Occurrence of four Neotropical migrants on Cozumel Island, Mexico
Joelle Buffa and Clyde Morris

Introduction
Many ornithologists visit Cozumel Island but the avifauna of this Caribbean island, in the Mexican state of Quintana Roo, is poorly known. During a four-day visit, from 29 April to 2 May 1995, we observed four species: Ruby-throated Hummingbird Archilochus colubris, Mourning Warbler Oporornis philadelphia, Dickcissel Spiza americana and Bobolink Dolichonyx oryzivorus either poorly documented or unrecorded previously. All are Neotropical migrants, breeding in North America and wintering in Mexico, Central America, or South America. We conclude that these sightings, documented by written descriptions, indicate transient status for these four species on the island.

Field observations
Ruby-throated Hummingbird Archilochus colubris
On 29 April 1995, we observed a female in Chankanaab Lagoon Park botanical garden. It was feeding at bright-red, long-stamened flowers at the top of an 8 m-tall tree. A Cozumel [Fork-tailed] Emerald Chlorostilbon forficatus and a Green-breasted Mango Anthracothorax prevostii were feeding in the same tree, providing a useful size comparison. The Ruby-throated Hummingbird was approximately the same size as the emerald and one-third smaller than the mango. The following description was made in the field: breast white; mantle green, but more yellowish or golden-green compared to the emerald; whitish spot behind the eye; bill dark in colour and medium size in comparison to the size of the bird. The tail did not appear forked when the bird was hovering, and was similar in colour to the mantle. The tail shape, colour of the upperparts and a spot, rather than a stripe, behind the eye eliminates a female emerald. The bill appeared shorter than that of Black-chinned Hummingbird Archilochus alexandri, with which we have had extensive experience identifying in flight and in the hand (we have banded hummingbirds since 1992 in the western USA). Female and immature male Ruby-throated and Black-chinned Hummingbirds are almost indistinguishable in the field. Immature males would not be expected at the time of our observation. The brownish grey crown of the female Black-chinned, as opposed to the greenish crown of the Ruby-throated, is one field mark separating the two species. The green upperparts we observed, together with the range, eliminates Black-chinned. Black-chinned Hummingbird winters in northern interior of Mexico and along the Pacific Slope. Its winter range does not extend south of the state of Guerrero, which is considerably north and west of the Yucatán Peninsula and Cozumel Island.

Mourning Warbler Oporornis philadelphia
On 2 May 1995, we observed two females at a sewage treatment plant, north of San Miguel, on the road to Punta Norte. The sewage treatment plant grounds contained a wet marshy area, ponds, grassy areas and ornamental shrubbery. The birds were watched between 07h45 and 08h00 as they fed low in the Acacia trees and dense shrubbery, hopping from branch to branch near and above a somewhat stagnant pond. The following description was made in the field: head greyish to chest; chest and belly below the greyish 'hood' yellowish with a sharp de-
Occurrence of four Neotropical migrants on Cozumel Island, Mexico

marcation between the yellow and grey; slight whitish colour on throat; back greenish; legs a subdued 'bubblegum' pink colour. One bird had a faint, narrow whitish eye-ring broken in front of the eye, whereas the other had no visible eye-ring. We did not note wingbars on either bird. They were obviously warblers by their body shape, slender bills, and active foraging behaviour. MacGillivray's Warbler (Oporornis tolmiei) was eliminated because the birds lacked the bold white eye-crescents, broken both in front and behind the eye. The throat of female MacGillivray's is usually more greyish. We are familiar with the identification and ageing of MacGillivray's Warblers, having banded many adults and immatures in the Sierra Nevada, California. We have had previous experience of Mourning Warbler in winter in Costa Rica and on migration in Canada.

Dickcissel Spiza americana
On 30 April 1995, we observed a flock of six Dickcissels along the Cross-Island Highway (Carretera Transversal), c.8 km east of the ferry dock and centre of San Miguel. They flew in and landed on top of the c.10 m-tall trees along the roadside. The following description was made in the field: sparrow-sized; back brown with streaking; head brownish with two very distinct whitish stripes starting at beak and forming a line below and above (to behind) the eye; chest with distinctive black bib (on some individuals), beginning below a white chin and forming an oval, ending mid-chest; pale yellowish colour around the bib, gradually fading to whitish. Some individuals lacked a distinct black bib, but were washed yellowish on the chest. The birds were similar in size to House Sparrow Passer domesticus; however, House Sparrow lacks the distinct, pale-coloured supercilium and malar stripes, and yellowish around the bib, all of which we observed.

Bobolink Dolichonyx oryzivorus
On 2 May 1995, we observed two males at the sewage treatment plant, north of San Miguel, on the road to Punta Norte. They fed on the ground in a large, moist grassy area, occasionally perching atop low bushes. The following description was made in the field: blackish overall (although one had pale edgings to the breast feathers giving it a speckled appearance); white rump and scapulars; buff nape very visible and pronounced; short, thick seed-eating bill. There are no similar species to cause confusion.

Conclusions
The observations of Ruby-throated Hummingbird, Dickcissel, and Bobolink are not unexpected on Cozumel Island. According to the AOU checklist, the winter range of Ruby-throated Hummingbird includes southern Sinaloa, Guanajuato, San Luis Potosí, Nuevo León, and southern Texas south through Middle America (including Cozumel and Holbox islands) to central Costa Rica. It occurs on Isla Contoy, c.90 km north of Cozumel Island. Howell & Webb considered it hypothetical on Cozumel Island due to a lack of documented sightings or specimens, and described the species as an uncommon to fairly common winter visitor, and a common to fairly common transient on mainland Yucatán. Furthermore, they list it as a transient on Isla Holbox, another Caribbean island off the northern tip of the Yucatán Peninsula. We conclude that Ruby-throated Hummingbird is a transient on Cozumel Island. Its status in winter is unknown, but we suspect it is very rare, notwithstanding the AOU range description. One would expect a regular winter visitor to have been previously reported.

While not mentioned explicitly by either AOU or Howell & Webb, Cozumel Island lies on the migration path of both Dickcissel and Bobolink. Dickcissel migrates regularly through the southeast USA and Bahaman Islands south along both slopes of Middle America, and casually through Jamaica, Puerto Rico, and islands in the western Caribbean Sea. On the Yucatán Peninsula, Dickcissel is an uncommon to fairly common transient (April–May; mid-August–October). Similarly, Bobolink migrates through the southeast USA, West Indies, islands in the Caribbean Sea, the Caribbean lowlands of Costa Rica and Panama, and the northern coast of South America. It is an uncommon to fairly common, but irregular, spring transient (mid April–early June) in northern Yucatán and the Honduras Bay islands.

Dickcissel and Bobolink were previously considered hypothetical on Cozumel Island as their occurrence was based solely on specimens collected by Gaumer in the late nineteenth and early twentieth centuries. Gaumer's specimens have been considered unreliable because he was inconsistent in labeling specimens, many apparently bear erroneous locational data. Our sightings confirm that the two species are spring transients on Cozumel Island.

The record of two Mourning Warblers on Cozumel Island is unexpected and represents an extralimital occurrence. According to published range descriptions, the migratory path of Mourning Warbler includes the Atlantic slope of Mexico, Chiapas, and northern Middle America. It is primarily a circum-Gulf, rather than a trans-Gulf migrant (S. N. G. Howell & S. Webb pers. comm.) and rare in the Yucatán Peninsula. Mourning Warbler is considered a more frequent migrant in the highlands, occurring rarely in the Caribbean lowlands in spring. S. N. G. Howell & S. Webb (pers. comm.), however, believe it is equally common in highlands and lowlands. It is a transient in Belize Cays, documented by one early May record. Previous
published accounts of birds on Cozumel Island have not mentioned the species, but S. N. G. Howell (pers. comm.) recorded an apparent second-year male on 13 May 1986.

Unlike the three previously discussed species, Mourning Warbler does not winter in Mexico, but from southern Nicaragua south through Costa Rica and Panama to Colombia, eastern Ecuador and southern Venezuela. Our sightings, together with Howell's unpublished record, support the conclusion that Mourning Warbler is a rare, but probably regular, spring transient, on Cozumel Island.

Despite Cozumel Island's accessibility and popularity with birders seeking the island's endemic species, many questions still exist concerning certain species' status. Howell & Webb (Appendix D: Birds of Gulf and Caribbean Islands) provide an excellent starting point for those interested in contributing to the ornithological knowledge of Cozumel and other Caribbean islands. This Appendix lists 34 species of hypothetical occurrence. Many are migrants which could be confirmed by field visits during the spring and autumn. The status of an additional 25 species is questionable in regard to their seasonal occurrence. Although possible, breeding for these species is unconfirmed.

**Acknowledgements**

We thank Dave Hodges and Jim Steele for reviewing and commenting on this article, and are particularly grateful to Steve N. G. Howell, Curtis A. Marantz, John C. Robinson and Sophie Webb for their substantial help in revising an earlier draft.

**References**


**Joelle Buffa and Clyde Morris**

U.S. Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex, P.O. Box 524, Newark, CA 94560, USA.