

and technical societies and organizations can gradually make more and more widespread use of the system in steadily progressive stages.

Such devices as the punched card make it possible to correlate a number of systems of classification, so that a user familiar with any one system may be guided into a mass of information organized according to another system. Over a period of time, the ineffective systems would clearly display their weakness and fall into disuse. Thus, it is unnecessary to contemplate the obviously impossible sudden shift from present systems, representing the accumulated efforts of many years, to a new and different system.

Once we all learn that there are certain effective principles which are most successful in organizing and relating information, and that there are guides and mechanical aids to conduct us from our familiar paths into those chosen by others, much of the bitter controversy as to the respective merits of various systems should disappear. Every creative worker in scientific fields will become a contributor to the development of the eventual standard or truly universal system. When that system is accepted and maintained, time now spent in uncertain hunting for clues to likely sources of information will be substantially eliminated.

Obituary

Leo Černosvitov

1902-1945

Although the common earthworm is one of the most widely investigated of laboratory animals, the number of competent students of oligochaete taxonomy has always been very limited. Perhaps this is due to the intrinsic difficulty of the subject, since the description of each new species is in itself almost an anatomical memoir. Leo Černosvitov, whose untimely death has deprived the scientific world of one of its most promising oligochaetologists, possessed the special qualifications so essential for an investigator in this field of knowledge. He received a thorough training in zoology at the University of Prague, where the subject of his Doctor's dissertation (1927), "La régression physiologique des organes génitaux du *Tubifex tubifex*," prepared him for both biological and taxonomic investigations.

His career was a stormy one, but filled with interest and adventure. Born at Poltava, Russia, in 1902, he fought with the White Army and was later evacuated, as a boy of 17, to Constantinople. In 1921 he went to Prague and received his higher education under the auspices of the Czech Government. After graduation he began an intensive study of the Oligochaeta which culminated in the publication of some 55 papers in this field alone. A survey of the *Zoological Record* shows that he described, in his short and much interrupted career, some 86 new species, exclusive of redescrptions and assignments of new names. His work on oligochaetes was not confined to a limited group or to a restricted geographical region, but, at one time or another, he studied representatives of nearly every family and from many different parts of the world. Among his more important contributions are a long series of articles dealing with the oligochaete fauna

of the Balkan countries, that hotbed of zoological endemism; a systematic revision of the *Enchytraeidae*, as well as numerous shorter papers on this, the most difficult of oligochaete families; and a review of the literature on cavernicolous oligochaetes. He was the first to observe uniparental reproduction in oligochaetes, and his studies on the resorption of spermatozoa are of equally general interest and importance.

In addition to his work on oligochaetes, Černosvitov engaged in many other activities, earning his living in a variety of ways, as lecturer, as entomologist, and as research technician in the Dental Clinic of the University of Prague. As entomologist he visited the Argentine in 1931-32 to study the control of insect pests in the plantations, and as a result of this visit he published several papers on South American oligochaetes. He investigated spruce sawfly for the British Imperial Institute of Entomology and was in Finland, engaged in this work, at the outbreak of the war. Returning to London, he became monitor for the BBC, feeling this to be his most useful service as a refugee alien, on account of his exceptional knowledge of foreign languages.

At the time of his sudden death from a heart attack, on December 15, 1945, he was on the threshold of happiness and security. Four days previously he had been appointed to the staff of the British Museum, and at last it had seemed that he could devote his entire energies to the work that he loved best. It is to be hoped that arrangements can be made for the completion of his unfinished Monograph of the British Oligochaeta, if not for his projected review of the economic importance of earthworms.

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