SCIENTIFIC AND EDUCATIONAL POTENTIAL OF THE EDUCATIONAL BASE "GORNOYE" OF THE STATE UNIVERSITY OF LAND USE PLANNING AS A SYSTEM OF MONITORING INDICATORS FOR THE ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT OF THE REGION

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Abstract

The use of green campus practices by the State University of land use planning promotes a culture of sustainable development for all stakeholders.
One of the forms of interaction was the scientific and educational base (SEB) Gornoye. The territory of the SEB "Gornoye" combines unique physical, geographical and agricultural features necessary for performing the educational, scientific, applied, research and production functions of the Department and is designed to ensure the sustainable development of natural territories.

Keywords: SULUP, environmental monitoring, green campus, SEB "Gornoye", field practices, environmental education.

• Introduction

Responding to global challenges, the State University of land use planning is trying to modernize its scientific, educational and economic activities and introduce the best available technologies in the field of environmental management. The University pursues an environmental policy that should guarantee its sustainable, environmentally-oriented development.

The uniqueness of the SEB «Gornoye» with a variety of landscapes, tracts, facies allows master's and postgraduate students to test their knowledge gained during training and further apply it in their profession.

Figure 1. Results of participation in the Green Metric World University Rankings Network. (2019)

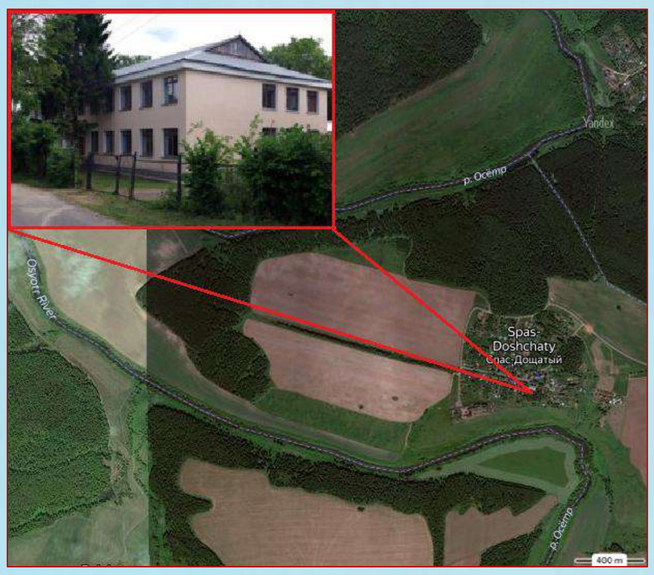

Figure 2. The location of the scientific and educational base (SEB) "Gornoye"

• Conclusion

The results of research on the SEB "Gornoe" are the basis of scientific reports, articles, final qualifying works, dissertations, etc.

Prospects of research in the "green campus" include: the establishment of a number field of integrated geoenvironmental laboratories (hydrochemical, soil, geo-ecological); organization and development of ecological trails and water routes for the study of problems of geoecology and nature management; geo-environmental monitoring of the basin of small rivers; the development of proposals for the improvement of water quality of the Osetr river and the state of the field of recreation; as well as training students (collection and processing) to participate not only in the preparation of RFBR (Russian Foundation For Basic Research) and RSF(Russian Science Foundation) bids, but also in contractual work on environmental monitoring.

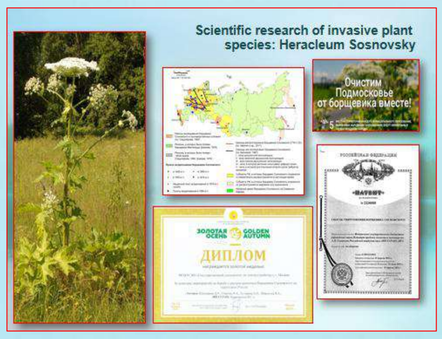

Figure 3. Compliance of the territory of SEB "Gornoye" with the General requirements for "smart" buildings according to the List and Description of Smart Building Requirements

Field		Requirement		Description
B	Automation	B1	BMS	+
		B2	APP	-
S	Safety	S1	Intruder Alarm System	+
		S2	Fire-fighting	+
		S3	Video surveillance	+
		S4	Anti-flooding	-
E	Energy	E1	Monitoring	+
		E2	Management	
A	Water	A1	Monitoring	+
		A2	Recovery	
I	Indoore environment	I1	Thermal comfor	+
		I2	Air quality	+
		I3	Real-time	-
		I4	Passive system	
L	Lighting	L1	LEDs	+
		L2	Sensors	-
		L3	Shielding	-
		L4	Natural light	+

• Method

Field practice - mandatory element of the educational process in the system of higher education in the natural sciences, aimed at expanding and deepening the knowledge of students obtained in the process of theoretical study of the material.

Educational field practices on a SEB «Gornoye» are the basic basis of professional training and an obligatory element of the training program for professional environmentalists-users of natural resources.

In order to assess the current ecological state of individual components of the natural environment in the surveyed territory, in the period from 2015 to the present together with the ***Department of Geodesy and Cartography*** have been carried out geo-ecological monitoring activities, which include set of studies.

• Results

The results of research on the SEB "Gornoe" are used as the basis for scientific reports, articles, final qualification works, dissertations.

Also, the data are actively used in conducting practical exercises in the discipline "Environmental Monitoring", writing research papers, etc.

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