



Field training for permafrost students in the cold-climate conditions

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We all know how complicated is organizing expeditions to the Arctic, especially to the remote areas with continuous permafrost, tundra landscapes, expensive helicopters, and extreme living conditions. But this cannot be the reason to deprive students of studying the nature. There is a serious problem with computer modeling becoming a main research instrument. Often young people involved in such modeling have never seen the object of their modeling. Some of us are “remnants” of the epoch before computer and satellite technologies when field data was the main source of mapping information, small-scale maps were based on field mapping. This knowledge is getting lost with the experts getting retired. This is the reason for involving students into field research as much and as soon as possible.

Arctic expeditions often mean absence of usual amenities in living conditions, exposure to weather extremes, bugs and simple meal. These complications make each bit of field data be of high-hourly-rate. That is why teaching the methods of field study is very important, to make each trip most effective and reduce costs of each bit of information. These methods include both science and logistic issues. There are two more aspects in field training: (1) students and teachers from different countries meeting in field learn to identify natural objects and conciliate positions and terminology; and (2) students and teachers from different disciplines learn to conciliate understanding of each others study subjects.

Examples of field research stations in Russian Arctic where interdisciplinary studies are ongoing for many years with participation of graduate and postgraduate students show the effectiveness of the above mentioned approach. In the north of West Siberia there are four polygons serving as a base for associated research of permafrost geologists, geographers, biologists, geochemists and more. The system is built in which basic role is shifting from one subject to the other depending on the objective of student’s research work. This can be permafrost as a factor of mammals distribution, or landscape structure as a factor of active-layer dynamics, and so on. IPY helps to involve more young scientists from various countries into the joint research field work. We can only hope that with the finish of IPY positive changes in field training will persist.