

and *Psalmatophanes*, a recently described Madeiran endemic genus. The discovery of *Hubbellia* in Florida, in an environment characterized by such plants as *Magnolia*, *Taxus*, etc., suggests strongly that it may be considered as a Tertiary relic.

Supplementary Notes on *Hubbellia marginifera* (Walker)

BY T. H. HUBBELL

The female described as *Hubbellia praestans* Hebard was taken on the night of July 29, 1925, at "Camp Torreya," Liberty County, Florida. I have since repeatedly visited that locality at all seasons of the year, in the unsuccessful attempt to find additional specimens, and especially the unknown male. During the last few years lumbering operations have greatly altered the environment, and the upper slopes of the ravine have been devastated to such an extent that on my last visit, in November, 1938, I had difficulty in finding the spot where the insect was collected. Instead of the tall forest over-arching the road along the brink of the ravine, there is now in most places a thicket of tree-seedlings and brambles growing up from among felled logs. The deeper parts of the ravine were apparently less damaged. Fortunately a similar ravine just to the north of the one at "Camp Torreya" has been included in the recently established Torreya State Park, and it is hoped that this will be maintained in natural condition.

The reduced condition of the plantulae of the caudal metatarsi to which Dr. Uvarov has called attention above, together with observations on the behavior of the female taken in 1925, make it highly probable that *Hubbellia marginifera* is normally thamnophilous, or even arboreal (cf. Uvarov, l. c., 1924, p. 492). If the latter be true it would help to account for my failure to find additional specimens in spite of most careful and prolonged search, by day and night, during which I was on the alert for any strange song which might have been made by the males.

Although the unique female was taken on the lip of the ravine, and adjacent to a grassy, pine-studded field, I believe that the species inhabits the ravine forest rather than the dry, oak- and pine-covered sandy uplands of the neighborhood. Dr. Uvarov's conclusion that *Hubbellia* probably represents a Tertiary relic makes this the more likely, and is itself strengthened by the fact that these ravines, in addition to coastal plain species and glacial relics, harbor other endemic species of plants and animals known or believed to be of great antiquity. The best

known of these relic forms is the small conifer, *Tumion taxifolium* (Arr.) Greene, which forms much of the undergrowth of the ravine forests. This species is known only from the ravines along the east bank of the Apalachicola river and from a single locality a short distance west of the river. It belongs to a genus which was widespread in the upper Cretaceous and early Tertiary, but which is today represented only by four widely disjunct species—one in Florida, the others in California, Japan and China. Besides *Hubbellia*, two other Orthoptera endemic to the ravine forests of the Apalachicola region are believed to be relic species. One is a grouse-locust, *Tettigidea empedonepia* Hubbell 1938, a wingless form apparently most closely allied to Central American species. The other is a cricket-locust or camel-cricket, *Ceuthophilus umbrosus* Hubbell 1936, which shows many generalized features, and cannot be assigned to any of the more modern groups of the conservative and presumably ancient genus *Ceuthophilus*.

The fact that Vigors' specimen must have been collected prior to 1840, together with the comparative inaccessibility of the Apalachicola ravines in those days, suggests the possibility that it was taken elsewhere, and that *Hubbellia marginifera* may occur, or have once occurred, in other isolated relic colonies in the southeastern United States.

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## REPORT OF THE 1939 ANNUAL MEETING OF THE FLORIDA ENTOMOLOGICAL SOCIETY

The annual meeting of the Florida Entomological Society was held at Gainesville, Florida, on December 8 and 9, 1939. This was one of the best attended meetings of the Society, there being 67 names on the register of attendance. During the sessions 17 papers dealing with a wide range of entomological subjects were presented and discussed.

The entomological dinner was held Friday evening with President J. H. Montgomery acting as toastmaster. An enjoyable after-dinner feature was a motion picture made in Mexico by Professor J. R. Watson and daughter, Wilma Watson.

At the business session the Society adopted a new Constitution and By-laws by which it will be governed in the future. Herbert Spencer, U. S. D. A., Fort Pierce, Florida, was elected President for the coming year; Homer Hixson, University of Florida, Gainesville, Vice-President; A. N. Tissot, Agricultural