

Report on visit by Robert Anderson to the Florida State Collection of Arthropods

February 18-March 6, 2023

From February 18-March 6, 2023, I had the opportunity to visit the Florida State Collection of Arthropods in Gainesville, Florida. This visit was funded from the Center for Systematic Entomology using funds from the Stewart Peck endowment. My goals were to curate the existing identified Curculionidae collection looking for errors in identification or misplacements of taxa and (mainly) to identify as far as was possible, the many drawers of unidentified Curculionidae present in the collection. A rough initial count of drawers indicated some 80 drawers of exotic (mostly Neotropical [West Indies and Bolivia]), and 10 drawers each of USA and Florida specimens.

Following an overall examination of the collection, where I found but a very few misplacements (due to recent generic assignments) and corrected some identifications (mostly in the difficult North American Cleonini), I focused on sorting and identifying the unidentified specimens. I initially focused on the exotic specimens which had previously been geographically sorted, specifically those from the Neotropical region. Extensive numbers of specimens were from the collecting efforts of Robert Woodruff in the West Indies and Jim Wappes (and his field partners) in Bolivia. Over the next two weeks I was present daily at the collection from approximately 9AM-6PM sorting these specimens. All specimens in the existing 80 drawers were sorted to species (some), genus (most) or subfamily (some, but especially Baridinae and Cryptorhynchinae). These latter two subfamilies have numerous undescribed taxa and many difficulties in defined generic limits so were left at the subfamily level for the present. Specimens were all placed in unit trays with identification labels attached to the first specimen in the series. Specimens of one taxon were not consolidated so there are numerous places among the identified specimens where a specific taxon (a genus, for example) might be found. FSCA staff will carry out this consolidation. Many specimens of taxa not identified to species (including Baridinae and Cryptorhynchinae) can be identified to a lower taxonomic level during a subsequent visit. Similarly, the USA and Florida specimens could be sorted to species/genus on this next visit.

During the sorting some duplicate representatives of longer series were retained for deposition in the Canadian Museum of Nature and specimens encountered that were related to my research projects were borrowed on loan for study and incorporation into upcoming manuscripts. Specimen relevant to existing research projects of other curculionid experts were separated and indicated to staff for potential loans.

I do not have a count on the precise numbers of specimens examined and sorted but it was substantial. The FSCA has an exceptional and highly diverse collection of Curculionidae including numerous new taxa from the West Indies and Central and South America. Of particular note are the amazingly diverse collections of Jim Wappes (and his field partners) in Bolivia and to a lesser extent French Guyana. The overall collection is one of the most diverse and exceptionally well-curated collections of Curculionidae in the USA. The diversity of taxa, numbers of species and specimens, numbers of specimens from interesting localities and quality and completeness of label data make this one of the most important collections for this group of beetles in North America. The importance of this collection as a resource for accurate identification of potential exotic pest taxa cannot be understated. Staff at the FSCA should be very proud of their work with this collection to bring it to the current level of curation.

Next steps would be to return for an additional two weeks to fully sort (to species and genus) the remaining drawers of USA and Florida specimens. This time can also be used to more fully sort the Neotropical Baridinae and Cryptorhynchinae) as best as is possible given the taxonomic state of the group.

Submitted by Robert Anderson, April 1, 2023

