

Soil-ecological summer school, Siberia 2017

Land use opportunities across climatic zones on the edge of human influence

Regardless of political opinions, public prejudices, gaps in touristic infrastructure and other obstacles in Russia, Siberia offers unique nature conditions with mostly unknown opportunities for science and education.

A group of scientists from leading universities and research centers in Siberia in collaboration with TU Berlin and TU Munich has established a soil-ecological summer school across southern part of West Siberian Plain and Altai mountains.

The aim of the summer school is to show the resource wealth of natural ecosystems from tundra to semi-desert climate conditions. Natural soil formation without concealing human activity services as a base for facilitated understanding of interrelations between climate conditions, geology, and vegetation cover. The main content, however, focuses on understanding of interrelations between



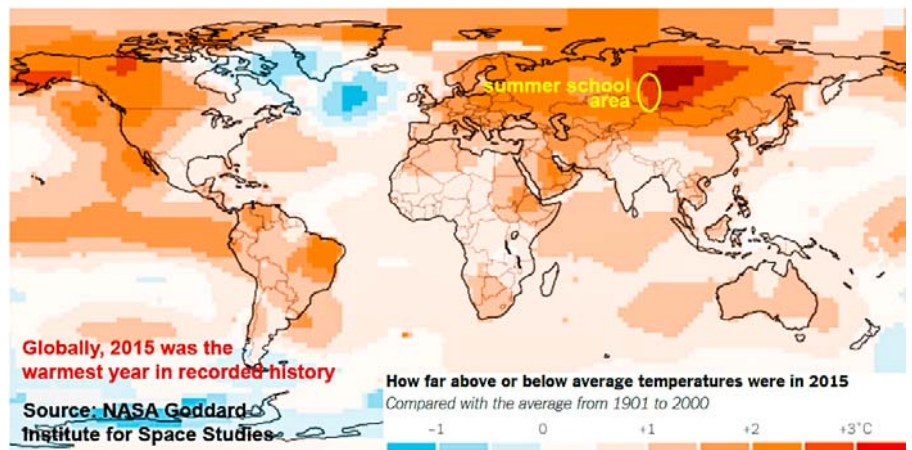
land use, culture, social structure, life style trends and economy as prerequisites for long-term society development. This way, we try to remove misunderstandings, to close knowledge gaps and to answer global challenges.

When thinking of Siberia, most people e.g. imagine permafrost, a severe cold climate, endless forests, and banishment. However, Siberia is much more than that. Banishment became history many years ago. The natural share of the forested area is much lower than

30 %. The Siberian climate is not just cold. The summers are usually sunnier and, at comparable latitudes, in mean even warmer than in Germany. Only the winters are extremely cold.

The specific contrast of climate and geological conditions leads to a unique diversity of landscapes that are still largely unknown. The soil and vegetation sequences of both the latitudinal zones along West Siberian Plain and the altitudinal belts in the Altai Mountains presents an exceptional natural textbook of climate effects on nature objects.

The area is located nearby the global center of climate change (s. fig) and distinguishes by many peculiarities making the region interesting for comparable studies with Europe. Together



with history and a rich local culture, this makes West Siberia as an ideal starting point for interdisciplinary education and research.

The visited sites include both typical and unique for Siberia objects such as the biggest oligotrophic peat bog in the world, different variants of taiga jungles, forest-steppe and steppe biomes, intact hotspots of biodiversity with more than 120 higher plants species per 100 m², giant herbal vegetation on apparently poor soils, the imposing dynamics of huge Siberian rivers, signs of Pleistocene and modern glaciers and many other famous features of the remote Altai mountains (UNESCO world heritage) nearby the Chinese and Mongolian borders.



Landscape formation by earthquakes

The organization of the summer schools combines the best scientific traditions of Russia with the warm hospitality of the Siberian people. The excellent didactics, high language skills and outstanding professional competence of the Siberian scientific guides provide deep insights into the different landscapes. This usually provokes new ways of thinking and sharing of own professional experiences offered between participants who will have an exceptional chance to enjoy nearly undisturbed nature by means of hearing, walking barefoot, touching, smelling, and even tasting.

A well-trained service team with over 20 years of experience guarantees a safe environment and best possible individual care even under permanent field conditions. The summer school carries out as a self-serving expedition with permanent stay in field conditions over 3 weeks.

The local nature conditions require transport during the summer schools by several busses and trucks. All participants should be equipped with their own tents and camping gear. The scientific sites are located near the campgrounds or can be reached by short hiking tours without luggage. The conversation during the expedition will be in English. In a few case a simultaneous translation from Russian to English or to German will be supplied.

The summer schools content management corresponds to demands of German universities. The organization of the group of participants will be supported by Apollo e.V.. This registered in Germany organization has been collaborating with Russia over decades and supports closer collaboration between universities and enterprises with distinguishing approaches.

Scientists, social scientists, students and teachers of any fields of studies related to land use, as well as employees of authorities and environmental related firms invited to participate. As a specific feature and using experience from last years, an early registration allows to choose optional excursion content and sites with consideration of the scientific interests of other participants. The start of summer schools in 2017 is scheduled for beginning of July depending on convenient flights, airfares and opportunities of most participants.

More information available at: <http://siberia.apollo-online.de>.

Questions about scientific content please email to Prof. Siewert: christian@siewert.berlin.

If you like to register as a possible participant in 2017, please e-mail to

summerschool@apollo-online.de with name, surname, graduation, and current position at research institute or university or, alternatively, short description of your professional focus/interests (max. 10 words).

Confirmation of registration will guarantee in-time information about deadlines for binding application and about participation opportunities from organizers.