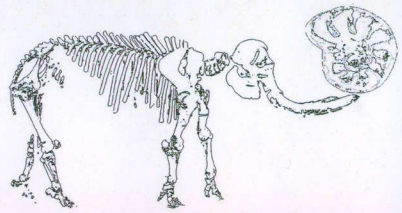
Proceedings stampati con il contributo dell'Università degli Studi Palermo
COAN CA.C.B.01.03.04

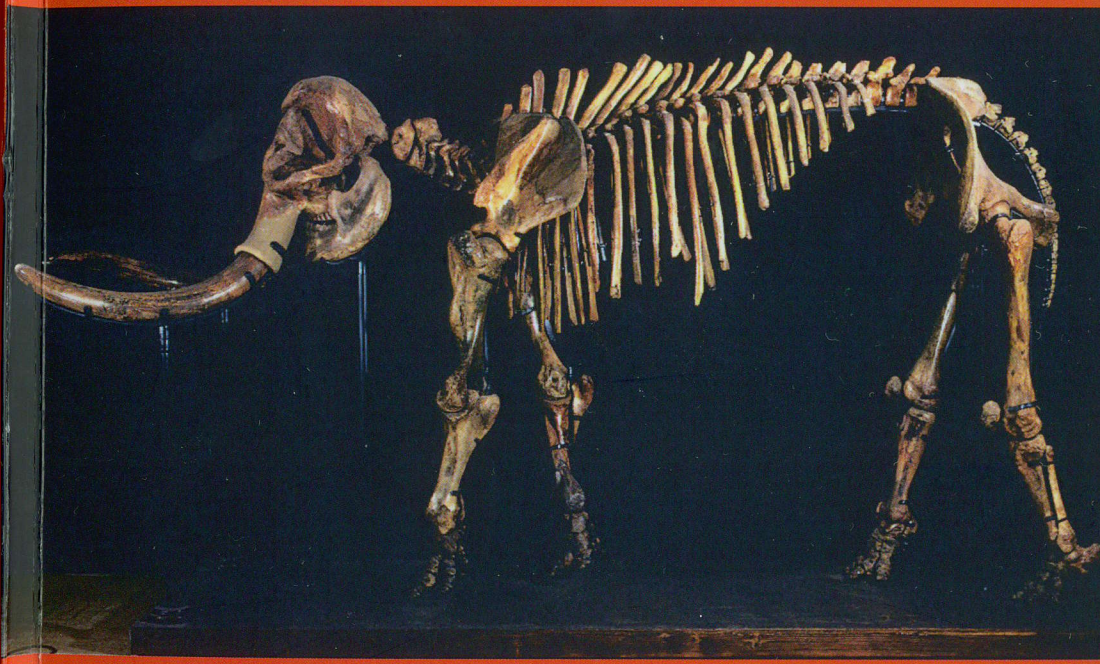


XV Edizione delle "Giornate di Paleontologia" - PALEODAYS2015

SOCIETA' PALEONTOLOGICA ITALIANA S.P.I.

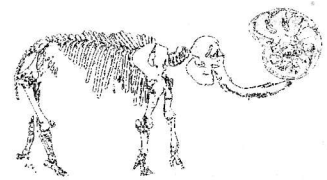


XV EDIZIONE DELLE "GIORNATE DI PALEONTOLOGIA"
PALEODAYS2015



Palermo, 27-29 Maggio 2015

Proceedings
a cura di Antonio Caruso & Claudia Cosentino



XV EDIZIONE DELLE

"GIORNATE DI PALEONTOLOGIA"

PALERMO, 27-29 MAGGIO 2015

PALEODAYS2015

PROCEEDINGS

A CURA DI ANTONIO CARUSO E CLAUDIA COSENTINO

UNIVERSITÀ DEGLI STUDI DI PALERMO

MUSEIUNIPA
Sistema Museale dell'Università degli Studi di Palermo

UNIVERSITÀ DEGLI STUDI DI PALERMO
DIPARTIMENTO DI SCIENZE DELLA TERRA E DEL MARE
VIA ARCHIRAFI 22, 90123 PALERMO

amphibius, *Microtus arvalis*, *Microtus agrestis* and northernmost occurrence of *Microtus* (*Terricola*) *savii* during the Late Pleistocene; 5 bats, *Rhinolophus* gr. *euryale-mehelyi*, *Rhinolophus ferrumequinum*, *Nyctalus noctula*, *Myotis* sp., and *Miniopterus schreibersii*;3 insectivores, *Erinaceus europaeus*, *Sorex* ex gr. *araneus* and *Talpa europaea*.

The change of percentages of *Apodemus* gr. *sylvaticus-flavicollis* and *Microtu sarvalis* through the sequence combined with the result of the Habitat Weighting method testify a modification in the environment surrounding the cave, from lower layers to upper layers (111 to 105) from woodland to open grassland characterized by forest patches.

Among bats, the strong dominance in layer 110 of *Nyctalus noctula* that usually lives in tree cavities has been interpreted as the presence in the cave of a colony of this species. Actually the occurrence of *Nyctalus noctula* is very interesting since is very interesting since in rarely found in the late Pleistocene European and Italian sites. Although no radiometric dating are available yet, the lithic industry, together with the characteristic of large and small mammal assemblages, allow us to probably correlate the Santi sequence to MIS 3.

The environmental and climatic changes observed in the small mammals of layers 105, 106, 107, 110 and 111 can be related to a transition from interstadial to stadial conditions during this isotopic stage.

The study of the assemblage from Grotta dei Santi provided new valuable insights into the small mammal communities of Late Pleistocene in Central Tyrrhenian regions, an area which is otherwise poorly known.

PALEOENVIRONMENTAL DATA FROM THE AMBER-BEARING LEVELS OF THE ROTZO FORMATION (PLIENSBACHIAN, LOWER JURASSIC), MONTI LESSINI (VERONA, ITALY)

Neri M.[1], Papazzoni C.A.[1], Kustatscher E.[1-2], Roghi G.[3]

[1]*Dipartimento di Scienze Chimiche e Geologiche, Università di Modena e Reggio Emilia, L.go S. Eufemia 19, 41121, Modena, Italy*

[2]*Museo di Scienze Naturali dell' Alto Adige, via Bottai, 1, 39100, Bolzano*

Department für Geo- und Umweltwissenschaften, Paläontologie und Geobiologie, Ludwig-Maximilians – Universität und Bayerische Staatssammlung für Paläontologie und Geologie, Richard-Wagner-Straße 10, 80333 München, Germany

[3]*Institute of Geosciences and Earth Resources (IGG-CNR), Via Gradenigo 6, 35131, Padova, Italy*

The Rotzo Formation is well known for its fossiliferous content, among others fossil plants, which have been collected and studied mostly in the XIX century. The discovery of fossil resin in the clay layers of the Rotzo Formation in the Bellori section (Lessini Mountains, Verona) attracted again the attention to this Lower Jurassic unit. The Rotzo Formation has been interpreted as deposited in shallow tropical lagoons, only a few metres deep. These lagoons were closed seawards by oolitic shoals and bars, and bordered landwards by marshes and emerged areas.

The palynomorph assemblages of the clayey levels bearing the amber shows a high abundance of *Classopollis* sp., produced by cheirolepidiacean conifers, a plant group supposedly associated to both dry and wet climates in coastal areas. The spores are more diversified, belonging to sphenophytes, horsetails, lycophytes, Selaginellales and ferns. The assemblage includes Zygnematacean and other freshwater algae. The abundance (more than 50%) of trilete spores (e.g., *Deltoidospora*) suggests a good freshwater availability corresponding to a wet climate. The closeness of a marshy environment is suggested by the presence of aquatic elements such as *Botryococcus* and *Pseudoschizaea*, a freshwater algal spore.

The abundant cuticle fragments yielded from the clayey levels are characterized by thick cuticle with a high number of slightly sunken stomata complexes, in both adaxial (upper cuticle) and abaxial (lower cuticle) surfaces. Thick cuticle with stomatal complex slightly sunken suggests that the climate was arid at least during some seasons, similar to modern monsoon areas. The good preservation of the cuticles and the other palynomorphs suggest little transport after shielding from the parent plants, and sedimentation taking in calm water, free from wave action and surface disturbance, as well as the sedimentation in low-oxygen conditions.

Inside the clay layers are sediments rich in fragments of corals, bryozoans, bivalves, echinoids, and foraminifera, suggesting a transport from the shallow marine environments where those animals lived to the brackish lagoons and marshes, probably occurred during storm events.

Sedimentological and palynological data permit to reconstruct a marshy and/or submerged paleoenvironment, in a rather wet monsoonal climate as in the modern southeastern Asia.

THE FORGOTTEN ICHTHYOSAUR: REVALUATION OF THE FIRST OPHTHALMOSAURID SPECIMEN FROM THE UPPER JURASSIC OF THE MARCHE APENNINES (CENTRAL ITALY)

Paparella I.[1], Roncacé S.[1], Cipriani A.[1], Maxwell E.E.[2], Caldwell M.W.[3]

[1]*Dipartimento di Scienze della Terra, Sapienza Università di Roma, Piazzale Aldo Moro 5, 00185, Roma*

[2]*Staatliches Museum für Naturkunde, Rosenstein 1, 70191 Stuttgart, Germany*

[3]*Department of Earth and Atmospheric Sciences, and Department of Biological Sciences, University of Alberta, Edmonton, Alberta T6G2E9, Canada*

With the exception of the Triassic material of Monte San Giorgio, which is quite abundant and well-preserved, the Italian fossil record about ichthyosaurs for the remainder of the Mesozoic is very poor, and usually consists of few disarticulated elements. Lower Cretaceous remains have been described from the Northern Apennines, south of Modena and Bologna; another rostrum belonging to *Platypterygius* sp. has been recently reported from the Lessini Mts., near Verona; and a few vertebrae are reported from the Triassic of Sicily.

In the summer of 1976, an ichthyosaur specimen was discovered in the locality of Camponocecchio, near Genga (Ancona, Marche, Italy) in an Upper Jurassic outcrop of the Marche Apennines. The specimen consists of a reasonably complete skeleton crushed on a slab, with a disarticulated skull, partially articulated vertebral column (from the atlas-axis to the tail