THE GEOGRAPHICAL DISTRIBUTION OF *CALLOSAMIA SECURIFERA* (SATURNIIDAE)

RICHARD PEIGLER
303 Shannon Drive, Greenville, South Carolina 29607

This study began with a desire to obtain specimens of the Sweetbay Silk Moth, *Callosamia securifera* (Maassen), of the southeastern United States, but scant information was available to aid in collecting the species. It was surprising to learn all the misconceptions that have centered around this distinctive moth, even among experienced lepidopterists. Ferguson (1972) has cleared up problems of the incorrect type locality given by Maassen, the synonymy of the name *carolina* Jones (Jones, 1908), and the fact the species is distinct from *C. angulifera* (Walker).

I obtained information on the distribution of this species in several ways. In the spring of 1971 I placed a research request notice in the *News of the Lepidopterists' Society* asking for locality data and gave both names for the species. J. P. Donahue, Los Angeles County Museum of Natural History, wrote giving data of their only specimen: Pensacola, Florida. (That museum now has more specimens.) Dr. L. N. Brown, University of South Florida, gave Plant City, Hillsborough Co.; Highlands Hammock State Park, Highlands Co. (ca. 10 mi. S Lake Placid); Bunnell Exit of Interstate 95, Flagler Co., and a location 10 mi. E Bartow, Polk Co., all in Florida. I have seen Dr. Brown's collection and the determinations are correct.

A second method of obtaining localities was through the literature, but most authors gave only type localities. Maassen & Weymer (1873) gave Central America as the type locality, but Draudt (1929) and Ferguson (1972) rejected this as incorrect. Jones (1908) redescribed the species as *angulifera* var. *carolina* from Berkeley Co., South Carolina. Brimley (1938) notes *angulifera* larvae taken on sweetbay (*Magnolia virginiana* L. = *glauca*) in North Carolina, but as *securifera* larvae are similar and *angulifera* refuses to accept sweetbay (pers. obs.), I assumed this to be ample evidence that *securifera* occurs in North Carolina.

Additional records were given by Packard (1914), who figured a female from Winter Park, Orange Co., Florida, and Kimball (1965), who gave the following Florida localities: Quincy, Gadsden Co.; Warrington, Escambia Co.; Monticello, Jefferson Co.; Gainesville; Tampa; Fruitville, Sarasota Co.; Parker's Island and Archbold Biological Station

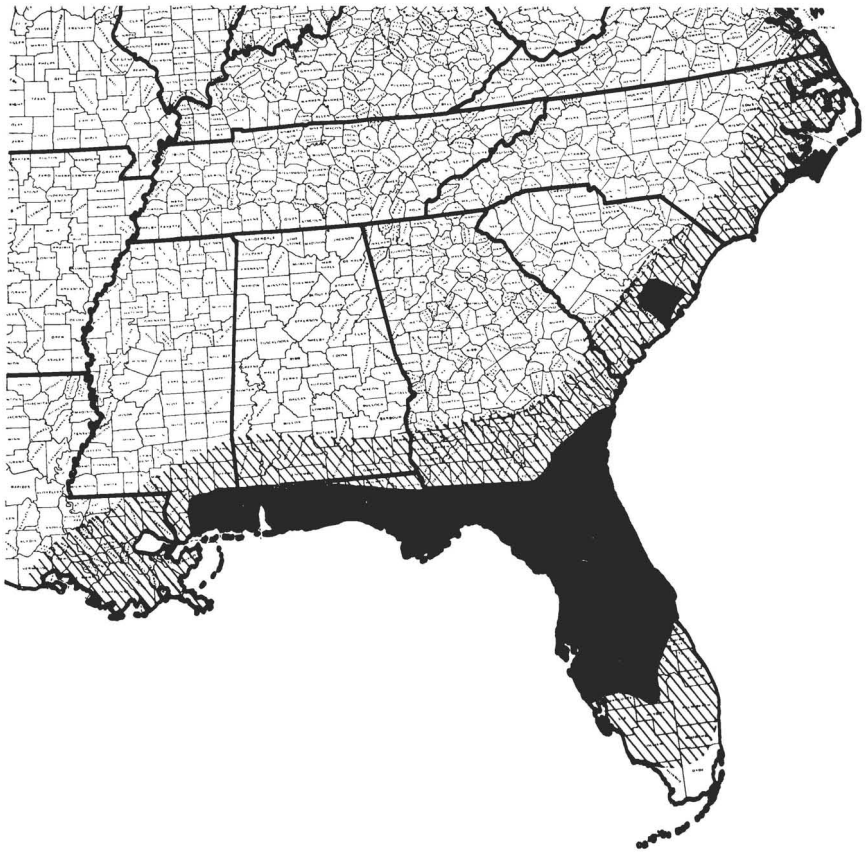

Fig. 1. The documented (black area) and hypothetical (lined area) geographical distribution of *Callosamia securifera*.

near Childs in Highlands Co. The latter two places are within a few miles of Highlands Hammock State Park. Ferguson (1972) gave several additional localities: Oneco, Manatee Co., Florida; Charleston Co., South Carolina; Mobile, Alabama; and Harrison and Stone counties, Mississippi.

I saw a female from Ocean City, Okaloosa Co., Florida (Dale E. Pforr collection) and Dale Schweitzer saw and verified a female in the collection of J. B. Sullivan from Carteret Co., North Carolina, so a valid record for that state now exists. Wm. H. Howe has a female from Loxley, Baldwin Co., Alabama. I was kindly supplied with a Georgia record by John W. Cadbury of Browns Mills, New Jersey who saw and collected *securifera* in the Okefenokee Swamp in 1937 and 1940.

The last way to elucidate the range of the Sweetbay Silk Moth was to collect it myself. I searched in Florida, Georgia, South Carolina, and North Carolina with success in all but the last named state. I collected cocoons in Gainesville, Florida in the vicinity of 39th Street two different years. In Long Co., Georgia I found a cocoon beside Highway 82 between Ludowici and Allenhurst. In Columbus and Brunswick counties, North Carolina much suitable habitat abounds but I did not find even an empty cocoon. However, the species should be present as it is now known from Carteret Co. north of there. In South Carolina I searched many coastal and inland counties but only found the species on the boundary of Charleston and Berkeley counties, near the Wedge Plantation, and beside Highways 6 and 311 several miles west of Moncks Corner, the latter being the most inland specific record for the state.

Fig. 1 represents a summary of the known records described above and a hypothetical geographical distribution of *securifera* based on published maps of the range of sweetbay (Brockman, 1968; Collingwood & Brush, 1955) and the knowledge of the distribution of many better known elements of the Floridian flora and fauna northward and westward on the coastal plain. It is extremely doubtful if *securifera* ever utilizes any other host besides sweetbay, but if it does take other *Magnolia* species such as *ashei* Weatherby or *pyramidata* Bartr., this would not suggest a wider range because the ranges of these trees fall within that of sweetbay (Brockman, 1968). Sweetbay ranges down the coastal plain from Massachusetts and across to Texas, up from the Gulf Coast into Arkansas and southwestern Tennessee, but only in the eastern halves of the Carolinas, commonly only near the coast. There is no valid reason to assume *securifera* does or could exist everywhere its host tree does.[1]

There are so many different types of habitats between points where the moth is recorded that it is also a mistake to assume the species occurs throughout the intervening areas. For examples, the marshland around Savannah, Georgia has scarcely any sweetbay and central Florida has so many dry oak forests that populations of *securifera* and sweetbay are often in isolated wet areas totally surrounded by miles of unsuitable habitat.

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[1] Note added in proof: On 22 March 1975 I collected cocoons of *securifera* along Highway 211, Brunswick Co., N. C., the southernmost county of that state.

Carner of Clemson University taught me principles of scientific research and writing, and my parents were especially helpful regarding collecting trips.

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THE TYPE LOCALITY OF *SATURNIA WALTERORUM* (SATURNIIDAE)

The type locality of *Calosaturnia meridionalis* (name changed to *Saturnia walterorum* by Hogue & Johnson 1958, J. Lepid. Soc. 12: 17) was fixed by Johnson (1940, Bull. Brooklyn Entomol. Soc. 35: 100–102) as Santiago Canyon, Santa Ana Mountains, Orange County, California. Santiago Canyon, however, extends for approximately 10 miles, from an altitude of 4600 ft. near Santiago Peak down to an altitude of approximately 1000 ft. Since the canyon has different plant associations at different elevations, and since *walterorum* is not known to occur through the entire length of the canyon, it seems desirable to fix the type locality and habitat more precisely.

I am indebted to Erich Walter (Anaheim, California), for information on the precise locality where he captured the type specimen. The type was captured on 15 March 1925 at an elevation of 1600 ± 20 ft. along Santiago Creek, in the Cleveland National Forest, at the junction of the first wash branching north (east of Modjeska Canyon). On the Santiago Peak, California, 7.5 Minute Geological Survey Quadrangle Map, 1954 edition, the coordinates are ^{4}44300 meters east, ^{37}29300 meters north (T5S, R7W, SW corner NE ¼ SW ¼ Section 27).

This information supplements a recent article on the distribution and larval foodplants of this rare moth (Tuskes 1974, J. Lepid. Soc. 12: 17).

LARRY J. ORSAK, *Center for Pathobiology, University of California, Irvine, California* 92664.