

RUFFO, S., AND F. STOCH (eds.). 2006. Checklist and Distribution of the Italian Fauna. Memorie del Museo Civico di Storia Naturale di Verona. 2. Serie. Sezione Scienze della Vita 17, with CD-ROM. Hardback, 20.5 × 29.5 cm. ISSN 0392-0097 and ISBN 88-89230-09-6.

I confess that until Dec 2007 I did not know there is an online checklist of the Italian fauna at <http://checklist.faunaitalia.it> (and a less complete one for the European fauna at large at <http://www.faunaeur.org>). The revelation came when I opened a hardback volume of Memorie del Museo Civico di Storia Naturale di Verona having the appearance of a book (Ruffo & Stoch 2006), that had arrived in my mailbox. Europeans, led by Italians, are years ahead of North Americans in cataloging their fauna.

Italy, together with 180 other countries ratified the 1992 Rio de Janeiro Convention on Biodiversity. A target was set in 2002 at the World Conference for Sustainable Development in Johannesburg to reduce biodiversity loss by 2010. The objectives seemed to require each country to understand its own biodiversity and plan to conserve it. Italy, however, already had a start, being the first country to compile a checklist of its fauna, in the early 1990s. Its online checklist now includes more than 57,468 species. The checklist is linked to maps of the distribution of more than 10,000 terrestrial and freshwater species, selected as biodiversity indicators, and to more than half a million collection or observation records.

The checklist is, of course, maintained online where it may conveniently be updated as new discoveries are made. The volume (book) provides background to the production of the checklist and summaries of the knowledge of some taxa. The hexapod taxa for which summaries are provided are: Ephemeroptera; Odonata; Blattaria; Mantodea; Orthoptera; Dermaptera; Plecoptera; Heteroptera Nepomorpha and Gerromorpha; Heteroptera Leptopodidae, Saldidae, and Miridae in part; Tingidae; Homoptera Auchenorrhyncha in

part; Carabidae; Hydroadephaga; Hydrophiloidea; Hydraenidae; Georissidae; Histeridae; Cholevidae and Platypyllidae; Staphylinidae; Staphylinidae Pselaphinae, Staphylinidae Omaliinae; Staphylinidae Staphylininae; Staphylinidae Aleocharinae *Leptusa*; Lucanidae; Scarabaeoidea; Dryopoidea; Elateridae; Buprestidae; Nitidulidae; Cucujidae; Cryptophagidae; Tenebrionidae, Cerambycidae; Chrysomelidae Cryptocephalinae; Chrysomelidae Alticinae; Curculionoidea; Neuroptera, Megaloptera and Raphidioptera; Mecoptera; Diptera Tipulidae; Simuliidae; Stratiomyiidae; Syrphidae Syrphini; Conopidae; Sciomyzidae; Trichoptera; Hepialidae; Zygaenoidea; Papilionoidea; Noctuidae Plusiinae and Noctuinae; Chrysididae; Dryinidae, Embolemidae and Sclerogibbidae; Scolioidea excluding Tiphiidae; and Apoidea in part. If the taxon of interest to you is included here, the volume has 2-5 pages of summary about it for you. The pages attest to very few invasive species. The included CD has the complete text of the volume (book) and thousands of distributional maps revealed at a click on a species or genus name.

Italy has an area of 301,318 km² which is almost twice the size of Florida (170,304 km²) but less than the size of California (410,900 km²). As the authors point out, Italy is remarkably rich in species: it has 37,303 species of Hexapoda (insects in the traditional sense), whereas in Florida an estimate of 12,500 species (Frank & McCoy 1995) has not yet been challenged seriously. The three most species-rich families of insects in Italy are Staphylinidae with 2,205 species, Ichneumonidae with 1,880, and Curculionidae with 1,667 (Table 1).

For comparison, Staphylinidae (new sense*, see Table 1) have over 4,100 species in America north of Mexico, where they are likewise the larg-

TABLE 1. SPECIES RICHNESS AMONG THE ITALIAN FAUNA.

Taxon	No. of genera	No. of species
Total fauna		57,468
Vertebrata		1,255
Arthropoda		45,888
Hexapoda	9,591	37,303
Coleoptera	2,757	12,005
Staphylinidae	314	2,205
Curculionidae	370	1,667
Hymenoptera	1,580	7,509
Ichneumonidae		1,880
For comparison with the fauna of America north of Mexico, the following is appropriate:		
Staphylinidae*		2,561
Curculionoidea*		2,034

*As outlined by Newton et al. (2001) and by authors in Arnett et al. (2002), Staphylinidae including Micropeplinae, Dasycerinae, Scaphidiinae, and Pselaphinae; Curculionoidea including Bruchidae, Urodontidae, Anthribidae, Nemomychidae, Attelabidae, Brentidae, Apionidae, Brachyceridae, and Rhynchophoridae (= Dryophthoridae).

est beetle family (Newton et al. 2001) but they would have 2,561 species in Italy if the classification pioneered in North America were adopted. Italy is indeed rich in staphylinid species considering its relative size.

I do not know where you may buy a copy of this volume (book). The website of Museo Civico di Storia Naturale di Verona lacks a pricelist of its publications. Online, I found that many libraries had acquired it by exchange, so perhaps you may borrow it.

J. H. Frank
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