

SHORTER CONTRIBUTIONS

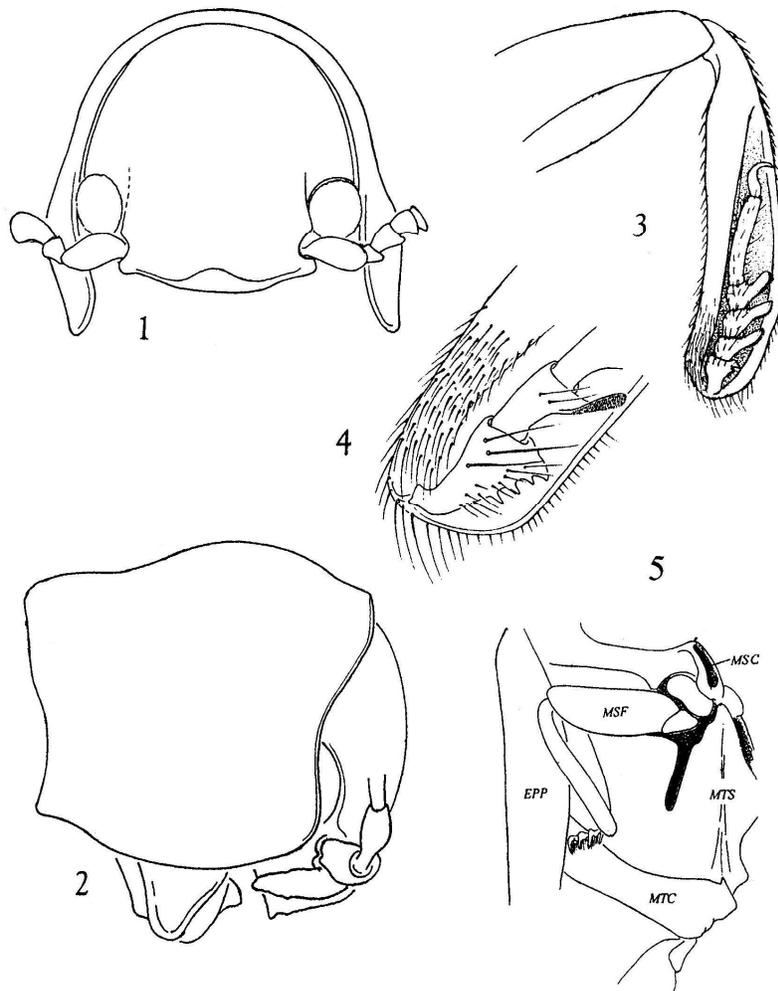
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VIRGINIA RECORD FOR A RARE FALSE CLICK BEETLE (COLEOPTERA: EUCNEMIDAE).—Despite its relatively large size, *Dendrocharis inexpectatus* is certainly one of the rarest North American eucnemids, having been described (Muona, 2000) from only three specimens: two taken in Florida and one in Texas. The capture of two specimens in southeastern Virginia

almost doubles the number of known specimens, in addition to extending the known range some 900 miles (1450 km) northeast from the Floridian sites. In putting this new information on record, I take the opportunity to provide some illustrations of important taxonomic characters and brief commentary on several features not treated in the original description.

Virginia: *City of Virginia Beach:* First Landing/Seashore State Park, 23 June - 6 July 2003, Robert Vigneault leg. (VMNH 2).



Dendrocharis inexpectatus Muona. Fig. 1. Front of head (mandibles not shown). Fig. 2. Head and prothorax, lateral aspect. Fig. 3. Protibia, posterior aspect, showing proportions of tarsomeres, their retraction into tibial convexity, and shape of ventral lamellae. Fig. 4. Distal end of protibia, enlarged, showing shape and armature of basal tarsomere. Fig. 5. Metasternal region, ventrolateral aspect of right side, showing appearance of tarsal grooves. The distal tarsomere of the second legs was missing and is not represented (abbreviations: EPP, epipleuron of right elytron; MSC, mesosternal cavity for reception of prosternal projection; MSF, mesofemur; MTC, metacoxa; MTS, metasternum). Figures 1, 2, and 5 drawn to the same scale, 3 - 4 enlarged.

With a robust, subcylindrical body up to 12 mm in length, *D. inexpectatus* ranks among the largest of Nearctic eucnemids. That it has been captured so seldom, and not at all in intensely sampled areas like eastern South Carolina (Kirk, 1969), suggests that either the species has very low population densities, occupies a niche not accessed by traditional collecting techniques, or has an extremely short period of adult activity. Maybe all three factors are operational in the case of this beetle.

Although eucnemids are considered by Muona (2000) to be “primitive polyphagan beetles”, they share with elaterids the thoracic modifications for projecting the body upward (“the click mechanism”) and various other character systems have become highly derived in some genera. *Dendrocharis* is strikingly distinctive from all other local genera of the family in several respects, most of which appear to suggest a cryptic, but not fossorial, life-style. The following features are noteworthy:

a. The eyes are small, and along with the broadly separated antennal sockets, set low on the front of the head (Fig. 1) with a deep round cavity centered in the interocular space.

b. The anterolateral region of the prothorax is distinctly lobed anteriorly, partly covering the eyes (Fig. 2).

c. The dorsolateral antennal groove is “closed” posteriorly, and remarkably deep, extending dorsad beneath the surface of the pronotum almost 1/3rd of the distance to the middorsal line.

d. The protibiae are broadened and deeply concave on the posterior face, forming a cavity into which the protarsomeres are hinged and held out of sight (Fig. 3); the profemora also are partially concave to accommodate the flexed tibiae, the two conjointly fitting into a deep groove on the posterolateral edge of prothorax.

e. The basal protarsomere is enlarged distally, with four distinct dentations along its ventral edge (Fig. 4), protarsomeres 2-4 are produced apically into narrow lamellae, finely pubescent on the ventral side.

f. The fifth metatarsomere is as long as the basal four combined, relatively much longer than in other genera.

g. The metasterna are unusually long and broad, each with a deep, narrow, sharp-edged groove (Fig. 5) which accommodates mesotarsi when the mesotibiae are reflexed into a shallow groove on the rear surface of the mesofemora.

Specimens of *Dendrocharis* cannot be identified in the key to genera in Muona’s revision (2000: 10), owing to the contrast in couplet 8 “Abdomen with tarsal grooves” (leading to *Dendrocharini*) versus

“Abdomen without tarsal grooves” (setting off genera in the tribes Eucnemini and Mesogenini). In actuality, there are no grooves on the abdominal sterna in *Dendrocharis*, specimens of which would therefore be carried on to an unresolvable limbo in one of the two tribes mentioned. Couplet 8 could be reworded to set off *Dendrocharis* by the presence of prominent deep grooves in the unusually large *metathoracic* sterna, not present in species of Eucnemini and Mesogenini. Changing the term “abdominal tarsal grooves” to “metathoracic sternal tarsal grooves” would correct the diagnostic statements for both tribe and genus on page 59.

ACKNOWLEDGEMENTS

I am very grateful to Dr. Jyrki Muona (Helsinki) for identifying the species and confirming the inadvertent statements in his revision about the presence of grooves on the abdominal sterna. That this beetle can be recorded for Virginia is due to the proficiency of Robert Vigneault (Oka, Ontario), *collecteur extraordinaire*.

LITERATURE CITED

Kirk, V. M. 1969. A list of beetles of South Carolina. Part 1 – Northern Coastal Plain. South Carolina Agricultural Experiment Station Bulletin 1033. 124 pp.

Muona, J. 2000. A revision of the Nearctic Eucnemidae. Acta Zoologica Fennica 212: 1-108, figs. 1-179.

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