Noteworthy bird records from southern Yucatán state, México

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El estado de Yucatán, a pesar de ser un destino turístico por sus tesoros arqueológicos y su biodiversidad, no ha recibido mucha atención por parte de ornitólogos. La información es escasa en particular para el sur del estado. En este estudio reportamos algunos registros interesantes que contribuyen al conocimiento sobre la distribución de aves en la península de Yucatán. Nuestros registros representan ampliaciones de rango de 50 km y evidencia de la presencia de ocho especies residentes y dos migratorias intratropicales en bosque seco mediano. Dos especies migratorias nearcticas fueron observadas fuera de sus rutas migratorias y/o hábitats invernales. Ponemos en duda los límites de muchas especies trazados en guías de aves que coinciden con el límite entre selva mediana subcaducifolia y selva baja subperennifolia.

The Yucatán Peninsula of Mexico harbours a diverse avian assemblage with species of both Neotropical and Nearctic origins. Despite the diversity of bird species on the peninsula, many areas are still under-studied. Most ornithological work has focused on the semi-humid forests of the Caribbean coast, the Celestún and Ría Lagartos Biosphere Reserves in the north, and the environs of the large archaeological attractions[12] (Chichén Itzá, Uxmal and Calakmul). Except for a few accounts[1,2,4,11,16], the interior of the state of Yucatán has received very little attention. Here we report noteworthy records from the Kaxil Kiuic Biocultural Reserve in the south of the state. Many of these represent range extensions from previously published accounts[7,8].

Methods

All of the observations reported here were made at Kaxil Kiuic Biocultural Reserve (KKBR), a 1,800-ha private reserve (centred on 20°01.48'N 89°00.42'W) in southern Yucatán state (Fig. 1). Habitat comprises tropical semi-deciduous medium-sized dry forest[3,13] in the Yucatán Dry Forest ecoregion[14] embedded within a complex matrix of forest of different successional stages, pastures and *milpas* (small-scale agricultural plots to grow corn in conjunction with other crops, usually established through slash-and-burn practices)[6]. The reserve is c.50 km from the more humid medium-sized near-evergreen forests[3,13] of the Yucatán Moist Forests ecoregion[14]. Most of the reserve is covered by old secondary forest (at least 60 years old) and, to a lesser degree, young successional vegetation. All habitats are >10 years old. The reserve is located within the Puuc Hills, an area of karstic kegel hills alternating with flat-bottomed valleys. Of the 151 bird species observed at KKBR by 2008[15], nine are endemic to the Yucatán zoogeographic subregion[17].

All observations were made during morning walks along the trails in the reserve, with mist-net captures in different habitats, and using trail-cameras during the years 2008–10 and 2012. Field work commenced at 05h45 and typically lasted until 10h00. In addition, observations were also made from an observation tower 5 m above the canopy on a kegel hill. Mist-nests were opened for various purposes (teaching, surveys and a study of bird energetics) for a total of 450 net-hours. In addition, six trail cameras were set up for a total of 120 camera-days.

Species accounts

For all species except Neotropical–Nearctic migrants, our observations represent range extensions of c.50 km. In contrast to published distribution maps, their northern limits on the Yucatán Peninsula do not appear to coincide with the limits between the Yucatán Dry Forest and Yucatán Moist Forest ecoregions. It remains to be determined if published species limits on the peninsula reflect incorrect assumptions by authors in delimiting ranges, observer bias due to unequal sampling, or effects of deforestation in the state of Yucatán.

Great Currasow *Crax rubra*

Shortly after dawn on 20 July 2012, we heard two individuals vocalising 50 m from the observation tower near the Learning and Research Center (LRC) in the centre of the reserve. The vocalisations were identical to published ones from the region. This Vulnerable[9] species is rare and its presence in the study area was previously suspected, but not confirmed. Great Currasow is also known from a few coastal areas north-west and north-east of KKBR.

Figure 1. Location of Kaxil Kiuic Biocultural Reserve in relation to the major ecoregions of the Yucatán Peninsula (*sensu* Olsen *et al.*[14]); Yucatán moist forest, Yucatán dry forest, Mesoamerican Gulf-Caribbean Mangroves.

Ornate Hawk-Eagle *Spizaetus ornatus*
The first record of an adult at KKBR was made by trail cameras established on a ridge and adjacent to a water-filled depression in the limestone. From six series each of three pictures taken on 15 and 17 July 2008, it is apparent that the bird drank and bathed in the water, following nearly three weeks of drought-like conditions. The next observation was made on 10 November 2010 in the low-lying areas of the reserve near Kiuic archaeological site. MPT observed the hawk at c.07h00 after hearing distress calls from two large birds (Ocellated Turkey *Meleagris ocellata* or Great Currasow). On approaching, they flew off noisily and the hawk-eagle flew from the vegetation at the same point. It landed on a branch c.5 m above ground and 7 m from MPT. The hawk-eagle remained in the area for c.20 minutes, changing perch once. Throughout this time, Brown Jays *Psilorhinus morio* continuously mobbed it. Unconfirmed sightings of a juvenile Ornate Hawk-Eagle (E. Uc pers. comm.) suggest the species might breed in or near the reserve.

Tawny-winged Woodcreeper *Dendrocincla anabatina*
Recorded in or near KKBR by Leyequién-Abarca *et al.*[10] during point counts, but without details. We captured one in mist-nets on 9 July 2009 at 06h40. A heavily vascularised and swollen brood-patch and a small cloaca suggest it was a breeding female. The only moult detected was in the tail, and was asymmetric, affecting left r1 and r3, and right r4 and r5. Muscle condition was fair, and no fat was detected.

Northern Barred Woodcreeper *Dendrocolaptes sanctithomae*
Nearly all records are auditory. An uncommon species, it was heard on several occasions during June and August in 2009 and 2010. One was observed by MPT at the LRC on 17 May 2013.

Stub-tailed Spadebill *Platyrinchus cancrominus*
Also recorded by Leyequién-Abarca *et al.*[10], one was trapped on 9 July 2009. A well-developed, but not vascularised, brood-patch suggests that it was a breeding female. Brood-patch, small deposits of fat in the furcula, fair muscle condition, no moult, and mostly fresh remiges suggest the species was only just commencing to breed. The inner primaries and secondaries were fresh, becoming successively more worn towards the outer flight feathers. Tail moderately worn throughout.

Royal Flycatcher *Onychorhynchus coronatus*
A male and female were first recorded by us in the western part of KKBR on 24 July 2008. Habitat consisted of low secondary forest (c.6 m tall). Both sexes fanned their crown feathers.

MPT subsequently observed a pair for 30 minutes, building two nests above the main road to Kiuic archaeological site on 17 May 2010. The female occasionally approached the unfinished nests with mosses or other plant materials, but usually she drew attention to herself by flying in front of MPT and perching within 3 m, then emitting *cleek* sounds accompanied by wing-flicks. The male did not approach the nests. MPT heard another *cleek* vocalisation on 16 May 2013, suggesting the species is present on a seasonal or annual basis.

Streaked Flycatcher *Myiodynastes maculatus*
We recorded one on 25 June 2009 for c.2 minutes in tall, old second growth. On 9 July 2012 we observed two for 15 minutes perched low in semi-open understory at the LRC. They occasionally vocalised, but spent most time perching quietly. The head clearly lacked the strongly contrasting black and white malar and submalar, respectively, of Sulphur-bellied Flycatcher *M. luteiventris*. In addition, they had a whitish, nearly unstreaked throat, washed-out, not sharply contrasting streaks on flanks and belly, and pale yellow supercilium and submoustachial stripes.

Golden-cheeked Warbler *Setophaga chrysoparia*
A suspected first-year female was recorded by MPT on 10 November 2010, at 07h00, in the canopy of hilltop forest. It formed part of a mixed-species flock that included a Yellow-bellied Flycatcher *Empidonax flaviventris*, White-eyed Vireo *Vireo griseus*, Yellow-throated Vireo *V. flavifrons*, Blue-winged Warbler *Vermivora cyanoptera*, juvenile Black-throated Green Warbler *Setophaga virens*, Northern Parula *S. americana*, a female American Redstart *S. ruticilla*, Black-and-white Warbler *Mniotilta varia* and a male Rose-throated Tanager *Piranga roseogularis*. First-year female Golden-cheeked Warblers strongly resemble first-year female Black-throated Green Warblers, with the main differences in the face, back and flanks. The observed bird shared with Golden-cheeked Warbler a black or nearly black ocular stripe (yellowish olive in Black-throated Green Warbler), all-yellow ear-coverts (an olive-brown patch was absent, but is present in *S. virens*, while the ear-coverts lacked the dark outline of some first-year female Golden-cheeked Warblers[5]), dark olive back (paler with a yellowish tint in Black-throated Green Warbler) and had some black on the upper flanks (scant or absent in first-year Black-throated Green Warbler)[5]. Excellent viewing conditions from the tower, with a Black-throated Green Warbler in the same binocular view at a distance of 5 m, permitted MPT to clearly note these subtle differences. Golden-cheeked Warbler winters in the central mountains of Chiapas, Mexico, and the Central American Cordillera of Guatemala and Honduras, so its possible presence on the Yucatán Peninsula would be very unusual.

Canada Warbler *Cardellina canadensis*
MPT observed an immature foraging in the canopy of low secondary forest (< 5 m) for c.1 minute on 11 November 2010. It had a noticeable eye-ring, yellow lores, faint brownish streaking on the breast, and lacked wingbars. The species winters in north-west South America, but migrates through Mexico via the western Gulf coast and further south in Tabasco and Chiapas. Probably, the bird was diverted by a strong cold front that swept through the Yucatán Peninsula five days previously, bringing near zero temperatures to the region, at the tail-end of the species' migration[7]. Paynter[16] reported a specimen taken at sea 30 km north of Santa Clara, Yucatán, in August 1949, demonstrating that the species very infrequently reaches this region during autumn migration.

Grey-headed Tanager *Eucometis penicillata*
One was observed by MPT near the main entrance of the reserve, in the understorey of older secondary forest, c.10 m tall, on 19 May 2010. The species' distinctive coloration does not resemble any other species in the area. Paynter[16] collected a specimen on 1 May 1949 in tropical semi-deciduous medium-sized dry forest near Xocempich, Yucatán, and considered the species to be characteristic of dry areas. However, it occurs more frequently in more humid forests of the peninsula, and is apparently rare and seasonal at KKBR (cf. Leyequién-Abarca *et al*.[10]).

Red-legged Honeycreeper *Cyanerpes cyaneus*
On 22 June 2009, at 08h16, we observed three males and two females from the observation tower. Two hours later, two males and two females were seen again from the tower. Subsequently, MPT observed at least two males and one female at the LRC on several occasions between 14 May 2013 and 18 May 2013 drinking water from a grinding stone.

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