

Polish Theriological Laboratories

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THERIOLOGICAL WORK OF THE CRACOW BRANCH OF THE
INSTITUTE OF ZOOLOGY,
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PRACE TERIOLOGICZNE ODDZIAŁU KRAKOWSKIEGO
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The Cracow Branch of the Institute of Zoology of the Polish Academy of Sciences was formed in 1954, in place of the natural history museum with its long-standing traditions of zoological research work. The main part of the collections and the majority of the research work of the former museum were devoted to entomology, which to a large extent determined the direction taken by the research work of the new Branch. In addition, the important collections of fossil mammals and the paleotheriological interests of the director of the branch, Professor Jan Stach, facilitated the development of research activities in the field of paleotheriology. The gradual increase in the number of the scientific personnel and the collections, contributed to the increasing development of theriological activities.

Apart from the director of the Cracow Branch of the Institute of Zoology, Professor Jan Stach, who is working on fossil mammals in addition to his chief entomological studies, three scientific workers of the branch are engaged solely on theriology. Research is aimed in the following two directions at the present time:

1. Systematics of small mammals, concentrating particularly on the area of the Carpathian Mountains. The Branch possesses a large collection of small mammals from the Tatra and Pieniny Mountains, and also the collections made by L. Sagan in the pre-war years from Czarnohora and Western Beskidy. Using this material as a basis, work has been carried out on the systematics of *Microtus nivalis* (Martins) in the Carpathians and on the morphology of the mole (*Talpa europaea* L.) in the Tatra Mts. A further work on the small mammals of the Tatra Mts. has also been prepared.

2. Mammal fauna of the young Tertiary and Quaternary in Poland.

In this field the work carried out by the Branch is at present pioneering in Poland. Professor Jan Stach initiated descriptions of the unusually interesting Pliocene bone breccia from Węże near Działoszyń, when he published his descriptions of *Carnivora*. Preliminary reports on rodents of this fauna have also been published, and works on further rodents, leporines and bats are in course of preparation.

Of recent years four further localities with mammalian faunas from the Pliocene and early Pleistocene of Poland were found: at Podlesice, Rębielice Królewskie, Kamyk and Kadzielnia. These works, part of which has been published and part prepared for publication, make it possible to get to know a whole world, hitherto unknown, of the small mammals inhabiting Poland before the maximum glaciation. Some of the species concerned are new to science, and others throw an interesting light on the origin and earliest development of the sub-family *Microtinae*. Work has already been carried out on the remains of small mammals from the more recent Pleistocene: descriptions of material obtained from the deposits of the cave at Dziadowa Skała have been published, and work is in progress on the very rich fauna of the Jaskinia Nietoperzowa (Bat-Cave).

A paper has been published on the remains of the cave lion, *Panthera spelaea* (Goldfuss) from the Pleistocene, and on the fossil, but probably post-glacial, remains of the bison, *Bison bonasus* (L.) from the Podhale district. L. Sych is at present engaged on the description of fossil *Leporidae* from the early Pleistocene of Poland. Our Branch is also working on the very numerous animal bones obtained from archaeological excavations, covering the period from the neolithic to the mediaeval. These materials are as a rule very monotonous, with a preponderance of several species of domestic animals, but should gradually yield data on the history of mammal fauna formed under the influence of the development of human cultivation in our country. The first paper on the above has already gone to press.

A comprehensive catalogue of the mammals of the Pleistocene of Poland, containing a list of all works hitherto published on this subject, but scattered and therefore difficult of access, has been prepared and published by our Branch.

The collections of the Cracow Branch of the Institute of Zoology includes in its theriological section over 2000 specimens of small mammals, chiefly from the Carpathians. The species represented in the greatest numbers are: *Clethrionomys glareolus* (Schreber), *Microtus nivalis* (Martins) and *Apodemus flavicollis* (Melchior). Continual additions have recently been made to the comparative osteological collection, which is now relatively rich, and includes skulls, and in some cases, the skeletons of all Polish mammals and certain foreign ones. This collection is indispensable, primarily as a source of comparative material when working on fossils.

Among the collection of fossil mammals, pride of place must be given to the specimen of the woolly rhinoceros, *Coelodonta antiquitatis* (Blumenbach), found in 1929 at Starunia in the Carpathian together with its soft parts. A cast of the specimen in its primary situation, the stuffed

skin and complete skeleton have been preserved. The museum of our Branch also includes a rich collection of Pleistocene mammal bones collected in the second half of the 19th century by G. Ossowski from the caves in the Cracow district.

The collection of small fossil mammals contains numerous specimens of *Insectivora*, *Chiroptera*, *Lagomorpha*, *Rodentia* and small *Carnivora* from Polish Pliocene and early Pleistocene localities, including holotypes of newly described species. We also possess fairly numerous species obtained by means of exchange of fossil mammals from Yugoslavia, Hungary, China and the United States of North America.

The publication of the Cracow Branch of the Institute of Zoology is entitled „Acta Zoologica Cracoviensia”, in which papers appear devoted to mammals, especially fossil ones. It should be mentioned that the second volume of this periodical, published on the occasion of the 80th birthday of Professor Jan Stach, included works on fossil mammals by B. Kurtén (Finland), E. Thenius (Austria), H. Tobien and G. Heller (Germany). The Branch has in addition printed as a separate publication „A catalogue of the Pleistocene mammals of Poland”.

Cracow Branch of the Inst. of Zoology, Polish Academy of Sciences.

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