

A NEW INTRODUCTION OF A EUROPEAN COCKROACH, *ECTOBIUS LAPPONICUS* (DICTYOPTERA: BLATELLIDAE)¹

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ABSTRACT: A new introduction of a European cockroach, *Ectobius lapponicus* is recorded from southeastern New Hampshire. Although not considered a house-infesting roach in Europe, this population was collected both inside and on the outside walls of a house in a rural setting near Sanbornville, New Hampshire. The time and mode of introduction could not be determined. A description of the adult is given, and the male abdominal glandular depression is illustrated.

During the course of legal action by a tenant, a small series of cockroaches from Sanbornville, New Hampshire, was delivered to me for identification. The specimens could not be identified using the manual of Helfer (1963). Fortunately, Dr. Frank W. Fisk was able to determine the material as *Ectobius (Ectobius) lapponicus* (L.), a European species never before recorded from North America. I confirmed this determination by use of the key and figures in Princis' (1965) work on the European Blattariae.

This species is widespread in Europe, and is known as the "Dusky Cockroach" (Cornwell 1968). It is not considered to be a pest, and is found on low vegetation or in leaf litter and decaying wood in several types of forests (Roth and Willis 1960: 46). In England the species requires two years to mature, with adults appearing in May or June and dying by September (Cornwell 1968: 91).

This species was of initial interest since the individuals collected were found inside a house, rather than in the forest. However, most of the specimens seen by the tenant were on the outside of the house near cracks or crevices in the siding and edges of the roofing, and were only seen from June to mid-July. A visit to the house on July 26, 1984, produced two females from piles of abandoned wood, and several specimens (one a female with an ootheca) found entangled in spider webs beneath and around the house.

The mode of introduction into New Hampshire is not known. The tenants have not visited Europe, and the cockroaches have been present the

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two years they have lived in the house. Several loads of old wood from southern Maine have been deposited at points around the house, and it is possible that the species has been introduced into New Hampshire from a Maine source. This population of *E. lapponicus* appears to prefer living on the outside of the house, but it of worth some note that a number of specimens were collected inside the house.

Ectobius lapponicus (L.)

Males 13-14 mm long, females 9.5-10 mm long. Pronotum with dark median circular blotch, with pale transparent margins widest laterally; tegmina brown to grey-brown, with numerous small brown flecks, tegmina fully developed in male, in female barely reaching abdominal apex; legs, abdomen and cerci dark brown. Males with large rounded-triangular impression in basal half of tergite VII, center of impression with pair of rounded close-set tubercles densely covered with golden setae (Fig. 1), only asymmetrical left stylus present.

This species is similar in appearance to another introduced cockroach in New York, *Ectobius sylvestris* (Poda) (Hoebeke and Nickle 1981). *E. lapponicus* is somewhat larger, 9.5-14 mm, and the male structures of tergite VII are quite different from those of *E. sylvestris* and the other introduced species of the genus, *E. pallidus* (Olivier). The male structure of the seventh tergite of these other introduced species consist of a large (*sylvestris*) or small (*pallidus*) circular to oval impression at the base of the tergite. In both cases the impression lacks any tubercles, while the triangular impression of *E. lapponicus* contains paired tubercles. The specimens of *E. lapponicus* collected in New Hampshire have 1-2 spines on the ventral margin of the profemora, while 3 spines are found on the profemora of the other two species of *Ectobius*.

Specimens examined, 20: New Hampshire: Carroll Co: 6 males, 2 females, 1 mi S Sanbornville, VII-3-1984, D. Ganjy; 4 males, 5 females, same data except, VII-26-1984; 3

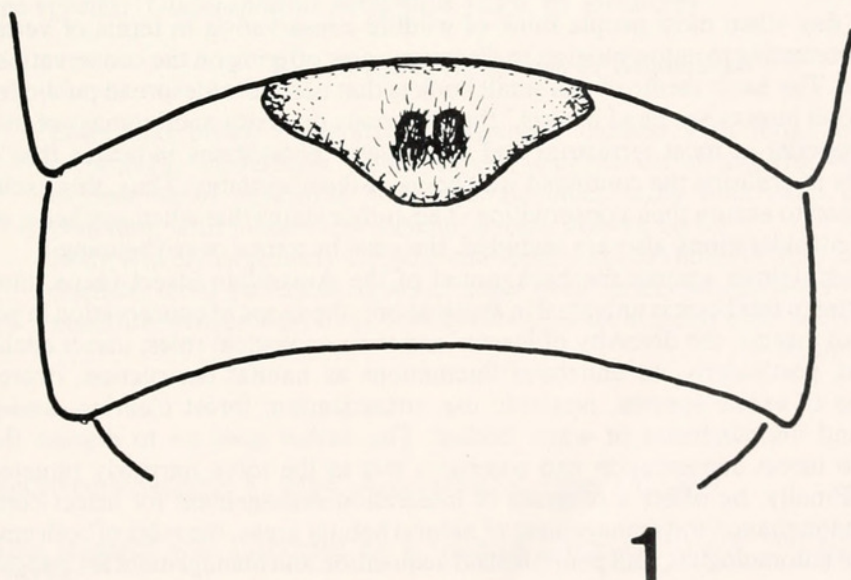


Fig. 1. *Ectobius lapponicus*, male, dorsal view seventh tergite.

females, same data except, J.S. Weaver and D.S. Chandler. Specimens are deposited in the insect collections of the U.S. National Museum, the Ohio State University, and the University of New Hampshire.

ACKNOWLEDGMENTS

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BOOK REVIEW

INSECT CONSERVATION - an Australian perspective. T.R. New. 1984. Dr. W. Junk pub. 184. pp.

In this day when most people think of wildlife conservation in terms of vertebrates, it should be interesting to entomologists to discover a new offering on the conservation of insect populations. The basic theme of this small book is that despite widespread public feeling that 'the only good insects are dead insects,' the enormous diversity and biomass of insects (and other arthropods) in most terrestrial and fresh water ecosystems indicates that they play central roles in ensuring the continued well being of those systems. Thus, this itself is a vital enough reason to ensure their conservation. The author states that when aesthetic, economic, and moral considerations also are included, the case becomes overwhelming.

Although written against the background of the Australian insect fauna, much of the subject matter in this book is universal in application: the scope of conservation in general and as applied to insects; the diversity of insects and their ecological roles; insect decline due to natural and, particularly, to unnatural fluctuations as habitat destruction, overcollecting, introduction of exotic species, pesticide use, urbanization, forest clearing, and pollution, draining, and impoundment of water bodies. The author goes on to discuss the habitat approach to insect conservation and compares this to the more narrowly targeted species approach. Finally, he offers a program of integration management for insect conservation including maintenance and management of natural habitat areas, the roles of both amateur and professional entomologists, and possible land acquisition and management for refuge reserves.

— H.P.B.



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