



International Summer School “ Freshwater ecosystems under natural conditions and anthropogenic impact. Lake Ladoga”

28, July – 9, August 2010

Venue: St. Petersburg (RSHU) and Education and Scientific Station of RSHU (Lake Ladoga, Valaam Island) the main objectives of which are:

- 1) monitoring of the coastal zone and the small forest lakes of the Valaam Archipelago for the purpose of supplying material for courses in natural sciences;
- 2) scientific research at the Valaam Archipelago, Ladoga Lake and the northern Ladoga region with participation of students and post-graduate students;
- 3) the organisation of field practice of the University students.

Local Organizer:

Russian State Hydrometeorological University <http://www.rshu.ru/>

Faculty of Ecology and Environmental Physics

Field-work for RSHU students on the Vallam Island have being conducting regularly since 1998.



Target Group:

MSc students, international

Scientific Scope of the School:

Freshwater ecology and biology

Working Language: English

Attendance documents:

Certificates incl. transcripts (ECTS)

The main tasks of the School are:

1. to familiarize the students with the limnogenesis types of North Russia water bodies, using as an example the water system of the Valaam Archipelago (Lake Ladoga);
2. to present to the students the range of natural fluctuations of the limnological parameters within which the normal regime of ecosystem functioning is maintained;
3. to demonstrate the connection between the main limnological parameters on the basis of the field materials collected;
4. to inculcate the idea about the lake being a important component of the landscape;
5. to compare the great lakes and small one (in example of Lake Ladoga);



Field investigations comprise the study of:

morphometric parameters, thermal regime, basic hydrochemical, hydrophysical parameters, phytoplankton, zooplankton, macrophytes, macrozoobenthos and the primary production of plankton

Useful information:

List for packing

Necessary things to bring with you:

- raincoat
- warm sweater
- comfortable boots or trainers (for long nice walks)
- house slippers (for laboratory)
- cap protecting from sun
- sun cream
- eco-friendly J personal washing accessories (shampoo, soap, bath sponge)
- shower and hand towels
- It is necessary for girls to bring a long skirt and headscarf if you wish to visit Valaam monastery (<http://valaam.ru/en/>).



Optional:

- swimming suit
- field glasses/ binocular (there are a lot of interesting things here)
- slippers for a shower cabin
- fishing equipment ;)

We have a basic complex of medicaments. If you need some special medicaments, please, bring them by your own.

Sleeping bags are provided in the station. If you wish you may bring your personal sleeping bag.

Linnens are provided at the station also.

Vaccinations:

July is not dangerous month according to encephalitis.

Preparatory readings:

Scientific article on climatic regime of the Valaam island will be sent on 27, July 2010.

Travel documents for participants granted with a financial support:

We need to have all your travel receipts for our accounting office. Please, bring them on Thursday, 29 July 2010.

Internet in RSHU dormitory: available in the nearby internet café (trade complex “Nevskiy”), open till 10 p.m.

Internet in Vallaam station: free access from the 3 stationary computers at the Valaam station but limited download traffic.

The weather in Valaam:

<http://rp5.ru/1974/ru>

Addresses:

RSHU, main building:

metro station “Novocherkasskaya” (line 4, yellow), 10 min by foot

Russian State Hydrometeorological University

Malookhtinskiy pr.98

St.Petersburg

195196

Russia

tel. +7(812)4445636 International Relations Office

fax +7(812)4446090

RSHU dormitory #2:

metro station "Ulitsa Dybenko" or "pr.Bol'shevikov" (line 4, yellow), 10 min by foot

pr.Bol'shevikov,13
St.Petersburg
195196
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tel. +7(812)5891005

International Relations Office

Maria Mamaeva, local organizer, RSHU (mamaeva-mamaeva@rambler.ru; mob: +7 911 217 55 90)

Anna Kanukhina, local organizer, RSHU (anakan@rshu.ru, mob: +7 921 3226445)

**Regulations
at the Education and Scientific Station "Valaam"**

- It is your own responsibility to clean and make sure that all living areas look great.
- Please, make sure that everyone around you are doing well. If you see that someone feels bad, talk to him/her and Anastasia.
- In lectures, at the meals and during activities, *English is the only used language*.
- You are not allowed to download/install software to the stationary computers of the Station (limited traffic).
- It is ok to go on trips in groups or by your own in your spare time, but, please, tell Anastasia before you leave and register in the special notebook.
- All lectures are mandatory and the schedules fixed in the programme are to be kept.
- You are not allowed to use the Stations boats that have a motor attached. You may use rowing boats: ask Anastasia and let her know where you are going and how long you are away. Always have the cell phone (special apparatus with local mobile operator sim-card will be provided at the station) with you and the emergency numbers written below.
- In summer 2010, we have a limited electricity supply, please, don't bring powerful-electricity consumption devices (irons, hair dryers).
- Since there are close neighbours, please, keep calm in front of the Station buildings and keep your voice down after 10.30 p.m.



***Thank you for your help in maintaining the wonderful atmosphere at The Education and Scientific Station
"Valaam"!***

PROGRAMME

Date	Time	Schedule
28 July	14.15	Arrival to SPb (Sibelius train) at the Finlyandskiy railway station. Accompanying persons – Anna Kanukhina, Maria Mamaeva, Denis Migulin
	15:30 –16:30	Collection of foreign passports for a registration procedure – Maria Mamaeva Accommodation of students at RSHU Dormitory. Accompanying persons – Anna Kanukhina, Ekaterina Primak, Nadezhda Lebedeva, Evgenia Ivanova Accommodation of Olli-Pekka at Nautilus Hotel. Accompanying person – Denis Migulin
		Free time
29 July	9:30	Meeting at the RSHU dormitory entrance and traveling to RSHU. Accompanying person – Anna Filippenko.
	10:30–11:00	Travel refund, coffee, refreshments – Maria Mamaeva.
	11.00-11.30	Introductory and welcome at RSHU. Dr. Anatoly Bogush, Vice-Rector for International Relations
	11.30-12.15	Lake Ladoga and its area - main information. Preamble Lecture (Dr. Stepanova, RSHU) , aud.209
	12.15-13.30	Approaches to the study of the stability of aquatic ecosystems to anthropogenic impact - Lecture (Prof. Dmitriev, SPb State University & RSHU) , aud.209
	14.00-15.00	Lunch together at “Auditoria” cafe Working meeting of Dr. Anastasia Stepanova and Dr. Olli-Pekka Penttinen
	15.00-16.00	Transfer to the Museum complex “The Universe of Water”
	16.00-16.40	Walking tour around Tavrichesky Sad
	16.45-17.45	Visiting the Museum complex “The Universe of Water”
	18.30 - 20.30	Issuing of registrations, return of passports – Maria Mamaeva. Dinner together in the city (Grand-café “Droryanskaya Usadba”, st. Vosstaniya, 34 http://www.dvusadba.ru/)
	20.30 -...	Free time
30 July	9.30	Meeting near the RSHU dormitory, bus to the Dam(water, refreshments are provided in the bus)
	09.30-14.30	Visit to The Saint Petersburg Dam
	14.30 – 15.30	Lunch together, "Auditoria" cafe
	16.00 – 17.30	Ecotoxicological aspects of lakes studies . Lecture. Dr. Olli-Pekka Penttinen (University of Helsinki) , aud.209
	17.30 -	Free time
31 July	6:30	Meeting near the RSHU dormitory, bus to the Valaam transfer to the Valaam Island
	12:00	arrival to Valaam, accommodation
	13.00-14.00	Welcome lunch
	14.00-18.00	Microlandscape diversity of Valaam Island – round-up field excursions
	18.00-21.00	Ice-breaking
1 August	9.00 -9.30	Breakfast
	10.00-12.00	Physical-geographical characteristics of Lake Ladoga - Lecture (Dr. Stepanova)
	12.15-13.30	Group work - The greatest lakes in the world
	13.30 -14.30	Lunch
	15.00- 18.30	The unique fauna and flora of the Valaam Archipelago - field excursion and group work
	19.00 – 19.30	Dinner
	19.40 - ...	free time
2 August	9.00 -9.30	Breakfast

	10.00-12.30	Hydrological regime of Lake Ladoga - Lecture (Prof. Naumenko, RSHU&Institute of Limnology, Russian Academy of Sciences)
	12.45 – 13.45	Group work - The scientific investigation of Lake Ladoga (with special film)
	14.00 – 14.30	Lunch
	15.00 – 17.30	Field work in Lake Ladoga and small acidic lake (by boat)
	18.00 – 19.00	Laboratory work
	19.00 – 19.30	Dinner
	19.40 - ...	free time
3 August	9.00 -9.30	Breakfast
	10.00-12.30	The main elements of the Lake Ladoga ecosystem - Lecture (Dr. Stepanova)
	12.45 – 14.00	Group work - The main community of fresh-water ecosystems
	14.30 – 15.00	Lunch
	15.30 -16. 30	Field work in Lake Ladoga - collection of materials
	17.00 – 19.00	Group work - Optical conditions in water. Laboratory work
	19.30 – 20.00	Dinner
	20.00 - ...	free time
4 August	9.00 -9.30	Breakfast
	10.00 – 11.30	Eutrophication of Lake Ladoga - Lecture (Dr. Vojakina, RSHU & St. Petersburg Scientific Research Center of Ecological Safety of the Russian Academy of Science)
	11.45 – 12.45	Field work in Lake Ladoga - collection of materials
	13.00 – 14.00	Group work - phyto- and zooplankton organisms
	14.30 – 15.00	Lunch
	15.30 – 19.00	Laboratory work - identification of common phyto- and zooplankton species
	19.30 – 20.00	Dinner
	20.00 - ...	free time
5 August	9.00 -9.30	Breakfast
	10.00-12.30	The role of macrophytes in Lake Ladoga ecosystems - Lecture (Dr. Zyeveva, RSHU)
	12.45 – 14.00	Group work - relations with common species of macrophytes and benthos
	14.30 – 15.00	Lunch
	15.30 -17.00	Field work in Lake Ladoga - collection of materials
	17.00 – 19.00	Laboratory work - identification of common macrophytes species
	20.00 - ...	free time
6 August	9.00 -9.30	Breakfast
	10.00 – 12.00	Field work in Lake Ladoga - collection of materials
	12.00 – 14.00	Laboratory work
	14.00 – 14.30	Lunch
	15.00 – 18.00	An experience of harmonious coexistence of man and nature (the Valaam Monastery in the 18th and the 19th century) - Excursion to the Valaam Monastery and skits
	18.30 – 19.00	Dinner
	19.00 - ...	free time
7	9.00 -9.30	Breakfast

August		
	9.30 – 13.30	The Ladoga ringed seal (Phoca hispida ladogensis) (with a visit to the summer haul-out sites at the distant islands of the Archipelago) - Boat trip excursion
	14.30 – 15.00	Lunch
	15.00 – 19.00	Group work - preparation the reports about field investigations
	19.30 – 20.00	Dinner
	20.00 -21.00	free time
	21.00 - ...	Goodbye party
8 August	9.00 -9.30	Breakfast
	10.00 – 11.45	Group work - prepare the final reports
	12.00 – 13.30	Conference (presentations of the reports made)
	13.30 – 14.00	Closing ceremony, certificates
	14.30 – 15.00	Lunch
	15.00 -16.30	free time
	17.00 – 21.30	Departure to St. Petersburg
	21. 30	Arrival to St. Petersburg, accommodation at RSHU Dormitory
	22.00 Ho	Free time
9 August	till 16.30	Free time, shopping
	16.30	Departure to Helsinki

