

## The beetle fauna of the state of Rhode Island, USA (Coleoptera): 656 new state records

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### Abstract

A summary and discussion of new state records from a recently assembled checklist of Coleoptera species known from the state of Rhode Island (270,660 hectares), USA, is presented. The checklist includes 2,208 species, is available on the World Wide Web, and will be published as a book by the Rhode Island Natural History Survey in 2003. The current status of the taxonomic and faunistic knowledge of southern New England Coleoptera is discussed. Six hundred and fifty six apparent **new state species records** for Rhode Island are presented, which constitute 30% of the total state beetle fauna. Three hundred and ninety of these records were collected during 1890–1930, and 266 additional new state records were added by collections made during 1995–2000. Two hundred and forty four of these new state records are not listed from any New England state in Downie and Arnett's *Beetles of Northeastern North America* (1996). The following 13 **new state family records** are herein reported from Rhode Island: Clambidae, Dryopidae, Heteroceridae, Artematopodidae, Phengodidae, Derodontidae, Nosodendridae, Endecatomiidae, Colydiidae, Synchronidae, Stenotrachelidae, Salpingidae, and Nemonychidae. The beetle fauna of Rhode Island is far less well known than would be generally expected, particularly in comparison to our knowledge of the subequally speciose flora, and the faunal composition may have changed markedly during the last century. No strong evidence is found for changes in the beetle fauna due to climate change. It is concluded that if our prior knowledge of the beetle fauna of Rhode Island is at all typical, then our inventory of North American biodiversity is far from complete.

**Key words:** Rhode Island, Beetle fauna, new state records, Coleoptera, macro-ecology, biodiversity, inventory, monitoring, faunal change, global warming

### INTRODUCTION

*"A prerequisite to making any decisions concerning the preservation of populations, species, or higher taxa is knowledge of their existence."* — George Barrowclough, Ornithology Curator of the AMNH