

FIRST RECORD OF GREAT-TAILED GRACKLE (*QUISCALUS MEXICANUS*) BREEDING IN THE WEST INDIES

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Abstract: The Great-tailed Grackle (*Quiscalus mexicanus*) has been recorded as a vagrant several times in the West Indies, including the Dominican Republic in December 2007. Here we provide evidence that the species bred in the country in 2011, based on two juveniles associating closely with two adults.

Key words: breeding, distribution, Dominican Republic, Great-tailed Grackle, Hispaniola, *Quiscalus mexicanus*

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Résumé : FIRST RECORD OF GREAT-TAILED GRACKLE (*QUISCALUS MEXICANUS*) BREEDING IN THE WEST INDIES. The Great-tailed Grackle (*Quiscalus mexicanus*) has been recorded as a vagrant several times in the West Indies, including the Dominican Republic in December 2007. Here we provide evidence that the species bred in the country in 2011, based on two juveniles associating closely with two adults.

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While new species of vagrant birds occur with some regularity in the West Indies (Raffaele *et al.* 1998, Latta *et al.* 2006), it is a much rarer event to add a new breeding species to a region's avifaunal list. Here we report on the presence of a family group, including juveniles, of the Great-tailed Grackle (*Quiscalus mexicanus*) in the Dominican Republic, and provide evidence that the juveniles were produced in the area. Although this species has been reported three times in the West Indies, previously reported individuals were considered vagrants, and there was no evidence of breeding.

The Great-tailed Grackle has expanded its range dramatically in the United States over the past 30 years (Dinsmore and Dinsmore 1993, Johnson and Peer 2001, Wehtje 2003), with vagrant individuals sighted as far north as Canada (American Ornithologists' Union 1998). In the West Indies this grackle has been reported on two occasions in Jamaica (Davis 2005, Vaughan *et al.* 2007), and was recently documented in the Dominican Republic in December 2007 (Mejía *et al.* 2009). The rapid expansion of the range of the Great-tailed Grackle is thought to be a result of human alteration of the environment, with the species responding especially

to the irrigation of arid areas, expansion of croplands, and increased urbanization (Johnson and Peer 2001).

During a wetlands bird census on 29 September 2011 at Los Charcos de Nigua in the Parque Ecológico de Nigua on the Caribbean coast of the province of San Cristóbal, Dominican Republic, Mejía and Paulino encountered multiple individuals of the Great-tailed Grackle. We were familiar with the species and its calls because we had previously discovered the same species at Las Calderas de Baní, Dominican Republic (Mejía *et al.* 2009), about 70 km west of Los Charcos de Nigua. In the earlier case, the single bird was identified as a Great-tailed Grackle, and not the similar-sized Boat-tailed Grackle (*Quiscalus major*), based on a combination of characters which were reviewed in Mejía *et al.* (2009). At Los Charcos de Nigua a group of four birds was encountered, consisting of an adult male, an adult female, and two juveniles. Of critical importance were the juveniles; they were identified as such by plumage characteristics and by behavior. These two birds were brownish on the back, but below, on the breast and flanks, they were a lighter buffy brown that was streaked with darker brown



Fig. 1. One of two juvenile Great-tailed Grackles (*Quiscalus mexicanus*) observed in a family group near Los Charcos de Nigua in the Parque Ecológico de Nigua, San Cristóbal province, Dominican Republic, on 29 September 2011. Photo by Danilo A. Mejía.

(Fig. 1). In several places black patches were also evident. These two birds were determined to be juveniles beginning their first molt (Selander 1958, Johnson and Peer 2001).

In addition to characteristics of the plumage indicating that these were adults accompanied by juveniles, the distinct behaviors of the adult-plumaged birds and juveniles strongly suggested that these were parents interacting with juveniles. The adult birds repeatedly issued sharp alarm calls, similar to the *chut* and *clack* notes reported by Johnson and Peer (2001). Frequently the female was seen perched near the top of a tree and gave alarm calls while the juveniles remained in the lower branches of the tree. Although we did not witness the adults feeding the juveniles, the juveniles never strayed from following the adults; they always followed the calling adult birds. During 4 hr of observation the juveniles always followed the adults when they called; we never observed the adults and juveniles separated.

Finally, we suggest that these birds were likely born and raised in the wetlands at Los Charcos de Nigua. This is supported by two observations: (1) although there is little information available on migratory movements of the Great-tailed Grackle, these birds are thought to molt out of the juvenal plumage before they migrate (Alvaro Jaramillo pers.

comm.); and (2) we found no evidence that Great-tailed Grackles migrate or even disperse in family groups (Johnson and Peer 2001). In contrast, as in many blackbirds, wintering flocks are often sex-specific (A. Jaramillo pers. observ.). This suggests that family groups break up between the post-fledging period and the migratory and overwintering period. Clearly then, the family group observed at Los Charcos de Nigua likely originated in the area.

The addition of a breeding bird species to a nation's or region's avifaunal community is always potentially significant, but may be of even greater significance in the case of a rapidly expanding species like the Great-tailed Grackle, should it become established. The grackle has benefitted from anthropogenic change in habitats and has expanded its range dramatically in the past 30 yr (Johnson and Peer 2001, Wehtje 2003). In some areas the Great-tailed Grackle is considered a pest species, damaging a wide range of crops from corn and sorghum to oranges and grapefruit (Johnson and Peer 2001). This species has also been implicated in the decline of White-winged Dove (*Zenaida asiatica*) populations through depredation of eggs and nestlings (Johnson and Peer 2001). While it is unknown whether an established population of Great-tailed Grackles would compete with the resident Greater Antillean Grackle (*Quiscalus niger*), the Great-tailed Grackle has been observed to compete with Red-winged Blackbirds (*Agelaius phoeniceus*) and Boat-tailed Grackles (Johnson and Peer 2001). In addition, because this is a highly social species, large flocks and communal roosts are expected, and this may cause its own localized problems. Given the density of human populations on Hispaniola and throughout much of the Caribbean, we predict that there are many opportunities for this human commensal species to continue to expand its range and to become established as a breeding resident in the West Indies.

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