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Cassola F. & P. Maltzef Tenuta Presidenziale di Castelporziano. Ambiente, storia delle ricerche entomologiche, importanza e conservazione ...p.1

In order to provide a useful reference to the specialistic contributions which are included in this monographic issue of the "Bollettino", a brief introduction is given to the main natural habitats of the Tenuta Presidenziale di Castelporziano (Rome), for better clarifying its rich biodiversity and underline its outstanding naturalistic and conservational importance. Besides, a brief history of the entomological researches which have been carried out so far in the area is provided.

Zilli A., P. Maltzef, M. Pinzari & V. Ranieri I Lepidotteri della Tenuta Presidenziale di Castelporziano (Lepidoptera)...P.13

Following more than seven years of investigation on the Lepidoptera from "Tenuta Presidenziale di Castelporziano", an account of the species so far ascertained is given, together with brief commenting on the most interesting records. The faunal composition of the area has revealed greatly heterogeneous, due to the coexistence of species characteristic of sharply different habitats and from mixed biogeographical origin.

Letardi A. & P. Maltzef Neurotteridi e Mecotteri della Tenuta Presidenziale di Castelporziano e delle aree limitrofe (Neuroptera, Raphidioptera, Mecoptera)...p.49

A checklist of Mecoptera and Neuropterida of a coastal protected area near Rome is presented. The study area comprises three adjacent sectors (Castelporziano, Capocotta and Castelfusano). On the whole, the area is covered by a mosaic of Mediterranean evergreen scrub and deciduous lowland forest. It also includes a long tract of well conserved sand dunes and a system of fresh-water pools under the forest cover. Thirty-two and three species of, respectively, Neuropterida and Mecoptera (about 15% and 30% of the Italian fauna) were recorded through the inspection of public and private collections as well as from the study of specimens gathered during recent field investigations. *Rexa lordina* Navás, 1920 is mentioned for the first time in peninsular Italy. *Xanthostigma corsica* (Hagen, 1867), *Megalomus pyraloides* Rambur, 1842, and *Coniopteryx (Holoconiopteryx) haematica* McLachlan, 1868 are new for Latium.

Cerretti P. I Tachinidi della Tenuta Presidenziale di Castelporziano (Diptera, Tachinidae)...p.63

In this work are related the monitoring data of Tachinidae (Diptera, Tachinidae) in the site "Tenuta Presidenziale di Castelporziano" (Italy, Latium). In this research were used four Malaise traps, two light traps and hand nets. In about three years have been identified 112 species, most of them particularly interesting from faunistic point of view: *Exorista deligata*, *Chetoria stylata*, *Medina multispina*, *Acemya pyrrhocera*, *Peribaea discicornis*, *Therobia leonidei*; *Freraea gagatea*, *Leucistoma anthracinum* e *Cylindromya hermonensis* know only in one of two places in Italy. For every species are indicated the following data: the collected material in the "Tenuta", the general distribution, the Italian distribution; the fenology of adults; the hosts known by bibliographical data, except *Linnaemya frater* considered for the first time as *Amata phegea* larval parasite. Moreover every species was attributed to a fundamental chorotypes and was elaborated a brief zoogeographical analysis.

Vigna Taglianti A., P. Bonavita, A. Di Giulio, A. Todini & P. Maltzef I Carabidi della Tenuta Presidenziale di Castelporziano (Coleoptera, Carabidae)...p.115

The carabid fauna of the Castelporziano presidential estate (about 6000 ha) includes 175 species.

This figure, based on several years of field researches performed by different methods (including monthly pit-fall and light trappings), can be assumed as a reliable estimate of the actual carabid species richness of this area. This speciose fauna includes a great number of chorotypes, which can be easily grouped in some major categories. The most important component is represented by species widespread over the Palaearctic region (45%). Another relevant component is represented by species widely distributed in Europe (30%). These two categories typically includes mesophilic species, with substantially northern distributions. A third component includes the species widespread over the Mediterranean area (22%). Few species show Afro-Mediterranean distribution patterns (4%). The species of major faunistical and biogeographical interest are discussed, and for two species of the genus *Carabus*, i.e. *C. (Carabus) italicus rostagnoi* Luigioni, 1904 and *C. (Archicarabus) alysidotus* Illiger, 1798, some bionomical notes and some morphological aspects of their preimaginal stages are reported and illustrated for the first time. From an ecological point of view, the carabid beetles collected in Castelporziano can be grouped into the following main communities: (1) species linked to coastal habitats; (2) species linked to wooded areas; (3) species associated with wet areas. The community of coastal habitats are represented by a low number of species, which, however, are stenoeccious and very sensitive to human influence. The community inhabiting the wooded areas includes both mesophilic species (which probably colonized the study area during Pleistocene glacial phases) and thermophilic species (of southern origin). The community linked to wet areas is very rich in species. However, these species are strongly subjected to human activities (e. g. water withdrawal and agricultural modifications). To ensure the maintenance of these communities, the environmental management of the study area (even if under a protection law) should take in account special attention to the coastal and wet habitats.

Nardi G. & P. Maltzeff Gli Idrodefagi della Tenuta Presidenziale di Castelporziano (Coleoptera, Gyrinidae, Haliplidae, Noteridae, Hygrobiidae, Dytiscida)..p.175

The "Tenuta Presidenziale di Castelporziano", is a Natural Reserve located about 20 km South of Rome (Latium, central Italy). It covers an area of 6086 ha and is relatively unanthropized because it is strictly closed to the public. The reserve comprises two adjacent sectors: Castelporziano (4786 ha) and Capocotta (1300 ha). The latter was in the past not managed by conservation criteria and only recently has been included in the Reserve. This wetland area (altitude 0-85 m a.s.l.), is one of the rare residues of the original Mediterranean maquis along the Latium coast and is very rich of temporary and permanent ponds. The Hydradephaga beetles fauna of this reserve has been studied through identification of specimens from several collections and critical review of all data gained from literature. The total amount of species collected, during the period 1936-2001, is 63 (4 Gyrinidae, 9 Haliplidae, 1 Hygrobiidae, 1 Noteridae, and 48 Dytiscidae) that represents the 52,06% of Hydradephaga fauna of Latium Region and 27,75% of the Italian fauna. The large number of species is probably related to the good preservation of the area, the high number of aquatic habitats and its geographic position placed between the sea and the "Campagna Romana". The most unexpected collected species is *Dytiscus circumcinctus* new to Latium and on the south extreme of its distribution in peninsular Italy. Some other species are also of interest because rare and/or localised in Italy (*Copelatus atriceps* and *Hydroporus gridellii*), rare and/or localised in peninsular Italy (*H. angustatus* and *Colymbetes schildknechti*), known in Latium only from this site (*Dytiscus pisanus*), rare and/or localised in Latium (*Haliphus fulvus*, *Bidessus muelleri*, *Hydroporus ionicus*, and *Cybister tripunctatus africanus*), on the south-western (*Hydroporus angustatus*) or north-eastern (*Copelatus atriceps* and *Colymbetes schildknechti*) extreme of their distribution, on the south extreme of their Italian distribution (*Hygrotus decoratus* and *Graptodytes granularis*). In the faunistic list are moreover treated six species collected only in neighbouring areas of the Reserve. An old record of *Copelatus atriceps* for Campania is confirmed through the study of the original material; *Bidessus muelleri* is recorded from new sites of Tuscany, while *B. goudoti* and *Porhydrus genei* are excluded from the fauna of Latium. The records obtained using light, pitfall and bottle-traps are briefly discussed. The zoogeographical analysis shows that prevailing

chorotypes are Holarctic (53,9%) and Mediterranean (28,5%).

Audisio P. Nitidulidi e Cateretidi della Tenuta Presidenziale di Castelporziano (Coleoptera, Nitidulidae, Kateretidae)...p. 233

The Coleoptera Nitidulidae and Kateretidae (60 Nitidulidae, 5 Kateretidae) known to occur in the Castelporziano area (Rome) are listed and briefly discussed. Most of the species are widespread European and Asiatic-European elements, with a few rare and endangered Nitidulinae and Meligethinae associated to mesophilous oak forests and relict wetlands. Several species from littoral and sublittoral environments are Mediterranean and W-Mediterranean elements, widely distributed over most of the peninsular coastal areas of the western Italy.

Nardi G. Gli Anticidi della Tenuta Presidenziale di Castelporziano (Coleoptera, Anthicidae)...p.239

The "Tenuta Presidenziale di Castelporziano" is a natural reserve (6068 ha) covered by a mosaic of Mediterranean evergreen scrub and deciduous lowland forest. It also includes a long tract of well-conserved sand dunes and many temporary and permanent ponds. Fourteen species of Anthicidae are recorded from this Reserve. Most of species have been collected on sand dunes and using light traps. The records of *Anthicus cribripennis* Desbrochers, 1875 and *Stricticomus tobias* (Marseul, 1879) are briefly discussed.

Fattorini S. & P. Maltzef I Tenebrionidi della Tenuta Presidenziale di Castelporziano (Coleoptera, Tenebrionidae)...p.245

The tenebrionid beetle fauna of Castelporziano, a large protected area facing the Tyrrhenian Sea (Central Italy), is analysed in order to explore the main ecological and zoogeographical features of the tenebrionid communities living in different Tyrrhenian habitats. Taking into account all available data, a reasoned list of 38 recorded species is presented, with indication of their geographical distribution and ecology. Based on ecological preferences, four tenebrionid guilds were recognised: (1) alophilous species inhabiting the beach-dune system; (2) ground-dwelling species of maquis and open country habitats; (3) xylophilous species characteristic of thermophilic Mediterranean woods and pine woods; (4) xylophilous species of mesophilic woods. The high number of species and their arrangement in different guilds can be interpreted as a result of the occurrence of many different well preserved habitats. Within the study area, the following major habitat types were recognised: beach, dunes, low maquis, high maquis, wet areas, natural forests, managed forests, pine forests, steppes, and cultivated plots. High values of tenebrionid species richness were observed for the beach-dune system and for natural forest habitats. High richness associated to sandy dunes can be related to the fact that many tenebrionid groups are well adapted to desert habitats. The high number of species recorded in natural forests can be related to the heterogeneity and well preservation status of this habitat. Both dunes and natural forests harbour stenotopic species. Stenotopic species occurring on dunes are represented by tenebrionids strictly associated to sandy habitats, while those of forests are typically xylophilous beetles, sometimes associated with particular vegetation types. To study faunal relationships between habitats, a matrix for binary data (absence/presence) was compiled for the species occurring in each habitat. Similarity between habitats was calculated using the Jaccard index. In order to obtain groups of habitats with a certain degree of internal homogeneity, an average linkage cluster analysis (UPGMA) was used to cluster similarities. Three main clusters were observed: (1) beach and dunes; (2) maquis habitats, steppes and cultivated plots; (3) wet areas, natural, managed and pine forests. These results suggest the presence of at least three well defined tenebrionid communities: (1) psammophilous species associated to the beach-dune habitat; (2) species associated with open areas and shrub vegetation; (3) xylophilous species associated with various types of forests. Habitats were also classified on the basis of the percentage of stenotopic, oligotopic and eurytopic species occurring in each habitat. In this analysis the Morisita index was used as a similarity measure and

the UPGMA as the amalgamation rule. The beach-dune system was clearly separated from all other habitats due to its fauna composed of many stenotopic species. Wet areas and natural forests were grouped in the same cluster due to the high number of stenotopic and oligotopic species. This cluster was linked to the managed forests, which have a high number of oligotopic species. The zoogeographical analysis showed the presence of nine chorotypes. The prevailing chorotypes are the West Mediterranean and Mediterranean ones, showing a typically Mediterranean composition of the fauna. However, "northern" chorotypes are also recorded. A comparison of the chorological composition observed in each habitat revealed a high percentage of species with "Mediterranean" distributions (i. e. Mediterranean, W-Mediterranean and E-Mediterranean chorotypes) in the beach, dune, maquis, steppe and cultivated habitats. By contrast, "European" species (i. e. species belonging to the European and S-European chorotypes) showed high percentages in wet area, natural forests, and managed forests. Based on the frequency of chorotypes occurring in each habitat, habitats were classified using Morisita index and UPGMA. Three main cluster were obtained: (1): beach (with only Mediterranean species); (2) dunes, steppes, and maquis (with a high proportion of species belonging to Mediterranean chorotypes); (3) wet areas, natural, managed and pine forests, and cultured plots (with high proportion of European chorotypes). Generally speaking, the beach-dune system, steppes, and maquis, harbour thermophilic species, having an open country trend, while forest habitats harbours more mesophilic species. As a whole, the occurrence of many thermophilic species with "Mediterranean" chorotypes can be related to the Mediterranean feature of the area and to the hypothetical refugial role of the Tyrrhenian coasts during Pleistocene glaciations. The occurrence of some mesophilic species with "northern" chorotypes can be related to the presence, in the study area, of hygrophilic/mesophilic phytocoenoses and to the role of the glaciations in faunal movements. Finally, from a conservation point of view, the presence of many stenotopic species, most of which rare and with scattered distribution, as well as the high species richness, evidences that Castelporziano is a well preserved area.

Bologna M. Meloidi, Edemeridi, Mitteridi e Pirocroidi della Tenuta Presidenziale di Castelporziano (Coleoptera, Meloidae, Oedemeridae, Mycteridae, Pyrochroidae)...p.301

The checklist of the species belonging to four Tenebrionoidea families, collected in the Castelporziano Presidential Estate is carried out. Twenty one species of Meloidae, Oedemeridae, Mycteridae and Pyrochroidae, are reported and briefly commented from a biogeographical and ecological point of view. Other species recorded in some neighbouring localities are cited. The Meloidae species are typically related to open habitat, as well as the most part of the Oedemeridae and the Mycteridae. The presence of two species appear to be very significant: *Stenostoma rostratum* is an endangered edemerid species strictly associated to the dunal ecosystems, almost monophagous on a few Asteraceae and Apiaceae; its conservation depends on the reduction of the natural beach by human activities. A second species, *Cerocoma schreberi* (Meloidae), is also vulnerable because of the destruction of plain forest and associate pastures. .

Carpaneto G.M., P. Maltzeff, E. Piattella & L. Facchinelli Nuovi reperti di Coleotteri Lamellicorni della Tenuta Presidenziale di Castelporziano e delle aree limitrofe (Coleoptera, Lamellicornia)...p.311

During the years 1999-2001, new field investigations have been carried out on the lamellicorn beetles (Coleoptera Lamellicornia) inhabiting an important coastal protected area near Rome, including the Castelporziano Presidential Estate, the jointed Capocotta Estate and the Castelfusano Urban Park (7200 ha on the whole). An updating of a precedent inventory of lamellicorn beetles of this area, conducted by the same research group in 1998, is furnished together with an updated table on the occurrence of each species within the three sectors. On the whole, 107 species were recorded in the area and distributed as follows: Castelporziano: 103; Capocotta: 49; Castelfusano 34. Three species were quoted of the area for the first time: *Aphodius quadrimaculatus* (Linné, 1761), *Mimela junii* (Duftschmid, 1805), and *Anthypna carceli* Castelnau, 1832.

Casilini R. & E. Colonnelli I Curculionoidei della Tenuta Presidenziale di Castelporziano (Coleoptera, Curculionoidea)...p.331

A faunal list of Curculionoidea collected mainly during the years 1996-1999 in the Presidential Reserve of Castelporziano near Rome, Italy, is drawn up. The most remarkable of the 277 species found are briefly commented. Faunistical and ecological analyses revealed that most of the Curculionoidea are related with fields and pastures, thus indicating the deep influence of men on the weevils communities, although the greatest portion of the surveyed area is still covered by forests. This area is the only Italian collecting site for *Aulacobaris corinthia* outside Sicily. New records to Latium are: *Aulacobaris corynthia*, *Nanodiscus transversus*, and *Sitona ononidis*.

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