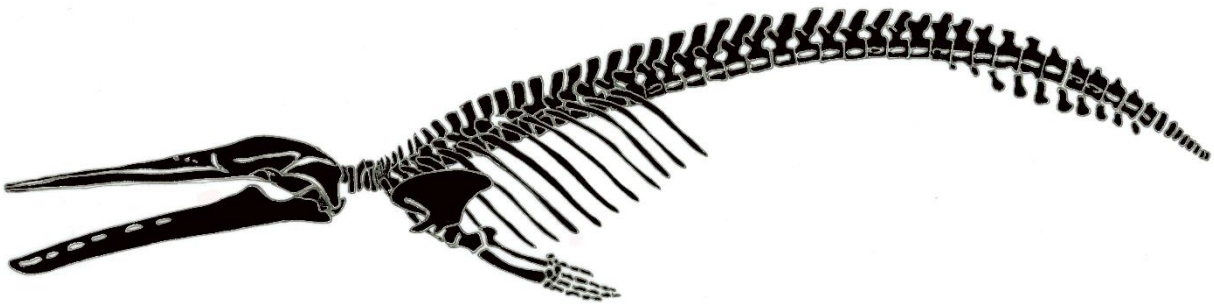
PALEODAYS 2022

XXII Edizione delle Giornate di Paleontologia

8-10 giugno 2022 – Asti (AT)



VOLUME DEI RIASSUNTI

&

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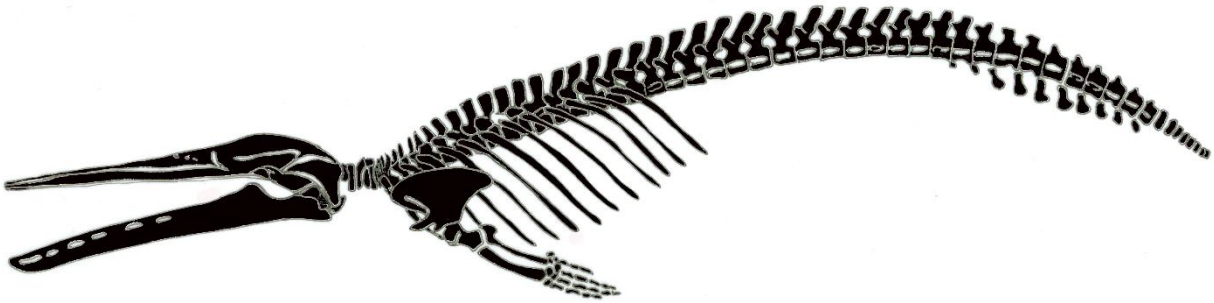

CONTENUTI

Past and present of skeletal diseases from a century-old collection of bone remains of cave bear (*Ursus spelaeus*) at the Museum of Geology and Palaeontology of the University of Padova (Italy)

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The palaeopathology is the study of pathological features recognised on fossil and subfossil remains. It provides epidemiological information including the incidence of bone and dental diseases in human and animal populations. Its highest development has been recently occurred after the introduction of modern techniques of digital radiology and computerised axial tomography that flanked the morphological and histological analyses. In the present study, the results obtained from a preliminary diagnostic analysis on thirty paleopathological remains attributed to *Ursus spelaeus* from the Pocala Cave (Trieste Karst, NE Italy, Upper Pleistocene) and housed at the museum as "E. Neumann's collection, 1925" are presented. Pathological conditions in the vertebral column and skull were particularly frequent among the osteological diseases found in the examined specimens. Most of the remains belonged to old individuals. The ageing pathologies concerned osteophytes and lipping on joints of the cervical vertebrae, friction signs on the patella, and wear of phalanges. Pathological conditions frequently occurred at the level of the masticatory apparatus, as tooth enamel erosion often associated with inflammatory processes in the jaw, due to the main herbivorous diet. However, the occurrence of numerous jaws of old individuals, with complete alveolar resorption, supports the hypothesis that the cave bears were able to survive for a long time after the loss of teeth. Traumatic injuries and congenital diseases were rare. Among the signs of trauma, as well as welded fractures of ribs and phalanges, the most interesting was an ankylosis with fusion of cervical vertebrae in a specimen that survived losing the neck mobility. These studies can help to understand behaviour and lifestyle of cave bears in the light of their commonest diseases.