DISTRIBUTION OF THE CICADAS (HOMOPTERA: CICADIDAE)
OF THE BAHAMAS

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While identifying material in the Florida State Collection of Arthropods (FCSA), I found specimens of cicadas that represent new distribution records for the cicadas that inhabit the Bahamas.

The Bahamas are an archipelago of approximately 700 islands and islets and 2400 cays north of the Greater Antilles (Cohen 1998). These islands were almost completely inundated around seventy thousand years ago during the last interglacial thaw after the Sangamon Ice Age (Cranton & Saunders 1992). Thus, the terrestrial fauna and flora are of relatively recent origin.

The first cicada to be described from the Bahamas was Diceroprocta bonhotei (Distant 1901). It has been attributed to New Providence and Andros Islands (Davis 1928). Specimens in the FCSA were collected in Nassau, New Providence, Bahamas which substantiates the distribution previously reported (Davis 1928). In addition, one specimen from the FCSA was collected on Eleuthera which extends the distribution of D. bonhotei approximately 80 km east-northeast of New Providence Island. I have also identified a single specimen of D. bonhotei in the K. C. Emerson Entomology Museum at Oklahoma State University from Norman’s Cay which is one of the northern Exuma Cays approximately 75 km southeast of Nassau. These new records extend the known distribution of D. bonhotei to the eastern and central cays of the northern island group.

The distribution of D. bonhotei is restricted to the Bahamas. Diceroprocta bonhotei is morphologically related to D. cleavesi Davis (1930) and D. caymanensis Davis (1939a) from the Cayman Islands, D. biconica (Walker) (Davis 1932; Davis 1935) and its variety from the Florida Keys, Cuba, the Isle of Pines, and Mexico (Metcalf 1963), and D. bicosta (Walker) (Davis 1928) reported from Cuba and Central America (Metcalf 1963). The morphological similarities suggest a common ancestry for the Diceroprocta species of the West Indies.

A second cicada species found in the Bahamas, Ollanta caicosensis Davis, was originally described from South Caicos Island (type location), Acklin’s Island, East Caicos Island, West Caicos Island, and Great Inagua Island (Davis 1939b). All but Acklin’s Island are part of the Turks and Caicos Island group which forms the southeastern end of the Bahama Island chain. I have identified specimens in the FSCA that extend the known range of O. caicosensis in the Commonwealth of the Bahamas. The newly identified specimens were collected on Mayaguana and Long Island. The Mayaguana specimens fill the gap in the distribution for the Turks and Caicos group to Acklin’s Island. The Long Island specimen extends the known range of O. caicosensis some 170 km northwest of Acklin’s Island across the Crooked Island Passage. This places O. caicosensis on islands of the Bahamas Platform proper.

The genus Ollanta has a broad, discontinuous distribution. Ollanta species are found in the Bahamas (Davis 1939b), Central America (Metcalf 1963), and Hispaniola (Ramos 1983). The ancestor of O. caicosensis may have migrated from the west onto the large island that would become the Bahamas during the last glacial period. Bahamian organisms that do not migrate easily show more affinities to the fauna of Cuba and Hispaniola than to that of the mainland United States (Cranton & Saunders 1992). This would support the hypothesis of an eastward migration of the ancestors of O. caicosensis across Cuba or a northward migration from Hispaniola.

The two Bahamian cicada species differ in size. Diceroprocta bonhotei is a relatively large species (body length 29-35 mm, wing span 89-110 mm) that inhabits the northwestern islands Ollanta caicosensis is a much smaller species (body length 18-22 mm, wing span 52-65 mm) that inhabits the southeastern half of the Bahamas and the Turks and Caicos.

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SUMMARY

This paper reports on the distribution of the two cicada species of the Bahamas, Diceroprocta bonhotei inhabits the islands of the northwest while Ollanta caicosensis is found on the central and southeastern islands into the Turks and Caicos. New distribution records are given for both species.

REFERENCES CITED


