



---

# The Birds of Central Belize

Victoria D. Piaskowski<sup>1</sup>, Mario Teul<sup>2</sup>, Reynold N. Cal<sup>2</sup>, Kari M. Williams<sup>1</sup>  
and Wilber E. Martinez<sup>2,3</sup>

<sup>1</sup>Birds Without Borders - Aves Sin Fronteras, Zoological Society of Milwaukee, Wisconsin 53202, U.S.A.

<sup>2</sup>Birds Without Borders - Aves Sin Fronteras, The Foundation for Wildlife Conservation, Inc., San Ignacio, Cayo District, Belize.

<sup>3</sup>Current address: Trinidad Village, Orange Walk District, Belize

**E-mail:** vickip@execpc.com

---

**Summary:** *The Birds Without Borders – Aves Sin Fronteras<sup>SM</sup> project has been gathering avifaunal data at three different study sites in Belize, Central America since November of 1997. Bird banding was conducted within six distinct habitat types resulting in 3,472 birds being banded. Fixed radius point counts were conducted along eleven transects representing eleven different habitat types. Detailed vegetation measurements were conducted at specific locations throughout the study sites. Analysis of these vegetation studies will be utilized to determine bird-habitat relationships in the areas studied. The Birds Without Borders – Aves Sin Fronteras project has gathered information on population size and trends, reproductive success, bird-habitat associations and vegetation characteristics within specific localities in central Belize. In this paper we briefly summarize the results of some of the research conducted from 1997-2002. We also present a list of the species found at each study site during this time period and information on the Belize and regional conservation status of these species.*

## **Key Words**

**BIODIVERSITY**

**CONSERVATION**

**BELIZE**

---

## **Introduction**

The Birds Without Borders – *Aves Sin Fronteras* (BWB-ASF) project was initiated in 1996 to study migratory and resident birds on privately owned lands in Wisconsin, U.S.A. and Belize, Central America. Wisconsin and Belize share approximately 114 species of migratory birds. These shared birds are Neotropical/Nearctic migrants (Neotropical migrants), birds that breed in North America and spend the non-breeding season south of the Tropic of Cancer. BWB-ASF began in Belize in 1997 with four major goals:

1. Research on both migratory and resident bird species;
2. Application of the research results to conservation by compiling the data into recommendations for landowners on how land can be managed to benefit birds
3. Educating children and adults about birds;

4. Training of Belizeans to conduct the research with the end result being autonomy of Belizeans in designing and conducting their own research as well as implementing local conservation strategies.

A total of 566 bird species have been documented in Belize (Jones & Vallely, 2001), many of which have not been studied in detail. Based on the premise that 'many characteristics of birds make them ideal biological indicators' (Stotz *et al.* 1996) and because bird monitoring programmes are relatively inexpensive yet highly accurate, BWB-ASF utilized birds as the focal point of the research. Ornithological research techniques implemented were established in collaboration with other scientists and were based on the standardized research protocols described below.

BWB-ASF is the only comprehensive, long-term monitoring project in Belize that was designed to use birds as conservation tools. BWB-ASF research was designed to gather four types of information:

1. Obtain estimates of population size and trends for some bird species in selected habitats within the study areas,
2. Assess the reproductive success of birds breeding in pine savanna habitats,
3. Determine the importance of six habitats to migrants and residents during the non-breeding season and,
4. Conduct vegetation assessments and utilize these to determine bird-habitat associations.

By studying the avifaunal composition of selected habitats in central Belize and by looking at both the Belize and regional conservation status of the bird species present, BWB-ASF hoped to identify conservation priorities and utilize the results of the research to assist in the development of local and regional conservation strategies. In this paper we briefly summarize the results of some of the research conducted from 1997-2002. We also present a list of the species found at each study site during this time period and information on the Belize and regional conservation status of these species.

## Methods

Three different study sites within central Belize comprising a total area of approximately 3,118ha were utilized to conduct the research (Figure 1). The three study sites were located at the Tropical Education Center (TEC) of the Belize Zoo and adjacent privately owned lands, the Runaway Creek Nature Preserve (RCNP), and Chaa Creek and adjacent privately owned lands. The TEC study site is located at 17°21'26.9"N, 88°32'26.0"W and 46 m a.s.l. and consists of approximately 438ha of pine savanna, scrub shrub, cashew plantation and riparian habitat. The RCNP study site is owned and managed as a preserve by the Foundation for Wildlife Conservation, Inc. and consists of approximately 2,500ha of diverse habitats including riparian, lowland broadleaf forest, karst, gallery forest and different successional stages of pine savanna. The RCNP is located at 17°18'05.1"N, 88°27'31.8"W and 16 m a.s.l. and is approximately 10 km east of the TEC study site. The Chaa Creek study site is located at 17°06'15.9"N, 89°04'53.2"W and 80m a.s.l. and consists of 180ha of secondary broadleaf forest, two citrus plantations and pastures.



FIGURE 1: Location of study sites in central Belize

Nest-searching and monitoring based on the methods of Martin *et al.* (1997a, b) were conducted in pine savanna habitats from approximately 6 April to 3 August of 1999, 2000 and 2001. During this time period, bird banding was conducted every 6-10 days based on the methods of Baillie (1990), Peach *et al.* (1996) and Burton and DeSante (1998). At the TEC study site, bird banding took place in the pine savanna and on the edge of the gallery forest that traversed the northern edge of the savanna. At the RCNP study site, bird banding was conducted in pine savanna and the shrubland with pine that was present within the savanna.

During the non-breeding season (February-April, 1999 and 2000; December-April, 2000-2002), bird banding and censusing based on the methods of McCracken *et al.* (1993) were conducted in six different habitat types: a transition zone from a karst hill forest to an adjacent seasonal wetland, scrub-shrub, pine savanna and riverine, karst hill and secondary broadleaf forests. For those species on which information was available, age and sex were determined according to Stiles and Skutch (1989) and Pyle (1997). Fixed-radius point counts based on the methods of Ralph *et al.* (1993) and Mallory (1997) were conducted along 11 transects beginning in 1997 (five transects at the TEC and six transects at Chaa Creek).

To characterize the habitats in which the research took place, vegetation measurements based on the methods of Ralph *et al.* (1993), Martin *et al.* (1997a, b), Mallory (1997) and Howe *et al.* (1997) were completed at bird banding sites, point-count locations, nest sites and within nest-searching plots.

## Results

In the habitats studied in central Belize, we documented 321 species of birds representing 56 different families (Table 1). This represents 57 percent of the 566 species confirmed to exist in the entire country of Belize (Jones & Vallely, 2001). Of the 566 species documented as being present in Belize, 271 (48 percent) were found at the RCNP study site, 264 (47 percent) were documented at the TEC study site and 255 (45 percent) were found at the Chaa Creek study site.

Of the 321 species of birds identified in central Belize by BWB-ASF research, 140 (44 percent) species representing 39 families are listed in varying categories of conservation concern in the neighbouring countries of Mexico and Guatemala (CONAP, 2000; CONABIO, 2004) (Table 1). In Mexico, 111 (35 percent) of the 321 species we recorded in central Belize are categorized as of conservation concern, rare, threatened, endangered and/or CITES-protected (CONABIO, 2004). In Guatemala, 68 (21 percent) of the 321 species we recorded in central Belize are categorized as of conservation concern, rare, threatened, endangered and/or CITES-protected (CONAP, 2000). Of the 140 bird species listed in varying categories of conservation concern in the neighbouring countries of Mexico and Guatemala, 100 (71 percent) have been documented as being secure in Belize (Miller & Miller, 1997) (Table 1).

In this paper, we group the birds of Belize into five distinct categories based on their seasonality: residents, Neotropical migrants, transients, dry season residents and vagrants (Stiles & Skutch, 1989; Garcia *et al.* 1994; Howell & Webb; 1995, Miller &

Miller 1998; Jones & Vallely, 2001). Some species have separate populations that can be placed in two categories. For example, there are both resident and migratory populations of the blue-gray gnatcatcher (*Polioptila caerulea*) in Belize.

Frequent and consistent observations by BWB-ASF over a five-year period, along with nesting records, suggest that a substantial number of the Belize resident bird species categorized as being of regional conservation concern appear to be secure within the habitats studied in central Belize. This includes species such as the plain chachalaca (*Ortalis vetula*) and the white-fronted parrot (*Amazona albifrons*). The globally endangered yellow-headed parrot (*Amazona oratrix*) and the globally near-threatened great curassow (*Crax rubra*) were confirmed as utilizing the habitats studied in central Belize. The ornate-hawk eagle (*Spizaetus ornatus*), jabiru (*Jabiru mycteria*), muscovy duck (*Cairina moschata*) and the crested guan (*Penelope purpurascens*), all species of conservation concern in Belize, also have been documented as utilizing the central Belize habitats studied. At least two nests of the regionally endangered jabiru stork have been confirmed to exist on the RCNP.

Of the 51 species of Neotropical migrants documented by BWB-ASF in central Belize, 12 (24 percent) are listed as being of regional conservation concern (Table 1). Seven (58 percent) of these 12 are listed by Miller and Miller (1997) as being secure in Belize.

During mist netting and bird banding conducted from 1999-2002, a total of 3,472 birds of 161 species were banded at the three study sites. Of this total, 1,105 (32 percent) individuals representing 32 species were Neotropical migrants and 2,307 (66 percent) individuals representing 118 species were Belize residents. Twenty-two individuals (1 percent) of two species banded were categorized as residents/Neotropical migrants and 28 (1 percent) individuals of three species banded were dry season residents. The remaining birds banded were transients (seven individuals of four species or 0.2 percent), dry season residents/transients (two individuals of one species or 0.06 percent), and a vagrant (one individual of one species or 0.03 percent). The Neotropical migrants banded in high numbers included the gray catbird (*Dumetella carolinensis*) with 218 individuals banded, the wood thrush (*Hylocichla mustelina*) with 123 individuals banded and the magnolia warbler (*Dendroica magnolia*) with 115 individuals banded. The Belize resident species banded in high numbers included the white-collared seedeater (*Sporophila torqueola*) with 220 individuals banded, the red-capped manakin (*Pipra mentalis*) with 149 individuals banded and the ochre-bellied flycatcher (*Mionectes oleagineus*) with 125 individuals banded. Of these, the ochre-bellied flycatcher and magnolia warbler are listed as being of regional conservation concern yet secure in Belize, while for other commonly captured species no information on the Belize status was presented in Miller and Miller (1997).

A total of 303 nests representing 38 species were found and monitored as part of the reproductive success research conducted in pine savanna habitats. The majority of nests found (61 or 20 percent) were those of the fork-tailed flycatcher (*Tyrannus savana*). Other nests commonly found were those of the yellow-bellied elaenia (*Elaenia*

*flavogaster*, 42 or 14 percent), the gray-crowned yellowthroat (*Geothlypis poliocephala*, 27 or 9 percent) and the pale-vented pigeon (*Columba cayennensis*, 17 or 6 percent).

## Discussion

Comprising only 8,867 square miles, Belize is a relatively small Central American country. However, the avifaunal composition of the central Belize habitats documented in this study indicates the relative importance of these habitats to both Belize and the region. The habitats studied were representative of the diverse habitats found in central Belize and included scrub-shrub, a transition zone from karst hill to adjacent seasonal wetland, different successional stages of pine savanna, citrus and cashew plantations, pasture, and riverine, karst hill and secondary broadleaf forest.

The BWB-ASF research documented 321 bird species in a total study area of approximately 3,118ha. This is a relatively small percentage of the total landmass in Mesoamerica; however, it appears to be very significant in terms of the sustainability of avian diversity. The creation and implementation of a long-term management plan for the protection of the habitats present in central Belize will be critical in ensuring that the 140 avian species of regional conservation concern are protected amid increasing development pressures. The BWB-ASF data will allow for this type of planning because detailed information on the use of habitats by birds in different stages of their life cycle, such as the breeding and non-breeding seasons, was studied. For example, during non-breeding season bird banding, the Swainson's warbler (*Limnothlypis swainsonii*), a species of conservation concern in Belize (Miller & Miller, 1997), was found to utilize three of the habitats studied in central Belize, indicating the importance of these areas to some Neotropical migrants.

We are analyzing the bird banding and the vegetation data collected and in subsequent manuscripts will present information on the habitat preferences and survival of both Neotropical migrant and resident species in the six habitats where bird banding was conducted during the non-breeding season. We are also analyzing the bird banding, reproductive success research and vegetation data collected in pine savanna habitats so that the importance of these habitats to birds during both the breeding and non-breeding seasons can be demonstrated. Analysis of research on the breeding biology of the Gray-crowned yellowthroat (Martinez *et al.*, 2004) showed that this Belize resident species bred successfully in pine savanna habitats in central Belize. The grassland yellow-finch (*Sicalis luteola*), a Belize resident species about which little is known (Jones & Vallel, y 2001), was documented as breeding in pine savanna habitat at the TEC study site in 1999. Preliminary analyses show that pine savannas are also important to Neotropical migrants during the non-breeding season, as we detected numerous species of Neotropical migrants such as the gray catbird, common yellowthroat (*Geothlypis trichas*) and the magnolia warbler in pine savannas during December to April.

During the past 10 years the central region of Belize has been exposed to increased developmental pressures that have resulted in significant natural habitats being converted or lost to citrus farms, fish (*tilapia*) farms, gravel mines, pastures and logging. Community development and increased hunting pressure also threaten these central

Belize habitats and the animals and plants present within them. These developmental and agricultural projects are placing increasing pressures on the integrity of the critical avian habitats in central Belize. Unfortunately, the centralized location and ease of accessibility enhances the feasibility of many such projects that eventually may result in the demise or degradation of these habitats.

The developmental pressures affecting central Belize undoubtedly will continue to increase in order to meet the needs of the growing human population. The establishment of privately owned sanctuaries such as the Runaway Creek Nature Preserve has become imperative for the protection of both local and regional biodiversity. Continued research, which will help to identify other critical areas and allow for the sustainable use of selected lands, also will become increasingly important. It is only by evaluating the results of systematic research such as that conducted by BWB-ASF, together with the impacts and needs of the growing human population, that development plans can be designed that will serve to ensure the successful co-existence of both humans and these critical avian habitats.

## Acknowledgments

We are grateful to the Zoological Society of Milwaukee and the Foundation for Wildlife Conservation, Inc. for funding the Birds Without Borders – *Aves Sin Fronteras*<sup>SM</sup> (BWB-ASF) project. We thank Gil Boese, founder of BWB-ASF project, for his vision and support, and the many landowners who allowed us to conduct research on their lands, especially Sharon Matola and Tony Garel of the Belize Zoo and TEC and Mick and Lucy Fleming of Chaa Creek. The research would not have been possible without the dedication and hard work of all of BWB-ASF field staff. We thank Sharon Matola and Tony Garel of the Belize Zoo and TEC for their support throughout this study, and the Conservation Division of the Belize Forestry Department (Ministry of Natural Resources, Environment and Industry) for granting the necessary research permits. We thank Hector Mai and Martin Meadows for their assistance in identifying unknown plant specimens. Paula Brookmire provided valuable comments on this manuscript. This is publication # 4 of the BWB-ASF project.

## References

- American Ornithologists' Union (1998) *Checklist of North American birds*, 7<sup>th</sup> ed. Washington, D.C.: American Ornithologists' Union.
- Baillie, S.R. (1990) 'Integrated population monitoring of breeding birds in Britain and Ireland', *Ibis*, 132, 151-156.
- Burton, K.M. & D.F. DeSante (1998) *MAPS Manual. Instructions for the establishment and operation of stations as part of the monitoring avian productivity and survivorship program*, Point Reyes Station, CA: Institute for Bird Populations.
- CONABIO (2004) Comision Nacional Para el Conocimiento y uso de la Biodiversidad, <http://www.conabio.gob.mx>.
- CONAP (2000) Consejo Nacional de Áreas Protegidas: Listado de Especies de Fauna Silvestre Amenazadas de Extincion (Lista Roja de Fauna).
- Garcia, J., Matola, S., Meadows, M. & C. Wright (1994) *A checklist of the birds of Belize*, World Wildlife Fund-U.S.

- Howe, R.W., Niemi, G.R., Lewis, S.J. & D.A. Welsh. (1997) 'A standard method for monitoring songbird populations in the Great Lakes region', *Passenger Pigeon*, 59, 183-194.
- Howell, S.N.G. & S. Webb. (1995) *A guide to the birds of Mexico and Northern Central America*, New York: Oxford University Press.
- Jones, H.L. & A.C. Valley (2001) *Annotated checklist of the birds of Belize*, Barcelona: Lynx Edicions.
- Mallory, E.P. (1997) *Rio Bravo Conservation Area monitoring*, Unpublished protocol provided by the author.
- Martin, T.E., Paine, C., Conway, C.J., Hochachka, W.M., Allen, P. & W. Jenkins. (1997a) *The Breeding Biology Research and Monitoring Database (BBIRD) field protocol*, Missoula, MT: Montana Cooperative Wildlife Research Unit.
- Martin, T.E., Paine, C., Conway, C.J., Hochachka, W.M., Allen, P. & W. Jenkins. (1997b) *The Breeding Biology Research and Monitoring Database (BBIRD) grassland protocol*, Missoula, MT: Montana Cooperative Wildlife Research Unit.
- Martinez, W.M., Piaskowski, V.D. & M. Teul. (2004) 'Reproductive biology of the gray-crowned yellowthroat (*Geothlypis poliocephala palpebralis*) in central Belize', *Ornitologia Neotropical* in press.
- McCracken, J.D., Hussell, D.J.T. & E.H. Dunn. (1993) *A manual for monitoring bird migration*, Port Rowan, Ontario: Long Point Bird Observatory.
- Miller B.W. & C.M. Miller. (1997) 'An Avian Risk Assessment', *Bird species of conservation concern in Belize*, Report to Programme for Belize and The Nature Conservancy.
- Miller B.W. & C.M. Miller (1998) *Birds of Belize: A checklist*, Belize, Central America: Belize Audubon Society.
- Peach, W.J., Buckland, S.T. & S.R. Baillie. (1996) 'The use of constant effort mist-netting to measure between-year changes in the abundance and productivity of common passerines', *Bird Study*, 43, 142-156.
- Pyle, P. (1997) *Identification guide to North American birds*, Bolinas, CA: Slate Creek Press.
- Ralph, C.J., Geupel, G.R., Pyle, P., Martin, T.E. & D.F. DeSante (1993) *Handbook of field methods for monitoring landbird*, United States Department of Agriculture Forest Service, Pacific Southwest Research Station, General Technical Report PSW-GTR-144.
- Stiles, F.G. & A.F. Skutch. (1989) *A guide to the birds of Costa Rica*, Ithaca, NY: Cornell University Press.
- Stotz, D.F., Fitzpatrick, J.W., Parker III, T.A. & D.K. Moskovits. (1996) *Neotropical birds – ecology and conservation*, Chicago: The University of Chicago Press.



TABLE 1: Belize seasonality, regional conservation status and Belize conservation status for avian species detected at three Birds Without Borders – Aves Sin Fronteras study sites in Belize, Central America

Belize seasonality codes: R=Resident, present year-round; M=Migrant, present October-April, does not breed in Belize; T=Transient, present during migration; D=Dry season resident, breeds in Belize, then migrates south (breeding migrant), V=Vagrant, very few records, Belize not part of the normal range.

TEC=Tropical Education Center study site; RCNP=Runaway Creek Nature Preserve study site; CHAA=Chaa Creek study site.

Belize conservation status codes: C=Conservation concern; R=Rare; S=Secure; A=Accidental; H=Hunted.

Conservation status for Mexico (Mex.) based on La Norma Oficial Mexicana (NOM-ECOL-059-94)(CONABIO), March 2004. Conservation status for Guatemala (Guat.) based on CITES (Resolucion No. 27-96, CONAP, Guatemala 9 de Mayo, 1996) and CONAP (Consejo Nacional de Areas Protegidas), February 2000. Conservation status for Belize based on Miller and Miller, November 1997, An Avian Risk Assessment-Bird species of Conservation Concern in Belize-Appendix 10 and the Belize Biodiversity Information System.

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Great Tinamou ( <i>Tinamus major</i> )	R	X	X		X	S
Little Tinamou ( <i>Crypturellus soui</i> )	R	X	X	X	X	
Thicket Tinamou ( <i>Crypturellus cinnamomeus</i> )	R	X	X	X	X	S
Slaty-breasted Tinamou ( <i>Crypturellus boucardi</i> )	R		X	X	X	S
Least Grebe ( <i>Tachybaptus dominicus</i> )	R	X	X	X		
Brown Pelican ( <i>Pelecanus occidentalis</i> )	R	X		X		
Neotropic Cormorant ( <i>Phalacrocorax brasilianus</i> )	R	X	X	X		
Anhinga ( <i>Anhinga anhinga</i> )	R	X	X	X		
Magnificent Frigatebird ( <i>Fregata magnificens</i> )	R	X	X			
Bare-throated Tiger-Heron ( <i>Tigrisoma mexicanum</i> )	R	X	X	X	X	S
Great Blue Heron ( <i>Ardea herodias</i> )	R/M	X	X	X	X	S
Great Egret ( <i>Ardea alba</i> )	R/M	X	X	X		
Snowy Egret ( <i>Egretta thula</i> )	R/M	X	X	X		
Little Blue Heron ( <i>Egretta caerulea</i> )	M	X	X	X		
Cattle Egret ( <i>Bubulcus ibis</i> )	R/M	X	X	X		
Green Heron ( <i>Butorides virescens</i> )	R	X	X	X		
Black-crowned Night Heron ( <i>Nycticorax nycticorax</i> )	R/M		X	X	X	S
Yellow-crowned Night Heron ( <i>Nyctanassa violacea</i> )	R/M			X	X	S

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Boat-billed Heron ( <i>Cochlearius cochlearius</i> )	R	X	X	X	X	S
Roseate Spoonbill ( <i>Ajaia ajaja</i> )	R	X			X	C
Jabiru ( <i>Jabiru mycteria</i> )	R		X		X	C
Wood Stork ( <i>Mycteria americana</i> )	R	X	X	X	X	C
Black Vulture ( <i>Coragyps atratus</i> )	R	X	X	X		
Turkey Vulture ( <i>Cathartes aura</i> )	R	X	X	X		
Lesser Yellow-headed Vulture ( <i>Cathartes burrovianus</i> )	R	X	X		X	C
King Vulture ( <i>Sarcoramphus papa</i> )	R	X	X	X	X	C
Black-bellied Whistling-Duck ( <i>Dendrocygna autumnalis</i> )	R	X	X	X	X	C
Muscovy Duck ( <i>Cairina moschata</i> )	R	X	X		X	C
Blue-winged Teal ( <i>Anas discors</i> )	M			X	X	H
Osprey ( <i>Pandion haliaetus</i> )	R		X		X	
Gray-headed Kite ( <i>Leptodon cayanensis</i> )	R		X	X	X	S
Hook-billed Kite ( <i>Chondrohierax uncinatus</i> )	R			X	X	S
Swallow-tailed Kite ( <i>Elanoides forficatus</i> )	D/T		X	X	X	S
White-tailed Kite ( <i>Elanus leucurus</i> )	R	X	X	X		
Snail Kite ( <i>Rostrhamus sociabilis</i> )	R		X		X	C
Plumbeous Kite ( <i>Ictinia plumbea</i> )	D	X	X	X	X	S
Black-collared Hawk ( <i>Busarellus nigricollis</i> )	R		X		X	R
White Hawk ( <i>Leucopternis albicollis</i> )	R		X		X	S
Gray Hawk [ <i>Asturina nitida (plagiata)</i> ]	R	X	X	X	X	S
Common Black-Hawk ( <i>Buteogallus anthracinus</i> )	R	X	X	X	X	S
Great Black-Hawk ( <i>Buteogallus urubitinga</i> )	R	X	X		X	S
Roadside Hawk ( <i>Buteo magnirostris</i> )	R	X	X	X	X	S
Short-tailed Hawk ( <i>Buteo brachyurus</i> )	R	X	X	X	X	S
White-tailed Hawk ( <i>Buteo albicaudatus</i> )	R	X			X	C
Zone-tailed Hawk ( <i>Buteo albonotatus</i> )	M		X		X	R
Black Hawk-Eagle ( <i>Spizaetus tyrannus</i> )	R			X	X	C
Ornate Hawk-Eagle ( <i>Spizaetus ornatus</i> )	R		X		X	C
Barred Forest-Falcon ( <i>Micrastur ruficollis</i> )	R		X		X	S
Collared Forest-Falcon ( <i>Micrastur semitorquatus</i> )	R	X	X	X	X	S
Laughing Falcon ( <i>Herpetotheres cachinnans</i> )	R	X	X	X	X	

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
American Kestrel ( <i>Falco sparverius</i> )	M			X	X	C
Aplomado Falcon ( <i>Falco femoralis</i> )	R	X	X		X	R
Bat Falcon ( <i>Falco rufigularis</i> )	R	X	X	X	X	S
Plain Chachalaca ( <i>Orientalis vetula</i> )	R	X	X	X	X	S
Crested Guan ( <i>Penelope purpurascens</i> )	R		X	X	X	C
Great Curassow ( <i>Crax rubra</i> )	R		X	X	X	C
Black-throated Bobwhite ( <i>Colinus nigrogularis</i> )	R	X	X			C
Spotted Wood-Quail ( <i>Odontophorus guttatus</i> )	R		X	X	X	S
Singing Quail ( <i>Dactylortyx thoracicus</i> )	R			X	X	R
Ruddy Crane ( <i>Laterallus ruber</i> )	R	X	X	X	X	S
Gray-necked Wood-Rail ( <i>Aramides cajanea</i> )	R	X	X	X	X	S
Purple Gallinule ( <i>Porphyryla martinica</i> )	R			X		
American Coot ( <i>Fulica americana</i> )	M/T			X		
Sungrebe ( <i>Heliornis fulica</i> )	R	X	X	X	X	S
Limpkin ( <i>Aramus guarauna</i> )	R	X	X	X	X	S
Killdeer ( <i>Charadrius vociferus</i> )	M/T	X	X	X		
Northern Jacana ( <i>Jacana spinosa</i> )	R		X	X		
Solitary Sandpiper ( <i>Tringa solitaria</i> )	M	X	X			
Spotted Sandpiper ( <i>Actitis macularia</i> )	M/T	X		X		
Common Snipe ( <i>Gallinago gallinago</i> )	M	X				
Pale-vented Pigeon ( <i>Columba cayennensis</i> )	R	X	X	X		
Scaled Pigeon ( <i>Columba speciosa</i> )	R	X	X		X	S
Red-billed Pigeon ( <i>Columba flavirostris</i> )	R	X	X	X		
Short-billed Pigeon ( <i>Columba nigrirostris</i> )	R	X	X		X	S
Mourning Dove ( <i>Zenaida macroura</i> )	M/T	X		X		
Plain-breasted Ground-Dove ( <i>Columbina minuta</i> )	R	X	X	X		
Ruddy Ground-Dove ( <i>Columbina talpacoti</i> )	R	X	X	X		
Blue Ground-Dove ( <i>Claravis pretiosa</i> )	R	X	X	X	X	S
White-tipped Dove ( <i>Leptotila verreauxi</i> )	R	X	X	X		
Gray-fronted Dove [ <i>Leptotila rufaxilla (plumbeiceps)</i> ]	R	X	X	X	X	
Gray-chested Dove ( <i>Leptotila cassini</i> )	R	X	X	X	X	S
Ruddy Quail-Dove ( <i>Geotrygon montana</i> )	R	X	X	X		

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Olive-throated Parakeet ( <i>Aratinga nana</i> )	R	X	X	X	X	
Brown-hooded Parrot ( <i>Pionopsitta haematotis</i> )	R	X		X	X	C
White-crowned Parrot ( <i>Pionus senilis</i> )	R	X	X	X	X	C
White-fronted Parrot ( <i>Amazona albifrons</i> )	R	X	X	X	X	C
Yellow-lored Parrot ( <i>Amazona xantholora</i> )	R	X	X		X	C
Red-lored Parrot ( <i>Amazona autumnalis</i> )	R	X	X	X	X	C
Mealy Parrot ( <i>Amazona farinosa</i> )	R	X	X	X	X	C
Yellow-headed Parrot ( <i>Amazona oratrix</i> )	R	X	X		X	C
Mangrove Cuckoo ( <i>Coccyzus minor</i> )	R	X				
Squirrel Cuckoo ( <i>Piaya cayana</i> )	R	X	X	X		
Striped Cuckoo ( <i>Tapera naevia</i> )	R	X		X		
Pheasant Cuckoo ( <i>Dromococcyx phasianellus</i> )	R		X		X	R
Groove-billed Ani ( <i>Crotophaga sulcirostris</i> )	R	X	X	X		
Barn Owl ( <i>Tyto alba</i> )	R	X		X	X	R
Vermiculated Screech-Owl ( <i>Otus guatemalae</i> )	R	X	X	X	X	S
Central American Pygmy-Owl ( <i>Glaucidium griseiceps</i> )	R			X	X	R
Ferruginous Pygmy-Owl ( <i>Glaucidium brasilianum</i> )	R	X	X	X	X	S
Mottled Owl ( <i>Ciccaba virgata</i> )	R	X	X	X	X	S
Lesser Nighthawk ( <i>Chordeiles acutipennis</i> )	M	X	X	X		
Common Nighthawk ( <i>Chordeiles minor</i> )	D/T	X	X	X		
Common Pauraque ( <i>Nyctidromus albicollis</i> )	R	X	X	X		
Yucatan Nightjar ( <i>Caprimulgus badius</i> )	R	X				
Northern Potoo ( <i>Nyctibius jamaicensis</i> )	R			X		
White-collared Swift ( <i>Streptoprocne zonaris</i> )	R	X	X	X		
Chimney Swift ( <i>Chaetura pelagica</i> )	T			X		
Vaux's Swift ( <i>Chaetura vauxi</i> )	R	X	X	X		
Lesser Swallow-tailed Swift ( <i>Panyptila cayennensis</i> )	R	X		X	X	?
Long-tailed Hermit ( <i>Phaethornis superciliosus</i> )	R	X	X	X	X	S
Little Hermit ( <i>Phaethornis longuemareus</i> )	R	X	X	X	X	S
Wedge-tailed Sabrewing ( <i>Campylopterus curvipennis</i> )	R	X	X	X	X	S
White-necked Jacobin ( <i>Florisuga mellivora</i> )	R	X	X	X	X	S
Green-breasted Mango ( <i>Anthracoceros prevostii</i> )	R	X	X	X	X	S

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Canivet's Emerald ( <i>Chlorostilbon canivetii</i> )	R	X	X	X	X	S
White-bellied Emerald ( <i>Amazilia candida</i> )	R	X	X	X	X	S
Azure-crowned Hummingbird ( <i>Amazilia cyanocephala</i> )	R	X	X	X	X	S
Rufous-tailed Hummingbird ( <i>Amazilia tzacatl</i> )	R	X	X	X	X	S
Buff-bellied Hummingbird ( <i>Amazilia yucatanensis</i> )	R	X				S
Cinnamon Hummingbird ( <i>Amazilia rutila</i> )	R	X	X		X	S
Purple-crowned Fairy ( <i>Heliothryx barroti</i> )	R		X		X	S
Long-billed Starthroat ( <i>Heliomaster longirostris</i> )	R		X		X	
Ruby-throated Hummingbird ( <i>Archilochus colubris</i> )	M	X	X	X	X	
Black-headed Trogon ( <i>Trogon melanocephalus</i> )	R	X	X	X		
Violaceous Trogon ( <i>Trogon violaceus</i> )	R	X	X	X	X	S
Slaty-tailed Trogon ( <i>Trogon massena</i> )	R		X	X	X	S
Tody Motmot ( <i>Hylomanes momotula</i> )	R		X	X	X	S
Blue-crowned Motmot ( <i>Momotus momota</i> )	R	X	X	X	X	S
Ringed Kingfisher ( <i>Ceryle torquata</i> )	R	X	X	X		
Belted Kingfisher ( <i>Ceryle alcyon</i> )	M	X	X	X		
Amazon Kingfisher ( <i>Chloroceryle amazona</i> )	R	X		X		
Green Kingfisher ( <i>Chloroceryle americana</i> )	R	X	X	X		
American Pygmy Kingfisher ( <i>Chloroceryle aenea</i> )	R	X	X	X		S
White-necked Puffbird ( <i>Notharchus macrorhynchos</i> )	R	X	X	X		
Rufous-tailed Jacamar ( <i>Galbula ruficauda</i> )	R	X	X	X	X	S
Emerald Toucanet ( <i>Aulacorhynchus prasinus</i> )	R			X	X	S
Collared Aracari ( <i>Pteroglossus torquatus</i> )	R	X	X	X	X	S
Keel-billed Toucan ( <i>Ramphastos sulfuratus</i> )	R	X	X	X	X	S
Acorn Woodpecker ( <i>Melanerpes formicivorus</i> )	R	X	X			
Black-cheeked Woodpecker ( <i>Melanerpes pucherani</i> )	R	X	X	X	X	S
Red-vented Woodpecker ( <i>Melanerpes pygmaeus</i> )	R	X	X			
Golden-fronted Woodpecker ( <i>Melanerpes aurifrons</i> )	R	X	X	X		
Yellow-bellied Sapsucker ( <i>Sphyrapicus varius</i> )	M	X	X			
Ladder-backed Woodpecker ( <i>Picoides scalaris</i> )	R	X	X			
Smoky-brown Woodpecker ( <i>Veniliornis fumigatus</i> )	R	X	X			S
Golden-olive Woodpecker ( <i>Piculus rubiginosus</i> )	R	X	X	X		

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Chestnut-colored Woodpecker ( <i>Celeus castaneus</i> )	R		X		X	S
Lineated Woodpecker ( <i>Dryocopus lineatus</i> )	R	X	X	X	X	S
Pale-billed Woodpecker ( <i>Campephilus guatemalensis</i> )	R	X	X	X	X	S
Rufous-breasted Spinetail ( <i>Synallaxis erythrothorax</i> )	R	X	X			
Plain Xenops ( <i>Xenops minutus</i> )	R		X	X	X	S
Tawny-winged Woodcreeper ( <i>Dendrocincla anabatina</i> )	R	X	X	X	X	S
Ruddy Woodcreeper ( <i>Dendrocincla homochroa</i> )	R	X	X	X	X	S
Olivaceous Woodcreeper ( <i>Sittasomus griseicapillus</i> )	R	X	X	X	X	S
Wedge-billed Woodcreeper ( <i>Glyphorynchus spirurus</i> )	R	X	X		X	S
Northern Barred-Woodcreeper ( <i>Dendrocolaptes sanctithomae</i> )	R	X	X	X	X	S
Ivory-billed Woodcreeper ( <i>Xiphorhynchus flavigaster</i> )	R	X	X	X		
Streak-headed Woodcreeper ( <i>Lepidocolaptes souleyetii</i> )	R	X	X	X		
Great Antshrike ( <i>Taraba major</i> )	R	X	X	X	X	S
Barred Antshrike ( <i>Thamnophilus doliatus</i> )	R	X	X	X		
Dusky Antbird ( <i>Cercomacra tyrannina</i> )	R	X	X	X	X	S
Black-faced Antthrush [ <i>Formicarius analis (moniliger)</i> ]	R	X	X	X	X	S
Yellow-bellied Tyrannulet ( <i>Ornithion semiflavum</i> )	R	X	X	X	X	S
Northern Beardless-Tyrannulet ( <i>Camptostoma imberbe</i> )	R	X	X	X		S
Greenish Elaenia ( <i>Myiopagis viridicata</i> )	R	X	X	X		
Yellow-bellied Elaenia ( <i>Elaenia flavogaster</i> )	R	X	X	X		
Ochre-bellied Flycatcher ( <i>Mionectes oleagineus</i> )	R	X	X	X	X	S
Sepia-capped Flycatcher ( <i>Leptopogon amaurocephalus</i> )	R		X	X	X	S
Northern Bentbill ( <i>Oncostoma cinereigulare</i> )	R	X	X	X	X	S
Slate-headed Tody-Flycatcher ( <i>Poecilatriccus sylvia</i> )	R	X	X	X	X	S
Common Tody-flycatcher ( <i>Todirostrum cinereum</i> )	R	X	X	X	X	S
Eye-ringed Flatbill ( <i>Rhynchocyclus brevirostris</i> )	R	X	X			
Yellow-olive Flycatcher ( <i>Tolmomyias sulphurescens</i> )	R	X	X	X	X	S
Stub-tailed Spadebill ( <i>Platyrrinchus cancrominus</i> )	R	X	X	X	X	S
Royal Flycatcher ( <i>Onychorhynchus coronatus</i> )	R	X	X	X	X	S
Sulphur-rumped Flycatcher ( <i>Myiobius sulphureipygius</i> )	R	X	X		X	S
Tropical Pewee ( <i>Contopus cinereus</i> )	R	X	X	X		
Yellow-bellied Flycatcher ( <i>Empidonax flaviventris</i> )	T/M		X	X		

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
White-throated Flycatcher ( <i>Empidonax albigularis</i> )	M			X		
Least Flycatcher ( <i>Empidonax minimus</i> )	M	X	X	X		
Black Phoebe ( <i>Sayornis nigricans</i> )	R	X		X		
Vermilion Flycatcher ( <i>Pyrocephalus rubinus</i> )	R	X	X	X		
Bright-rumped Attila ( <i>Attila spadiceus</i> )	R	X	X	X	X	S
Dusky-capped Flycatcher ( <i>Myiarchus tuberculifer</i> )	R	X	X	X		
Great Crested Flycatcher ( <i>Myiarchus crinitus</i> )	T/M	X	X	X		
Brown-crested Flycatcher ( <i>Myiarchus tyrannulus</i> )	R	X	X	X		
Great Kiskadee ( <i>Pitangus sulphuratus</i> )	R	X	X	X		
Boat-billed Flycatcher ( <i>Megarynchus pitangua</i> )	R	X	X	X		
Social Flycatcher ( <i>Myiozetetes similis</i> )	R	X	X	X		
Streaked Flycatcher ( <i>Myiodynastes maculatus</i> )	D			X		
Sulphur-bellied Flycatcher ( <i>Myiodynastes luteiventris</i> )	D	X	X	X		
Piratic Flycatcher ( <i>Legatus leucophaeus</i> )	D	X	X	X	X	S
Tropical Kingbird ( <i>Tyrannus melancholicus</i> )	R	X	X	X		
Couch's Kingbird ( <i>Tyrannus couchii</i> )	R	X	X	X		
Eastern Kingbird ( <i>Tyrannus tyrannus</i> )	T	X	X	X		
Fork-tailed Flycatcher ( <i>Tyrannus savana</i> )	R	X	X	X		
Thrush-like Schiffornis ( <i>Schiffornis turdinus</i> )	R	X	X	X		
Gray-collared Becard ( <i>Pachyramphus major</i> )	R	X	X			
Rose-throated Becard ( <i>Pachyramphus aglaiae</i> )	R	X	X	X		
Masked Tityra ( <i>Tityra semifasciata</i> )	R	X	X	X		
Black-crowned Tityra ( <i>Tityra inquisitor</i> )	R	X		X		
White-collared Manakin ( <i>Manacus candei</i> )	R	X	X	X	X	S
Red-capped Manakin ( <i>Pipra mentalis</i> )	R	X	X	X		
White-eyed Vireo ( <i>Vireo griseus</i> )	M	X	X	X		
Mangrove Vireo [ <i>Vireo pallens (semiflavus)</i> ]	R	X	X	X		
Yellow-throated Vireo ( <i>Vireo flavifrons</i> )	M	X	X	X		
Yellow-green Vireo ( <i>Vireo flavoviridis</i> )	D	X	X	X		
Tawny-crowned Greenlet ( <i>Hylophilus ochraceiceps</i> )	R	X	X	X	X	S
Lesser Greenlet ( <i>Hylophilus decurtatus</i> )	R	X	X	X	X	S
Rufous-browed Peppershrike ( <i>Cyclarhis gujanensis</i> )	R	X	X			

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Green Jay ( <i>Cyanocorax yncas</i> )	R	X	X	X		
Brown Jay ( <i>Cyanocorax morio</i> )	R	X	X	X		
Yucatan Jay ( <i>Cyanocorax yucatanicus</i> )	R		X			C
Purple Martin ( <i>Progne subis</i> )	T	X	X			
Gray-breasted Martin ( <i>Progne chalybea</i> )	D	X	X	X		
Tree Swallow ( <i>Tachycineta bicolor</i> )	T	X	X	X		
Mangrove Swallow ( <i>Tachycineta albilinea</i> )	R	X	X	X		
Northern Rough-winged Swallow ( <i>Stelgidopteryx serripennis</i> )	R/M	X	X	X		
Ridgeway Rough-winged Swallow	R		X			
Barn Swallow ( <i>Hirundo rustica</i> )	T/M	X	X	X		
Band-backed Wren ( <i>Campylorhynchus zonatus</i> )	R			X		
Spot-breasted Wren ( <i>Thryothorus maculipectus</i> )	R	X	X	X		
Carolina Wren ( <i>Thryothorus ludovicianus</i> )	R			X		
House Wren ( <i>Troglodytes aedon</i> )	R	X	X			
White-bellied Wren ( <i>Uropsila leucogastra</i> )	R	X	X	X	X	S
White-breasted Wood-Wren ( <i>Henicorhina leucosticta</i> )	R	X	X	X	X	S
Long-billed Gnatwren ( <i>Ramphocaenus melanurus</i> )	R	X	X	X	X	
Blue-gray Gnatcatcher ( <i>Polioptila caerulea</i> )	R/M	X	X	X		
Tropical Gnatcatcher ( <i>Polioptila plumbea</i> )	R	X		X	X	S
Gray-cheeked Thrush ( <i>Catharus minimus</i> )	T		X			
Swainson's Thrush ( <i>Catharus ustulatus</i> )	T		X	X		
Wood Thrush ( <i>Hylocichla mustelina</i> )	M	X	X	X		
Clay-colored Robin ( <i>Turdus grayi</i> )	R	X	X	X		
White-throated Robin ( <i>Turdus assimilis</i> )	R		X			
Gray Catbird ( <i>Dumetella carolinensis</i> )	M	X	X	X		
Tropical Mockingbird ( <i>Mimus gilvus</i> )	R	X	X	X		
Blue-winged Warbler ( <i>Vermivora pinus</i> )	M/T	X	X	X		
Tennessee Warbler ( <i>Vermivora peregrina</i> )	M/T	X	X	X		
Orange-crowned Warbler ( <i>Vermivora celata</i> )	V		X			
Nashville Warbler ( <i>Vermivora ruficapilla</i> )	M/T			X		
Northern Parula ( <i>Parula americana</i> )	M	X	X	X		
Yellow Warbler ( <i>Dendroica petechia</i> )	M	X	X	X		



Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Chestnut-sided Warbler ( <i>Dendroica pensylvanica</i> )	T	X	X	X		
Magnolia Warbler ( <i>Dendroica magnolia</i> )	M	X	X	X	X	S
Yellow-rumped Warbler ( <i>Dendroica coronata</i> )	M	X				
Black-throated Green Warbler ( <i>Dendroica virens</i> )	M	X	X	X	X	S
Blackburnian Warbler ( <i>Dendroica fusca</i> )	T	X		X		
Yellow-throated Warbler ( <i>Dendroica dominica</i> )	M	X	X	X		
Grace's Warbler ( <i>Dendroica graciae</i> )	R	X	X			
Bay-breasted Warbler ( <i>Dendroica castanea</i> )	T	X		X		
Black-and-white Warbler ( <i>Mniotilta varia</i> )	M	X	X	X		
American Redstart ( <i>Setophaga ruticilla</i> )	M	X	X	X		
Prothonotary Warbler ( <i>Protonotaria citrea</i> )	T		X	X		
Worm-eating Warbler ( <i>Helmitheros vermivorus</i> )	M	X	X	X	X	S
Swainson's Warbler ( <i>Limnithlypis swainsonii</i> )	M	X	X		X	C
Ovenbird ( <i>Seiurus aurocapillus</i> )	M	X	X	X	X	S
Northern Waterthrush ( <i>Seiurus noveboracensis</i> )	M	X	X	X	X	S
Louisiana Waterthrush ( <i>Seiurus motacilla</i> )	M/T	X	X	X	X	S
Kentucky Warbler ( <i>Oporornis formosus</i> )	M/T	X	X	X		
Common Yellowthroat ( <i>Geothlypis trichas</i> )	M	X	X	X		
Gray-crowned Yellowthroat ( <i>Geothlypis poliocephala</i> )	R	X	X	X		
Hooded Warbler ( <i>Wilsonia citrina</i> )	M	X	X	X	X	S
Golden-crowned Warbler ( <i>Basileuterus culicivorus</i> )	R	X		X	X	S
Yellow-breasted Chat ( <i>Icteria virens</i> )	M	X	X	X		
Gray-throated Chat ( <i>Granatellus sallaei</i> )	R		X	X		
Bananaquit ( <i>Coereba flaveola</i> )	R			X		
Gray-headed Tanager ( <i>Eucometis penicillata</i> )	R	X	X	X	X	S
Black-throated Shrike-Tanager ( <i>Lanio aurantius</i> )	R			X	X	S
Red-crowned Ant-Tanager ( <i>Habia rubica</i> )	R	X	X	X		
Red-throated Ant-Tanager ( <i>Habia fuscicauda</i> )	R	X	X	X		
Rose-throated Tanager ( <i>Piranga roseogularis</i> )	R			X		R
Hepatic Tanager ( <i>Piranga flava</i> )	R	X	X			
Summer Tanager ( <i>Piranga rubra</i> )	M	X	X	X		
Scarlet Tanager ( <i>Piranga olivacea</i> )	T		X			

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Crimson-collared Tanager ( <i>Ramphocelus sanguinolentus</i> )	R	X	X	X		
Passerini's Tanager ( <i>Ramphocelus passerinii</i> )	R	X	X	X		
Blue-gray Tanager ( <i>Thraupis episcopus</i> )	R	X	X	X		
Yellow-winged Tanager ( <i>Thraupis abbas</i> )	R	X	X	X		
Scrub Euphonia ( <i>Euphonia affinis</i> )	R	X	X	X		
Yellow-throated Euphonia ( <i>Euphonia hirundinacea</i> )	R	X	X	X		
Olive-backed Euphonia ( <i>Euphonia gouldi</i> )	R	X		X	X	S
Red-legged Honeycreeper ( <i>Cyanerpes cyaneus</i> )	R	X	X	X		
Blue-black Grassquit ( <i>Volatinia jacarina</i> )	R	X	X	X		
Variable Seedeater ( <i>Sporophila americana</i> )	R	X	X	X		
White-collared Seedeater ( <i>Sporophila torqueola</i> )	R	X	X	X		
Thick-billed Seed-Finch ( <i>Oryzoborus funereus</i> )	R	X	X	X		
Blue Seedeater ( <i>Amaurospiza concolor</i> )	R		X		X	
Yellow-faced Grassquit ( <i>Tiaris olivacea</i> )	R	X		X		
Grassland Yellow-Finch ( <i>Sicalis luteola</i> )	R	X				A
Orange-billed Sparrow ( <i>Arremon aurantiirostris</i> )	R	X			X	S
Olive Sparrow ( <i>Arremonops rufivirgatus</i> )	R	X	X			S
Green-backed Sparrow ( <i>Arremonops chloronotus</i> )	R	X	X	X		
Chipping Sparrow ( <i>Spizella passerina</i> )	R	X	X			
Savannah Sparrow ( <i>Passerculus sandwichensis</i> )	M/T		X			
Grasshopper Sparrow ( <i>Ammodramus savannarum</i> )	R	X	X			
Grayish Saltator ( <i>Saltator coerulescens</i> )	R	X	X	X		
Buff-throated Saltator ( <i>Saltator maximus</i> )	R	X	X	X		
Black-headed Saltator ( <i>Saltator atriceps</i> )	R	X	X	X		
Black-faced Grosbeak ( <i>Caryothraustes poliogaster</i> )	R	X	X	X		
Northern Cardinal ( <i>Cardinalis cardinalis</i> )	R	X	X		X	S
Rose-breasted Grosbeak ( <i>Pheucticus ludovicianus</i> )	M	X		X		
Blue-black Grosbeak ( <i>Cyanocompsa cyanoides</i> )	R	X	X	X	X	S
Blue Bunting ( <i>Cyanocompsa parellina</i> )	R	X	X	X		
Blue Grosbeak ( <i>Guiraca caerulea</i> )	M/T		X	X		
Indigo Bunting ( <i>Passerina cyanea</i> )	M	X	X	X		
Painted Bunting ( <i>Passerina ciris</i> )	M	X	X			

Species	Belize seasonality	TEC	RCNP	CHAA	Conserv. conc. in Mex. and/or Guat.	Belize conservation status
Dickcissel ( <i>Spiza americana</i> )	T	X	X			
Red-winged Blackbird ( <i>Agelaius phoeniceus</i> )	R	X				
Eastern Meadowlark ( <i>Sturnella magna</i> )	R	X	X	X		S
Melodious Blackbird ( <i>Dives dives</i> )	R	X	X	X		
Great-tailed Grackle ( <i>Quiscalus mexicanus</i> )	R	X	X	X		
Bronzed Cowbird ( <i>Molothrus aeneus</i> )	R	X		X		
Giant Cowbird ( <i>Scaphidura oryzivora</i> )	R	X		X		
Black-cowled Oriole ( <i>Icterus dominicensis</i> )	R	X	X	X		
Orchard Oriole ( <i>Icterus spurius</i> )	M	X	X	X		
Hooded Oriole ( <i>Icterus cucullatus</i> )	R	X			X	S
Yellow-backed Oriole ( <i>Icterus chrysater</i> )	R	X	X	X		
Yellow-tailed Oriole ( <i>Icterus mesomelas</i> )	R	X	X	X		
Baltimore Oriole ( <i>Icterus galbula</i> )	M	X	X	X		
Yellow-billed Caciue ( <i>Amblycercus holosericeus</i> )	R	X	X	X		
Montezuma Oropendola ( <i>Psarocolius montezuma</i> )	R	X	X	X	X	S

---

# **CARIBBEAN GEOGRAPHY**

**SPECIAL ISSUE:  
Belize and the Wider Caribbean  
San Ignacio, Belize, 2002**

**PART 1  
Selection of papers from 4th International Belize Conference**

**Editors  
Michael J. Day and David Barker**

---

**Volume 13 Number 1  
March 2003**