PROBABLE BREEDING OF HORNED LARKS IN SOUTHWESTERN GEORGIA AND NORTH FLORIDA

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Horned Larks (Eremophila alpestris) expanded their pre-European settlement breeding distribution eastward from the prairies of the Midwest to New England and the east coast of the mid-Atlantic states from 1800 to 1946. Lark breeding distribution expansion apparently followed creation of artificial "barrens" as a result of deforestation and burning, agricultural practices, and urbanization (Hurley and Franks 1976). The first record of Horned Larks in Georgia occurred on 20 January 1893 in DeKalb County (Cooke 1908), which could indicate that the species was spreading to the Southeast, yet Mark Catesby observed larks in South Carolina as early as 1731 (Sprunt and Chamberlain 1949), suggesting that they were rare visitors before extensive European settlement. The first breeding record of larks in Georgia occurred in Floyd County at Russell Field (now the Richard B. Russell Airport) in April 1950 (Griffin 1951). J.F. Denton (in Burleigh 1958) confirmed larks nesting in Augusta, Georgia, in spring 1953. Chandler et al. (1997) observed newly fledged young in Bulloch County, Georgia. They suspected that additional nesting records of the species in Georgia's Lower Coastal Plain would be confirmed with more intensive field work. Parrish (2009) reported that he had observed larks during the breeding season for more than 2 decades at a turf farm in Bulloch County. In a systematic survey of turf farms in a 7-county area from 1-14 June 2009, he found singing larks at 4 different sites in Bulloch and Evans counties. R. West (*in* Sewell 1995) observed a singing bird in Decatur County on June 15 1995. Georgia Breeding Bird Atlas observers recorded Horned Larks in 36 survey blocks throughout the state, including 16 blocks in 7 counties in the Upper Coastal Plain (Wigh 2010). Larks were considered to be possible breeders in Decatur County based on observations at 2 locations.

Near dawn on the morning of 2 May 2011, we (WWB, OD, and RTE) visited the Decatur County Industrial Air Park (DCIAP; 30°59'N, 84°38'W), 11 km northwest of Bainbridge in Decatur County, Georgia. While searching for Grasshopper Sparrows (Ammodramus savannarum) known from there in the 1990s, we discovered several Horned Larks. On subsequent visits, 18 and 26 May and 2 June, with additional observers including RLC, we saw approximately 9 to 12 Horned Larks engaged in aerial displays and singing from the ground, similar to behaviors described by Beason and Franks (1974) and Beason (1995). One lark engaged in a continuous aerial display with singing and wing fluttering that lasted over 30 minutes, although it was impossible to be sure that it was singing the entire time, because this individual ascended to a height at which it would have been difficult to follow without the aid of binoculars. The larks were spread out over a distance of 1.3 km along abandoned runways and adjacent grassy/weedy fields. Although the runways were paved, the asphalt was crumbling. One or more larks used a pile of broken concrete (3-4 m in height) as a song perch.

On another day, RTE observed 2 individuals that appeared to be a pair on a territory. One of these individuals, presumably the male, flew 150-200 m from where it was initially observed singing on the ground to confront and chase another lark in what seemed to be a territorial encounter. After several minutes of foraging, it flew back to the area where it was first observed and joined a second individual assumed to be the female. The putative male then gave an aerial display, and the likely female flew into an area that was part of the active runway. Although we did not find any nests, observe an adult feeding young, or detect juvenile birds in the vicinity, the amount of singing and courtship displays indicated a strong possibility of breeding.

The DCIAP was built in 1942 as a U.S. Army flight training field. In 2009-2010 it served an average of 37 mostly commercial aircraft operations per day on 2 active runways (*fide* AirNav 2012). Management of the 360-ha fields is primarily with annual dormant season (usually December or January) prescribed fire. In 2011 fire was applied in February, and some grassy patches around air traffic equipment and weather instruments were not burned. Vegetation is

predominately bahia grass (*Paspalum notatum*) with small scattered patches of shrubs.

DCIAP has been the site of several sightings of unusual birds. In 1995 falconer Brian Millsap, while flying one of his hawks, discovered a Burrowing Owl (*Athene cunicularia*) that was apparently using a Gopher Tortoise (*Gopherus polyphemus*) burrow. Two owls were observed in March and again on 3 June 1995 (Sewell 1995). Subsequently, a population of Grasshopper Sparrows was discovered. During our visits to DCIAP in 2011, we were certain of at least 12 Grasshopper Sparrows

On 26 May, we (RTE, WWB, and OD) visited the privately-owned G.W. Long Farm (30°54′11″N, 84°30′38″W) on the east side of Bainbridge, Georgia, also in Decatur County. The Long Farm is approximately 60 ha of corn, potatoes, and a variety of other "u-pick" truck crops. While we were at the site, other observers (Caleb Atkins and Branch, Josiah, and Anders Austinson) heard Horned Larks overhead at 2 locations within the farm, although we did not observe them at this time. These observers reported seeing and hearing larks numerous times in the weeks prior to our visit.

On 1 June, RLC heard at least 2 horned larks and watched one from Ponder Road (30°55'12"N, 83°52'11"W) northeast of Thomasville, Georgia (Thomas County), as it displayed over a large (c. 80 ha) field of young (10-15 cm) cotton after failing to find them that morning at the nearby Thomasville Airport. Crawford surveyed this site because he had observed 2 larks there once on 13 January 2008. Engstrom and RLC heard larks at the site on 6 June, and RLC found a single lark there again on 12 June, 2 on 19 June, 1 on 26 June, 2 on 3 July, and 1 on 10 July. On all morning visits the larks were singing during aerial displays. On the afternoon of 26 June, RLC observed an adult Horned Lark through binoculars at 20 m and saw 2 larks flying and calling together.

In Florida, the Horned Lark has been described as a "very rare winter visitor inland" and less rare along the east coast, although a bird was reported by W. Shannon at Fort Walton on 2 June 1948 (Stevenson and Anderson 1994). David Simpson (pers. comm.) reported observing 4 Horned Larks north of Marianna, in Jackson County, Florida (30°58'03"N, 85°03'40"W) on 30 May 2009. On 10 June 2011, WWB and RTE found 2 larks in a young cotton field at the location described by Simpson. The larks were on the ground within 20 m of each other, and one of them made a 16-min courtship display.

In summary, we found Horned Larks at 4 widely separated locations at approximately the same latitude in southwestern Georgia and north Florida in May, June, and July 2011. The Thomas County, Georgia, site is about 114

km east of the Jackson County, Florida, site. As with many other locations in the eastern United States, grasslands associated with air fields seem to provide good habitat for this prairie species (Vickery et al. 1994, Kershner and Bollinger 1996), but we also found larks in cotton fields and at a truck crop farm. Others have reported larks on sod farms (Chandler et al. 1997, Parrish 2009) and in a soy bean field (T. Schneider, pers. comm.). This breadth of habitat use in south Georgia and north Florida indicates that Horned Larks could be very widely distributed, yet relatively unreported as breeding birds to date. Apart from their dawn aerial displays, in agricultural fields especially, we often found them difficult to detect.

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