

PECK, S. B., AND M. C. THOMAS. 1998. A Distributional Checklist of the Beetles (Coleoptera) of Florida. *Arthropods of Florida and Neighboring Land Areas* 16: i-viii, 1-180. From: Florida State Collection of Arthropods, P.O. Box 147100, Gainesville, FL 32614-7100, \$5.25 + \$1.74 for post and packing (\$2.32 abroad).

In this up-to-date checklist, the compilers state that they provide the scientific names of 4,675 species of Coleoptera and 11 of Strepsiptera now known or thought to occur in Florida. They note that the list is yet incomplete, and will grow as species names are added. The British fauna, for comparison, includes just under 4,000 species of Coleoptera and 15 of Strepsiptera in a larger land area (Pope 1975).

The arrangement of the checklist is phylogenetic (so far as is possible) between the levels of tribe and order, but alphabetical for names of genera within tribes and species within genera. There is an alphabetical index of names of genera at the end of the checklist. Following the listing of each family are given some references from the literature. After the name of each species is given its colloquial name, if one exists. Also is given for each species its general distribution within the USA (and in other major land areas where relevant), and its distribution by county within Florida (so far as was known to the compilers). For a few of the species are given some comments on the habitat and/or food of adults and/or larvae.

A note is made for those species known only from Florida, labelling them "endemic" (elsewhere called precinctive). Likewise, a note is made for those species believed to be adventive (the vogue expression for this word in the early 1990s in the USA was "non-indigenous"). The two subcategories of adventive are immigrant (meaning arrived by entirely natural means, or at least without deliberate help from humans, and thus an undocumented arrival), and introduced (meaning introduced deliberately by humans, and thus a documented arrival). One strepsipteran species was introduced to Florida in the 1950s, for purposes of biological control, but may already have been present. Few coleopteran species have been introduced successfully, but a couple of hundred are immigrant.

The value of this checklist is evident to anyone who works with the Florida insect fauna. I, for one, wish there were similar checklists for all other orders of insects in

Florida, and I congratulate the compilers for their effort. Because of frugal printing budgets, we are unlikely to see a revised, expanded version for decades (consider, after all, how many years this checklist has been awaited). Therefore, I would like to see this checklist published on the internet, which could be done for vastly less cost than the cost of printing and distribution on paper. Then, the compilers or their successors could make additions and corrections as needed, to keep the checklist current. If they take this step, they might consider five changes to it, as follows:

1. Each species name is followed by the name of its author, but without the date of description and without reference(s) to the literature. These things should be added for the convenience of users.

2. The compilers have not deemed it necessary to provide a reference to a specialist publication reporting each species from Florida. However, checklists may by error list species that do not occur in the area in question (in this instance, Florida), and such errors tend to be perpetuated in the literature because subsequent workers have difficulty in refuting the entry. An example is *Steirastoma brevis* Sulzer (p. 122) whose presence in Florida is questionable according to the compilers. Please tell us: who reported it for Florida and in what publication? With that information, we might be able to track specimens upon which the record is based, and then either confirm the record or refute it.

3. I am unenthusiastic about the inclusion of unnamed species such as *Eulimnichius* sp. (p. 68) and *Eurysphindus* n. sp. (p. 87). I think the appropriate time to include them is after they have been characterized in the literature, and notes about them should until then remain in the files of specialist taxonomists. Publication of species names in the primary literature brings with it a much higher level of certainty about the true identity, plus a description or reference to one, plus information on distribution and habitat.

4. I am unenthusiastic about listing species as probably occurring in Florida "based on their occurrence in neighboring states" (p. 1). I think it far better to defer such listings until the primary literature reports occurrences. This checklist denies incentive for anyone to bother to publish a report finding in Florida a species that is already mentioned here, no matter that there may previously have been no confirmed record.

5. I am unenthusiastic about listing subspecies on an equal ranking with names of species. For example, *Onthophagus polyphemi polyphemi* and *Onthophagus polyphemi sparsisetosus* are listed (p. 57) just as if they were species. I think it would have been more appropriate to list the species name *Onthophagus polyphemi* with its author and distribution and, under that heading, to list the two subspecies with their individual distributions. My major point is that studies of most Coleoptera in Florida are still at the species level, so that subspecies have not yet been discriminated. My minor point is that by listing the two subspecies separately, as if they were species, the compilers may have inflated the apparent number of species in Florida.

Items 2-5 above blur the edges of an accurate species list for Florida and make me aware that the number of species actually reported for Florida probably is less than 4,675. I have not counted. This checklist adds a huge amount of information to what was scattered in the literature. Unfortunately, it does not discriminate between what is new (was listed first here) and what was in the primary literature, nor does it specify where to look in the primary literature, making verification of records difficult.

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REFERENCES CITED

- POPE, R. D. (ed.) 1975. A check list of British insects. Second edition. Part 3: Coleoptera and Strepsiptera. Handbk. Ident. Br. Ins. (R. Entomol. Soc. Lond.) 11(3): i-xiv, 1-105.