

Ludwik Sitowski (1880-1947)

Summary

Ludwik Sitowski was born on March 29th 1880 in Stary Sącz, in the Małopolska region of Poland. His parents were Zofia née Myszkowska and Jan Sitowski, a graduate of the Faculty of Law at the Jagiellonian University in Kraków. Due to the nature of his father's occupation and his various positions in district courts, the family moved from Stary Sącz to Mielec and next to Krościenko nad Dunajcem. It was there that young Ludwik developed very strong emotional ties with the pristine nature of the Pieniny Mountains.

In the years 1893-1898, Ludwik was educated in an excellent boarding school administered by the Jesuit order in Chyrów near Sambor (presently Khyriv in Ukraine). However, the young Sitowski found it difficult to accept and adapt to the strict discipline and rules binding at that school. For this reason, in 1899 he started his education at the Higher Secondary School in Nowy Sącz, which he completed in 1902. It was then that he started to develop his passionate interest in hunting, which he cherished all his life.

In the academic years 1902/1903, he briefly studied at the Faculty of Medicine and then decided to transfer to the Faculty of Philosophy of the Jagiellonian University in Kraków to study life sciences. At that university, he met many outstanding scientists, particularly renowned biologists, who inspired his keen interest in entomology.

In 1905 Ludwik married Zofia Dziewolska and the young couple established their family home in Kraków. Their first son, Zygmunt, was born in 1906 and their second son, Michał, was born three years later. Zofia, whom Ludwik had known since their childhood years, was a tremendous help in his work, illustrating his texts, taking care of the home laboratory with preserved specimens of insects, birds and mammals, as well as a moth colony. In his free time, Ludwik very often returned to the land of his childhood, not only to hunt, but also to record observations on wildlife, including avifauna and entomofauna of the Pieniny Mountains.

In 1906, after four years of studies, he graduated from the Faculty of Philosophy of the Jagiellonian University in Kraków. He continued to develop his scientific interests, which resulted in a scientific study on butterflies of the Pieniny Mts., published in 1906. At that time, Sitowski worked as a volunteer at the Department of Zoology as an assistant to Prof. Antoni Wierzejski.

In 1907, based on his dissertation entitled *Biological observations on Microlepidoptera*, Sitowski received his PhD degree. His scientific supervisor was the outstanding zoologist and professor of comparative anatomy Henryk Ferdynand Hoyer. Sitowski's PhD dissertation was highly regarded by fellow scientists; it was cited in German textbooks and on its merit he was awarded an imperial medal of the Austro-Hungarian Empire.

The first years of Sitowski's professional career were connected with teaching in secondary schools of Kraków. In the middle of 1909, he was given a position as a junior assistant lecturer at the Department of Zoology, the Jagiellonian University, and later he worked as an assistant lecturer in two university departments: the Department of Zoology, where his responsibilities included mainly preservation of animal specimens, and the Department of Comparative Anatomy.

Since living in the polluted city of Kraków took a toll on the family's health, his wife Zofia moved with their sons to Krościenko, to a newly rebuilt detached house with a large garden, which her parents gave her in 1912. From then on, Zofia lived with their sons in Krościenko and Ludwik remained in Kraków. He visited his family very often, driven by his affection for his loved ones and by the desire to continue field studies in the Pieniny Mts. The family property, named Saint Anthony Villa, soon became a favourite spot to visit for family and friends. It was the centre of social life, as the Sitowskis invited many scientists and artists there, who spent many days or even weeks as guests at the villa.

When Dr. Sitowski started working at the Agricultural Studies Centre of the Jagiellonian University as an assistant to Prof. Dr. Władysław Kulczyński, he gave classes on the identification of pest insects causing damage to field crops and forests. In that period, he collected butterflies of the Pieniny Mts., which he donated, for example, to the museum of the Commission of Physiography, the Academy of Learning in Kraków.

The period of World War I brought dramatic changes both to teaching and scientific activity at the university. At the recommendation of the presiding vice-president of Kraków, Prof. Julian Nowak, in 1916 Dr. Sitowski organised the Experimental Station operating at the Department of Zoology of the Jagiellonian University. The aim was to investigate the negative effect of selected insect species on trees and stands. It was at that time that his main scientific interest was fully developed. Ludwik Sitowski proposed, for example, biological methods to control the damage caused by the cockchafer (Maybeetle) *Melolontha melolontha* in the Podkarpacie region and by the bordered white moth *Bupalus piniarius* in the Puszcza Niepołomska and Puszcza

Sandomierska forests. In 1919, based on the dissertation entitled *Biology of forest pests in the Puszcza Sandomierska forest*, Dr. Sitowski received his post-doctoral (habilitation) degree in the field of zoology at the Faculty of Philosophy of the Jagiellonian University in Kraków.

Following Poland's regaining of its national independence in 1918, the situation started to change dynamically. Proposals to establish new universities were put forward and educated professional staff sought. At that time Dr. Sitowski received two offers: to work in the position of professor at the University of Lwów and the University of Poznań. He chose Poznań and in 1919 he was appointed professor of zoology at the newly established Faculty of Agriculture and Forestry of the Piast University, later the University of Poznań (UP). He started his work by creating the Department of Zoology and Entomology. He put all his efforts into recruiting scientific staff and collect teaching aids, an entomological collection and library resources.

In the 1920/1921 academic year, he served in the position of Dean and in the year of 1921/1922 as Vice-Dean of the Faculty of Agriculture and Forestry at the University of Poznań, while in the 1922/1923 academic year, he was elected Vice-Rector of that university. On the basis of his organisational skills, efficient management work, exceptional personal talents and integrity, he was elected Rector of the University of Poznań in the 1925/1926 academic year, while in the following academic year he was elected Vice-Rector.

The period of his employment at the University of Poznań was marked by creativity in Prof. Sitowski's scientific work, and his research gained renown both in Poland and abroad. This was thanks to his pioneering outlook on natural phenomena, e.g. mass emergence of pest insects. Although the solution to the problem of damage caused by insects in forests was generally associated with the application of chemical control methods, Ludwik Sitowski promoted the belief in the power of nature. He proved that an important role in limiting the mass emergence of such pest insects as the pine beauty moth *Panolis flammea*, the pine-tree lappet moth *Dendrolimus pini* or the bordered white moth *Bupalus piniarius* may be played by their natural enemies, such as parasitoids (some species of Diptera or Hymenoptera). To ensure successful biological control of pests it is enough to support their natural enemies. Forests were capable of defending themselves against pest insects provided appropriate forest management methods were implemented and optimal conditions were provided for the development of parasitoids. The results of Sitowski's research were extensively discussed and followed, and his department on the University of Poznań was visited by scientists from all parts of the world.

An example of his unique perception of the forest environment may be his work on aphids found on pines. Both scientists and forestry practitioners considered them to be absolute pests feeding on sap. However, Prof. L. Sitowski showed that the green forest islands left after the mass emergence of the pine beauty are the result of the beneficial activity of the common red ant *Formica rufa*. He argued that the presence

of ants is caused by the activity of aphids, e.g. *Cinara nuda*, which sweet secretions attracted ants. As a consequence, trees colonised by aphids were not destroyed by pine beauty caterpillars.

Professor L. Sitowski conducted many of his research projects in the Pieniny Mts. This was where he started his scientific career by identifying numerous rare butterfly species. In later years, he also carried out ornithological and ichthyological studies, as well as observations of bats in that region. Thanks to the knowledge gathered during his research work, he developed convincing arguments for the establishment of a national park in the Pieniny Mts. The efforts of naturalists, including Ludwik Sitowski, were rewarded, and in 1932 the first national park in Poland was established there.

This exceptionally active and creative period of Prof. Sitowski's career was interrupted by the outbreak of World War II in 1939. The Sitowski family spent the war years in Krościenko and thanks to that fact, both Professor Sitowski and his sons avoided arrest, since in Poznań they were placed on the Nazi list of individuals to be arrested. Their new house, called the Old Mansion, became not only a family refuge but also a safe haven for many people displaced from the Wielkopolska region and threatened with potential expulsion to the Third Reich.

During the Nazi occupation, the National Park in the Pieniny ceased to exist and the forested areas were included in the newly established forest district. The forest stands were intensively thinned and felled; for this reason, Prof. Sitowski started cooperation with foresters to protect the forest areas of greatest nature value. Moreover, he preserved zoological collections, which he had previously donated to the park. He continued his scientific work, which included elaborating on his notes brought from Poznań. He continued his research on the fauna of the Pieniny Mts., conducting observations on birds and bats, while in his free time he wrote his hunting memoirs, which survived as a manuscript. He also helped his son Michał, who was a doctor, in laboratory analysis of blood and urine samples of his patients.

At the end of 1943, before the Soviet troops entered Lwów, Prof. Sitowski invited a well-known microbiologist to Krościenko, Prof. Rudolf Weigl, who became world-famous for developing an effective vaccine against epidemic typhus. It was in Krościenko at a guest house that he organised accommodation and a laboratory for Prof. Weigl.

In April 1945, Prof. Sitowski, together with his family, returned to Poznań and immediately started to recreate the Department of Zoology and Entomology at the Faculty of Agriculture and Forestry, the University of Poznań, which had been seriously destroyed by the Nazis. He started classes with students as early as on 15th May 1945.

Unfortunately, his health was failing, and Prof. Sitowski experienced cardiac problems. In June 1947, he suffered his first heart attack. Although his health was constantly monitored by his son Michał, the next heart attack would prove fatal. Professor Ludwik Sitowski died on 20th November 1947 while going to work. He was buried at the cemetery on Lutycka Street in Poznań.