

# Nencki Institute of Experimental Biology

## The Myrmecological Workshop at the Nencki Institute Hydrobiological Station in Mikołajki

2015-09-25



On 31<sup>th</sup> August - 13<sup>th</sup> September 2015 the Nencki Institute Hydrobiological Station in Mikołajki hosted the Myrmecological Workshop for young people organized as a part of the project of the Foundation for Polish Science (programme SKILLS – eNgage) entitled „Awesome world of ants” (project manager: Paweł Jarosław Mazurkiewicz, M. Sc., a student of the Inter-faculty Interdisciplinary Doctoral Studies in Mathematics and Natural Sciences at the University of

Warsaw, carrying out an interdisciplinary Ph. D. thesis in the Laboratory of Ethology of the Nencki Institute and the Department of Animal Physiology of the Faculty of Biology of the University of Warsaw). The main aim of the workshop was to raise interest in scientific research in young people via the exploration of the secrets of ant biology and the active participation in their experimental unraveling. Workshop participants from all parts of Poland (in total 32 persons) achieved that goal by taking part in various activities including lectures, field trips and laboratory classes during two one-week turns.

The lecturers were mostly the researchers and the Ph. D. students from the Laboratory of Ethology of the Nencki Institute and the Faculty of Biology of the University of Warsaw. The topics of the lectures included the selected issues of ant ethology (Ewa J. Godzińska, Paweł J. Mazurkiewicz), the methods of collection and observation of insects and the principles of their classification (Aneta Kulis, Beata Symonowicz), the embryonic development of insects with a particular stress laid on the ants (Katarzyna Czajkowska), and the myrmecofauna of Poland (Paweł J. Mazurkiewicz). More general issues were discussed, too. Ewa J. Godzińska, Jarosław Szczepanik and Katarzyna Czajkowska gave the lectures on the evolution of social behaviour and altruism and on evolutionary psychology, and Paweł J. Mazurkiewicz presented the methods of statistical analysis of experimental data and of quantification of behaviour, and the art of creating a good scientific presentation. Additionally, Jarosław Szczepanik shared with the participants of the workshop his knowledge about predatory plants, and Tomasz Janecki, the Head of the Hydrobiological Station in Mikołajki, a well known polar explorer, gave a fascinating lecture on Antarctic.

Field trips and laboratory classes were supervised by some of the lecturers and additionally also by Stefan Hornostaj, a volunteer from the Laboratory of Ethology of the Nencki Institute, and Adam Tarkowski, a Ph. D. student from the Maria Curie-Skłodowska University in Lublin. The principal aim of the field trips was to gather more informations about the myrmecofauna of the Hydrobiological Station in Mikołajki and its surroundings. As a consequence, it became possible, among others, to confirm the occurrence of *Tapinoma subboreale*, a rare ant species from the subfamily Dolichoderinae, at a relatively short distance from the Station, and

to add several further items to the list of ant species living on the grounds of the Station.

Laboratory classes included the identification of ant specimens collected during field trips, and various experiments during which the participants of the workshop investigated ant behaviour by means of innovative behavioural tests which at the same time acted as pilot tests for the future research in the field of ant ethology devoted to such issues as causal factors mediating ant rescue behaviour and behavioural lateralization in ants.

During the evenings the participants and their supervisors used to meet at the fire, and the discussions about the ants and their ways as a rule continued until the late night. As many of the participants had interesting experiences gained during taking care of ant cultures kept at home, the distinctions between the pupils and the teachers were becoming increasingly blurred, until finally all debaters were learning mutually from each other.