

NOVE KNJIGE / NEW BOOKS

Detlef Mader, 2010: **Moon-Related Population Dynamics and Ecology of the Stag Beetle *Lucanus cervus*, other Beetles, Butterflies, Dragonflies and other Insects.** Verlag Regionalkultur, Ubstadt-Weiher, ISBN 978-3-89735-645-0.

In 2010 the second book dedicated to the biology and conservation of the Stag Beetle (*Lucanus cervus*) was published by Detlef Mader in collaboration with Verlag Regionalkultur from Ubstadt-Weiher in Germany. The large volume of 654 pages comprises three different aspects of Stag Beetle population biology and conservation. The major part of the book is written in English, with abstracts given also in German and French. The content is divided into three distinct and according to the scope quite different chapters or papers, two of which are in English and one in German. The author discusses long-term population dynamic, phenological patterns related to the moon cycles and conservation issues in the Stag Beetle population. The geographical range covered within the book is quite local focusing on original data and data obtained from local nature observers in south-western Germany. However, with extensive overview of literature the author tried to incorporate larger range into discussion and conclusion part to get broader view of phenomena studied and described in the book. The book is an example of observational study comprising large set of observation and literature data. The author attempted to make conclusions by comparisons and by empirical searching of studied phenomena patterns in different data sets rather than by statistical or mathematical data analysis. Therefore some conclusions might be speculative, what was indicated also by the author. The first paper deals with long-term population dynamic of the Stag Beetle in the region around Heidelberg and Mannheim in which author collected continuous annual data for the period up to 75 years. Based on nature observers' estimates of annual abundance the author concluded that the Stag Beetle population in the region seems to be stable with no obvious signs of decrease. The second paper, the main and the most extensive paper in the book, is considering swarming or abrupt occurrence of the Stag Beetle related to the new moon and fool moon phases in the lunar cycle. In this part the author discussed abrupt occurrence patterns not just in the case of the Stag Beetle but taking into account also several other species of Coleoptera, Lepidoptera, Odonata, Ephemeroptera, Hymenoptera, Hemiptera, Collembola, Psocoptera, Diptera, and even non-insect species like Common Toad (*Bufo bufo*) and mushrooms. Many data presented in the book might indicate close relationship between abrupt or mass occurrence of considered species and lunar phases. The researchers would be easily able to extract raw data from the book and use them in further statistical analysis of swarming phenomena. The last paper is focused on conservation measures for the Stag Beetle. Here major threats are summarized (partly presented also in previous Mader's book) and some conservation guidelines are given. The book might be useful as a good data source and literature overview on the Stag Beetle to all specialist researchers focused on the problems of Stag Beetle biology and questions considering insect phenology. The book order is available at the author's e-mail address (dr.detlef.mader@web.de) or at publisher web-site: <http://www.verlag-regionalkultur.net/>.

Al Vrezec