. San Marcos (Cóbar Carranza & Rivas Romero 2005), where an adult was photographed at Vega del Volcán on 29 August 2014 at 2,750 m, one sound-recorded on 31 March 2015 and two adults photographed on 28 June 2015, Sibinal, dpto. San Marcos (Cóbar Carranza & Rivas Romero 2005), where one was heard at Unión Reforma on 1 February 2012, an adult photographed on 27 March 2015 and one on 30 June 2015, Parque Regional Municipal de San Marcos, dpto. San Marcos (Cóbar Carranza & Rivas Romero 2005), five photographed at Volcán Tajumulco on 7 October 2015 (C. López, eBird S25331529) and one at Volcán Chicabal, dpto. Quetzaltenango, on 18 August 2016 (C. River, eBird S31433816).

Atlantic slope reports are from the Sierra de las Minas in dptos. El Progreso, Zacapa, Izabal and Alta Verapaz (Rivas Romero & Cóbar Carranza 2005, Quiñónez-Guzmán et al. 2017). An adult photographed at Cerro Cruz Maltín east of Soloma, dpto. Huehuetenango, in 2010 (Cotí Lux 2010), confirms historical reports (Baepler 1962) from the site.

At three more sites, two on the Pacific slope and one in the Atlantic slope highlands, Horned Guan has been recorded historically but not recently: Cerro Tecpán, dpto. Chimaltenango (Griscom 1932, Carriker & Meyer de Schauensee 1935), Volcán Fuego, dptos. Chimaltenango, Escuintla and Sacatepéquez (Salvin & Sclater 1860a) and Cerro El Amay, dpto. Quiché (Salvin 1874, Eisermann et al. 2013).

Horned Guan may occur at 13 additional sites based on reports by local people (Cóbar Carranza & Rivas Romero 2005, Rivas Romero 2006a,b, Eisermann & Avendaño 2007, Rivas Romero & Cóbar Carranza 2007, Eisermann et al. 2013), which require verification (Fig. 4).

Breeding reported at just six sites. At Volcán Tolimán two nests were found in March and May 2000 (Méndez 2000). At Volcán Atitlán nesting was reported in Reserva Natural Privada Los Tarrales in 2005 (Eisermann et al. 2007). At the same site, a pair with two c.2-week-old juveniles were photographed on 18 March 2007 (Fig. 5), an adult with two one-week-old juveniles on 18 March 2011 (G. López & KE pers. obs.) and an adult with small young hidden in leaf litter on the forest floor on 4 April 2012 (G. López pers. comm.). At Volcán San Pedro, two juveniles were observed in September 2007 (J. Rivas in BirdLife International 2012), and at Sierra de las Minas an adult was seen with two 2-3 month-old juveniles in August 2009 (Quiñónez-Guzmán 2011). At Unión Reforma, dpto. San Marcos, a nest was found in 2008 (V. Bravo pers. comm.) and a juvenile was seen at Vega del Volcán on the slopes of Volcán Tacaná in April 2017 (R. Bartolón pers. comm.).

NORTHERN BOBWHITE Colinus virginianus (D; r)
Long known in Guatemala from a single female collected in the poorly surveyed Nentón area in dpto. Huehuetenango in 1895 (Nelson 1897). Thereafter, unrecorded for more than

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115 years. New records show it is fairly common there: four heard near Nentón in July 2012 (Jones & Komar 2013b), five 2 km north of Chacaj on 28 April 2015, two 3 km north of Chacaj on 30 January 2016, four 7 km north of Nentón on 29 April 2015 (Fig. 6), two at Finca El Carmen on 22 April 2017, with two sound-recorded there on 2 June 2017, two 2 km east of Unión on 2 June 2017 and two at Chaculá on 23 April 2017. All records are from the Nentón Valley, but it might also occur in open landscapes in the Pacific coastal lowlands, while deforestation in north-west dpto. Petén may induce the species to expand there from adjacent Tabasco, Mexico. We assume it is a resident breeder in the Nentón Valley, but nesting has not been reported.

BLACK-THROATED BOBWHITE Colinus nigrogularis (D; R)
Long known only from historical records in La Libertad in south-west dpto. Petén and at Lago Petén Itzá, dpto. Petén (van Tyne 1935, Taibel 1955). Recent records are from open landscapes north-east and south-east of Lago Petén Itzá including at least 20 seen 25 km north of Dolores, dpto. Petén, in December 2012 (Jones & Komar 2013d), 5 km north of El Remate, dpto. Petén (Jones & Komar 2014a), near Santa Ana, Ixpanpajul, dpto. Petén (Jones & Komar 2015c) and 27 km north-east of Dolores, dpto. Petén (Jones et al. 2016b).

OCELLATED QUAIL Cyrtonyx ocellatus (D; R)
Considered Vulnerable (IUCN 2017). Eitniear & Eisermann (2009) summarised the known distribution in 2008. Recent records including several from new sites as follows: Finca Filadelfia, dpto. Sacatepéquez and Volcán San Pedro, dpto. Sololá (Jones & Komar 2010b), Finca Rubel Chahim, dpto. Alta Verapaz (Jones & Komar 2011d), Reserva Natural Privada Santa Rosa y Llano Largo, dpto. Baja Verapaz (Jones & Komar 2015d), one sound-recorded near Tochatzé, Volcán Tacaná, dpto. San Marcos, on 2 February 2011 and one on the same volcano in Parque Regional Municipal Canjulá on 2 February 2012, with two near La Haciendita on 28 August 2014, a male at Volcán Siete Orejas, dpto. Quetzaltenango, on 14 May 2012, two calling on 28 February 2013 and one on 15 April 2013 near Parque Ecológico Corazón del Bosque, Novillero, dpto. Sololá, one heard at Cerro Tecpán, dpto. Chimaltenango, on 12 May 2012, confirming historical reports from the site (Dearborn 1907), two heard at 3,750 m on 12 April 2016, four on 3 June 2016, two seen on 2–3 July 2016, two on 27 August 2016, four on 24 April 2017 and one on 10 May 2017 in Parque Regional Municipal Todos
Santos Cuchumatán, dpto. Huehuetenango, three heard in Chiabal, dpto. Huehuetenango, on 28 April 2016, three photographed at Montaña de Carmona, dpto. Sacatepéquez, on 29 July 2016, a male seen in Parque Regional Municipal de San Marcos, dpto. San Marcos, on 14 May 2016 (E. O. Díaz, eBird S29700382) and a female photographed 2 km east of Chajul, dpto. Quiché, on 1 September 2016 (eBird S31563003).

Breeding records include a chick estimated to be c.2 weeks old photographed in Finca Rubel Chahim, dpto. Alta Verapaz, on 20 May 2015 (J. Cahill, eBird S23594215), a nest with six eggs at Montaña de Carmona, dpto. Sacatepéquez, on 16 June 2017 (J. Antonio pers. comm.) and a two-day old chick photographed there on 30 June 2017 (Fig. 7), and five recently fledged chicks photographed in Chiabal, dpto. Huehuetenango, on 18 July 2017 (E. Matías pers. comm.). These records suggest that nesting occurs during the first half of the wet season (April–July). In total, Ocellated Quail is reported from 31 topographic units at 1,200–3,750 m.

**WHITE-CROWNED PIGEON** *Patagioenas leucocephala* (A; V)
Breeds on Caribbean islands including the Belize Cays and Bay Islands off Honduras, but rarely reported from the Central American mainland. Following multiple observations of adults and immatures in mangroves at Punta de Manabique Wildlife Refuge, dpto. Izabal, during October 2000 to April 2001 (Eisermann 2003), one photographed near Yaxhá, dpto. Petén, on 8 April 2017 (G. Gonzales, eBird S35873329, photo ML54152661) was the first documented record.

**EURASIAN COLLARED DOVE** *Streptopelia decaocto* (A, C, D; R)
An Old World species introduced to the New World in the 1970s, and now expanding across North America including Mexico (Romagosa 2012). Recently established on the Yucatán Peninsula and in northern Belize (Jones & Komar 2015b). Records from San Benito, Santa Elena and La Libertad in central dpto. Petén since June 2014 (Jones & Komar 2015c,d, Jones et al. 2016a,b) indicate it is now established and common there, e.g. 55 in San Benito on 17 December 2016 (C. Echeverría, eBird S33052809). Display flights observed in San Benito on 18 March 2016 and one collecting nest material in San Miguel on 24 February 2017 (J. Dangel, eBird S34777998) confirm breeding. Singles at Uaxactún, northern dpto. Petén, in April 2015, and at La Corona archaeological site in May 2015 (Jones et al. 2016b). One near Tulumajillo, dpto. El Progreso, on 23 February 2015 (M. Rodriguez pers. comm.) was the first record in the río Motagua Valley, and one photographed in Panajachel, dpto. Sololá, on 9 March 2016 (M. E. Chocoy, eBird S28652083) was the first record for the department. Records from the Pacific coast include one photographed in Manchón-Guamuchal, dpto. Retalhuleu, on 26 January 2017 (M. Rodriguez, eBird S33945751), one photographed in Puerto Quetzal, dpto. Escuintla, on 6 January 2017 (M. Ovando, eBird S33477941) and one photographed in Monterrico, dpto. Santa Rosa, on 13 May 2017 (E. Alvarez, eBird S36862356). Eurasian Collared Dove has colonised Guatemala from north to south in just three years and it can now be expected in open and urban habitats throughout the country.

**PLAIN-BREASTED GROUND DOVE** *Columbina minuta* (D; R)
Formerly thought to be locally distributed (Howell & Webb 1995, Eisermann & Avendaño 2007), but many new site records in the Atlantic slope lowlands and it is perhaps increasing with deforestation. In dpto. Alta Verapaz: a pair in Chiquibul in July 2007 (Jones & Komar 2008a), a pair 7 km north-east of Tucurú at 700 m on 12 April 2008, three south of Panzós on 7 October 2012, one sound-recorded south-east of Panzós on 10 October 2012, three near Muchilhá in June 2014 (Jones & Komar 2015c); dpto. Izabal: three at Sierra del Caral in June
2014 (Jones & Komar 2015c), one photographed at Hacienda Tijax on 23 October 2014 with two there on 28 December 2014; dpto. Petén: one 7 km south-west of San Andrés at west end of Lago Petén Itzá (Jones & Komar 2013d), one at the río Sacluc, 7 km south-west of Paso Caballo, Parque Nacional Laguna del Tigre, on 14 April 2013, and one 25 km north of San Andrés in July 2013 (Jones & Komar 2014b). Records in Guatemala range from sea level to 700 m and the species is widespread in deforested areas of the humid lowlands and foothills.

**MAROON-CHESTED GROUND DOVE** *Claravis mondetoura* (D; R)

Rare, sporadically reported, and thought to be closely associated with seeding bamboo (Stiles & Skutch 1989, Howell & Webb 1995). It can be expected throughout the humid highlands of Guatemala, where it has been reported from 11 sites on the Pacific slope and four on the Atlantic slope. Pacific slope records include Volcán Tolimán, dpto. Sololá (Griscom 1932), Volcán Fuego in dptos. Escuintla, Chimaltenango and Sacatepéquez (Salvin & Godman 1897–1904), one at Volcán Chicabal, dpto. Quetzaltenango, on 1 November 2000 (J. Berry pers. comm.), two at Fuentes Georginas, dpto. Quetzaltenango, on 28 July 2001 (J. Berry pers. comm.), an active nest at Volcán Atitlán in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, at 1,400 m, in late February–early March 2010 (J. de León Lux pers. comm.) with one heard there on 10 April 2014, a male on Volcán San Pedro, dpto. Sololá, in October 2010 (Jones & Komar 2011b), a pair seen and sound-recorded at 3,100 m on 11 April 2012, three males heard and seen at 3,200 m on 14–15 May 2012, three males heard on 16 April 2013 and two on 19 April 2017 at Volcán Siete Orejas, dpto. Quetzaltenango, a female seen at Finca El Pilar, dpto. Sacatepéquez, in January 2014 (Jones & Komar 2015a), one in Finca Filadelfia, dpto. Sacatepéquez, on 25 February 2006 (A. Jaramillo, eBird S23688647), three heard at 3,150 m on 28 August 2014 and a male photographed on 29 March 2015 near La Haciendita on Volcán Tacaná, dpto. San Marcos, and two heard at Volcán Pacaya, dpto. Escuintla, in June 2013 (Jones & Komar 2014b). Atlantic slope records are from north of Usumatlán, dpto. Zacapa, singles sound-recorded at 1,200 m at Montaña Sacranix, dpto. Alta Verapaz, on 24 August 2003, and in Reserva Natural Privada Santa Rosa Llano Largo, near Purulhá, dpto. Baja Verapaz, in July 2015 (Jones *et al.* 2016b), and a male seen in Biotopo del Quetzal, dpto. Baja Verapaz, on 3 December 2016 (E. Buchán pers. comm.). Guatemalan records are from elevations of 1,200–3,200 m.

**CARIBBEAN DOVE** *Leptotila jamaicensis* (A, D; r)

Endemic to the Caribbean region and Yucatán Peninsula where most records are from coastal areas and islands (Howell & Webb 1995). Reports from Biotopo Dos Lagunas and / or Biotopo San Miguel La Palotada–El Zotz, dpto. Petén, in 1988–92, by Whitacre & Thorstrom (1992) lack documentation. The first documented record for Guatemala (sound-recordings) was made in El Tintal, dpto. Petén, on 2–3 March 2008 (Budney *et al.* 2008, Jones & Komar 2008d).

![Figure 8. Caribbean Dove Leptotila jamaicensis, dpto. Petén: (a) río Sacluc, 7 km south-west of Paso Caballo, 16 May 2013; (b) Tikal, 29 April 2017 (Knut Eisermann)](image)
At least eight were seen and sound-recorded along 3 km of the río Sacluc 7 km south-west of Paso Caballo, dpto. Petén, in the south-east of Parque Nacional Laguna del Tigre, on 23 March 2013, with two recorded there on 14, 16 and 17 May 2013 (Fig. 8a). Two were sound-recorded at the río San Pedro 10 km west of Paso Caballo on 15 May 2013. One was heard 1 km east of Paso Caballo, and two were 4 km south-east of Paso Caballo on 24 March 2013. In Tikal, dpto. Petén, lone birds were photographed and sound-recorded on 3 April 2017 and 28–29 April 2017 (Fig. 8b). These records suggest that the south-eastern section of Parque Nacional Laguna del Tigre hosts a population and that the mainland distribution extends well inland and >100 km further south than previously known (Howell & Webb 1995). We presume that Caribbean Dove breeds in Guatemala, but nesting has not been reported.

**WHITE-WINGED DOVE** *Zenaida asiatica* (D; R)

Formerly restricted to southern Guatemala (Eisermann & Avendaño 2007) but has expanded in recent decades and is now common in deforested parts of dpto. Petén, including around Lago Petén Itzá and the south of Parque Nacional Laguna del Tigre (Eisermann & Avendaño 2007). New site records include the east shore of Lago Izabal near Boca Ancha, dpto. Izabal, on 6 February 2015 (M. Ramírez, eBird S21700099), one at Rocjá Pomtilá, dpto. Alta Verapaz, in November 2009 (Jones & Komar 2010c) and one at Finca Chajbaoc, dpto. Alta Verapaz, on 13 June 2016 (M. Noack, eBird S23889585). These reports document further expansion over the Atlantic slope lowlands and foothills, and suggest that the species can now be expected throughout the country.

**MOURNING DOVE** *Zenaida macroura* (C; RM)

Mainly a non-breeding winter visitor to Guatemala, but summer records have long suggested it may breed locally (Eisermann & Avendaño 2007). One seen building a nest with two eggs, 2 m above ground on a palm leaf, in Manchón-Guamuchal, dpto. Retalhuleu, on 2–4 July 2015 (Fig. 9) with a total of nine seen in the area, confirms the presence of a resident breeding population.

**MANGROVE CUCKOO** *Coccyzus minor* (D; r)

One seen at 900 m near Nentón, dpto. Huehuetenango, on 19 January 2015 was a rare inland record. Other inland records include one at Santa Elena, dpto. Petén, in October 2014 (Jones & Komar 2015d), one photographed near Poptún, dpto. Petén, on 3 May 2016 (E. Salvatierra,
Lesser Ground-Cuckoo *Morococcyx erythropygus* (D; R)

Long known only from the arid south (Howell & Webb 1995). Recent records from the Nentón Valley, dpto. Huehuetenango, demonstrate that its distribution extends from the central valley of Chiapas, Mexico, into adjacent western Guatemala. These include: nine at Finca El Carmen on 13 April 2012 with two there on 2 June 2017, one at Chaculá on 14 April 2012, three km south of La Trinidad on 15 April 2012, four at Limonar on 1 December 2014, one near Chacaj on 28 April 2015 with one there on 30 January 2016, eight at Lagunas de Candelaria on 28 April 2015 with one there on 29 January 2016, and three on 22 April 2017 and 2 June 2017 near Unión.

Short-tailed Night Hawk *Lurocalis semitorquatus* (A, D; r)

Uncommon in the Atlantic slope lowlands, where known from just eight sites. Howell & Webb (1992) reported one in Biotopo Chocón-Machacas, dpto. Izabal, in February 1991, and Eisermann & Avendaño (2006) reported singles near Rocjá Pomtilá east of Parque Nacional Laguna Lachúa, dpto. Alta Verapaz, in February 2002, and at Laguna Yaxhá, dpto. Petén, in April 2003. Recent records include four at Rocjá Pomtilá on 8 January 2012 (E. Caal pers. comm.), one at Laguna Lachúa on 26 November 2011 (J. Harding pers. comm.) and one near Panzós, dpto. Alta Verapaz, on 9 October 2012. At least four at Santa María Tzejá, dpto. Quiché, on 19 October 2011 were the first in dpto. Quiché. Records from northern dpto. Petén further extend the range with two on 23 March 2013 and one on 16 May 2013 at the río Sacluc, 7 km south-west of Paso Caballo, Parque Nacional Laguna del Tigre. One photographed there on 14 December 2014 (Jones *et al.* 2016a) was the first documented record. Lone birds seen over a pond in Tikal on 7 and 22 January 2018 were the first records for that site. We assume it is a breeding resident, but nesting has not been recorded.

Lesser Night Hawk *Chordeiles acutipennis* (C, D; RM)

Eight nests, each with 1–2 eggs, found on a beach at the río Paz, dpto. Jutiapa, on the border with El Salvador, in April 2010 (Juárez-Jovel & Komar 2012) was the first breeding record. Records from April–May in the Pacific slope lowlands, as well as reports from arid interior valleys and foothills on the Atlantic slope (the río Motagua Valley), suggest that the breeding range is larger than suggested by Howell & Webb (1995) and may include the entire Pacific slope, interior valleys, and highlands.

Common Night Hawk *Chordeiles minor* (D; rv)

Long-distance migrant with most breeding in North America and wintering in South America (Brigham *et al.* 2011). Transients may be abundant during migration, e.g. >5,000 (170 individuals per minute during 30 minutes at dusk) emerged from day roosts in coastal scrub at Punta de Manabique Wildlife Refuge, dpto. Izabal, on 13 May 2001.

Summer records (June–July) are scarce but include two in Reserva Natural Privada Santa Rosa y Llano Largo, dpto. Baja Verapaz, on 9 July 2013 (J. Cahill, eBird S14616460),
five c.5 km south-east of Santa Ana, dpto. Petén, on 8 July 2014 (J. Cahill, eBird S19225992), six sound-recorded at Finca Ixobel, dpto. Petén, on 24 July 2017 (J. Dangel, eBird S38311254) and two at Chaculá, dpto. Huehuetenango, on 3 June 2017. All summer records are from lowland pine savanna or semi-humid highland pine–oak forest. These data suggest that the species is a local and uncommon summer visitor. Breeding can be assumed but has not been reported. Also, recent winter records as far north as Texas (Lockwood & Freeman 2014) and Florida (Pranty & Ponzo 2012) mean that Common Nighthawk may occur exceptionally in Guatemala at this season.

YUCATAN NIGHTJAR *Antrostomus badius* (A; rm)
Considered to be a short-distance migrant from the Yucatán Peninsula to northern Central America (Howell & Webb 1995). Two sound-recorded near the río Sacluc, 7 km south-west of Paso Caballo, Parque Nacional Laguna del Tigre, dpto. Petén, on 14 and 16 May 2013, constituted the first documented record. May nest in the area as breeding is thought to occur April–August (Cleere 1999). We consider it resident, in part migratory, breeding suspected.

BUFF-COLLARED NIGHTJAR *Antrostomus ridgwayi* (D; r)
At least five sound-recorded at Chaculá on 13–15 April 2012 were the first documented record for dpto. Huehuetenango and extend the known range from the central valley of Chiapas, Mexico, into the Nentón Valley.

EASTERN WHIP-POOR-WILL *Antrostomus vociferus* (D; vagM)
A poorly known Nearctic migrant that was formerly considered conspecific with the widespread resident Mexican Whip-poor-will *A. arizonae* (e.g. AOU 1998, Eisermann & Avendaño 2007). The only documented records for Guatemala appear to be a few specimens collected mainly in the 19th century (Salvin & Sclater 1860b, Salvin & Hartert 1892), including a male taken near Cobán, dpto. Alta Verapaz, in February 1935 (Carriker & Meyer de Schauensee 1935) and a female collected in dpto. Izabal in March 1959 (Land 1963). This paucity of material, in combination with the difficulty of identifying silent birds in the field (Howell & Webb 1995) has obscured the status of Eastern Whip-poor-will in the region. We regard it as a vagrant to Guatemala.

BLACK SWIFT *Cypseloides niger* (D; rv)
Rare, local and poorly known across its vast range (Stiles & Negret 1994, Chantler & Driessens 2000, Beason *et al.* 2012). Birds breeding in the USA have recently been found wintering in western Brazil (Beason *et al.* 2012) and it is probably a widespread transient across Central America (Stiles & Skutch 1989, Howell & Webb 1995). Summer (June–July) records are available including a female over Montaña Yalijux, dpto. Alta Verapaz, on 6 July 2014 (Fig. 10a; Jones & Komar 2015c), ten over Manchón-Guamuchal, dpto. Retalhuleu, on 1 July 2015 (Fig. 10b), ten with Vaux’s *Chaetura vauxi* and Chestnut-collared Swifts *Streptoprocne rutila* over Jocotenango, dpto. Sacatepéquez, on 27 June 2017 (Fig. 10c–e), with ten also there with Vaux’s, Chestnut-collared and White-collared Swifts *Streptoprocne zonaris* on 5 July 2017 (Fig. 10f–j), a pair among a flock of Chestnut-collared Swifts near La Haciendita, dpto. San Marcos, on 30 May 2017 (Fig. 10k) and a single at 3,700 m in Parque Regional Municipal Todos Santos Cuchumatán on 3 June 2016 (Fig. 10l). Summer records suggest that Black Swift is both a transient and breeder in Guatemala, but evidence of nesting has not been reported.
WHITE-CHINNED SWIFT  *Cypseloides cryptus* (B; ?, H)
Rare, local and poorly known (Chantler & Driessens 2000). Presumed to occur in Guatemala (Howell & Webb 1995) given specimens collected in Belize (Russell 1964). Two presumed White-chinned Swifts were observed with Black *Cypseloides niger* and Great Swallow-tailed Swifts *Panyptila sanctihieronymi* over Jocotán, dpto. Chiquimula, on 3 September 2006 (R. Fergus pers. comm.). Identification was based on ‘smaller size, shorter wings, shorter tail, no gliding’ (R. Fergus pers. comm.). This is the first report from Guatemala, but it is undocumented and the species’ status is unknown. Nearest known colonies in Costa Rica (Marín & Stiles 1992).

CHIMNEY SWIFT  *Chaetura pelagica* (A; T)
Breeds in eastern North America, winters in South America, and commonly passes through Middle America via the Atlantic slope (Howell & Webb 1995). However, one photographed near Hacienda Tijax, dpto. Izabal, on 22 October 2014 appears to be the first documented record.

GREAT SWALLOW-TAILED SWIFT  *Panyptila sanctihieronymi* (D; R)
Rare in the interior valleys and semi-humid highlands. Historical records include observations of nesting in the eastern valley of the río Chixoy near San Jerónimo, dpto. Baja Verapaz, and near Antigua Guatemala, dpto. Sacatepéquez (Salvin & Godman 1888–97, Griscom 1932). New records are of lone birds and small flocks, including one in Antigua
Guatemala, dpto. Sacatepéquez, on 1 September 2008 (R. Fergus pers. comm.), at Volcán Acatenango, dpto. Sacatepéquez, in January 2007 (Jones & Komar 2008c), in the northern río Chixoy Valley south of San Cristóbal Verapaz, dpto. Alta Verapaz, in July 2007 (Jones & Komar 2008a), near Biotopo del Quetzal, dpto. Baja Verapaz, in August 2009 and July 2013 (Jones & Komar 2010b, 2014b), two in Jocotán, dpto. Chiquimula, on 3 September 2006 (R. Fergus pers. comm.), at Sabana Grande, dpto. Chiquimula, in September 2010 (Jones & Komar 2011b) and near Cunén, dpto. Quiché, in May 2014 (Jones & Komar 2015b). Four photographed 7 km north-west of Santa Ana Huista, dpto. Huehuetenango, on 31 January 2016 (Fig. 11) were the first record for the Nentón Valley.

**WHITE-NECKED JACOBIN** *Florisuga mellivora* (C; R)

Uncommon resident in the Atlantic slope lowlands and foothills. A female incubating two eggs near Rocjá Pomtilá, dpto. Alta Verapaz, on 19 July 2009 (Fig. 12) was the first documented nesting record for Guatemala. On the Pacific side there are several records from the south-eastern slope of Volcán Atitlán in October–February (Eisermann & Avendaño 2007, Jones & Komar 2015a) including singles on 9 January 2007, 14 December 2007, 25 November 2009, 8 November 2010 (J. de León Lux pers. comm.), 20 December 2011 (A. de León Lux pers. comm.), 21 October 2012 (J. de León Lux pers. comm.) and 14 February 2015 (J. de León Lux, eBird S21820020), three on 11 February 2016 (J. de León Lux, eBird S27425910) and singles on 23 November 2016 (J. de León Lux, eBird S27425910) and singles on 23 November 2016 (J. de León Lux, eBird S27425910) and singles on 23 November 2016 (J. de León Lux, eBird S27425910) and singles on 23 November 2016 (J. de León Lux, eBird S33002808) and 8 January 2017 (M. Rodríguez, eBird...
S33555131). These records suggest that White-necked Jacobin is a regular non-breeding visitor to the Pacific slope.

**LONG-BILLED STARThROAT** *Heliomaster longirostris* (C; R)
Uncommon on both the Pacific and Atlantic slopes. Nesting records from Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, confirm breeding. These include an adult seen nestbuilding at 900 m on 11 April 2011 and an adult feeding a juvenile on 6 December 2006 (E. Buchán & L. de León Lux pers. comm.), while an active nest with an incubating female was found at 1,000 m located c.18 m above ground atop a broken vertical limb of a tree in a shade-coffee plantation on 16 December 2011 (G. López pers. comm.), a nest photographed with an incubating or brooding female at 1,000 m on 9 November 2014, and a nest photographed with an incubating or brooding female at 800 m on an arching vine on 5 February 2015. On 17 February the female was video-recorded feeding two juveniles that were c.7 days old. All five nesting records were in the dry season.

**PLAIN-CAPPED STARThROAT** *Heliomaster constantii* (D; r)
Thought to be restricted to the arid south-east (Howell & Webb 1995) but new records from the Nentón Valley, dpto. Huehuetenango, show that the distribution extends from the central valley of Chiapas, Mexico, into western Guatemala. These include: three at Finca El Carmen on 13 April 2012, one in Limonar on 1 December 2014, one at Lagunas de Candelaria on 28 April 2015 and one near Unión on 2 June 2017.

**SLENDER SHEARTAIL** *Doricha enicura* (C; R)
A female incubating two eggs in Santiago Atitlán, dpto. Sololá, on 27 July 2013 (F. Cummings pers. comm.; photograph) is the first documented breeding record for Guatemala. A young bird photographed in Chamelco, dpto. Alta Verapaz, at a lek site of Slender Sheartail, on 17 September 2008, and a fledged juvenile photographed in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 6 September 2009 (Fig. 13) suggest that it breeds in the wet season.

**BROAD-TAILED HUMMINGBIRD** *Selasphorus platycercus* (C; R)
In Guatemala only found above 2,700 m. A nest with two eggs found near Chiabal, dpto. Huehuetenango, on 18 August 2016 and a nest with two eggs photographed there on 2 August 2017 (E. Matías pers. comm.), a female observed nestbuilding at Volcán Tolimán, dpto. Sololá, on 24 September

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![Figure 13. Juvenile Slender Sheartail *Doricha enicura*, Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, 6 September 2009 (Knut Eisermann)](image)

![Figure 14. Female Broad-tailed Hummingbird *Selasphorus platycercus* during final stage of nestbuilding, Volcán Tolimán, dpto. Sololá, 24 September 2017 (Knut Eisermann)](image)
2017 (Fig. 14) and a female at another nest there on 16 November 2017 were the first breeding records for Guatemala.

**GREEN-FRONTED HUMMINGBIRD**  
*Amazilia viridifrons* (D; r)

Long considered a Mexican endemic but known from three sites in the Nentón Valley, dpto. Huehuetenango (Sandoval 2000, Eisermann & Avendaño 2007). New records include at least three photographed at Finca El Carmen on 13 April 2012 (Fig. 15) with four there on 22 April 2017 and two on 2 June 2017, two near Nentón in July 2012 (Jones & Komar 2013b), one at Limonar on 1 December 2014, and two near Chacaj on 30 January 2016. It is fairly common in dry scrub in the Nentón Valley and we assume it is a breeding resident although nesting has not been reported.

**GREY-BREASTED CRAKE**  
*Laterallus exilis* (D; r)

Reported from just five sites, all in the Atlantic slope lowlands. Previous records are from Finca Higuerito, Izabal (Howell & Webb 1992) and Quetzalito and Quineles in Punta de Manabique Wildlife Refuge, dpto. Izabal (Eisermann & Avendaño 2007). One was sound-recorded on 28 March 2011 and others heard on 7 November and 23 December 2010 at El Tucán Uno, dpto. Petén. Three heard on 29 December 2014 and 26 January 2015 in Hacienda Tijax, dpto. Izabal, represented a new site record (Jones *et al.* 2016a). Reports from Tikal (Beavers 1992) and Parque Nacional Laguna del Tigre, dpto. Petén (Pérez & Castillo 2000) require confirmation (Eisermann & Avendaño 2007). Probably a breeding resident, but nesting has not been reported.

**BLACK RAIL**  
*Laterallus jamaicensis* (D; ?)

Rare, local and poorly known in Central America (Russell 1965, Vallely & Gallardo 2013). In Guatemala known from only two specimens, collected before 1874 in San Miguel Dueñas, dpto. Sacatepéquez (Salvin 1866, Salvin & Godman 1897–1904). Considering its cryptic behaviour, the low observer coverage in Guatemala, and that one of the specimens was identified as an immature (Salvin & Godman 1897–1904), we conclude that an overlooked breeding population could be involved. Thus, an uncertain residency status may be more appropriate than our previous categorisation as extirpated (Howell & Webb 1995, Eisermann & Avendaño 2007).

**RUFOUS-NECKED WOOD-RAIL**  
*Aramides axillaries* (A; r)

First reported from the Atlantic slope in Punta de Manabique Wildlife Refuge, dpto. Izabal, in March 2001 (Eisermann 2003) and on the Pacific slope at Manchón-Guamuchal, dpto. Retalhuleu, in April 2002 (J. Berry in Eisermann & Avendaño 2007). One photographed in mangroves at Manchón-Guamuchal on 3 February 2016 (Fig. 16) was the first documented record. Although all of the few Guatemalan records are from mangroves, it may also occur in humid inland forests (Carriker 1910, Thurber *et al.* 1987, Taylor & van Perlo 1998,
Jones 2003b, Eisermann & Avendaño 2007, Howell 2010). We assume that it is a resident breeder, but nesting has not been confirmed.

**UNIFORM CRAKE Amaurolimnas concolor**

(D; r)

First reported from Guatemala by Lawrence (1863) without details and subsequently unreported for nearly 140 years. New records involve singles seen in second growth adjacent to mangroves at Punta de Manabique Wildlife Refuge, dpto. Izabal, in May 2001 (Eisermann 2001) and heard in mangrove edge at Hacienda Tijax, dpto. Izabal, on 22 October 2014. We assume it breeds in Guatemala, but nesting has not been reported.

**SPOTTED RAIL Pardirallus maculatus** (C, D; R)

Rare and reported from just six sites in Guatemala, including birds photographed at Lago de Güija, dpto. Jutiapa, in April 2004 (Herrera 2005), San Cristóbal Verapaz, dpto. Alta Verapaz, in March 2014 (Jones & Komar 2015b), and in a wetland 4 km west of Purulhá, dpto. Baja Verapaz, on 21 and 22 December 2016 (M. Ovando, eBird S33146128). One heard in Hacienda Tijax, dpto. Izabal, on 29 December 2014, was a new site record. In Belize, one was recorded at Benque Viejo in January 2014 (Jones & Komar 2015a) near the border with Guatemala. An adult with two juveniles seen on 5 April 2017 (J. Cahill, eBird S35881252) and photographed on 14 April 2017 (M. Noack, eBird S35945090) at San Cristóbal Verapaz, dpto. Alta Verapaz, was the first breeding record. Previous records from Tikal and Parque Nacional Laguna del Tigre, dpto. Petén, require confirmation (Eisermann & Avendaño 2007). Guatemalan records range from sea level to 1,600 m, but it has been reported up to 2,000 m elsewhere (Taylor & van Perlo 1998) and we expect it may occur at wetlands across most of Guatemala.

**DOUBLE-STRIPPED THICK-KNEE Burhinus bistriatus** (D; R)

Unrecorded for almost 40 years following reports from the Pacific slope lowlands in the 1970s (Dickerman 2007). Recently confirmed to breed when 12 birds and a nest with a single egg were found at Finca El Sacramento, dpto. Santa Rosa, in April 2014 (Jones & Komar 2015b). Observed repeatedly in the environs of La Avellana, dpto. Santa Rosa, with 12 there in January 2014 (Jones & Komar 2015a) and an impressive 123 on 7 November 2015 (D. Aldana pers. comm., eBird S25813813). Five seen 25 km south-west of Escuintla, dpto. Escuintla, on 6 March 2014 (J. Hackett, pers. comm.) extend the known range to the south-eastern Pacific plain. Repeated observations south-west of Río Hondo, dpto. Zacapa, since December 2014 (Jones et al. 2016a) were the first records for the río Motagua Valley. Double-striped Thick-knee has been reported from four areas of Guatemala including historical and recent records from the Pacific coastal plain south and south-east of Escuintla, dptos. Escuintla and Santa Rosa, and Manchón-Guamuchal, dptos. Retalhuleu and San Marcos, on the Atlantic slope, from the interior valleys of the río Motagua near Río Hondo, dpto. Zacapa, and the rio Chixoy near San Jerónimo, dpto. Baja Verapaz (Salvin & Godman 1897–1904, Griscom 1932).
SOUTHERN LAPWING *Vanellus chilensis* (A; ?)
Perhaps expanding in Central America following large-scale conversion of forest to grassland for cattle ranching. One photographed at Rubelsanto, dpto. Alta Verapaz, in August 2014 (Jones & Komar 2015d) was the first country record. Status remains unknown. It is doubtful if the species will become established in Guatemala, because extensive cattle farming areas are currently being converted into oil palm *Elaeis guineensis* plantations (FAOSTAT 2012).

WILSON’S PLOVER *Charadrius wilsonia* (D; rm)
A winter visitor and local breeder on both coasts of Middle America (Howell & Webb 1995). Breeding has been reported in adjacent El Salvador and a male giving alarm calls at the río Paz, dpto. Jutiapa, in April 2010, on the border with El Salvador (Juárez-Jovel & Komar 2012) suggests that the species probably also breeds in Guatemala.

SURFBIRD *Calidris virgata* (A; vagM)
Rare on the Pacific coast. A flock of 12 photographed near Hawaii, dpto. Santa Rosa, on 17 August 2014 (J. Cahill pers. comm.) was the first documented record.

RED PHALAROPE *Phalaropus fulicarius* (A; V)
Breeds in the Arctic and winters in near-shore waters of the tropical Atlantic and east Pacific Oceans (van Gils *et al.* 2017). One photographed in the Pacific off dpto. Santa Rosa in January 2010 (Jones & Komar 2010c) was the first documented record.

SOUTH POLAR SKUA *Stercorarius maccormicki* (A; V)
Breeds in the Antarctic and reaches tropical and boreal seas as a non-breeding visitor (Harrison 1983, Furness *et al.* 2017a). One photographed in the Pacific off dpto. Santa Rosa in November 2007 (Velásquez Jofre 2008a) was the first documented record. We consider it to be a rare visitor to Guatemala.

POMARINE JAEGGER *Stercorarius pomarinus* (A; V)
Breeds in the Arctic and disperses widely in pelagic waters (Harrison 1983). Reported repeatedly from both coasts of Guatemala. One photographed off the coast of dpto. Santa Rosa in April 2007 (Jones & Komar 2007d, Velásquez Jofre 2008a) was the first documented record. Uncommon near coasts, but more common in pelagic waters, where this species is apparently commoner than the next species (Pitman 1986, Velásquez Jofre 2008a,b).

PARASITIC JAEGGER *Stercorarius parasiticus* (A; V)
Breeds in the Arctic and disperses widely in pelagic waters (Harrison 1983). Several reports from both coasts of Guatemala, but one photographed near Puerto Barrios, dpto. Izabal, in June 2006 (Jones & Komar 2007a) was the first documented record. Data from Guatemalan Pacific waters (Pitman 1986, Velásquez Jofre 2008a,b) suggest it is less common than Pomarine Jaeger.

SABINE’S GULL *Xema sabini* (A; V)
Circumpolar Arctic breeder and trans-equatorial migrant with main known wintering grounds in the Pacific off the coast of South America and in the Atlantic off the coast of southern Africa (Howell & Dunn 2007, Stenhouse *et al.* 2012, Davis *et al.* 2016). All records are from the Pacific Ocean off dpto. Escuintla. An adult photographed in August 2009 (Anon. 2010, Jones & Komar 2010b) was the first documented record. Other records
include eight on 20 October 2001 (J. Berry pers. comm.), four on 11 May 2002 (J. Berry pers. comm.), seven on 20 and 21 May 2013, two on 8 January 2015 and 26 on 31 December 2015 (O. Komar, eBird S26569945). These records suggest that the species is a year-round non-breeding visitor to Pacific waters off Guatemala.

**BONAPARTE’S GULL** *Chroicocephalus philadelphia* (A; vagM)
Breeds in northern North America and is a rare visitor to Central America and the Caribbean (Stiles & Skutch 1989, Jones 2005a, Howell & Dunn 2007, Jones & Komar 2008d). The first report in Guatemala was an adult in non-breeding plumage seen near Livingston, dpto. Izabal, on 16 January 2000 (P. Kaestner pers. comm.). A first-year photographed near Sipacate, dpto. Escuintla, on 25 March 2012 (Jones & Komar 2013a) was the first documented record.

**GREY-HOODED GULL** *Chroicocephalus cirrocephalus* (B; vagM, H)
Breeds in South America and Africa (Howell & Dunn 2007), with a few Central American reports, all from Panama (Jones 2004a, Angehr *et al.* 2008, Jones & Komar 2010d). An adult at Lago Petén Itzá, dpto. Petén, in February 2013 (Jones & Komar 2013d) was the first report for Guatemala. Another adult in worn breeding plumage, and identified based on the grey hood, whitish iris, red bill and legs, was seen through a telescope while perched among 300 Laughing Gulls *Leucophaeus atricilla* near Hawaii, dpto. Santa Rosa, on 19 January 2018. We consider it an accidental vagrant in Guatemala.

**RING-BILLED GULL** *Larus delawarensis* (A; vagM)
Breeds in northern North America and is a non-breeding visitor to Central America and the Caribbean (Howell & Dunn 2007). Rarely reported in Guatemala (Land 1970, Beavers *et al.* 1991). An immature photographed near Flores at Lago Petén Itzá, dpto. Petén, on 19 December 2015 (J. Cahill, eBird S26361105) was the first documented record.

**LESSER BLACK-BACKED GULL** *Larus fuscus* (A; vagM)
A mainly Old World species that is increasingly frequent in the Americas (Howell & Dunn 2007). One was seen in Puerto Barrios, dpto. Izabal, on 17 February 2001 (P. Kaestner pers. comm.). An immature photographed at Lago de Güija, dpto. Jutiapa, in March 2009 (Jones & Komar 2009d) was the first documented record.

**WHITE TERN** *Gygis alba* (B; vagM, H)
Pantropical pelagic species (Gochfeld *et al.* 2018). Nearest colonies are on Clipperton Island off Mexico (Howell & Webb 1995), 1,900 km west of Guatemala, and Cocos Island, Costa Rica (Stiles & Skutch 1989), 1,000 km south of Guatemala. Reported off Guatemala’s Pacific coast by Pitman (1986) and Ballance *et al.* (2018), with singles 360 km offshore on 19 and 21 August 1992, and 270 km offshore on 30 October 2000. None of the observations has been documented.

**BRIDLED TERN** *Onychoprion anaethetus* (A; V)
Pantropical species found in pelagic and coastal waters (Harrison 1983). Two photographed 20 km off dpto. Escuintla in August 2009 was the first documented record (Jones & Komar 2010a, Anon. 2010). Another was photographed 16 km off dpto. Escuintla on 18 April 2012 suggesting that the species is an irregular visitor to Pacific waters. Records from Caribbean waters off Belize (Jones & Vallely 2001) and Honduras (Monroe 1968) suggest it may also occur off the Guatemalan Caribbean coast.
FORSTER’S TERN *Sterna forsteri* (A; V)
Breeds in North America and is an uncommon non-breeding visitor to Central America (Harrison 1983). An adult in non-breeding plumage photographed in Iztapa, dpto. Escuintla, on 20 December 2010 (C. Swift pers. comm.) was the first documented record. Records in the Caribbean off Belize (Jones *et al.* 2000) suggest that it may also occur near the Guatemalan Caribbean coast.

ELEGANT TERN *Thalasseus elegans* (A; V)
Breeds on the Pacific coast of northern Mexico and California, and along coasts and rivers in South America east of the Andes (Harrison 1983). Perhaps a fairly common visitor to Guatemala, but a non-breeding-plumaged adult photographed in Iztapa, dpto. Escuintla, on 20 December 2010 (C. Swift pers. comm.) was the first documented record.

BLACK SKIMMER *Rynchops niger* (D; V)
Breeds locally on Atlantic and Pacific coasts of the USA and Mexico, and along coasts and rivers in South America east of the Andes (Harrison 1983). Breeds locally in El Salvador (Komar 1998), but nesting has not been reported in Guatemala where records are thought to involve migrants from northern populations. An uncommon visitor to the Pacific coast and, given records in Belize (Jones & Valelly 2001), may also occur on the Guatemalan Caribbean coast. Five seen on the río La Pasión near Sayaxché, dpto. Petén, on 6 November 1999 (P. Kaestner pers. comm.) and three at Lago Petén Itzá, dpto. Petén, in December 2006 (Jones & Komar 2007c) were the first inland records.

RED-BILLED TROPICBIRD *Phaethon aethereus* (A; V)
Pelagic in the eastern tropical Pacific, the tropical Atlantic and north-west Indian Oceans (Harrison 1983). An adult photographed 30 km off dpto. Santa Rosa on 18 January 2010 (Jones & Komar 2010c) was the first documented record for Guatemala. Additional records indicate that it occurs regularly in small numbers off the Guatemalan Pacific coast including one photographed off dpto. Santa Rosa on 15 February 2010 (J. A. Jiménez pers. comm.), one seen off dpto. Escuintla in April 2011 (Jones & Komar 2011d), one near the beach at Iztapa, dpto. Escuintla, on 22 April 2000 (P. Kaestner pers. comm.) and a juvenile photographed 6 km off Puerto San José, dpto. Escuintla, on 21 May 2013.

KERMADEC PETREL *Pterodroma neglecta* (A; vagM)
Pelagic; mainly in the tropical and subtropical Pacific Ocean (Howell 2012). Eight records near the Guatemalan coast in the Southwest Fisheries Science Center database (Ballance *et al.* 2018): one 60 km south of the Guatemalan Pacific coast on 25 August 1988, one 310 km and two 340 km offshore on 10 August 1992, one 300 km offshore on 19 August 1992, singles 280 km and 300 km offshore on 23 August 1992, one 250 km offshore on 23 August 1998 (documented with field notes by M. P. Force pers. comm.) and one 50 km offshore on 30 August 1998. Reported by Pitman (1986) off the Pacific coast of Chiapas, Mexico, and >400 km off the Guatemalan Pacific coast. Kermadec Petrel was also reported by a more recent study (Sigüenza *et al.* 2008, Velásquez Jofre 2008a,b) but a photograph showed a misidentified Tahiti Petrel *P. rostrata*.

JUAN FERNANDEZ PETREL *Pterodroma externa* (B, vagM, H)
A Vulnerable (IUCN 2017) pelagic bird nesting on the Juan Fernández Islands off Chile and ranging across the eastern and central Pacific Ocean (Howell 2012, Carboneras *et al.* 2018b).
The Southwest Fisheries Science Center database contains six records of singles 290–360 km off the Guatemalan Pacific coast, all on 13 October 1999 (Ballance et al. 2018). Pitman (1986) reported the species >800 km off the Guatemalan Pacific coast, and it was also reported without documentation by Sigüenza et al. (2008) and Velásquez Jofre (2008a,b).

**GALAPAGOS PETREL** *Pterodroma phaeopygia* (B; vagM;H)
Breeds on the Galápagos Islands and ranges across the eastern tropical Pacific (Howell 2012). Considered Critically Endangered (IUCN 2017). Observations by Pitman (1986) c.300 km off the Guatemalan Pacific coast are the only reports for the country.

**TAHITI PETREL** *Pterodroma rostrata* (A; V)
Breeds on islands in the central and western tropical Pacific and is a visitor to pelagic waters off Middle America (Howell 2012, Carboneras et al. 2018b). Reported by Pitman (1986) within 200 km of the Guatemalan Pacific coast. One photographed by V. Dávila c.100 km off the Pacific coast of dpto. Retalhuleu on 29 April 2008 (Sigüenza et al. 2008) was initially misidentified as *P. neglecta* (Sigüenza et al. 2008, Velásquez 2008b) but subsequently determined as Tahiti Petrel (S. N. G. Howell pers. comm.) for the first documented record. The Southwest Fisheries Science Center database contains 92 records of 1–9 individuals 60–350 km off the Guatemalan Pacific coast between 1988 and 2006 (Ballance et al. 2018). Those observations nearest to the coast involve 13 records of 1–2 individuals 60–100 km offshore on 27 September 2000, one at 70 km on 21 August 1998, five records of 1–2 at 100–150 km on 23 September 2003, one at 100 km on 3 September 1989, and one at 120 km on 14 October 1999 (Ballance et al. 2018). Apparently a regular visitor to the Guatemalan Pacific.

**PARKINSON’S PETREL** *Procellaria parkinsoni* (D; V)
Breeds in New Zealand and disperses to the tropical Pacific Ocean including pelagic waters off Central America (Pitman & Ballance 1992, Howell 2012). Considered Vulnerable (IUCN 2017). Recent data from Guatemalan Pacific waters (Velásquez Jofre 2008a) reveal it to be an uncommon but regular visitor.

**WEDGE-TAILED SHEARWATER** *Ardenna pacifica* (D; V)
Breeds on islands in the tropical and subtropical Pacific and Indian Oceans (Howell 2012). Recent data from Guatemalan Pacific waters (Velásquez Jofre 2008a) show that it is a common visitor.

**PINK-FOOTED SHEARWATER** *Ardenna creatopus* (A; V)
Breeds on islands off Chile and disperses across the east Pacific (Howell 2012); considered Vulnerable (IUCN 2017). Pitman (1986) reported relatively large numbers off the Pacific coast of Middle America. One photographed off dpto. Suchitepéquez on 7 June 2007 (Velásquez Jofre 2008b, Jones & Komar 2008a) was the first documented record for Guatemala. Subsequent observations off dpto. Escuintla (Jones & Komar 2008c, 2011c) including 300 seen on 26 March 2012 (Jones & Komar 2013a) and two photographed on 19 April 2012 indicate that it is common in Guatemalan Pacific waters.

**CHRISTMAS SHEARWATER** *Puffinus nativitatis* (D; V)
Breeds on islands in the tropical and subtropical Pacific and visits pelagic waters off Central America (Howell 2012). Pitman (1986) reported it far off the Central American Pacific coast. The Southwest Fisheries Science Center database contains four records in 1988–2000 within 400 km of the Guatemalan Pacific coast (Ballance et al. 2018). One photographed on 8 April
2008 off the Pacific coast (Velásquez Jofre 2008a) was the first documented record. We consider it to be a rare visitor.

**GALAPAGOS SHEARWATER** *Puffinus subalaris* (D; V)
Formerly considered conspecific with Audubon’s Shearwater *P. lherminieri* (e.g. AOU 1998, Eisermann & Avendaño 2007) but now treated as a separate species (Chesser et al. 2012). Breeds on the Galápagos Islands (Howell 2012) and a common visitor to Pacific pelagic waters off Guatemala (Velásquez Jofre 2008a). Audubon’s Shearwater occurs mainly in the tropical and subtropical western Atlantic Ocean (Howell 2012) but there are no reports from Caribbean Guatemala; its status changes to probable.

**TOWNSEND’S SHEARWATER** *Puffinus auricularis* (B; VagM, H)
Pelagic; nests on islands in the eastern tropical Pacific Ocean off Mexico (Howell 2012). Critically Endangered (IUCN 2017). The Southwest Fisheries Science Center database contains six records of 1–3 individuals 60–75 km off dpto. Escuintla on 25 August 1988, and one 23 km off dpto. Escuintla on 30 August 1989 (Ballance et al. 2018). Also reported by Pitman (1986). Undocumented observations reported by P. Kaestner & J. Berry in Eisermann & Avendaño (2007), Sigüenza et al. (2008) and Velásquez Jofre (2008a,b). We regard it as a vagrant.

**BLACK-VENTED SHEARWATER** *Puffinus opisthomelas* (A; vagM)
Breeds on islands in the Pacific Ocean off Baja California, Mexico, and disperses mainly to the eastern Pacific Ocean from the southern USA to southern Mexico (Howell 2012). One photographed at close range on the water off dpto. Escuintla on 23 October 2017 (L. Valle pers. comm., eBird S40094008, photo ML72892581) was the first documented record. Sullivan (2009) mentioned an observation from the Guatemalan Pacific without details. The Southwest Fisheries Science Center database does not contain any Guatemalan records (Ballance et al. 2018). We regard it as a vagrant.

**BAND-RUMPED STORM PETREL** *Oceanodroma castro* (B; vagM, H)
Pelagic, with several distinct populations in the Pacific and Atlantic Oceans; nearest colonies on the Galápagos Islands (Howell 2012). Reported off the southern Central American Pacific coast by Pitman (1986). Two undocumented records off the Guatemalan Pacific coast in the Southwest Fisheries Science Center database: one 80 km off dpto. Escuintla on 8 August 1992 and one 280 km off dpto. Retalhuleu on 23 August 1998 (Ballance et al. 2018). We regard it as a vagrant.

**WEDGE-RUMPED STORM PETREL** *Oceanodroma tethys* (A; V)
Breeds on the Galápagos Islands and disperses to the eastern tropical and subtropical Pacific Ocean (Howell 2012). The first photo-documented record for Guatemala was from Pacific waters in 2008 (Velásquez Jofre 2008a), where reports by Pitman (1986) and observations of up to 500 per day (Velásquez Jofre 2008a) suggest it is a regular and temporally common visitor.

**BLACK STORM PETREL** *Oceanodroma melania* (A, D; V)
Breeds on islands in the Gulf of California and off the Pacific coast of northern Mexico and the southern USA, and disperses to the eastern tropical and subtropical Pacific (Howell 2012). Photographs in Velásquez Jofre (2008a) provided the first documented record.
Numerous sight records testify to it being a regular visitor to Pacific waters (Pitman 1986, Velásquez Jofre 2008a, Jones & Komar 2010b).

**MARKHAM’S STORM PETREL** *Oceanodroma markhami* (B; vagM, H)
Poorly known pelagic species of the eastern tropical Pacific, nesting in deserts of Chile and Peru (Howell 2012, Torres-Mura & Lemus 2013, Schmitt *et al.* 2015). Eleven undocumented records off the Guatemalan Pacific coast in the Southwest Fisheries Science Center database, including singles 320–370 km offshore on 10, 19 and 20 August 1992, 20 at 260 km on 30 October 2000, with four records of singles 215–320 km offshore on the same day, one 150 km from the coast on 23 September 2003, and two 290 km from the coast on 4 October 2006 (Ballance *et al.* 2018). We regard it as a vagrant.

**LEAST STORM PETREL**
*Oceanodroma microsoma* (A, D; V)
Breeds in the Gulf of California and on islands off the Pacific coast of Mexico, and disperses widely in the eastern tropical and subtropical Pacific (Howell 2012). Data in Velásquez Jofre (2008a) demonstrate that it is an uncommon visitor. Birds photographed off dpto. Escuintla on 21 June 2014 (J. Cahill, eBird S18878418) and 8 January 2015 (Fig. 17) appear to be the first documented records.

**GREAT FRIGATEBIRD** *Fregata minor* (B; vagM, H)
Mainly in the tropical and subtropical Pacific and Indian Oceans, locally in the Atlantic. Nearest colonies on Cocos Island off Costa Rica and Islas Revillagigedos off Mexico (Howell & Webb 1990, Howell 1994). Reported by Pitman (1986) c.400 km off the Guatemalan Pacific coast.

**MASKED BOOBY** *Sula dactylatra* (A; V) / **NAZCA BOOBY** *S. granti* (A; D)
Nazca Booby has only recently been considered a species apart from Masked Booby (Pitman & Jehl 1998, Banks *et al.* 2000). Immatures may be inseparable in the field (Roberson 1998) and all historical sightings off the Guatemalan Pacific coast were believed to involve Nazca Boobies (Pitman & Jehl 1998). Recent photographic records confirm that both species occur. Nazca Booby is a common visitor to Pacific waters (Velásquez Jofre 2008b). Masked Booby has been reported with photographic evidence as a rare visitor off the Guatemalan Pacific coast (Velásquez Jofre 2008a). The origin of both species in the Guatemalan Pacific is unknown. Nearest colonies of Masked Booby are in the north-east Pacific on Clipperton Island, the Islas Revillagigedos and Rocos Alijos off Mexico, and in the south-east Pacific on the Juan Fernández Islands off Chile (Howell & Webb 1990, Roberson 1998). Nazca Booby breeds mainly on the Galápagos Islands, but also on Islas Revillagigedos, Clipperton, Cocos Island, and islands off Colombia, Peru and Ecuador (Howell & Webb 1990, del Hoyo *et al.* 2018).

**BLUE-FOOTED BOOBY** *Sula nebouxii* (A; V)
Breeds on islands off western Mexico and northern South America, and disperses to the tropical and subtropical eastern Pacific (Harrison 1983). An adult photographed and two seen off the coast of dpto. Retahuleu on 29 April 2008 (Jones & Komar 2008d) was
the first documented record. Three seen off dpto. Escuintla on 23 August 2009 (Jones & Komar 2010b) is the only other report. Despite an increase in pelagic bird observations off Guatemala, there are few reports and we regard it as a rare visitor.

**BROWN BOOBY** *Sula leucogaster* (D; V)

Widespread in tropical and subtropical oceans (Harrison 1983), breeding locally on Caribbean and Pacific coasts of Central America (Harrison 1983) but nesting has not been reported in Guatemala where it is an uncommon visitor to the Caribbean coast (Eisermann 2001). Data in Velásquez Jofre (2008a) suggest it is a regular visitor to Pacific pelagic waters.

**RED-FOOTED BOOBY** *Sula sula* (A, D; V)

Pantropical (Harrison 1983) and occurs on both coasts. Data from Pacific waters (Pitman 1986, Velásquez Jofre 2008a) indicate that it is a regular visitor. An immature photographed off dpto. Escuintla on 18 April 2012 (Fig. 18) was apparently the first documented record.

**DOUBLE-CRESTED CORMORANT** *Phalacrocorax auritus* (A; vagM)

Following undocumented reports from Bahía de Amatique, dpto. Izabal (Eisermann & Avendaño 2007), two photographed in Punta de Manabique Wildlife Refuge, dpto. Izabal (Jones & Komar 2015b; J. Cahill pers. comm.) was the first documented record. Perhaps increasing on the Caribbean coast of neighbouring Belize (Jones & Komar 2015b). We treat it as a vagrant in Guatemala.

**PINNATED BITTERN** *Botaurus pinnatus* (D; r)

Rare and local in Central America, and reported from just seven sites in Guatemala. In the Atlantic slope lowlands it was recorded at the rio Dulce, dpto. Izabal, and Lago Petén Itzá, dpto. Petén, (Beavers 1992, Jones & Komar 2013d, Jones & Komar 2015b), 10 km south of Paso Caballo, dpto. Petén, in April 2013 (Jones & Komar 2014a) and at El Tucán Uno, southern dpto. Petén. Petén, in December 2010 (Jones & Komar 2011b,c). In the Pacific lowlands, one at Manchón-Guamuchal, dpto. Retalhuleu, on 18 May 2001 (J. Berry pers. comm.), three at Monterrico, dpto. Santa Rosa (Jones & Komar 2009c, 2010c) with two there on 7 January 2015 and three on 15 January 2015 (Jones et al. 2016a), and at Lago de Güija, dpto. Jutiapa (Pineda et al. 2006). Three at Manchón-Guamuchal, dpto. Retalhuleu on 2 July 2015 was the first summer record. Seven there on 28 May 2017 suggest it is a breeding resident but nesting has not been reported.

**AMERICAN BITTERN** *Botaurus lentiginosus* (D; vagM)

Rare in Central America and long known in Guatemala only from historical records at four sites: near Cobán, dpto. Alta Verapaz...
BLACK-CROWNED NIGHT HERON *Nycticorax nycticorax* (D; RM)
Cosmopolitan species thought to be mainly a winter visitor to Guatemala (Howell & Webb 1995, Eisermann & Avendaño 2007). Recent reports confirm breeding at two sites in the Pacific slope lowlands, with eight nests at Lago de Güija, dpto. Jutiapa (Herrera & Ibarra Portillo 2005), and 75 nests at Las Lisas, dpto. Santa Rosa, on 3 July 2009 (R. A. Jiménez pers. comm., photograph).

YELLOW-CROWNED NIGHT HERON *Nyctanassa violacea* (D; RM)
Fairly common resident in coastal lowlands and recently reported inland in the Atlantic slope lowlands including at Parque Nacional Mirador-Río Azul, dpto. Petén (Budney *et al.* 2008), Laguna Yaxhá, Parque Nacional Laguna del Tigre, Parque Nacional El Rosario and Cancún, dpto. Petén (Jones & Komar 2012b, 2013b), and San Cristóbal Verapaz, dpto. Alta Verapaz (Jones & Komar 2012a). Nesting presumed in Parque Nacional Laguna Lachuá, dpto. Alta Verapaz (Eisermann & Avendaño 2007).

WHITE IBIS *Eudocimus albus* (C, D; RM)
Found mainly near coasts in Middle America, and Land (1970) considered it rare in dpto. Petén. The only previous record for this area was reported by Beavers *et al.* (1991). New records include seven in Parque Nacional Laguna del Tigre, dpto. Petén, on 7 April 2017 (M. Rivera, eBird S35964569), six near Sayaxché on 20 January 2016 (M. Ovando, eBird S27029917), one in wetlands along the río Mopán near La Pólvora on 29 December 2011 (J. Cahill eBird S9671682) and an adult flying over Tikal, dpto. Petén, on 15 December 2006 (Jones & Komar 2007c). Nesting not reported inland, but a colony with at least 30 active nests photographed in mangroves on the Pacific coast near Las Lisas, dpto. Santa Rosa, on 3 July 2009 (R. A. Jiménez pers. comm.) confirms breeding.

GLOSSY IBIS *Plegadis falcinellus* (A, D; vagM)
An Old World species recorded for the first time in North America in the 19th century, and now expanding its range in North, Middle and South America (Howell & de Montes 1989, Howell & Webb 1995, Patten & Lasley 2000). In northern Central America it is a rare visitor. One photographed at San Cristóbal Verapaz, dpto. Alta Verapaz, in March 2013 by J. Cahill (Jones & Komar 2014a) was the first documented record for Guatemala. Near the Guatemalan Pacific coast, an adult was photographed in April 2014 (Jones & Komar 2015b, J. Cahill pers. comm.) and one seen on 3 February 2015 (M. Rodríguez pers. comm., eBird S21677386). An adult *Plegadis* in non-breeding plumage (retaining traces of bronzy colour) photographed near Panzós, dpto. Alta Verapaz, on 10 October 2012, could not be identified to species, yet is noteworthy because no *Plegadis* has otherwise been recorded from the Guatemalan Atlantic slope lowlands. We consider Glossy Ibis to be a non-breeding vagrant.

WHITE-FACED IBIS *Plegadis chihi* (A, D; vagM)
Restricted to the Americas with a resident population in South America, and partially migratory population in North America and Mexico (Howell & de Montes 1989, Ryder & Manry 1994). A rare winter visitor to northern Central America, mainly on the Pacific coast (Howell & de Montes 1989, Howell & Webb 1995). Two photographed at Manchón-
Guamuchal, dpto. Retalhuleu, on 13 October 2014 (M. Rodríguez, eBird S20312144), and seven photographed there on 3 February 2015 (Jones et al. 2016a, M. Rodríguez, eBird S21677386) were the first documented records. We consider it a non-breeding vagrant.

**ROSEATE SPOONBILL Platalea ajaja (C; RM)**
Uncommon and a very local breeder on both coasts of Middle America (Stiles & Skutch 1989, Howell & Webb 1995, Frederick et al. 1997). At least six active nests photographed near Las Lisas, dpto. Santa Rosa, in October–November 2009 (Jones & Komar 2010b) confirm breeding. Scattered recent records in dpto. Petén indicate it is widespread in the Atlantic slope lowlands, including one at Laguna Petexbatún on 5 April 2016 (E. Salvatierra, eBird S29433140), three photographed near La Pólvora on 1 March 2015 (A. B. Lucas, eBird S22163722) with four photographed there on 23 January 2016 (A. B. Lucas, eBird S27082033) and four seen on 24 January 2018 and one on 4 May 2016 in the east of Parque Nacional Laguna del Tigre (J. Cahill, eBird S29463490).

**WHITE-TAILED KITE Elanus leucurus (C; R)**
Expanding in Central America due to deforestation. A pair with one fledgling 5 km south of Santa Catarina Pinula, dpto. Guatemala, in November 2009 (F. Mazarriegos pers. comm.) was the first nesting record for Guatemala. At the same site, displaying adults were observed in January 2010, 2011 and 2012, and adults with fledglings were seen in June–July of those years (F. Mazarriegos pers. comm.).

**SNAIL KITE Rostrhamus sociabilis (C; R)**
Local in wetlands in both the Atlantic and Pacific slope lowlands (Eisermann & Avendaño 2007). Reports of nesting at Lago de Güija, dpto. Jutiapa (Pineda & Herrera 2014) and at least three active nests at Manchón-Guamuchal, dpto. Retalhuleu, on 20 May 2017, were the first breeding records for Guatemala.

**DOUBLE-TOOTHED KITE Harpagus bidentatus (D; RM)**
Uncommon in the Atlantic slope lowlands and foothills. One photographed at Takalik Abaj, dpto. Retalhuleu, in December 2008 (Jones & Komar 2009c) was the first documented record for the Pacific slope, where it was first reported from the southern foothills of Volcán Santa María, dpto. Quetzaltenango (Vannini 1989). Eighty in flight at Punta de Manabique Wildlife Refuge, dpto. Izabal, on 31 March 2012 (Jones & Komar 2013a) suggest migration but the nature of any seasonal movements is unknown.

**SWAINSON’S HAWK Buteo swainsoni (D; T)**
Probably the entire world population passes over Guatemala during migration between the breeding range in North America and wintering range in South America (Bildstein & Zalles 2001), and it is a common transient on the Pacific slope (Heinrichs et al. 2006). Because little is known about roosting and foraging by raptors on migration in Central America (Dickey & van Rossem 1938, Smith 1980, Ruelas Inzunza et al. 2009), a concentration of at least 100 roosting in trees bordering humid broadleaf forest and a shade-coffee plantation at 1,600 m in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 4 April 2008, was noteworthy.

**HARPY EAGLE Harpia harpyja (C; R)**
Very rare. The only nest in Guatemala was found in south-east dpto. Petén in 2000 (Whitacre et al. 2002, Vargas et al. 2006). A nest found in the Maya Mountains in Belize in 2010 (Rotenberg et al. 2012) was c.50 km to the east of that site.
FLAMMULATED OWL *Psiloscops flammeolus* (C, D; R)
Previously thought to be a non-breeding visitor (Howell & Webb 1995, AOU 1998, Eisermann & Avendaño 2015, Weidensaul 2015) and unrecorded in Guatemala for more than 80 years. A nest found in Parque Regional Municipal Todos Santos Cuchumatán, dpto. Huehuetenango, in 2016, was also the first nesting record south-east of the Isthmus of Tehuantepec (Eisermann *et al.* 2017b). Two were at the same site on 18 November 2016. Based on the nesting record, it appears doubtful if any northern Flammulated Owls migrate further south than Mexico and we suspect that all records in Guatemala involve residents (Eisermann *et al.* 2017b, Eisermann & Avendaño 2017).

PACIFIC SCREECH OWL *Megascops cooperi* (D; R)
Found mainly in arid scrub below 1,000 m in the Pacific slope lowlands and interior valleys. The río Motagua Valley is connected via a narrow corridor of land below 1,000 m to the Pacific slope lowlands (Fig. 1). Pacific Screech Owl has been reported from several sites in the Pacific slope lowlands, and recently at Reserva Heloderma, dpto. Zacapa (Jones & Komar 2013d, see Eisermann & Avendaño 2017 for correct site information) in the río Motagua Valley, c.60 km north of sites around Lago de Güija in El Salvador (Pérez León *et al.* 2015). At other dry scrub localities in the Motagua Valley only Vermiculated Screech Owl *M. guatemalae* has been recorded (Eisermann & Avendaño 2015), suggesting that Pacific Screech Owl may have colonised the valley only recently, or that it occurs only very locally, perhaps due to competition with Vermiculated Screech Owl. A nest found at Manchón-Guamuchal, dpto. San Marcos, in March 2015, was the second nesting record (Eisermann & Avendaño 2017).

WHISKERED SCREECH OWL *Megascops trichopsis* (C; R)
Fairly common in highlands but breeding confirmed only recently based on juveniles collected in 1973 (Eisermann & Avendaño 2017).

BEARDED SCREECH OWL *Megascops barbarus* (C, D; R)
Restricted to humid Atlantic slope highlands of Guatemala and Chiapas, Mexico, and considered Vulnerable (IUCN 2017). Nesting records from the highlands of dptos. Quiché and Alta Verapaz were the first breeding records (Eisermann & Avendaño 2017). A male found at Montaña Santa Rosa, dpto. Baja Verapaz, on 9 August 2017, represents the sixth known locality in Guatemala.

NORTHERN PYGMY OWL *Glaucidium gnoma* (C; R)
G. *g. cobanense* (Guatemalan Pygmy Owl), which occurs in Mexico south-east of the Isthmus of Tehuantepec and in northern Central America has distinctive vocalisations (Eisermann & Howell 2011) and may represent a separate species. G. *g. cobanense* is fairly common throughout the Guatemalan highlands at 1,800–3,400 m, rarely to 1,400 m. Several nesting records in dpto. Alta Verapaz (Eisermann & Avendaño 2017) confirm breeding.

FULVOUS OWL *Strix fulvescens* (C, D; R)
Fairly common in cloud forest above 1,800 m (Eisermann & Avendaño 2017) but the nest is undescribed. A juvenile at Montaña Caquipec, dpto. Alta Verapaz, one in Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, on 6 May 2013 (Eisermann & Avendaño 2017) and a fledgling photographed at Finca El Pilar, dpto. Sacatepéquez, on 26 April 2017 (Fig. 20) were the first breeding records for Guatemala. A pair photographed 2 km south of...
Yalambojoch, dpto. Huehuetenango, on 12 April 2017, was the first record for the Sierra Los Cuchumatanes.

**STYGIAN OWL** *Asio stygius* (C, D; R)
Rare in Guatemala where known from just 11 sites (Eisermann & Avendaño 2017). A fledged juvenile at Volcán Atitlán, dpto. Suchitepéquez, in 2008 (Holt *et al.* 2014) was the first breeding record for Guatemala.

**STRIPED OWL** *Pseudoscops clamator* (C, D; R)
Recent records from north-west dpto. Petén and adjacent eastern Chiapas, Mexico, since 2012 (Eisermann & Avendaño 2017) suggest it may be expanding in the Atlantic slope.
lowlands, benefitting from deforestation. A nest found at Hacienda Tijax, dpto. Izabal, in March 2008 (Eisermann & Avendaño 2015) was the first breeding record for Guatemala.

UNSPOTTED SAW-WHET OWL *Aegolius ridgwayi* (C, D; R)
Long thought to be rare, but recent surveys demonstrate that it is widespread in the highlands at 1,900–3,700 m and occurs rarely as low as 1,400 m (Eisermann 2013, Eisermann & Avendaño 2017). The first breeding records were from dptos. Chimaltenango, San Marcos and Alta Verapaz in 2008–15 (Eisermann & Avendaño 2017). A pair near Finca Chancol, dpto. Huehuetenango, on 13 November 2017 was a new site record for the Sierra Los Cuchumatanes.

ELEGANT TROGON *Trogon elegans* (D; R)
Uncommon to locally common on the arid eastern Pacific slope (Tashian 1953) and locally in the arid interior valleys of the Atlantic slope, where it was known from the río Motagua Valley (Dearborn 1907, Griscom 1932), and was recently observed in Parque Regional Municipal Niño Dormido, Zacapa, on 6 September 2010. Reports from the río Chixoy Valley, south of San Cristóbal Verapaz, dpto. Alta Verapaz, in July 2007 (Jones & Komar 2008a) documented a new site record on the Atlantic slope.

TODY MOTMOT *Hylomonas momotula* (C; R)
Uncommon to fairly common in the humid lowlands and foothills of both slopes. Nesting has apparently never been described (Stiles & Skutch 1989, Howell & Webb 1995, Snow & Kirwan 2018). Three nests were found in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez. Their entrances were similar to mouse holes on the slightly inclined forest floor and unlike other motmot holes, which are usually placed in steep banks (Skutch 1983). The first was found in humid broadleaf forest at c.1,000 m on 17 June 2009. Adults were feeding juveniles in the nest entrance and almost ready to fledge (A. de León Lux & G. López pers. comm.). A second nest observed between 17 May and 1 June 2010 was in a shade-coffee plantation at c.900 m (J. de León Lux pers. comm., A. Burge, video) and a third was attended by two adults feeding young on 8 June 2012 (J. de León Lux pers. comm.). All nests were active during the wet season.

RUSSET-CROWNED MOTMOT *Momotus mexicanus* (D; R)
Restricted to arid scrub in Mexico and Guatemala, where previously known only from the río Motagua Valley (Land 1970, Howell & Webb 1995). New records from the Nentón Valley, dpto. Huehuetenango, demonstrate that its distribution extends from the central valley of Chiapas, Mexico, into western Guatemala. These include one near Limonar on 1 December 2014, four near Lagunas de Candelaria on 28 April 2015, one photographed 8 km north-west of Santa Ana Huista on 21 April 2017 (L. Conrad), two seen on 22 April 2017 and one on 1 February 2018 2 km east of Unión, and two at Finca El Carmen on 20 April 2018.

TURQUOISE-BROWED MOTMOT *Eumomota superciliosa* (D; R)
Widespread on the Pacific slope of Middle America but only recently reported from the Atlantic lowlands of Guatemala, in Parque Nacional Laguna del Tigre, dpto. Petén (Eisermann & Avendaño 2007). One photographed at the park entrance 4 km south-east of Paso Caballo on 17 May 2013 (Fig. 21) was the first documented record for this area. The tawny breast with a very faint greenish wash identified it as *E. s. superciliosa* (Griscom 1929), a race not previously reported in Guatemala. Together with recent records from Tabasco,
Mexico (Gómez de Silva 2013), these observations suggest that Turquoise-browed Motmot has expanded south from the Yucatán Peninsula into north-western dpto. Petén.

**YUCATAN WOODPECKER** *Melanerpes pygmaeus* (A, D; r)
Endemic to the Yucatán Peninsula and Caribbean islands off Honduras (Howell & Webb 1995). In Guatemala, the first report involved one in forest edge on the rio San Pedro south
of the El Perú archaeological site in Parque Nacional Laguna del Tigre, dpto. Petén, on 28 March 2011 (G. Péron pers. comm.). A bird photographed on the lower 5 km of the río Sacluc, 7 km south-west of Paso Caballo, on 23 March 2013 (Fig. 22a) was the first documented record. Twelve along 5.6 km of the río Sacluc from its confluence with the río San Pedro, on 23 March 2013, suggest it is common in gallery forest and adjacent oak woodland there. Three more were seen 5 km south-east of Paso Caballo on 24 March 2013. Yucatan Woodpecker was subsequently found in the south-east part of Parque Nacional Laguna del Tigre and adjacent areas during 2013–17 including seven in gallery forest along the ríos Sacluc and San Pedro west of Paso Caballo on 15–17 May 2013 and three 4 km south-east of Paso Caballo on 17 May 2013 (Fig. 22b), along the río Sacluc in January 2014 (Cahill 2014), near the El Perú archaeological site on 20 December 2015 (Christmas Bird Count, eBird S26437510), 9 km south of Paso Caballo on 18 December 2016 (J. Madrid, eBird S33120072) and 13 May 2017 (C. Chablé, eBird S36811213). The southernmost record involved a male in El Caoba, dpto. Petén, on 15 March 2016 (J. Madrid, eBird S28680918). We assume it breeds in Guatemala, but nesting has not been confirmed.

**RED-NAPED SAPSUCKER** *Sphyrapicus nuchalis* (A; vagM)
Formerly considered conspecific with Yellow-bellied Sapsucker *S. varius* (e.g. AOU 1985) and not listed in recent works on Guatemalan birds (Eisermann & Avendaño 2007). A male collected by W. B. Richardson near Panajachel, dpto. Sololá, pre-1895 (Salvin & Godman 1879–87) is the only record for Guatemala. The only other Central American records are from dpto. Santa Bárbara, Honduras, in 1952/53 (Monroe 1968).

**LADDER-BACKED WOODPECKER** *Picoides scalaris* (A, C, D; R)
Very local in Central America (Howell & Webb 1995). In Guatemala reported from Magdalena Milpas Altas, dpto. Sacatapéquez, and the west slope of the Maya Mountains in south-east dpto. Petén (Howell & Webb 1992, 1995). New records are from oak savanna in the lowlands of north-western dpto. Petén (Jones & Komar 2012b), plus two photographed on 21 July 2014 (C. Echeverría, eBird S20672419) and two on 23 June 2017 (L. F. Garma, eBird S37753279) near Santa Ana in central dpto. Petén. A group comprising an adult male, female and two juveniles photographed 4 km south-east of Paso Caballo on 17 May 2013.
(Fig. 23) was the first breeding record. One was photographed at a nest near Sacpuy on 7 March 2017 (M. Ovando, eBird S35033208). These records indicate a range extension from Tabasco and north-east Chiapas, Mexico, to the south-east. A recent colonist in Palenque, Chiapas, Mexico (Patten et al. 2011). In the region this woodpecker may benefit from man-made conversion of dense humid forest to woodland.

**BARRED FOREST FALCON** *Micrastur ruficollis* (D; R)
Fairly common in humid forest on the Atlantic slope but rare on the Pacific slope (Eisermann & Avendaño 2007), where reported from Finca Dos Marías, dpto. San Marcos (Cooper 2003). Recent records from the Pacific slope suggest it is expanding there. Heard at Volcán Atitlán in Reserva Natural Privada Los Andes, dpto. Suchitepéquez, in April 2007 and February 2010 (Jones & Komar 2007d, 2010c), with a young bird seen in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, in July 2007 (Jones & Komar 2008a) providing the first indication of breeding on this slope, a report from Finca El Pilar, dpto. Sacatepéquez, in February 2011 (Jones & Komar 2011c, 2011d), one sound-recorded in Loma Linda, dpto. Quetzaltenango, on 30 October 2009, one sound-recorded at 2,550 m near Las Pilas on the north-west slope of Volcán Tacaná, dpto. San Marcos, and one on the south-east slope of the same volcano near Yalú at 2,100 m on 3 September 2014, one at Finca Las Nubes, Volcán Santo Tomás, dpto. Suchitepéquez, on 21 March 2011 (M. Retter, eBird S31493333) and at Volcán Agua, dpto. Escuintla, where it was recorded for the first time on the south slope on 2 November 2013 (D. Aldana, eBird S15678373).

**APLOMADO FALCON** *Falco femoralis* (A, D; r)
Rare and local in Central America. The first country reports were one west of Lago Petén Itzá, dpto. Petén, on 27 December 2010 (Jones & Komar 2011c) and near El Tucán Uno in southern dpto. Petén in March 2013 (Jones & Komar 2014a). Two photographed in December 2014 and one in January 2015 near Paso Caballo (Jones et al. 2016a) were the first documented records and suggest it is resident and that breeding can be assumed. Central and southern dpto. Petén have been considerably modified by large-scale conversion of forest to cattle pasture, creating savanna-like favourable habitat for Aplomado Falcons.

**PEREGRINE FALCON** *Falco peregrinus* (C; RM)
Widespread winter visitor but not previously reported breeding in Central America. Following summer records in Guatemala City in 2008 (Jones & Komar 2009a), breeding was confirmed there in 2014. Although the nest site is unknown, two recently fledged juveniles with their parents were seen in the last week of April (Jones & Komar 2015b) and remained together until August (F. Aldana pers. comm.). Based on the mean length of the incubation (34 days) and nestling periods (40 days) elsewhere (White et al. 2002), egg laying presumably occurred in the first week of February. The first breeding record for Central America. Based on the dark ear-coverts and rather pale breast of the adults, and chestnut ground colour of the juveniles (F. Aldana & M. Rodríguez pers. comm., photographs) they were perhaps race *anatum*, whose regular breeding range includes North America, except the northern tundra, and northern Mexico (White et al. 2002, 2013).

**PACIFIC PARAKEET** *Psittacara strenuus* (D; R)
Fairly common in the Pacific foothills and highlands, and found locally on the Atlantic slope in the interior valley of the río Motagua. Observations in Cobán, dpto. Alta Verapaz, extend its range 60 km over the Atlantic slope highlands from the nearest record in the Motagua Valley. These include two on 13 and 18 July 2015, ten on 15 February 2016, two on 4 March
2016, two sound-recorded on 19 March 2016, ten sound-recorded on 1 April 2016 (Fig. 24) and ten seen on 23 and 26 July 2016.

**BLACK-BANDED WOODCREEPER**
*Dendrocolaptes picumnus* (D; R)
Widely distributed from southern Mexico to central South America, but the northern race *puncticollis* is poorly known (Howell & Webb 1995). Historical records from the highlands in dptos. Alta Verapaz and Baja Verapaz, and Sierra de las Minas, dpto. Zacapa (Salvin & Godman 1888–1897, Griscom 1932, Land 1962a). Unreported in Guatemala for almost 60 years until one was photographed at Montaña Santa Rosa, dpto. Baja Verapaz, on 26 May 2018 (Fig. 25).

**STRONG-BILLED WOODCREEPER**
*Xiphocolaptes promeropirhynchus* (D; R)
Uncommon and previously recorded only in the Atlantic slope highlands and lowlands (Howell & Webb 1995). New records are from pine–oak forest in the Pacific slope highlands including one in Parque Regional Municipal Los Altos de San Miguel Totonicapán, dpto. Totonicapán, on 22 July 2001 (J. Berry pers. comm.), Montaña de Carmona, dpto. Sacatepéquez, Cerro Alux, dpto. Sacatepéquez (Jones & Komar 2007a,c), Cerro Alux, dpto. Sacatepéquez (Jones & Komar 2013a), and one at Cerro Tecpán, dpto. Chimaltenango, on 7 April 2014. These records suggest that it occurs throughout the Guatemalan highlands.

**RUFOUS-BREASTED SPINETAIL**
*Synallaxis erythrothorax* (D; R)
Found mainly below 900 m on both slopes. A pair photographed nestbuilding near the ecotone between humid broadleaf forest and a coffee plantation were at the unusually high elevation of 1,500 m, in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 20 May 2008. The nest was unsuccessful (G. López pers. comm.).

**MOUNTAIN ELAENIA**
*Elaenia frantzii* (D; R)
Following the distributional summary in Eisermann & Avendaño (2007), recent data suggest it occurs locally throughout the humid and semi-humid Atlantic and Pacific slope highlands. New site records from the Atlantic highlands include 1–2 birds seen repeatedly in Reserva Natural Privada Posada Montaña del Quetzal, dpto. Baja Verapaz, during 2007–
17 including a nest with an incubating or brooding adult photographed on 15 June 2015
and an adult with recently fledged juvenile on 15 September 2008, two seen in oak forest
at Chaculá, dpto. Huehuetenango on 3 February 2015, and records from Cerro El Amay,
dpto. Quiché at 1,800–2,600 m (Eisermann et al. 2013). New site records from the Pacific
highlands include two at Volcán Pacaya, dpto. Escuintla, on 12 May 2009 (O. Barden pers.
comm.), two at Volcán San Pedro, dpto. Sololá, on 21 August 2009, and singles at 1,800 m
in Reserva Natural Privada Los Tarrales at Volcán Atitlán, dpto. Suchitepéquez, on 6 April
and 15 April 2008, with one at 2,700 m on 21 June 2008. The westernmost record was one
heard in Refugio del Quetzal, 4 km east of San Rafael Pie de la Cuesta, dpto. San Marcos,
on 1 and 3 March 2010. Recently reported for the first time in Chiapas, Mexico (Hanna et al.
2016). Guatemalan records are from 1,400–2,700 m.

**BELTED FLYCATCHER** *Xenotriccus callizonus* (C, D; R)

Very local in semi-humid to arid oak forest with dense understory, being reliably recorded
in Guatemala from only five topographic units: the Lago Atitlán Valley, dpto. Sololá, the río
Chixoy Valley, dpto. Alta Verapaz, Montaña Santa Rosa, dpto. Baja Verapaz, the Antigua
Guatemala Valley, dpto. Sacatepéquez, and the Nentón Valley / northern foothills of Sierra
Los Cuchumatanes, dpto. Huehuetenango.

Lago Atitlán Valley: new records from near the type locality in Panajachel (Dwight &
Griscom 1927, Griscom 1932), include north-east of Panajachel (J. Berry in Eisermann &
Avendaño 2007), one in Reserva Natural Privada Atitlán, north-west of Panajachel, on 17
February 2008 (A. Kling pers. comm.), one photographed at Laguna Lodge, Santa Cruz La
Laguna, in August 2008 (Jones & Komar 2009b), one on the north-west slope of Volcán San
Pedro on 4 January 2007 (C. Benesh pers. comm.), near San Juan La Laguna in July 2009
(Jones & Komar 2010a), west of San Juan La Laguna at nearly 2,200 m on 15 August 2014
(C. Aguilar pers. comm.), two territories at Finca Santa Victoria on 16 February 2012, one
photographed at Cerro Paquisís on 12 November 2015 (M. Ovando pers. comm.) and one
in Los Robles east of Lago Atitlán at 2,030 m on 28 January 2017 (E. Buchán pers. comm.,
eBird S33986309).

Río Chixoy Valley: recently discovered at Finca San Joaquín, 4 km south of San Cristóbal
Verapaz, dpto. Alta Verapaz, where two were heard on 10 July 2007.
Montaña Santa Rosa: historical records are available 8 km north-west of Purulhá, dpto. Baja Verapaz (Land & Wolf 1961), while recent reports 6 km south of there confirm its presence near Pantín (Jones & Komar 2015d), with another near La Cebadilla, dpto. Baja Verapaz, on 28 November 2015 (J. Cahill, eBird S26033869). Six territories at Montaña Santa Rosa along a 2.5 km transect on 26 July and 7 August 2017, and 11 territories along a 2 km transect on 25 / 26 May 2018. Based on a strip width of 100 m, we estimate a mean population density of four territories / 10 ha of forest in that area.

Antigua Guatemala Valley: first documented at Finca Filadelfia on 10 June 2016 (G. Seeholzer, photograph, eBird S30246483).

Nentón Valley: recently documented from the transition between the northern foothills of Sierra Los Cuchumatanes and the Nentón Valley including one photographed on 14 April 2012, one seen on 21 January 2015, two seen on 3 February 2015 and one on 13 April 2017, at Chaculá, dpto. Huehuetenango.

Guatemalan records of Belted Flycatcher are at altitudes of 1,100–2,200 m. Alvarez del Toro (1965) reported it as low as 800 m in Chiapas, Mexico. A nest with two young, c.6 days old, photographed west of San Juan La Laguna, dpto. Sololá, on 27 May 2014 (J. Chocoy pers. comm., Fig. 26a) and a nest with two chicks of the same age at Montaña Santa Rosa, dpto. Baja Verapaz, on 27 May 2018 (Fig. 26b) are the first breeding records for the country. The nest at Montaña Santa Rosa was a thin-walled cup of grass, herb stems and pine needles, with an outer diameter of 6 cm and depth of 6 cm, and was sited 2 m above ground in the fork of a shrub, similar to nests described from Chiapas, Mexico (Alvarez del Toro 1965).

At Cerro Montecristo it has been reported from the El Salvador side (Komar 2002). This flycatcher is apparently closely tied to oak-dominated forest with a dense understorey. Although this type of forest occurs only disjunctly throughout the interior mountains of Guatemala, we assume Belted Flycatcher to be more widely distributed than the sum of records suggests; it should be looked for in under-surveyed parts of dptos. Huehuetenango, El Progreso, Quiché, Chimaltenango, Guatemala, Santa Rosa, Jutiapa, Jalapa, Zacapa and Chiquimula.

WESTERN WOOD PEWEE Contopus sordidulus (C; RV)
A widespread transient that was thought likely to breed in the highlands by Griscom (1932) based on specimens from July and August, but nesting has not previously been reported. A territorial pair with an adult incubating or brooding on a nest, sound-recorded and photographed near Finca El Carmen, dpto. Huehuetenango, on 2 June 2017 (Fig. 27) confirms breeding. The nest was c.6 m above ground on a bare branch. June records are

Figure 27. Nesting Western Wood Pewee Contopus sordidulus in Guatemala, near Finca El Carmen, dpto. Huehuetenango, 2 June 2017: (a) adult in nest; (b) nest; (c) adult (Knut Eisermann)
very rare, but it has been reported from Montaña Caquipec, dpto. Alta Verapaz (Eisermann & Schulz 2005) and one was seen 5 km south-west of Esquipulas, dpto. Chiquimila, on 30 June 2005. Of 48 specimens from Guatemala registered in Vertnet (http://portal.vertnet.org), 37 have data on month of collection (collections and number of specimens: AMNH, 14; DMNH, 1; FMNH, 1; MCZ, 8; MVZ, 1; USNM, 5; LACM, 2; UWBM, 2; WFVZ, 1). Specimens were collected in April, July, August, September, October and November. None is from June. We consider Western Wood Pewee to be a very rare and local breeder in Guatemala. Because the migration period of this species in Guatemala is prolonged, with the first autumn transients in July and spring migration continuing until May (Howell & Webb 1995; KE pers. obs.), it is difficult to determine the status of individual birds. We suspect that most records in Guatemala, including those from May and July, are of passage migrants.

**WHITE-THROATED FLYCATCHER** *Empidonax albigularis* (C, D; RM)

Thought to breed based on immatures collected at Sierra de las Minas, dpto. Zacapa (Land 1962a). Forty-three broods recorded at Montaña Yalijux, dpto. Alta Verapaz, in 2013–16 (Fig. 28) are the first definite nesting records. Thirty broods for which complete clutch size could be determined were of 1–3 eggs (24 clutches with three eggs, four clutches of two eggs and two clutches of one egg; mean ± SD: 2.7 ± 0.6, n = 30). Observed or calculated breeding season (nestbuilding to fledging) at Montaña Yalijux was from mid April to late July. All nests were at 1,900–2,400 m in 1–6-year-old second growth in areas used for growing corn (*Zea mais*). Locally fairly common in the Atlantic slope highlands and territorial birds have been observed March–August. White-throated Flycatcher is apparently absent from these high elevations in September–February. Short-distance altitudinal migrations have been suggested (Griscom 1932), but the details of any such movements remain unknown.

**VERMILION FLYCATCHER** *Pyrocephalus rubinus* (D; R)

Perhaps expanding with deforestation. Its range in Guatemala now includes the savanna of central dpto. Petén, cattle pastures in north-western dpto. Petén, as well as open landscapes in the arid valley of Nentón, dpto. Huehuetenango (Eisermann & Avendaño 2007). Recent records from the interior valleys and highlands include three photographed at San Marcos, dpto. San Marcos on 23 October 2015 (E. O. Díaz, eBird S25544911), two photographed 5 km south-east of San Miguel Ixtahuacán, dpto. San Marcos, on 22 March 2017 (C. Quezada, eBird S35357682), near Sacapulas, dpto. Quiché, in May 2014 (Jones & Komar 2015b), near Salamá, dpto. Baja Verapaz, in November 2013 (Jones & Komar 2014c), one photographed in San Cristóbal Verapaz, dpto. Alta Verapaz, on 15 November 2016 (R. Botzoc, eBird S32568679) and a male seen 10 km west of Huehuetenango, dpto. Huehuetenango, on 3 February 2015 (K. Easley pers. comm.). Records range from near sea level to 2,400 m.

Figure 28. Breeding White-throated Flycatcher *Empidonax albigularis*, Montaña Yalijux, dpto. Alta Verapaz: (a) lateral view of a nest with (b) complete clutch of three eggs, 26 May 2015 (© Rogelio Rax Xó); (c) adult with recently fledged juvenile, 4 June 2013 (Knut Eisermann)
NUTTING’S FLYCATCHER
*Myiarchus nuttingi* (D; R)
Until recently known only from the arid south and south-east (Howell & Webb 1995). Recent records from the Nentón Valley, dpto. Huehuetenango, indicate that its range extends from the central valley of Chiapas, Mexico, into western Guatemala. These include six at Finca El Carmen on 13 April 2012 (Fig. 29), one at Lagunas de Candelaria on 28 April 2015 with two there on 29 January 2016, and three near Unión on 2 June 2017.

CASSIN’S KINGBIRD *Tyrannus vociferans* (D; V)
An uncommon and irregular winter visitor. An historical record is from San Miguel Dueñas, dpto. Suchitepéquez (Salvin & Godman 1888–97). New records are from the río Chixoy Valley in dptos. Baja Verapaz and Huehuetenango (Jones & Komar 2013c, 2014c) including four seen 6 km south-east of Aguacatán, dpto. Huehuetenango, on 29 March 2014 (J. Cahill, eBird S18044305), and from the Nentón Valley, where one was seen on 20 January 2015, three on 2 February 2015 and six on 22 April 2017 at Finca El Carmen, dpto. Huehuetenango (but none seen there on 2 December 2014, 13 April 2012 and 2 June 2017), two seen on 6 March 2014 (J. Cahill, eBird S17574890, S17574791), one on 30 January 2016 and two on 28 April 2015 near Chacaj, and three seen 3 km south of La Trinidad on 3 February 2015.

FORK-TAILED FLYCATCHER *Tyrannus savana* (C; RM)
An adult building a nest at El Tucán Uno, dpto. Petén, on 9 May 2008 was the first breeding record for Guatemala. The species’ migrations are poorly understood (AOU 1989, Howell & Webb 1995, Eisermann & Avendaño 2007).

SPECKLED MOURNER *Laniocera rufescens* (D; r)
Rare in the Atlantic slope lowlands and known in Guatemala from just five sites. Specimens collected near Cobán, dpto. Alta Verapaz (Sclater 1857, Salvin & Godman 1888–97) lack precise locality data. Recent records include one photographed in Parque Nacional Laguna Lachuá, dpto. Alta Verapaz (Avendaño 2001, Fig. 30), with repeated records in 2002–12 during surveys at nearby Rocjá Pommilá, dpto. Alta Verapaz (E. Caal pers. comm.), as well as Cerro San Gil, dpto. Izabal (Howell & Webb 1992, Cerezo *et al.* 2005), Sierra Santa Cruz, dpto. Izabal (Cerezo & Ramírez 2002) and Nakum archaeological site, dpto. Petén (Seavy
et al. 1997). One was sound-recorded at 500 m at Montaña Sacranix, dpto. Alta Verapaz, on 16 March 2002.

**CHESTNUT-SIDED SHRIKE-VIREO** *Vireolanius melitophrys* (C, D; R)
Mainly in the semi-humid Pacific slope highlands (Howell & Webb 1995) but recently recorded from the Atlantic slope highlands in Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, in July 2006 (Jones & Komar 2007a), where it was reported regularly along the entire ridge of Montaña Yalijux in 2007–14. Despite monthly bird counts at Montaña Sacranix, dpto. Alta Verapaz, since 2004 the species was not recorded there until May 2008, with subsequent records in 2009–12 (E. Col & KE pers. obs.). Other new sites in the Atlantic slope highlands include Biotopo del Quetzal, dpto. Baja Verapaz, and Finca Rubel Chahim, dpto. Alta Verapaz (Jones & Komar 2012a), one singing at Montaña Caquipec, dpto. Alta Verapaz, on 25–26 June 2009 (E. Col pers. comm.), Cerro El Amay, dpto. Quiché (Eisermann et al. 2013), one singing at Tontem, dpto. Alta Verapaz, on 25 February 2012, and Sierra de las Minas, dpto. El Progreso (Jones & Komar 2013c). With its distinctive and far-carrying vocalisations, it is unlikely to have been overlooked previously and we suspect that Atlantic slope records represent a recent range expansion. A nest photographed near San Lucas Tolimán, dpto. Sololá, on 2 June 2017 (R. A. Xep, R. Tol González pers. comm.) was the first breeding record.

**WHITE-EYED VIREO** *Vireo griseus* (D; V)
Common winter visitor to the Atlantic slope lowlands, but rare on the Pacific slope (Eisermann & Avendaño 2007). New Pacific slope records include one in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, in December 2011 (Jones & Komar 2012b) and one photographed in San Marcos La Laguna, dpto. Sololá, on 10 March 2017 (I. Soliz, eBird S35083698).

**GREEN JAY** *Cyanocorax yncas* (D; R)
Five seen near Limonar on 1 December 2014 and two in Chaculá on 29 April 2015 appear to be the first records for the Nentón Valley, dpto. Huehuetenango.
BUSHY-CRESTED JAY *Cyanocorax melanocyaneus* (D; R)
Common in pine–oak forest and plantations in the highlands above 800 m but recorded at the unusually low elevation of 350 m in arid scrub in Parque Regional Municipal Lo de China, dpto. El Progreso, during the breeding and non-breeding seasons, with one on 7 September 2010, four on 10 March and at least ten on 26 October 2014 (including immatures with yellow bills). The site is at the base of a mountain range with pine–oak habitat. Areas above 800 m lie just 3 km distant, and probably within the home range of a flock. Nesting has not been observed in arid scrub but cannot be ruled out. These observations suggest that Bushy-crested Jay may range throughout the year to low elevations near optimal habitat above 800 m.

COMMON RAVEN *Corvus corax* (D; R)
Reportedly common and widespread during the 19th and first half of the 20th century in the highlands and arid interior valleys, with records from Volcán Fuego, dpto. Chimaltenango, the plains near Chimaltenango, dpto. Chimaltenango, Volcán Atitlán, dpto. Sololá, San Miguel Dueñas, dpto. Zacatepéquez, Quetzaltenango, dpto. Quetzaltenango, Sierra Los Cuchumatanes, dpto. Huehuetenango, San Jerónimo, dpto. Baja Verapaz, and the arid valley of the río Motagua, dpto. Zacapá (Sclater & Salvin 1859, Salvin & Godman 1879–87, Griscom 1932, Baepler 1962, Land 1962b). Not listed by Dearborn (1907) or Wetmore (1941), but Land (1970) described it as ‘fairly common in the highlands’ and ‘especially numerous in the Altos of Huehuetenango’ (= Sierra Los Cuchumatanes).

Records post-1970 are very few but include two seen by CA in what is now Parque Regional Municipal Todos Santos Cuchumatán, dpto. Huehuetenango, on 12 April 1997, one near Nueva Santa Catarina Ixtahuacán, dpto. Sololá, on 10 February 2002 (J. Berry pers. comm.), a report without details from Montaña Yalijux, dpto. Alta Verapaz, in 2001–02 (Renner et al. 2006), two seen on 11 April and four on 7 May 2007 near San Pedro La Laguna, dpto. Sololá (C. Anderson pers. comm.), one at Finca Rubel Chahim, dpto. Alta Verapaz, on 15 May 2015 (J. Cahill pers. comm.), a presumed pair photographed (Fig. 31) near Chiabal, dpto. Huehuetenango and adjacent to Parque Regional Municipal Todos Santos Cuchumatán, on 5 December 2014, where two birds were seen repeatedly in 2014 (E. Matías pers. comm.), one in Parque Regional Municipal Todos Santos Cuchumatán, dpto. Huehuetenango, on 26 April 2015, with other singles on 11 and 12 April 2016, 30 April 2016, 4 June 2016, 3 July 2016 and 26 August 2016. During multiple visits to the area in 2014–18 up to three birds were seen per day (E. Matías pers. comm.). An undocumented report of eight there on 19 January 2015 (Bolaños Sittler 2016) is doubtful.

Local people in the western highlands report that ravens disappeared in the late 1970s. They were common near Sibinal, dpto. San Marcos, at 2,900 m until the 1970s, when pairs and flocks were seen regularly. Ravens were considered a pest, predating corn, and people poisoned them with baits. Subsequently, the species disappeared from there (A.
At Chiabal, in the Sierra Los Cuchumatanes at 3,300 m, dpto. Huehuetenango, flocks of 30–40, and sometimes 100 were seen until 1978. Ravens nested there on cliffs (I. Ramos Pérez pers. comm.). North-west of the Sierra Los Cuchumatanes, at Limonar, dpto. Huehuetenango, at 800 m in the Nentón Valley, the species was seen in flocks of up to ten mainly in June–July until the end of the 1970s. Again, local people poisoned the birds because they were predating corn (A. Días Cota pers. comm.). At Volcán Siete Orejas at 3,000 m, dpto. Quetzaltenango, they were common until the second half of the 1970s; flocks of 3–20 were seen and the birds nested on cliffs. Ravens disappeared from there suddenly between 1974 and 1979 (M. Rivera pers. comm.). The western highlands of Guatemala are densely populated by farmers. It can be presumed that poisoning throughout the region led to a sudden collapse in the population. Until recently, the species had not recovered. Based on repeated recent observations of two birds in Parque Regional Municipal Todos Santos Cuchumatán and its environs, we presume that nesting may still occur there.

**PURPLE MARTIN** *Progne subis* (A; T)
Breeds in North America and winters in South America (Brown & Tarof 2013). Purple Martin is a fairly common transient through Guatemala, but without documentation and thus until recently was considered hypothetical (Eisermann & Avendaño 2007). One photographed in Punta de Manabique Wildlife Refuge, dpto. Izabal, in March 2012 (J. Cahill, eBird, S10403679) and another in San Benito, dpto. Petén, in September 2016 (C. Echeverría, eBird S31429440) provide documented records from spring and autumn passage.

**CAVE SWALLOW** *Petrochelidon fulva* (A; V)
First documented by a bird photographed near Antigua Guatemala, dpto. Sacatepéquez, in March 2008 where 55 were seen (Jones & Komar 2008d). Undocumented reports from the rio Paz, dpto. Jutiapa (Eisermann & Avendaño 2007), Monterrico, dpto. Santa Rosa (Eisermann & Avendaño 2006), Cerro San Gil, dpto. Izabal (Robbins & Dowell 1995), Finca Patrocinio, dpto. Quetzaltenango (Jones & Komar 2008d), Escuintla, dpto. Escuintla (Jones & Komar 2008d) and 24 seen at Lago Atitlán, dpto. Sololá, on 14 December 2008 (R. Sigüenza pers. comm.). All records are in December–March. A common and regular winter visitor to coastal El Salvador (Jones & Komar 2008d), but it appears to be an irregular visitor and transient in Guatemala.

**ROCK WREN** *Salpinctes obsoletus* (C, D; R)
Associated with extensive rocky areas and is very local in northern Central America (Griscom 1932, Howell & Webb 1995). In Guatemala, recent records include one heard at Volcán Pacaya, dpto. Escuintla, on 12 May 2009 (O. Barden pers. comm.), at least one seen at Lago Atitlán near Santiago Atitlán, dpto. Sololá, on 25 February 2001 (P. Kaestner pers. comm.) and three north of Panajachel dpto. Sololá, on 22 March 2002 (M. Mathieson pers. comm.). Unrecorded for more than a century in the arid interior valley of Nentón, dpto. Huehuetenango (Nelson 1897), where a population was relocated in April 2012, with two at Finca El Carmen on 13 April 2012 and at least nine territories (13 individuals) at seven of nine sample points along a 10 km transect south of La Trinidad on 15 April 2012. At the same site, an active nest with at least two nearly fledged young on 27 April 2015 (Fig. 32a) confirms breeding. Another active nest with three c.8 day-old juveniles was observed at Finca El Carmen on 2 June 2017 (Fig. 32b). Both nests were in natural rock cavities, but another observed on 25 August 2017 held nearly fledged juveniles and was in the wall of a house 5 km east of San Andrés Sajcabajá, dpto. Quiché, where 19 individuals were
seen (M. E. Chocoy pers. comm.). Records from the upper Sierra Los Cuchumatanes, dpto. Huehuetenango, including one near La Capellanía on 4 March 2014 (J. Cahill, eBird S17553926) and two near Paquix on 3 September 2017 (E. Matías, eBird S38975603) confirm its presence at historical collection localities (Nelson 1897). In dpto. Quetzaltenango, Rock Wren was recorded several times at Volcán Cerro Quemado in December 2014 (Jones et al. 2016a). In dpto. Baja Verapaz, one was photographed at Chixoy dam 10 km south of San Cristóbal Verapaz on 13 November 2012 (Jones & Komar 2013c). In dpto. San Marcos, 5 km south-east of San Miguel Ixahuacán, the species was photo-documented for the first time on 29 January 2017 (C. Quezada, eBird, S34046193). Historical (Salvin & Godman 1879–87, Nelson 1897, Griscom 1932) and recent records in Guatemala are from elevations of 1,000–3,200 m. We consider it a rare to common but very local resident.

**SEDGE WREN** *Cistothorus platensis* (C, D; R)

Very local in savanna and grasslands, and recorded from six sites in the Pacific slope highlands and in lowlands of central dpto. Petén at 200–3,700 m. Historical records are from San Miguel Dueñas and Volcán Agua, dpto. Sacatépéquez (Salvin & Godman 1879–87, Griscom 1932). Recently a resident population was reported by J. Berry from Quetzaltenango, dpto. Quetzaltenango (Eisermann & Avendaño 2007), where the species was also reported in 2012 (Jones & Komar 2013b), in Fraijanes, dpto. Guatemala (Jones & Komar 2009b) and 5 km north of San Francisco El Alto, dpto. Totonicapán (Jones & Komar 2011c). A report of six with photographs and observations of copulation and collecting nest material in Santa Ana, dpto. Petén, on 14 June 2017 (C. Echeverría, eBird S37587495) was the first breeding record.

**CAROLINA WREN** *Thryothorus ludovicianus* (D; R)

Fairly common in northern dpto. Petén. A report from near Salamá, dpto. Baja Verapaz, in May 2015 (Jones et al. 2016b) confirms historical records of an isolated population in the arid interior valley of the río Chixoy (Griscom 1932).

**GIANT WREN** *Campylorhynchus chiapensis* (A, C, D; R)

Long considered a Mexican endemic and confined mainly to the Pacific slope lowlands of Chiapas (Howell & Webb 1995). First reported from the río Suchiate near Limones, dpto. San Marcos, on the Mexico / Guatemala border, in March 2014 (Cahill 2014, Jones & Komar 2015b). Subsequent records include birds 4 km east of the border in La Blanca, dpto. San Marcos, in October and December 2014 (Jones & Komar 2015d, Jones et al. 2016a) and three
territories in Salinas Dos on 24 March 2015. A bird carrying nest material near La Blanca in October 2014 (Jones & Komar 2015d) and a pair photographed nestbuilding in a mistletoe in a Salix tree 16 m above ground in Salinas Dos, dpto. San Marcos, on 25 April 2015 confirms breeding in Guatemala. Two photographed near Catarina, dpto. San Marcos, on 26 December 2015 (J. Monzón pers. comm.) represents the easternmost record.

**BANDED WREN** *Thryophilus pleurostictus* (C; D; R)
Previously unrecorded in the Nentón Valley, dpto. Huehuetenango (Howell & Webb 1995) but observations in 2012–17 indicate it is common there. Nests observed at Finca El Carmen, on 13 April 2012 and 7 km north of Nentón on 29 April 2017 confirm breeding.

**BLUE-GREY GNATCATCHER** *Polioptila caerulea* (D; rm)
A fairly common Nearctic migrant in Guatemala, which also breeds locally in the region (Jones 2003a). Spring and summer records in Guatemala include territorial pairs, with the male in breeding plumage, photographed in Chaculá, dpto. Huehuetenango, on 13 April 2017 and 2 June 2017 (Fig. 33), five seen near Sayaxché in central dpto. Petén, on 5 July 2015 (A. B. Lucas, eBird S24187929), four near San Francisco, dpto. Petén, on 26 June 2017 (J. Dangel, eBird S37796876), and one or two on the south shore of Lago Petén Itzá, in June and July 2014–17 (J. Dangel, eBird S37781379, A. B. Lucas S24570138, S37813803, M. García, S37580712, and M. Rodríguez, S19192390). The only historical summer record is a specimen from El Remate, dpto. Petén, taken on 30 July (van Tyne 1935). These records suggest breeding in central dpto. Petén and in northern dpto. Huehuetenango, but nests have not been reported.

**WHITE-LORED GNATCATCHER** *Polioptila albiloris* (D; R)
Found in arid to semi-humid scrub and forest, and until recently known only from the arid south-east (Howell & Webb 1995, Dickerman 2007). Recent records in the Nentón Valley, dpto. Huehuetenango, indicate that its range in the central valley of Chiapas, Mexico, extends into western Guatemala. These include one near La Mesilla on 17 February 2002 (P. Kaestner pers. comm.), six on 13 April 2012, three on 2 December 2014, six on 20 January 2015, five on 2 February 2015, two on 22 April 2017 and two on 2 June 2017 at Finca El Carmen, two near Unión on 2 June 2017, two at Lagunas de Candelaria on 2 December 2014 with four on 28 April 2015 and two on 29 January 2016, one 3 km south of La Trinidad on 15 April 2012, seven at Limonar on 1 December 2014, and two near Chacaj on 28 April 2015 and 30 January 2016. Reports of lone birds in the Lago Atitlán Valley, dpto. Sololá, including singles on 24 October 2006 and 24 January 2007 at San Pedro La Laguna (C. Anderson pers. comm.) may have been vagrants. There seem to be no historical or more recent records (2007–16) from this locality.
Figure 34. Adult American Dipper *Cinclus mexicanus* with two dependent juveniles, Reserva Ranchitos del Quetzal, 18 May 2018 (Knut Eisermann)

**AMERICAN DIPPER Cinclus mexicanus** (C, D; R)
Uncommon in the highlands. An active nest photographed in Reserva Natural Privada Posada Montaña del Quetzal, dpto. Baja Verapaz, in February 2008 (T. Janson pers. comm.) and a pair with two dependent juveniles in Reserva Ranchitos del Quetzal on 18 May 2018 (Fig. 34) confirm breeding. Observations at the río Polochic near Tamahú, at the unusually low elevation of 650 m, in March 2014 (Jones & Komar 2015b) and on 8 October 2014 suggest that the species ranges locally below 1,000 m year-round.

**GOLDEN-CROWNED KINGLET Regulus satrapa** (C; R)
Locally fairly common resident in high-elevation (>2,500 m) coniferous forest and woodland. A pair was observed tending juveniles in Parque Regional Municipal Todos Santos Cuchumatán on 5 June 2017. Both adults repeatedly entered a dense, 3 m-tall juniper (*Juniperus standleyi*) shrub from where begging calls could be heard. We could not determine if the young were in a nest or fledged. This is the first observation of breeding in Guatemala.

**RUBY-CROWNED KINGLET Regulus calendula** (D; vagM)
Rare winter visitor (Eisermann & Avendaño 2007). Several specimens were collected at unknown sites in the 19th century by G. U. Skinner (Sclater & Salvin 1859, Salvin &
Godman 1879–87). One of these is a male taken in 1859 now in the Smithsonian Institution, Washington DC (USNM 13631). Several sightings lack documentation, including from Totonicapán, dpto. Totonicapán (Salvin & Godman 1879–87, Ridgway 1904), one at Finca Chancol (Hotel Unicornio Azul), dpto. Huehuetenango, at 3,100 m on 16 February 2002 (P. Kaestner pers. comm.) and one at Volcán Tolimán, dpto. Sololá, on 24 February 2001 (P. Kaestner pers. comm.). Another was heard in Parque Regional Municipal de San Marcos, dpto. San Marcos, at 2,800 m on 9 February 2012, and one seen at Cerro Tecpán, dpto. Chimaltenango, on 2 January 2014 (Jones & Komar 2015a). A bird photographed in a mixed-species flock with Pink-headed Warbler *Cardellina versicolor*, Townsend’s Warbler *Setophaga townsendi* and Wilson’s Warbler *Cardellina pusilla* in an 8 m-tall pine plantation at 3,100 m in Parque Regional Municipal de San Pedro Sacatepéquez, dpto. San Marcos, on 6 February 2012 (Fig. 35) was the first documented site-specific record.

**BLACK CATBIRD** *Melanoptila glabrirostris* (D; r)
Poorly known endemic to the Yucatán Peninsula. Studies in Belize and Mexico (Morgenthaler 2003, Roldán-Clarà 2009, Roldán-Clarà *et al.* 2013) indicate that breeding occurs April–August. With few available records (van Tyne 1935), status in Guatemala was uncertain (Land 1970, Eisermann & Avendaño 2007). New records are from central dpto. Petén during the breeding season including ten near Santa Anta in May 2014 (Jones & Komar 2015b) plus three in June and eight in July 2014 (Jones & Komar 2015c), three on 13 August 2015 (A. B. Lucas, eBird S24780214), seven on 14 May 2016 (M. García, eBird S29661709), three on 23 June 2017 (A. B. Lucas, eBird S37768931) and one on 29 June 2017 (J. Madrid, eBird S37869445), and one near San Miguel in July 2014 (Jones & Komar 2015c) with three there on 26 May 2017 (C. Echeverría, photograph, eBird S37169870). Based on these data, we suspect that Black Catbird breeds in the area, but nesting has not been reported.

**TRICOLOURED MUNIA** *Lonchura malacca* (A, D; ?)
Native to India and Sri Lanka, and recently introduced in the Caribbean and Venezuela (Banks *et al.* 2000), with recent records throughout Central America (Jones 2003a, 2004b, Funes & Herrera 2006). An adult photographed by M. Rivera at Lago Petén Itzá, dpto.
Petén, on 29 September 2009 (Jones & Komar 2010b) was the first documented record. A pair photographed near Puerto Quetzal, dpto. Escuintla, in January 2015 (Jones et al. 2016a) was the second. A flock of 25 photographed in reed swamps near Montserrat, dpto. Santa Rosa on 9 January 2018 (Fig. 36) is the largest concentration reported. The agricultural fields favoured by this species are rarely surveyed and it is uncertain if it is established in Guatemala.

**CHESTNUT MUNIA** *Lonchura atricapilla* (B; ?, H)
Native to south Asia and recently introduced in the West Indies (Banks et al. 2000). It is unknown if the species is established in South America, where it has been reported in Ecuador (Restall et al. 2006). An adult 6 km north-west of Villa Canales, dpto. Guatemala, on 27 June 2007 (K. Duchez pers. comm.) was the first report for Guatemala, but the bird’s origin is uncertain and we are not aware of any other reports.

**HOUSE SPARROW** *Passer domesticus* (D; R)
An Old World species introduced into the eastern USA during the 19th century, which has expanded throughout North and Middle America (AOU 1998). In Guatemala, House Sparrow was still unknown in the 1960s (Land 1970) but during the 1970s it became widespread in the highlands (Thurber 1972, 1986). Dpto. Petén, covering large parts of the Atlantic slope lowlands, was colonised more recently with the first record there in 2011. New records from urban areas in the deforested southern and central parts of the department (in chronological order) include 30 in El Subín in February 2011 (Jones & Komar 2011c), three in La Libertad on 27 March 2013, two in Poptún in September 2013 (Jones & Komar 2014c), 20 in Santa Elena in October 2014 (Jones & Komar 2015d), eight in Vista Hermosa on 5 May 2015 (M. García, eBird S26549685), two in San Andrés on 1 January 2016 (C. Chablé, eBird S26572819) and seven photographed in San Luis on 18 March 2017 (B. Mes, eBird S35270885).

**WHITE-VENTED EUPHONIA** *Euphonia minuta* (D; r)
Rare to locally uncommon in the Atlantic slope lowlands and foothills. A specimen reported to be from Cobán, dpto. Alta Verapaz (Salvin & Sclater 1860b) was probably collected at a lower elevation north of the city. Reliable site records are from Cerro San Gil, Las Escobas, Cimarrón, Santo Tomás, Sierra del Caral, and El Estor in dpto. Izabal (Wendelken & Martin 1989, Howell & Webb 1992, Seglund & Conner 1997, Cerezo & Ramírez 2003). New records include one in Selempín, dpto. Izabal, on 25 April 2002 (J. Berry pers. comm.) and a pair near Río Tzetoc in Parque Nacional Laguna Lachuá, dpto. Alta Verapaz, on 23 November 1999. Reports from Bonampak in adjacent Chiapas, Mexico (Gómez de Silva 2010, 2011a,b, 2012) suggest that it may also occur in dpto. Petén. Nesting is assumed but has not been reported.

**HOUSE FINCH** *Haemorhous mexicanus* (B; r, H)
Ranges from North America to southern Mexico, with a disjunct population in the central valley of Chiapas (Howell & Webb 1995). Several were observed singing persistently in Tziscao, Chiapas, Mexico, on the border with Guatemala and two were heard in the village of El Quetzal, dpto. Huehuetenango, on 9 July 2017 (E. Hernández Molina, eBird S38059548). This is the first report for Guatemala and Central America. The presence of territorial birds suggests it is now a resident breeder in the area.
The taxonomy of **S. atriceps** and the southernmost race of Pine Siskin **S. p. perplexus** is vexed. **S. atriceps** was described based on two male specimens, one olive-coloured with a black cap and the other mainly grey with a black cap (Salvin 1863, Salvin & Godman 1879–1904, Vallely et al. 2014). **S. p. perplexus** was described based on a mainly greyish bird with dark dorsal and ventral streaks (van Rossem 1938, Vallely et al. 2014). Vallely et al. (2014) discussed the existing confusion in the literature from 1863 to 2008 regarding the taxonomic status of the different forms, which includes olive-coloured birds with a dark cap referred to **S. atriceps**, greyish birds with a dark cap that have been considered either to be **S. atriceps** or **S. p. perplexus**, greyish birds with dark streaks considered to be **S. p. perplexus** and greyish birds with a dark cap that have been regarded as hybrids between the two species, as well as the possibility of all these forms being conspecific.

Based on measurements of specimens belonging to all of these morphological variants, Vallely et al. (2014) determined there to be differences in bill shape and wing length that permit definition of two groups: (1) olive birds (males and females) and (2) greyish birds and streaked birds. A more recent molecular study is congruent with these results, as olive birds grouped together vs. grey and streaked birds (Alvarez et al. 2016). Both studies shed light on the taxonomic relationships between the different morphotypes, but the nomenclatural confusion remains unresolved, because grey-coloured birds with a dark cap were originally described as **S. atriceps** (Salvin 1863, Salvin & Godman 1879–1904), meaning that using the name **S. pinus perplexus** for grey birds with a dark cap violates the International code of zoological nomenclature (ICZN 1999, Dickinson et al. 2011).

The olive form is locally common in the western highlands of Guatemala, but nesting has apparently not been described (Howell & Webb 1995). We observed an active nest at 3,170 m at Volcán Siete Orejas, dpto. Quetzaltenango, on 12–14 February 2012 during the final phase of construction. The nest was an open cup placed 5.5 m above ground on the dense branch of a 7 m cypress **Neocupressus lusitanica**. The pair flew back and forth and the female, identified by its duller olive plumage, entered the nest with material and remained up to 70 minutes inside it, probably indicating the onset of incubation. The male fed the female in the nest. Surrounding habitat was open woodland with cypress, pine (**Pinus** sp.), arrayán (**Baccharis** sp.), agave (**Agave** sp.) and some alder trees (**Alnus** sp.). At the same site a female was seen nestbuilding on 16 April 2013. Birds with streaked juvenile plumage were observed there on 14 May 2012. Juveniles were also seen at Volcán Atitlán, in Reserva
Natural Privada Los Tarrales, dpto. Suchitepéquez, on 7 June 2008, at Cerro Tecpán, dpto. Chimaltenango, on 18 April 2009, and Unión Reforma, dpto. San Marcos, on 2 April 2012. Nesting appears to be synchronised with the dry season, which in the Pacific slope highlands is in December–April.

We observed grey birds, and grey birds with dark streaks, in flocks of up to more than 50 individuals, in pairs, and in family groups of adults with dependent juveniles at two sites: Sierra Los Cuchumatanes, dpto. Huehuetenango, and 5 km north of San Francisco El Alto, dpto. Totonicapán. Juveniles of grey birds were previously unknown (Vallely et al. 2014). Near Chichim, adjacent to Parque Regional Municipal Todos Santos Cuchumatán, we observed a family group with dependent juveniles on 3 July 2016 (Fig. 37b,c), as well as 5 km north of San Francisco El Alto, dpto. Totonicapán, on 11 September 2014 (Fig. 36a). The juvenile at San Francisco El Alto was heavily streaked, similar to the image labelled ‘unknown juvenile’ in Fig. 2b in Vallely et al. (2014). The streaking on the juvenile near Chichim was less pronounced. Two nests of grey birds were observed in Chiabal, dpto. Huehuetenango: one with two young less than a week old on 23 September 2016, and one with two eggs on 27 September 2016 (E. Matías pers. comm.). Based on the observations of dependent juveniles and nests, the breeding season seems to be synchronised with the wet season. Although most siskins we saw in Parque Regional Municipal Todos Santos Cuchumatán and environs in 2014–17 were grey and streaked birds, we also saw pairs and small groups of olive birds, sometimes in mixed flocks with grey birds.

**OLIVE SPARROW** *Arremon rufivirgatus* (D; r)

Long known in Guatemala only from a specimen taken in 1956 near La Libertad in central dpto. Petén (Smithe & Paynter 1963). Two were seen at the same site in November 2012 (Jones & Komar 2013c). Other documented records from dpto. Petén include two photographed...
near La Libertad on 23 August 2017 (I. Morataya, eBird S38786303), one photographed 8 km north-east of La Libertad on 31 December 2014 (C. Echeverría, eBird S21099506), one photographed near Santa Ana on 14 May 2016 (A. B. Lucas, eBird S29664052) and two photographed there on 17 March 2016 (C. Echeverría, eBird S28334488).

Recent observations in the Nentón Valley, dpto. Huehuetenango, indicate a slight extension of the range from the central valley of Chiapas, Mexico. These include several 8 km north of Nentón and near Lagunas de Candelaria in May 2014 (Jones & Komar 2015b), two near Lagunas de Candelaria on 28 April 2015, two photographed on 2 December 2014, two seen on 20 January 2015 and one singing on 2 June 2015 at Finca El Carmen, one 2 km east of Unión on 2 June 2017, one on 1 February 2015, six photographed and sound-recorded on 13 April 2017 (Fig. 38), two each on 22 April 2017, 2 June 2017 and 8 October 2017 at Chaculá, one 7 km south of La Trinidad on 4 June 2017, two near Nentón on 4 June 2017, one 12 km south-west of Nentón on 4 June 2017, and one 3 km north of Camojá Grande on 27 April 2015 (H. Barnard pers. comm.). Nesting has not been reported but we assume it is a breeding resident in the valley of Nentón and in central dpto. Petén.

WHITE-FACED GROUND SPARROW *Melozone biarcuata* (C; R)

Previously considered conspecific with the Costa Rican endemic Cabanis’s Ground Sparrow *M. cabanisi* under the name ‘Prevost’s Ground Sparrow’ *M. biarcuata* (e.g. AOU 1998, Eisermann & Avendaño 2007) but now treated separately following Sandoval *et al.* (2014). Juveniles reported by Griscom (1932) suggested that White-faced Ground Sparrow is a breeding resident in the highlands and foothills, but a nest photographed at Montaña Yalijux, dpto. Alta Verapaz at 1,950 m, on 21 July 2006 was the first confirmed nesting record. The nest was an open cup constructed mainly of sedge (*Carex* sp.) leaves, with some rootlets and inflorescences of *Plantago* sp., and lined with fine rootlets. It was placed 50 cm above ground in a tussock of a 1 m-tall sedge *Carex donnell-smithii* at the edge of a corn field (Fig. 39a). Nest dimensions were: 14.0 cm outer diameter, 13.0 cm depth, 7.5 cm cup diameter and 6.0 cm cup depth. An adult was photographed incubating two eggs, which were whitish with reddish-brown mottling (Fig. 39b). Egg dimensions were 23.4 × 16.8 mm and 22.6 × 16.5 mm. The nest and eggs were similar to five nests described from Chiapas, Mexico (Danner *et al.* 2008).

![Figure 39. Nesting evidence of White-faced Ground Sparrow *Melozone biarcuata* in Guatemala: (a) adult in nest, (b) nest with two eggs, Montaña Yalijux, dpto. Alta Verapaz, 21 July 2006 (Knut Eisermann)](image-url)
STRIPE-HEADED SPARROW *Pezucaea ruficauda* (D; R)

Formerly thought to be confined to the south-east (Howell & Webb 1995), recent records indicate it is widespread on the entire arid and semi-humid Pacific slope from sea level to 1,500 m, with records from Tilapa, dpto. San Marcos (Eisermann & Avendaño 2007), one at Panajachel, dpto. Sololá, on 23 April 2008, one at San Pedro La Laguna, dpto. Sololá on 12 June 2009 (C. Anderson pers. comm.) and two 6 km north-east of Champerico, dpto. Retalhuleu, on 10 March 2011 and 4 March 2012 (T. Fjesme pers. comm.).

CHIPPING SPARROW *Spizella passerina* (C; R)

Resident populations in northern Central America are at the southern limit of the species’ range (Middleton 1998), where it is confined to lowland pine savanna and highland pine–oak woodland (Griscom 1932). A nest with two c.7 day-old young photographed on 28 April 2015 (Fig. 40a) and one with two c.5 day-old young and an egg photographed on 3 June 2017 (Fig. 40b) at Chaculá, dpto. Huehuetenango, confirm breeding. These open-cup nests were 2.2 m and 2.5 m above ground, respectively, in 3 m-tall cypress (*Neocupressus* sp.) trees. Nesting appears to be synchronised with the start of the wet season. In Chiapas, Mexico, egg laying was reported in April (Miller *et al.* 1957). In Belize the nesting season is April–July based on specimens in breeding condition and observations of adults carrying nest material (Russell 1964). Although considered locally common in Nicaragua (Howell 2010), Honduras (Monroe 1968, Gallardo 2014), El Salvador (Dickey & van Rossem 1938) and Belize (Russell 1964), our nest documentation from Chaculá appears to be the first for northern Central America. It is unknown if two broods are produced per season as in northern populations (Middleton 1998).

CLAY-COLOURED SPARROW *Spizella pallida* (D; vagM)

A vagrant documented by a historical specimen from Sacapulas, dpto. Quiché (Griscom 1932) and photographs taken in Tikal, dpto. Petén, in October 2008 (Jones & Komar 2009b). One photographed at Chiabal, dpto. Huehuetenango, on 5 December 2014 (Fig. 41) was the third country record.
LARK SPARROW *Chondestes grammacus* (D; vagM)
Breeds in southern Canada, the USA and northern Mexico (Martin & Parrish 2000) and is a vagrant to Central America. A specimen was taken near Alotenango, dpto. Sacatepéquez, in 1873 (Salvin & Godman 1879–87). Following another specimen, collected near Sacapulas, dpto. Quiché, in 1928 (Griscom 1932) it went unrecorded for 88 years. Six seen near Salamá, dpto. Baja Verapaz on 3 April 2016 (J. Cahill, eBird S28778078) was the third record.

SAVANNAH SPARROW *Passerculus sandwichensis* (C, D; RM)
Rare winter visitor and very local resident breeder. Nearctic migrants are rare winter visitors throughout the country (Howell & Webb 1995, Eisermann & Avendaño 2007). One seen in Tikal, dpto. Petén, in December 2010 (Jones & Komar 2011c) was the first there. The resident race *wetmorei* (van Rossem 1938) endemic to the west Guatemalan highlands went unreported for more than a century following collection of the type series (Eisermann et al. 2017a). Breeding was erroneously reported by Jones (2002), based on a report wherein the observer assumed nesting but did not observe it (J. Berry pers. comm.). Resident Savannah Sparrows are known from the Sierra Los Cuchumatanes, dpto. Huehuetenango, and the Sierra Madre in dpto. Totonicapán (van Rossem 1938, Eisermann & Avendaño 2007, Eisermann et al. 2017a).

GRASSHOPPER SPARROW *Ammodramus savannarum* (D; V)
Nearctic migrants and resident breeders potentially occur, but status uncertain and all records are in September–April (Dearborn 1907, Griscom 1932, van Tyne 1935, Eisermann & Avendaño 2007). There are no summer records, but a resident population in Belize (Russell 1964, Howell & Webb 1995) suggests that it may breed in Guatemala as well. New site records include Panajachel, dpto. Sololá, in November 2007 (Jones & Komar 2008b), Punta de Manabique Wildlife Refuge, dpto. Izabal, in March 2012, Sipacate, dpto. Escuintla (Jones & Komar 2013a), one photographed in Tikal, dpto. Petén, on 28 January 2008 (B. Frenz pers. comm.) and 16 at Finca Cataluña, dpto. Retalhuleu, on 16 December 2010 (J. Berry pers. comm.). Another was seen near Chacaj, in the Nentón Valley, dpto. Huehuetenango, on 28 April 2015 (H. Barnard pers. comm.).

EASTERN MEADOWLARK *Sturnella magna* (C, D; R)
Historically reported from savannas in central dpto. Petén, the arid interior valleys and the highlands (Salvin & Godman 1879–87, Griscom 1932, Land 1962b, Howell & Webb 1995). New sites reported in the Pacific slope lowlands since Eisermann & Avendaño (2007) include two at Manchón-Guamuchal, dpto. Retalhuleu, in December 2009 (Jones & Komar 2010c) and 13 at Finca Cataluña, dpto. Retalhuleu, in December 2010 (Jones & Komar 2011c). New sites in the Atlantic slope lowlands include seven near Morales, dpto. Izabal, in December 2010 (Jones & Komar 2011c), four in Punta de Manabique Wildlife Refuge, dpto. Izabal, in March 2014 (Jones & Komar 2015b), nine near Chisec, dpto. Alta Verapaz, in December 2010 (Jones & Komar 2011c), one at Muchilhá, dpto. Alta Verapaz, in October 2013 (Jones & Komar 2014c) and five in Parque Nacional Laguna del Tigre, dpto. Petén, in December 2010 (Jones & Komar 2011c). New records in the highlands include six in Parque Ecológico Cerro Alto, dpto. Jalapa, in January 2014 (Jones & Komar 2015a). A nest found at 3,750 m in Parque Regional Municipal Todos Santos Cuchumatán, dpto. Huehuetenango, on 3 July 2016, confirms breeding. We regard it as widespread and increasing due to deforestation.
YELLOW-WINGED CACIQUE *Cassiculus melanicterus* (D; R)
Endemic to the Pacific slope of Mexico, Guatemala and El Salvador (Howell & Webb 1995, Komar 1998, Ibarra Portillo 2009), and previously known in Guatemala only from the coastal lowlands (Eisermann & Avendaño 2007). A pair (Fig. 42a), including a nestbuilding female (Fig. 42b), photographed at Río Jordán (= Finca Potrero del Morro) on 28 April 2015 shows that its range extends from the central valley of Chiapas, Mexico (Alvarez del Toro 1971, Howell & Webb 1995) to interior western Guatemala in the Nentón Valley, dpto. Huehuetenango.

BAR-WINGED ORIOLE *Icterus maculialatus* (C, D; R)
Observations in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, confirm breeding and appear to be the first ever (Howell & Webb 1995, Jaramillo & Burke 1999). These include a nest with an incubating male photographed on 17 July 2007 (G. López pers. comm., J. de León Lux). The nest was a thin-walled cup of thin rootlets, c.2 m above ground, attached pendulously to the underside of leaves of an *Inga micheliana* tree by some rootlets ‘sewn’ into the nest rim through the leaves. A second nest placed in a cypress *Neocupressus lusitanica* tree, 2.5 m above ground, held newly hatched young on 23–25 July 2012. A third nest, on 10 June 2015, with four young, c.10 days old, and both adults in attendance, was 1.7 m above ground in a 2.5 m *Inga micheliana* tree (Fig. 43). The cup was 8.5 cm deep (from the lowest point of the rim) and 8 cm wide, and the longest attachments from the nest rim to the leaf were c.11 cm long. All three nests were in shade-coffee plantations within 20–70 m of humid broadleaf forest edge, at 1,350–1,600 m. A fledged juvenile was photographed in Reserva Natural Privada Los Tarrales on 30 August 2009. Breeding seems to be synchronised with the wet season, in May–November.

Bar-winged Oriole has been thought to range as high as 1,800 m (Howell & Webb 1995). New records including a male in cloud forest at 2,400 m on 26 April 2017, and pairs on 29 July 2017 and 5 August 2012, in pine–oak forest at 2,200 m in Finca El Pilar, dpto. Sacatepéquez, one in cloud forest at 2,500 m at Volcán Atitlán in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 16 January 2015, and a male in an orchard at 3,300 m...
in Chiabal, dpto. Huehuetenango, on 31 January 2015, show that it occurs at least locally or temporally at higher elevations.

HOODED ORIOLE *Icterus cucullatus* (A, D; r)
An adult male at El Mirador archaeological site, dpto. Petén, on 1 March 2008 (Budney *et al.* 2008) was the first country record. An immature male photographed in Tikal, dpto. Petén, on 13 March 2017 (G. Lin, eBird S35480320, photo ML53497781) was the first documented record. A recent colonist in Palenque, Chiapas, Mexico (Patten *et al.* 2011), it can be expected in Parque Nacional Laguna del Tigre, dpto. Petén.

YELLOW-BACKED ORIOLE *Icterus chrysater* (D; R)
Commonest at mid elevations (500–1,500 m) but found locally on the Atlantic slope near sea level. At least one was at the río Dulce on 29 January 2008 (J. & M. Hubinger pers. comm.), two at the río La Pasion between Sayaxché and río Usumacinta, dpto. Petén, on 5 July 1963 (L. Warren pers. comm.) and one was carefully observed in Tikal, dpto. Petén, on 14 March 1993 (W. Nezadal pers. comm.). In the Pacific slope highlands, found locally at higher altitudes than previously reported, i.e. 2,500 m (Howell & Webb 1995, Jaramillo & Burke 1999) including four at 2,900 m in Parque Regional Municipal Los Altos de San Miguel Totonicapán, dpto. Totonicapán, on 22 July 2001 (J. Berry pers. comm.), two at 2,750 m in Parque Chajil Siwan, dpto. Totonicapán, on 12 September 2014, four on 16 January 2011, singles on 2 and 4 February 2012 and 25 and 27 August 2014, four on 27 March 2015, one on 23 March 2016 and six on 8 April 2017 at 3,000 m near Unión Reforma, dpto. San Marcos. Several adults and a dependent juvenile seen there on 30 June 2015 suggest it is a breeding resident at that elevation. In Parque Regional Municipal Canjulá, dpto. San Marcos, at 2,700
m, two were seen on 17 January 2011, one on 28 August 2014 and one on 29 March 2015. In Vega del Volcán, dpto. San Marcos, at 2,700 m, singles were seen on 30 August 2014, 31 March 2015 and 21 March 2016, with two on 9 April 2017, and two were seen at 2,800 m on Volcán Siete Órejas, dpto. Quetzaltenango, on 30 January 2015. Thus, nominate I. chrysater ranges in altitude from sea level to 3,000 m.

**STREAK-BACKED ORIOLE** *Icterus pustulatus* (D; R)

Long known only from the arid south-east (Howell & Webb 1995). Recent records in the Nentón Valley, dpto. Huehuetenango, including 20 at Finca El Carmen on 13 April 2012, with two there on 2 February 2015, seven in Limonar on 1 December 2014, and four 7 km north-west of Santa Ana Huista on 31 January 2016, show that its distribution extends from the central valley of Chiapas, Mexico, into western Guatemala.

**SHINY COWBIRD** *Molothrus bonariensis* (A, D; vagR)

A mainly South American species thought to be expanding north in Central America (Jones & Komar 2008b, 2010a, 2011b). The first report involved four seen by R. Fergus at Jocotán, dpto. Chiquimula, in September 2006 (Jones & Komar 2007b). Two immature males photographed at Marajuma, dpto. El Progreso, on 14 September 2010 (Jones & Komar 2011b) was the first documented record. Breeding has not been reported and we regard it as a vagrant.

**BROWN-HEADED COWBIRD** *Molothrus ater* (A; vagR)

Two males and two females found near Nentón, dpto. Huehuetenango, in May 2014 (Jones & Komar 2015b) represented the first country record. Several reports from the Yucatán Peninsula, Mexico (Gómez de Silva 2002, 2005, McKinnon et al. 2011) and three records in Belize (Jones et al. 2002, Jones & Komar 2008b, 2010d) are the only others south-east of the Isthmus of Tehuantepec. We consider it a rare vagrant.

**VIRGINIA’S WARBLER** *Oreothlypis virginiae* (D; vagM, H)

A rare winter vagrant known from just two reports, with the first from northern Petén (Beavers et al. 1991). One seen in coastal thorn scrub at Tilapa, dpto. San Marcos, on 13 March 2002 (J. Berry pers. comm.) was the second. There is no documented record for the country.

**CAPE MAY WARBLER** *Setophaga tigrina* (A, D; vagM)

Rare and irregular winter visitor with records from near Lago Atitlán, dpto. Sololá, in 1970 and 1974 (Mason 1976), and Tikal, dpto. Petén, in 1975 (Beavers 1992). Unrecorded in Guatemala for 30 years until a male was seen in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, in April 2005 (Jones 2005b) and a female in Quetzaltenango, dpto. Quetzaltenango, in December 2011 (Jones & Komar 2012b). Males photographed at Panajachel, dpto. Sololá, in March and April 2014, and Tikal, dpto. Petén, in April 2014 (Jones & Komar 2015b) were the first documented records.

**TROPICAL PARULA** *Setophaga pitiayumi* (D; r)

Only recently recorded in adjacent Belize (Jones et al. 2000) and at Yaxchilán, Chiapas, Mexico (Puebla-Olivares et al. 2002). One photographed in Parque Nacional Laguna del Tigre, in February 2014 (Jones & Komar 2015a) was the first documented record for dpto. Petén. Recently also documented at Tikal, dpto. Petén, including three on 1 May 2018 (Fig. 44) and two sound-recorded on 8 May 2018. Rather local in Guatemala, but given records
in the Atlantic slope lowlands and Atlantic and Pacific slope highlands (Eisermann & Avendaño 2007) it can be expected in broadleaf forest throughout the country. Residency status of local populations is poorly known, but altitudinal migrations have been reported in Mexico (Howell & Webb 1995). We assume it is a resident breeder in Guatemala, but nesting has not been reported.

**PALM WARBLER** *Setophaga palmarum*  
(D; V)

A rare winter visitor reported from the Atlantic coast in Punta de Manabique Wildlife Refuge, dpto. Izabal (Eisermann & Avendaño 2007). One was seen inland at Cobán, dpto. Alta Verapaz, in November 2010–March 2011 (Jones & Komar 2011b,c; J. Cahill pers. comm.), and another was photographed at Yaxhá, dpto. Petén, in November 2010 (Jones & Komar 2011b).

**GOLDMAN’S WARBLER** *Setophaga goldmani* (C, D; R)

Endemic to the highlands of Chiapas, Mexico, and western Guatemala, but often considered conspecific with Nearctic migrant taxa under the name Yellow-rumped Warbler *S. coronta* (e.g. AOU 1998, Eisermann & Avendaño 2007). Known from just six sites in country.
The easternmost record is from Chichicastenango, dpto. Quiché (Griscom 1932). In dpto. Totonicapán, it was reported from Momostenango (Griscom 1932), from where there were also several observations in 2001 and 2002 (J. Berry pers. comm.). At Sierra Los Chuchumatanes, dpto. Huehuetenango, it was reported from Finca Chancol, in the eastern part of the tableland (Nelson 1897), and at least nine were seen around Hotel Unicornio Azul on 26 February 2011. In the environs of Parque Regional Municipal Todos Santos Cuchumatán it was reported by Milá et al. (2007) and we found it to be common there in 2014–17, with several breeding records. In dpto. San Marcos it was reported from Ixchiguán (Milá et al. 2007) and at least six were recorded in Parque Regional Municipal de San Pedro Sacatepéquez on 8 February 2012. Guatemalan records are from elevations of 2,000–3,750 m. In Mexico, Goldman’s Warbler has been reported only from Volcán Tacaná (Hubbard 1969). The total extent of occurrence for this taxon (minimum convex polygon encompassing all sites of occurrence) is just 3,900 km². The potential area of distribution may cover 9,350 km², which includes areas above 2,000 m altitude in the 50 km buffer zone around all sites of occurrence (Fig. 45).

GRACE’S WARBLER Setophaga graciae (C, D; R)
Closely associated with pine forest and fairly common in the highlands. One seen at Finca Ixobel south of Poptún, dpto. Petén, on 29 January 2008 (J. & M. Hubinger pers. comm.) and one photographed 4 km south-west of Poptún on 14 September 2017 (E. Salvatierra, eBird S39192998) indicate that the range in the Maya Mountains of Belize (Howell & Webb 1995) extends west into dpto. Petén. Adults with a dependent juvenile at Chaculá, dpto. Huehuetenango, on 1 June 2017 confirm breeding.

HEPATIC TANAGER Piranga flava (D; rm)
Represented by several subspecies from the south-west USA to northern South America (Hellmayr 1936, Hilty 2017). In Guatemala, the resident race albifacies is widespread in highland pine forest (Griscom 1932) and race figlina is known from lowland pine savannas on the Atlantic slope (Griscom 1932, Russell 1964). Birds from northern populations belonging to race dextra reach the country rarely in winter (Griscom 1932, Hellmayr 1936). A female, apparently of a northern migrant race based on its extensively greyish face, neck

Figure 46. Hepatic Tanager *Piranga flava*, Chaculá, dpto. Huehuetenango: (a) female apparently of northern race *dextra*, 12 April 2012; (b) male of resident race *albifacies*, 12 April 2017 (Knut Eisermann)
and back was photographed at Chaculá, dpto. Huehuetenango, on 12 April 2012 (Fig. 46a).

Resident *albifacies* also occurs at the same site (Fig. 46b).

**NORTHERN CARDINAL** *Cardinalis cardinalis* (D; R)
Reaches its southernmost limit in northern dpto. Petén and is uncommon near the border with Mexico in Parque Nacional Mirador-Río Azul (Radachowsky *et al* 2004, Budney *et al*. 2008). Rare elsewhere, with records from near Flores (Taibel 1955), Tikal (Smithe & Paynter 1963) where one was also seen on 22 December 2009 (C. Artuso pers. comm.), Laguna Yaxhá, where a male was seen on 26 April 2003, a pair photographed 14 km north-west of Melchor de Mencos (J. Cahill, eBird S21026256) and at the south-east edge of Parque Nacional Laguna del Tigre, where a male was photographed near the río Sacluc, 7 km south-west of Paso Caballo, on 14 May 2013 (Fig. 47).

**YELLOW GROSBEAK** *Pheucticus chrysopeplus* (C; D; R)
Thought to reach 2,500 m (Howell & Webb 1995) but recently found in cloud forest to 3,000 m at several sites on the Pacific slope in dpto. San Marcos. These include three on 16 January 2012, a pair on 1 February 2011 (Fig. 48), one on 27 March 2015, two on 8 April and two on 21 April 2017 at Unión Reforma at 2,950–3,000 m. In Vega del Volcán, it was seen...
repeatedly in cloud forest at 2,700 m including one on 29 and 31 August 2014, pairs on 30–31 March 2015, and one on 9 April 2017. One was seen at 2,700 m in Parque Regional Municipal Canjulá on 28 August 2014. Also found locally on the Atlantic slope in the río Motagua Valley (dptos. El Progreso and Zacapa) as indicated by Dearborn (1907), Griscom (1932), Land (1970) and Eisermann & Avendaño (2007). A. W. Anthony observed young in dpto. El Progreso, providing the country’s only breeding record (Griscom 1932). Recent records confirm its presence there with five in Parque Regional Municipal Niño Dormido, dpto. Zacapa, on 6 September 2010 and one in Parque Regional Municipal Lo de China, dpto. El Progreso, on 7 September 2010.

RED-BREASTED CHAT *Granatellus venustus* (A, D; r)

Long considered a Mexican endemic. Two at Lagunas de Candelaria in the Nentón Valley, dpto. Huehuetenango, in May 2014 (Cahill 2014, Jones & Komar 2015b) was the first country record. At the same site, c.2 km from the Mexico border, a pair was photographed on 28 April 2015 (Fig. 49a), two, including an immature male, were photographed on 29 January 2016 (Fig. 49b) and a pair was seen on 20 April 2018. Three were found 6 km from the Mexican border and 2 km east of Unión on 22 April 2017, with singles there on 2 June 2017, 7 October 2017 and 1 February 2018. A pair was photographed c.1 km north-west of Unión on 13 December 2015 (O. Komar, eBird S33008738). These records indicate that its range extends from the central valley of Chiapas, Mexico, into western Guatemala. Nesting has not been reported but observations of immatures and records year-round suggest it is probably a resident breeder in the Nentón Valley.

BLUE SEEDEATER *Amaurospiza concolor* (C, D; R)

Poorly known but often found with mast-flowering bamboo (Stiles & Skutch 1989, Howell & Webb 1995). Recorded several times at Volcán Atitlán (Jones & Komar 2009b,c, 2011a). An adult male feeding a juvenile in humid broadleaf forest at 850 m in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 28 August 2009 (Fig. 50a) was the first documented breeding.

Including observations compiled by Eisermann & Avendaño (2007), it has been recorded at ten sites in Guatemala. New sites include a male photographed in Reserva Natural Privada Atitlán, Panajachel, dpto. Sololá, on 2 February 2008 (Jones & Komar 2008c), one in Reserva Natural Privada Pachuj, dpto. Sololá, on 14 December 2008, a female photographed at Laguna Lodge, Santa Cruz La Laguna, dpto. Sololá, on 30 April 2014 (J.
Cahill pers. comm.), a male at Finca Chajbaoc, dpto. Alta Verapaz, on 13 April 2013 (Jones & Komar 2014a), a female photographed in cloud forest at 2,800 m near Vega del Volcán, dpto. San Marcos, on 30 March 2015 with a female there on 10 April 2017 at 2,850 m (Fig. 50b), an immature male photographed on 29 July 2016 and a pair photographed and sound-recorded on 2 July 2017 at Finca El Pilar, dpto. Sacatepéquez, and a male sound-recorded on the slopes of Volcán Agua, dpto. Escuintla, on 20 March 2016 (D. Aldana, eBird S28494229). Elevational range reported as 450–2,700 m (Rising & Jaramillo 2011) but records in Guatemala are from 400 to 2,850 m and records are available from 200 m in Yaxchilán, Chiapas, Mexico (Puebla-Olivares et al. 2002), and near sea level at Bermudian Landing, Belize District, Belize (Howell et al. 1992, Vallely & Aversa 1997) showing that its overall elevational range encompasses 0–2,850 m.

**VARIED BUNTING** *Passerina versicolor* (D; R)
Long known in Guatemala only from the arid valley of the río Motagua in dptos. El Progreso, Zacapa and Chiquimula (Howell & Webb 1995). Recent records in the Nentón Valley, dpto. Huehuetenango show that it also extends from the central valley of Chiapas, Mexico, into adjacent western Guatemala. These include a male near Lagunas de Candelaria on 28 April 2015, a pair near Chacaj on 28 April 2015, a male at Finca El Carmen on 22 April 2017, and four near Unión on 22 April 2017 with one on 2 June 2017.

**AZURE-RUMPED TANAGER** *Tangara cabanisi* (D; R)
Endangered (IUCN 2017) and endemic to Pacific slope highlands of Guatemala and Chiapas, Mexico. Since the summary of Guatemalan distribution by Eisermann et al. (2011a) it has been reported at three new sites. A bird photographed in humid forest on the south slope of Volcán Agua, dpto. Escuintla, in April 2013 (Jones & Komar 2014a; A. Duarte pers. comm.) was the first documented record within the potential range east of the known area of distribution (Eisermann et al. 2011a). A bird seen in cloud forest at 1,700 m, 5 km south of Santiago Atitlán (south of Mirador Rey Tepepul), dpto. Sololá, on 2 April 2014 was the first record for the site. Seven photographed at Volcán Tacaná, near Yalú, dpto. San Marcos, on 5 September 2014 also documented a new site. Azure-rumped Tanager is locally common in Reserva Natural Privada Los Tarrales (Eisermann et al. 2011a,b). Two seen there at 850 m on 15 March 2013 (J. de León Lux pers. comm.) represents the lowest-altitude record.
GRASSLAND YELLOW FINCH  
*Sicalis luteola* (D; vagR)  
Rare and irregular in Central America and known from just three sites in Guatemala: San Miguel Dueñas, dpto. Sacatepéquez, where an immature was collected (Salvin 1866), near San Juan del Obispo, dpto. Sacatepéquez, where one was seen in January 1988 (Wendelken & Martin 1989), and near Salamá, dpto. Baja Verapaz, where five were seen in April 2008 (Jones & Komar 2008d) and four photographed on 25 October 2017 (Fig. 51; A. Larios pers. comm.).

SLATY FINCH  
*Haplospiza rustica* (C; R)  
Considered nomadic and reported reliably at only three sites in Guatemala: Biotopo del Quetzal, dpto. Baja Verapaz (Eisermann & Avendaño 2007), Fuentes Georginas, dpto. Quetzaltenango (Jones & Komar 2015d) and Sierra de las Minas, dpto. El Progreso. At the latter site it was recorded in September 2003 (Nájera Acevedo 2004), May 2013 (Jones & Komar 2014a) and March 2014, when a male was seen with nesting material (Jones & Komar 2015b). These records, together with a male in breeding condition at Cerro Montecristo, El Salvador, near the Guatemalan border (Komar 2002), suggest that it is a rare breeder in Guatemala.

SHINING HONEYCREEPER  
*Cyanerpes lucidus* (D; r)  
Rare in Guatemala where known from only six sites. Records are from near Cubilhuitz, dpto. Alta Verapaz at 350 m (Salvin & Godman 1879–87), Cerro San Gil, dpto. Izabal at 300–1,200 m (Cerezo *et al.* 2005), Reserva Ranchitos del Quetzal, dpto. Baja Verapaz at 1,700 m, in September 2010 (Jones & Komar 2011b), as well as two on 12 December 2010, a female on 24 January 2015, a male photographed on 15 June 2015, and four males and one female on 20 July 2017, near Purulhá, dpto. Baja Verapaz, in September 2014 (Jones & Komar 2015d), and one at 1,000 m at Montaña Sacranix, dpto. Alta Verapaz, on 14 October 2001 with a pair seen there on 28 August 2003 at 1,300 m. A bird seen in Finca Las Nubes, dpto. Alta Verapaz, on 24 February 2015 (M. Rodríguez, eBird S22059325) was just 8 km south-east of Cubilhuitz. Nesting is presumed but has not been reported.

YELLOW-FACED GRASSQUIT  
*Tiaris olivaceus* (D; R)  
Fairly common in open habitats on the Atlantic slope. Recent records from the Pacific foothills suggest it may be expanding including two near Retalhuleu, dpto. Retalhuleu, on 9 March 2008 (A. Jaramillo, eBird S23701611), one on the south-east slope of Volcán Atitlán in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 14 July 2008 with nesting seen there in August 2008 (G. López pers. comm.), at Volcán Agua, dpto. Escuintla, in May 2013 (D. Aldana, eBird S14085817), two in Finca Patrocinio, dpto. Quetzaltenango, in February 2014 (Jones & Komar 2015a), one in Finca Las Nubes, dpto. Suchitepéquez, in February 2014 (Jones & Komar 2015a), one in Guatemala City, dpto. Guatemala, on 10 May 2015 (A. Sagone, eBird S23988137), and two photographed near San José Pinula, dpto. Guatemala, on 26 July 2015 (M. J. Lou, eBird S24413850).
BLACK-HEADED SALTATOR *Saltator atriceps* (D; R)
Common on both slopes below 1,800 m. An active nest with at least one nestling a few days old was at the unusually high altitude of 2,050 m in Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, on 28 August 2012.

Several widespread and common species were listed as ‘resident, breeding suspected’ in Eisermann & Avendaño (2007). Table 1 summarises information on first nesting records for 12 of these species, which are not included in the species accounts.

### TABLE 1
First breeding records in Guatemala of common species within their known ranges.

| Species                          | Observation                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Emerald-chinned Hummingbird      | Female incubating two white eggs in a nest 1 m above ground on a dead fern leaf at 1,900 m near La Gloria, dpto. Quiché, on 16 April 2011 (Fig. 52a). |
| *Abeillia abeillei*              |                                                                                                                                           |
| Violet Sabrewing                 | In Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, incubating female on 18 July 2007 at 900 m (J. de León Lux & E. Buchán pers. comm.) and another female incubating two eggs in a nest 1.6 m above ground on 3 September 2009 at 1,400 m (Fig. 52b) |
| *Campylopterus hemileucurus*     |                                                                                                                                           |
| Blue-tailed Hummingbird          | Nests in Takalik Abaj, dpto. Retalhuleu, and El Palmar, dpto. Quetzaltenango (Eisermann & Avendaño 2007), with an active nest at 1,400 m in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 11 November 2006 (Fig. 52c), and another with two young photographed there at 1,200 m on 6 December 2010. |
| *Amazilia cyanura*               |                                                                                                                                           |
| Blue-throated Goldentail         | Female nestbuilding in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 28 October 2009 (J. de León Lux pers. comm.).                |
| *Hylocharis eliciae*             |                                                                                                                                           |
| White-necked Puffbird            | Nest on 10 May 2008 in a termitary at Tikal, dpto. Petén.                                                                                 |
| *Notharchus hyperrhynchus*       |                                                                                                                                           |
| Couch’s Kingbird                 | Adult with nesting material in an open agricultural area with some trees at 900 m in La Gloria, dpto. Quiché, on 18 April 2011 and one on 2 May 2018 in Tikal (Fig. 52e), dpto. Petén. |
| *Tyrannus couchii*               |                                                                                                                                           |
| Grey-collared Becard             | In Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, two adults feeding juveniles on 7 June 2006 at 900 m (J. de León Lux pers. comm.) and adult female feeding a fledged juvenile in a shade-coffee plantation at 1,050 m on 5 September 2009 (Fig. 52d), plus two adults with two dependent juveniles in Finca El Pilar, dpto. Sacatepéquez, on 9 August 2016. |
| *Pachyramphus major*             |                                                                                                                                           |
| Long-tailed Manakin              | Nest video-recorded in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 26 May to 25 June 2008 in a shade-coffee plantation at 900 m (J. de León Lux pers. comm.). |
| *Chiroxiphia linearis*           |                                                                                                                                           |
| Brown-capped Vireo               | In Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, at 2,000 m, two recently fledged juveniles on 17 July 2006, an adult feeding a fledgling on 24 July 2010, and two adults with a recently fledged juvenile on 25 July 2012. |
| *Vireo leucophrys*               |                                                                                                                                           |
| Blue-crowned Chlorophonia        | In Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez: a pair nestbuilding on 20 May 2008, an adult with three recently fledged juveniles on 14 July 2008, a pair nestbuilding at 1,800 m on 6 June 2009 and 4 May 2010 (G. López & J. de León Lux pers. comm.), and a pair nestbuilding at 1,400 m on 9 June 2009, 13 March 2011 and 16 May 2012. In Reserva Natural Privada Chelemhá, dpto. Alta Verapaz, a pair nestbuilding on 30 May 2015 in cloud forest at 2,100 m. Nesting appears to be synchronised with the wet season. |
| *Chlorophonia occipitalis*       |                                                                                                                                           |
| Elegant Euphonia                 | A pair nestbuilding in a hanging bromeliad clump c.10 m above ground, at 2,000 m in Reserva Natural Privada Los Tarrales, dpto. Suchitepéquez, on 6 April 2008, and at the same site a nest under construction on 3 February and incubating on 3 March 2010 in a bromeliad 13 m above ground in a cypress *Neocupressus lusitanica* tree at 1,400 m (J. de León Lux pers. comm.). |
| *Euphonia elegantissima*         |                                                                                                                                           |
| Blue Bunting                     | A juvenile photographed in Biotopo Cerro Cahuí, dpto. Petén, on 14 August 2017 (C. Echeverría, eBird 538641345).                               |
| *Cyanocompsa parellina*          |                                                                                                                                           |
In addition to residency status updates compared to Eisermann & Avendaño (2007) based on new information, we correct the status of the following nine species. Band-tailed Pigeon *Patagioenas fasciata* is a resident in Guatemala without visiting non-breeding populations, thus status corrected from RM to R. Specimens of Heermann’s Gull *Larus heermanni* collected by Salvin (1866) are the only records for Guatemala indicating a status correction from vagM, H to vagM. Zone-tailed Hawk *Buteo albonotatus* is mainly a winter...
visitor, but local summer records (Vannini 1989) indicate that while breeding has not been confirmed, it may nest locally, thus status changed from V to rm. Red-tailed Hawks *Buteo jamaicensis* from northern populations winter in Guatemala (Griscom 1932), thus status is corrected from R to RM. Several records of Yellow-lobed Parrot *Amazona xantholora* in northwest Petén (Eisermann & Avendaño 2007) indicate that it is probably a resident breeder (status: r). The only record of Thick-billed Kingbird *Tyrannus crassirostris* was a specimen collected near Escuintla, dpto. Escuintla, in January 1860 (Salvin & Godman 1860c), thus the status is corrected from V to vagM. American Robin *Turdus migratorius* breeds in North America and the only documented site record for Guatemala was a specimen from near Cobán, dpto. Alta Verapaz (Salvin & Sclater 1860c). Griscom (1935) reported two specimens from Guatemala lacking date and location in what is now the Natural History Museum, Tring (NHMUK) and Wetmore (1941) reported sightings from San Miguel Dueñas, dpto. Sacatepéquez, and near Tecpán, dpto. Chimaltenango, from 1936; thus, status corrected from vagR to vagM. Juveniles of Botteri’s Sparrow *Puecaea botterii* were reported by van Tyne (1935), thus status corrected from r to R. Brewer’s Blackbird *Euphagus cyanephalus* breeds mainly in North America and winters in the southern USA and northern Mexico (Howell & Webb 1995). A specimen collected in Finca Chancol at Sierra Los Chuchumatanes, dpto. Huehuetenango, pre-1905 (Salvin & Godman 1904) is the only record for Guatemala, thus status corrected from vagR to vagM.

**Discussion**

New information on the distribution of birds in Guatemala updates the residency status of birds in the country (Eisermann & Avendaño 2007) as follows. Based on the taxonomic list of the AOU (1998 and supplements, including Chesser *et al.* 2017), except the Sharp-shinned Hawk and Yellow-rumped Warbler species complexes (see Methods), the number of bird species recorded in Guatemala is 758. Of these, 23 lack documentation via specimens, photographs or sound-recordings. First documented country records were recently reported for 50 species and first undocumented country records for 11 species. Breeding has been confirmed recently for 58 species. Table 2 summarises the number of species in each category of residency. This summary also reflects the recently revised taxonomic treatments of Audubon’s *Puffinus lherminieri* and Galapagos Shearwaters *P. subalaris*, Eastern *Antrostomus vociferus* and Mexican Whip-poor-wills *A. arizonae*, as well as the merging of ‘Mangrove Black Hawk’ *Buteogallus subtilis* in Common Black Hawk *B. anthracinus* (Banks *et al.* 2008, Chesser *et al.* 2010, 2012).

For 18 species there is no reliable record since 1980 and 15 of these have not been recorded in Guatemala for more than 80 years (Table 3). Most of these are vagrants, but Red-throated Caracara *Ibycter americanus*, Black Rail *Laterallus jamaicensis*, Virginia Rail *Rallus limicola* and Bare-crowned Antbird *Gymnocichla nudiceps* are species that were previously considered resident. Most of these are difficult to detect owing to their cryptic behaviour, and thus may be overlooked. Red-throated Caracara, however, is a large and noisy bird, and we consider it extirpated (Howell & Webb 1995, Eisermann & Avendaño 2007).

Records of Caribbean Dove, Yucatan Woodpecker, Ladder-backed Woodpecker, Yucatan Nightjar and Turquoise-browed Motmot from Laguna del Tigre National Park in north-western dpto. Petén are noteworthy because they extend the known ranges of these species further south on the Yucatán Peninsula than previously reported (Howell & Webb 1995) and indicate a general pattern of Yucatán avifauna that has either recently expanded or been newly documented in northern Petén. Similarly, new distributional records for Northern Bobwhite, Lesser Ground Cuckoo, Buff-collared Nightjar, Plain-capped...
Starthroat, Green-fronted Hummingbird, Russet-crowned Motmot, Nutting’s Flycatcher, Banded Wren, White-lored Gnatcatcher, House Finch, Olive Sparrow, Yellow-winged Cacique, Streak-backed Oriole, Red-breasted Chat and Varied Bunting from the poorly explored Nentón Valley, dpto. Huehuetenango, document a general pattern of arid habitat species extending from the central valley of Chiapas into west Guatemala.

Most of the new site records and range extensions reported here fill gaps in the distributions of widespread species but, for some, new records appear to document recent range expansions driven by increased habitat availability following large-scale deforestation, conversion of forest to woodland, and urbanisation. These include Eurasian Collared Dove, Plain-breasted Ground Dove, White-winged Dove, Yellow-faced Grassquit, Southern Lapwing, Striped Owl, Ladder-backed Woodpecker, Aplomado Falcon, Vermilion Flycatcher, Tricoloured Munia, House Sparrow and Eastern Meadowlark. Less readily explained are new data that seem to document recent expansions for species such as Double-crested Cormorant, Glossy Ibis, Barred Forest Falcon and Chestnut-sided Shrike-Vireo in areas where apparently favourable habitat already existed.

Two corrections. A photographed bird reported as a Long-tailed Jaeger Stercorarius longicaudus from Puerto Barrios, dpto. Izabal, in January 2009 (Jones & Komar 2009c) is misidentified and should be regarded as Stercorarius sp., probably Parasitic Jaeger S. parasiticus (S. N. G. Howell pers. comm.). We did not take into account an undocumented report of Ashy Storm Petrel Oceanodroma homochroa (Sigüenza et al. 2008, Velásquez Jofre 2008a,b) because it is restricted to near-coast pelagic waters of California and Baja California (Howell 2012), and observations far outside this range should be well documented photographically.

| Residency status                                      | Number of species |
|------------------------------------------------------|-------------------|
| Breeding resident, without migratory populations     | 393 (including 1 extinct) |
| Breeding resident, in part migratory                 | 36                |
| Breeding visitor                                     | 7                 |
| Resident, breeding presumed                           | 62 (including 1 extirpated) |
| Resident, breeding presumed                           | 9                 |
| Visitor, breeding presumed                            | 2                 |
| Subtotal breeding species                             | 509               |
| Non-breeding visitor                                  | 151               |
| Transient                                            | 33                |
| Migratory vagrant                                    | 52                |
| Non-migratory vagrant                                | 4                 |
| Subtotal non-breeding species                         | 240               |
| Status uncertain                                      | 9                 |
| Total                                                | 758               |
TABLE 3
Species not reported from Guatemala for more than 30 years.

| Species                     | Residency status* | Year of last record | Source                                |
|-----------------------------|-------------------|---------------------|---------------------------------------|
| Ruff Calidris pugnax       | vagM, H           | 1974                | Dickerman (1975)                      |
| White-tailed Tropicbird Phaethon lepturus | vagM, H     | 1936                | Wetmore (1941)                       |
| Red-throated Caracara Ibycter americanus | ex (r)     | 1920s               | Griscom (1932)                       |
| Black Rail Laterallus jamaicensis | ?             | 1874 or before      | Salvin & Godman (1897–1904)          |
| Virginia Rail Rallus limicola | R              | 1874 or before      | Salvin & Godman (1897–1904)          |
| Eskimo Curlew Nenunes borealis | ex (vagM) | 1860                | Salvin (1861)                        |
| Heermann’s Gull Larus heermanni | vagM     | 1863                | Salvin (1866)                        |
| Short-eared Owl Asio flammeus | vagM          | 1863                | (Salvin 1866), reported in Belize in 1999 (Jones et al. 2000) |
| Burrowing Owl Athene cunicularia | vagM     | 1920s               | Griscom (1932)                       |
| Eastern Whip-poor-will Antrostomus vociferus | vagM     | 1959                | Land (1963)                          |
| Red-naped Sapsucker Sphyrapicus nuchalis | vagM | 1895 or before      | Salvin & Godman (1879–87)            |
| Bare-crowned Antbird Gymnocichla nuchips | r       | 1932                | Taibel (1955)                        |
| Thick-billed Kingbird Tyrannus crassirostris | vagM | 1860                | Salvin & Sclater (1860c)             |
| Loggerhead Shrike Lanius ludovicianus | vagM | 1979                | Ericsson (1981)                      |
| American Robin Turdus migratorius | vagM | 1936                | Wetmore (1941) but only documented site record from 19th century (Salvin & Sclater (1860c) |
| Black-throated Grey Warbler Setophaga nigrescens | vagM, H | 1936                | Wetmore (1941)                       |
| Vesper Sparrow Pooecetes gramineus | vagM | pre-1880            | Salvin & Godman (1904)               |
| Brewer’s Blackbird Euphagus cyanocephalus | vagM | pre-1880            | Salvin & Godman (1904)               |

* ex—extirpated, H—hypothetical record, R—breeding resident, r—resident, breeding suspected, vagM—migratory vagrant, ?—status uncertain.

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### Appendix 1: Geographic coordinates of sites mentioned in the text.

| Dpto. | Site                  | Latitude      | Longitude     |
|-------|-----------------------|---------------|---------------|
| Alta Verapaz | Chamelco             | 15°25'24.6"N | 90°19'46.1"W |
| Alta Verapaz | Chiquibul             | 15°55'58"N   | 90°30'36.2"W |
| Alta Verapaz | Chisec                | 15°48'47.3"N | 90°17'29.1"W |
| Alta Verapaz | Cobín                 | 15°28'20.8"N | 90°22'45"W   |
| Alta Verapaz | Cubilhuitz            | 15°40'31"N   | 90°25'25.6"W |
| Alta Verapaz | Finca Chajbaoc       | 15°29'10.5"N | 90°21'38.8"W |
| Alta Verapaz | Finca La Aurora       | 15°22'45.9"N | 90°26'9.7"W  |
| Alta Verapaz | Finca Rubel Cháim     | 15°22'34.1"N | 90°20'44.7"W |
| Alta Verapaz | Laguna Chichoj        | 15°21'41.2"N | 90°28'29.9"W |
| Alta Verapaz | Laguna Lachuá         | 15°55'13.4"N | 90°40'22.4"W |
| Alta Verapaz | Montaña Caquipec      | 15°22'24.9"N | 90°10'37.6"W |
| Alta Verapaz | Montaña Sacranix      | 15°30'44.5"N | 90°29'03.3"W |
| Alta Verapaz | Montaña Xucanéb       | 15°21'16.4"N | 90°14'53.5"W |
| Alta Verapaz | Montaña Yalijux        | 15°23'44.4"N | 90°03'50.1"W |
| Alta Verapaz | Muchilhá              | 15°52'5"N    | 90°08'14.1"W |
| Alta Verapaz | Panzós                | 15°23'54.8"N | 89°38'26.2"W |
| Alta Verapaz | Parque Nacional Laguna Lachuá | 15°55'13.4"N | 90°40'22.4"W |
| Alta Verapaz | Reserva Natural Privada Chelemhá | 15°23'9.4"N | 90°04'23.3"W |
| Alta Verapaz | Rio Tzetoc            | 15°54'38.1"N | 90°36'32.1"W |
| Alta Verapaz | Rocjá Pomtilá         | 15°51'45.1"N | 90°37'7.8"W  |
| Alta Verapaz | Rubelsanto            | 15°59'20.7"N | 90°26'51"W   |
| Alta Verapaz | San Cristóbal Verapaz | 15°22'7.1"N  | 90°28'9.9"W  |
| Alta Verapaz | Tamahú                | 15°18'26.8"N | 90°14'2.5"W  |
| Alta Verapaz | Tontem                | 15°24'18.1"N | 90°24'40.2"W |
| Alta Verapaz | Tucurú                | 15°17'36.3"N | 90°07'07.1"W |
| Baja Verapaz | Biotopo del Quetzal   | 15°12'51.4"N | 90°13'21.7"W |
| Baja Verapaz | La Cebadilla          | 15°12'30.1"N | 90°17'51.6"W |
| Baja Verapaz | Montaña Santa Rosa    | 15°13'32.4"N | 90°16'28.3"W |
| Baja Verapaz | Pantin                | 15°15'05.1"N | 90°17'8"W    |
| Location                          | Coordinates                  | Coordinates                  |
|----------------------------------|------------------------------|------------------------------|
| Baja Verapaz Purulhá            | 15°14'11.7"N 90°14'8.4"W     |                              |
| Baja Verapaz Reserva Natural     | 15°12'31.3"N 90°12'15.5"W    |                              |
| Baja Verapaz Santa Rosa Llano    | 15°13'43.5"N 90°16'52.9"W    |                              |
| Baja Verapaz Reserva Sachut      | 15°12'59"N 90°13'12.9"W      |                              |
| Baja Verapaz Salamá              | 15°06'13.2"N 90°19'0.3"W     |                              |
| Baja Verapaz San Jerónimo        | 15°03'38.7"N 90°14'17.4"W    |                              |
| Chimaltenango Cerro Tecpán       | 14°47'18.3"N 91°01'24.4"W    |                              |
| Chimaltenango Chimaltenango      | 14°39'41.9"N 90°49'12.5"W    |                              |
| Chimaltenango Volcán Fuego       | 14°28'19.1"N 90°52'52.8"W    |                              |
| Chiquimula Cerro Montecristo     | 14°26'36"N 89°21'55.2"W      |                              |
| Chiquimula Esquipulas            | 14°33'53.3"N 89°20'55.2"W    |                              |
| Chiquimula Jocotán               | 14°49'13.3"N 89°23'20.8"W    |                              |
| Chiquimula Sabana Grande         | 14°44'26.3"N 89°32'27"W      |                              |
| El Progreso Marajumá             | 14°55'36.6"N 90°06'4.6"W     |                              |
| El Progreso Parque Regional      | 14°54'20.9"N 89°50'26.2"W    |                              |
| El Progreso Sierra de las Minas  | 15°05'59.7"N 89°56'40"W      |                              |
| El Progreso Tulumajillo          | 14°55'36.2"N 90°2'49.3"W     |                              |
| Escuintla Escuintla              | 14°18'20.3"N 90°46'48.7"W    |                              |
| Escuintla Iztapa                 | 13°55'55.6"N 90°42'50.8"W    |                              |
| Escuintla Puerto Quetzal          | 13°55'32.2"N 90°47'40.9"W    |                              |
| Escuintla Puerto San José         | 13°55'28.4"N 90°49'17.8"W    |                              |
| Escuintla Sipacate                | 13°55'49.2"N 91°08'51.6"W    |                              |
| Escuintla Volcán Pacaya          | 14°23'2.1"N 90°36'6.9"W      |                              |
| Guatemala Fraijanes               | 14°27'58.3"N 90°26'31.7"W    |                              |
| Guatemala Guatemala City          | 14°36'47.8"N 90°32'4.5"W     |                              |
| Guatemala Lago Amatitlán          | 14°28'22"N 90°34'51.5"W      |                              |
| Guatemala San José Pinula         | 14°32'46.9"N 90°24'44.5"W    |                              |
| Guatemala Santa Catarina Pinula   | 14°34'19.3"N 90°29'30"W      |                              |
| Guatemala Villa Canales          | 14°28'57"N 90°31'57.7"W      |                              |
| Huehuetenango Aguaacatán         | 15°20'33.7"N 91°18'43"W      |                              |
| Huehuetenango Barillas           | 15°48'16.1"N 91°18'51.2"W    |                              |
| Huehuetenango Camojá Grande      | 15°38'14.4"N 91°55'8.5"W     |                              |
| Huehuetenango Cerro Cruz Maltín  | 15°40'50.3"N 91°14'25.5"W    |                              |
| Huehuetenango Cerro Yaxcalanté   | 15°43'53.9"N 91°22'10.1"W    |                              |
| Huehuetenango Chacaj             | 15°54'30.5"N 91°48'33.4"W    |                              |
| Huehuetenango Chaculá            | 15°58'30.7"N 91°38'59.7"W    |                              |
| Huehuetenango Chibal             | 15°27'48.4"N 91°30'49.6"W    |                              |
| Huehuetenango Chichim            | 15°33'1"N 91°33'57.2"W       |                              |
| Huehuetenango El Quetzal         | 16°04'10.4"N 91°40'43.6"W    |                              |
| Huehuetenango Finca Chancol      | 15°23'40.2"N 91°22'54.1"W    |                              |
| Huehuetenango Finca El Carmen    | 15°54'38.9"N 91°43'42.7"W    |                              |
| Huehuetenango Huehuetenango      | 15°19'11.5"N 91°28'15.7"W    |                              |
| Huehuetenango La Capellánía      | 15°24'38.7"N 91°25'55.3"W    |                              |
| Huehuetenango La Mesilla         | 15°38'27.4"N 91°58'54.9"W    |                              |
| Huehuetenango La Trinidad        | 16°01'14.3"N 91°40'47.2"W    |                              |
| Location                  | Coordinates                   |
|---------------------------|-------------------------------|
| Huehuetenango Lagunas de Candelaria | 15°57'4.1"N 91°46'56.6"W |
| Huehuetenango Limonar      | 15°46'8"N 91°49'16.4"W       |
| Huehuetenango Nentón       | 15°48'4.4"N 91°45'16.6"W     |
| Huehuetenango Paquix       | 15°26'27.8"N 91°27'45.7"W    |
| Huehuetenango Parque Regional Municipal Todos Santos Cuchumatán | 15°31'21.8"N 91°34'4.3"W |
| Huehuetenango Río Jordán   | 15°56'42.3"N 91°48'7.8"W     |
| Huehuetenango Santa Ana Huista | 15°40'54.6"N 91°49'16.6"W  |
| Huehuetenango Sierra Los Cuchumatanes | 15°28'41.8"N 91°28'22"W |
| Huehuetenango Soloma       | 15°39'29.1"N 91°25'54.4"W    |
| Huehuetenango Unión        | 15°55'20.8"N 91°46'33.5"W    |
| Huehuetenango Yalambojoch  | 15°58'51.7"N 91°34'20.4"W    |
| Izabal Bahía de Amatique   | 15°49'39.5"N 88°37'45.7"W    |
| Izabal Biotopo Chocón-Machacas | 15°44'54.4"N 88°54'8.6"W  |
| Izabal Boca Ancha          | 15°30'32.6"N 88°58'55.7"W    |
| Izabal Cerro San Gil       | 15°40'58.8"N 88°45'28.4"W    |
| Izabal Cimarrón            | 15°34'38.5"N 88°38'12.1"W    |
| Izabal Delta of río Polochic | 15°27'52.4"N 89°21'15"W     |
| Izabal El Estor            | 15°31'30.7"N 89°20'5.3"W     |
| Izabal El Golféte          | 15°44'24.1"N 88°51'54.1"W    |
| Izabal Finca El Higuerito  | 15°42'53.7"N 88°50'22.9"W    |
| Izabal Hacienda Tijax      | 15°39'50.3"N 89°00'16.1"W    |
| Izabal Lago Izabal         | 15°29'16.5"N 89°11'0.5"W     |
| Izabal Las Escobas         | 15°41'20.9"N 88°38'33.5"W    |
| Izabal Livingston          | 15°49'42.4"N 88°45'5.8"W     |
| Izabal Morales             | 15°28'18"N 88°50'12.5"W      |
| Izabal Puerto Barrios      | 15°43'33.1"N 88°35'37.8"W    |
| Izabal Punta de Manabique Wildlife Refuge | 15°56'30.4"N 88°34'55.3"W |
| Izabal Quetzalito          | 15°42'48.1"N 88°17'34.7"W    |
| Izabal Quineles            | 15°41'27.7"N 88°16'30.4"W    |
| Izabal río Dulce           | 15°46'52.9"N 88°47'56.1"W    |
| Izabal Santo Tomás         | 15°41'26.5"N 88°37'01.3"W    |
| Izabal Selempín            | 15°19'00.7"N 89°24'14.5"W    |
| Izabal Sierra del Caral    | 15°22'55.8"N 88°41'5.9"W     |
| Izabal Sierra Santa Cruz   | 15°39'45.7"N 89°14'8.4"W     |
| Jalapa Parque Ecológico Cerro Alto | 14°44'3.5"N 89°57'7.5"W |
| Jutiapa Lago de Güija      | 14°16'4.2"N 89°33'11.6"W     |
| Jutiapa Laguna de Retana   | 14°25'0.1"N 89°51'11"W       |
| Jutiapa río Paz            | 13°44'45.9"N 90°7'56.7"W     |
| Petén Biotopo Cerro Cahuí  | 17°00'02.8"N 89°43'0.4"W     |
| Petén Biotopo Dos Lagunas  | 17°45'9.9"N 89°35'1.1"W      |
| Petén Biotopo San Miguel La Palotada - El Zotr | 17°13'52.6"N 89°48'52.6"W |
| Petén Cancuén             | 16°00'56.8"N 90°02'22.3"W    |
| Petén Dolores             | 16°30'46.3"N 89°24'59.6"W    |
| Petén El Caoba            | 17°01'26.5"N 89°40'28.6"W    |
| Petén El Mirador archaeological site | 17°45'10.9"N 89°55'8.7"W |
| Petén El Perú archaeological site | 17°15'50.7"N 90°21'12.6"W |
Petén  El Ramonal  16°54'13.5"N  89°44'43"W
Petén  El Remate  16°59'30"N  89°41'28.9"W
Petén  El Subín  16°38'17.3"N  90°10'52.3"W
Petén  El Tintal  17°34'34.9"N  90°00'13.5"W
Petén  El Tucán Uno  16°05'9.1"N  90°10'47.4"W
Petén  Finca Ixobel  16°18'13.4"N  89°25'12.2"W
Petén  Flores  16°55'50"N  89°53'29.5"W
Petén  Ixpanpajul  16°52'30.2"N  89°48'45"W
Petén  La Corona archaeological site  17°26'27.8"N  90°23'13.7"W
Petén  La Libertad  16°47'18.1"N  90°07'01.2"W
Petén  La Pólvera  17°00'30.3"N  89°18'51.3"W
Petén  Lago Petén Itzá  16°59'39.3"N  89°49'17.9"W
Petén  Laguna Petexbatún  16°25'45.7"N  90°11'16.5"W
Petén  Laguna Yaxhá  17°03'58.8"N  89°24'44"W
Petén  Melchor de Mencos  17°03'37.8"N  89°09'14"W
Petén  Nakum archaeological site  17°10'33.7"N  89°24'19.7"W
Petén  Parque Nacional El Rosario  16°31'11.4"N  90°9'29.6"W
Petén  Parque Nacional Laguna del Tigre  17°30'0"N  90°45'0"W
Petén  Parque Nacional Mirador-Río Azul  17°45'15"N  89°24'17.5"W
Petén  Paso Caballo  17°15'36.6"N  90°14'10"W
Petén  Poptún  16°19'45.9"N  89°25'14.9"W
Petén  Reserva Natural Privada Finca AA  16°57'7.3"N  89°32'46.3"W
Petén  Sacpuy  16°59'13.9"N  90°03'01.1"W
Petén  San Andrés  16°58'5"N  89°54'39.6"W
Petén  San Benito  16°55'25.7"N  89°55'4.5"W
Petén  San Francisco  16°47'56.5"N  89°56'4.6"W
Petén  San Luis  16°11'57.3"N  89°26'31.6"W
Petén  San Miguel  16°56'12.6"N  89°53'14.4"W
Petén  Santa Ana  16°48'32"N  89°49'34.4"W
Petén  Santa Elena  16°55'5.2"N  89°53'40.5"W
Petén  Sayaxché  16°31'40.5"N  90°11'20.7"W
Petén  Tikal  17°13'30"N  89°36'55.2"W
Petén  Uaxactún  17°23'38.5"N  89°38'1"W
Petén  Vista Hermosa  16°41'55.2"N  90°35'12.8"W
Petén  Yaxhá  17°04'7.5"N  89°23'30.6"W
Quetzaltenango  Coatepeque  14°42'11.3"N  91°51'47.2"W
Quetzaltenango  El Palmar  14°39'4.3"N  91°35'20.1"W
Quetzaltenango  Finca Patrocinio  14°39'43.2"N  91°36'23.4"W
Quetzaltenango  Fuentes Georginas  14°44'53.4"N  91°28'47.2"W
Quetzaltenango  Loma Linda  14°43'40.7"N  91°37'35"W
Quetzaltenango  Quetzaltenango  14°50'16.4"N  91°31'4.5"W
Quetzaltenango  Volcán Cerro Quemado  14°47'48.2"N  91°31'7.9"W
Quetzaltenango  Volcán Chicabal  14°47'17.5"N  91°39'26"W
Quetzaltenango  Volcán Lacandón  14°48'55.2"N  91°43'3"W
Quetzaltenango  Volcán Santa María  14°45'22.1"N  91°33'8.9"W
Quetzaltenango  Volcán Santo Tomás  14°42'44.4"N  91°29'12.9"W
Quetzaltenango  Volcán Siete Orejas  14°48‘49.4”N  91°35‘40.5”W
Quiché  Acul  15°24‘23.6”N  91°11‘16.7”W
Quiché  Cerro El Amay  15°29‘14.3”N  90°47‘17.8”W
Quiché  Chajul  15°29‘6.9”N  91°02‘02”W
Quiché  Chichicastenango  14°56‘34.3”N  91°6‘39.9”W
Quiché  Cunen  15°20‘15.2”N  91°01‘38.3”W
Quiché  La Gloria  15°32‘1.7”N  90°50‘0.5”W
Quiché  Nebaj  15°24‘25.5”N  91°08‘48.7”W
Quiché  Sacapulas  15°17‘15.9”N  90°55‘27.2”W
Quiché  San Andrés Sajcabajá  15°10‘32.1”N  90°56‘32.5”W
Quiché  San Juan Cotzal  15°26‘6.7”N  91°02‘3.4”W
Quiché  Santa María Tzejá  15°51‘44.7”N  90°53‘18.5”W
Retalhuleu  Champerico  14°17‘39.3”N  91°54‘41.5”W
Retalhuleu  Finca Cataluña  14°28‘24.2”N  90°01‘29.4”W
Retalhuleu  Manchón-Guamuchal  14°28‘28.5”N  92°07‘12.5”W
Retalhuleu  Retalhuleu  14°32‘16.7”N  91°40‘37.7”W
Retalhuleu  Takalik Abaj  14°38‘55.3”N  91°44‘13.2”W
Sacatepéquez  Alotenango  14°29‘11”N  90°48‘18.9”W
Sacatepéquez  Antigua Guatemala  14°33‘33.2”N  90°44‘1.3”W
Sacatepéquez  Cerro Alux  14°36‘58.2”N  90°37‘59.6”W
Sacatepéquez  Cerro El Hato  14°34‘51.7”N  90°42‘40.8”W
Sacatepéquez  Finca El Pilar  14°32‘30.2”N  90°42‘3”W
Sacatepéquez  Finca Filadelfia  14°35‘2.3”N  90°44‘1.5”W
Sacatepéquez  Jocotenango  14°34‘29.4”N  90°44‘29.3”W
Sacatepéquez  Magdalena Milpas Altas  14°32‘50.8”N  90°40‘29.6”W
Sacatepéquez  Montaña de Carmona  14°31‘30”N  90°41‘39.4”W
Sacatepéquez  San Juan del Obispo  14°31‘25.3”N  90°43‘40.8”W
Sacatepéquez  San Miguel Dueñas  14°31‘23”N  90°47‘54.6”W
Sacatepéquez  Volcán Acatenango  14°30‘2.1”N  90°32‘30.6”W
Sacatepéquez  Volcán Agua  14°28‘1.2”N  90°44‘29.8”W
San Marcos  Catarina  14°51‘13”N  90°24‘31.1”W
San Marcos  Finca Dos Marias  14°49‘8.7”N  91°48‘15.6”W
San Marcos  Ixchiguán  15°09‘50.4”N  91°55‘59.1”W
San Marcos  La Blanca  14°34‘31.2”N  92°08‘31.2”W
San Marcos  La Haciendita  15°08‘32.5”N  92°05‘2.9”W
San Marcos  Las Pilas  15°09‘28”N  92°06‘59.4”W
San Marcos  Limones  14°35‘25”N  92°10‘30.4”W
San Marcos  Ocos  14°30‘33.2”N  92°11‘31.3”W
San Marcos  Parque Regional Municipal Canjulá  15°07‘47.8”N  92°33‘39.5”W
San Marcos  Parque Regional Municipal de San Marcos  14°58‘33.3”N  91°50‘7.7”W
San Marcos  Parque Regional Municipal de San Pedro Sacatepéquez  15°00‘30.9”N  91°47‘56.8”W
San Marcos  Refugio del Quetzal  14°56‘24”N  91°52‘26.5”W
San Marcos  Salinas Dos  14°32‘5.7”N  92°09‘26.3”W
San Marcos  San Marcos  14°57‘51”N  91°47‘41.1”W
San Marcos  San Miguel Ixtahuacán  15°16‘17.5”N  91°45‘52”W
San Marcos  San Rafael Pie de la Cuesta  14°55‘53.8”N  91°54‘48.2”W

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San Marcos Sibinal 15°8'58.4"N 92°02'52.7"W
San Marcos Tilapa 14°29'50.2"N 92°10'29.1"W
San Marcos Unión Reforma 15°09'50.9"N 92°01'13.2"W
San Marcos Vega del Volcán 15°09'07.9"N 92°04'58.3"W
San Marcos Volcán Tacaná 15°08'3.5"N 92°06'22.9"W
San Marcos Volcán Tajumulco 15°02'32.6"N 91°54'4.1"W
San Marcos Yalú 15°05'22.4"N 92°04'24.2"W
Santa Rosa Finca El Sacramento 13°56'53.7"N 90°35'54.4"W
Santa Rosa Hawaii 13°50'43.2"N 90°21'35.4"W
Santa Rosa La Avellana 13°55'11.8"N 90°28'3"W
Santa Rosa Laguna de Ayarza 14°25'2.4"N 90°07'28.2"W
Santa Rosa Las Lisas 13°48'12.7"N 90°15'41.7"W
Santa Rosa Monterrico 13°53'40.2"N 90°28'49.6"W
Sololá Cerro Chuiraxamoló 14°44'27.5"N 91°17'49.2"W
Sololá Cerro Iquiquí 14°37'23"N 91°07'29"W
Sololá Cerro Panán 14°37'29.5"N 91°18'54.4"W
Sololá Cerro Paquisís 14°37'55.1"N 91°18'24.2"W
Sololá Finca Santa Victoria 14°46'16.8"N 91°07'56.9"W
Sololá Lago Atitlán 14°42'23.8"N 91°11'36.6"W
Sololá Laguna Lodge 14°44'36.8"N 91°11'49.1"W
Sololá Los Robles 14°42'17.2"N 91°05'07.1"W
Sololá Nueva Santa Catarina Ixtahuacán 14°51'1.7"N 91°21'35.5"W
Sololá Panajachel 14°44'30.3"N 91°09'25.4"W
Sololá Parque Ecológico Corazón del Bosque 14°47'19.5"N 91°15'50.9"W
Sololá Reserva Natural Privada Atitlán 14°45'8.7"N 91°09'55"W
Sololá Reserva Natural Privada Pachuj 14°36'14.7"N 91°07'20.9"W
Sololá San Juan La Laguna 14°41'45"N 91°17'21.3"W
Sololá San Lucas Tolimán 14°38'5.7"N 91°08'35.5"W
Sololá San Marcos La Laguna 14°43'37.6"N 91°15'33.4"W
Sololá San Pedro La Laguna 14°41'27.6"N 91°16'21.6"W
Sololá Santa Catarina Ixtahuacán 14°47'53.6"N 91°21'31.4"W
Sololá Santiago Atitlán 14°38'17.6"N 91°13'45.8"W
Sololá Volcán Atitlán 14°34'58.3"N 91°11'15.2"W
Sololá Volcá San Pedro 14°39'26.5"N 91°16'0.2"W
Sololá Volcán Tolimán 14°37'22.6"N 91°11'10"W
Suchitepéquez Finca Las Nubes 14°40'0.2"N 91°29'29.3"W
Suchitepéquez Reserva Natural Privada Los Andes 14°32'15.8"N 91°11'5.4"W
Suchitepéquez Reserva Natural Privada Los Tarrales 14°31'31.6"N 91°08'44"W
Totonacapán Momostenango 15°02'39"N 91°24'34.6"W
Totonacapán Parque Chajil Siwan 14°56'8.4"N 91°19'41.8"W
Totonacapán Parque Regional Municipal Los Altos de San Miguel 14°54'39.6"N 91°16'31"W
Totonacapán San Francisco El Alto 14°56'44.8"N 91°26'30.3"W
Totonacapán Totonacapán 14°54'44.3"N 91°21'39.1"W
Zacapa Parque Regional Municipal Niño Dormido 14°54'39.7"N 89°48'36.4"W
Zacapa Reserva Heloderma 14°51'45.3"N 89°47'23.5"W
Sites in Belize

| District   | Site          | Latitude       | Longitude      |
|------------|---------------|----------------|----------------|
| Belize     | Bermudian Landing | 17°33'57.2"N | 88°32'22.6"    |
| Toledo     | Maya Mountains | 16°34'N        | 89°W           |

Sites in Mexico

| State   | Site       | Latitude       | Longitude      |
|---------|------------|----------------|----------------|
| Chiapas | Palenque   | 17°30'39.6"N   | 91°59'34.8"W   |
| Chiapas | Bonampak   | 16°42'13.1"N   | 91°03'53.6"W   |
| Chiapas | Tziscao    | 16°04'37"N     | 91°40'34.9"W   |
| Chiapas | Yaxchilán  | 16°53'31.3"N   | 90°58'14.1"W   |