



recharge.green – Summer School

Pokljuka, Triglav National Park, Slovenia

June 16th – 20th 2014

Programme

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1. Rechargee.green Summer school course

Time frame

- Spring 2014 – Preparations for *Summer School*
- Summer 2014 – course and field work from June 16th to June 20th
- September/October 2014 – post-fieldwork activities; reporting and data processing
- Nov/Dec 2014 – public presentation of results in TNP, public workshop and exhibition (posters, presentations etc.)

Other information

Accommodation

- Slovenian army premises in Pokljuka EVOJO Rudolf Badjura.

2. Participants

- High school third year students, exceptionally also 2nd year students;
- School mentors;
- Triglav National Park employees and field supervisors: preparation of materials, field work and mentoring (expert help and presentations);
- Employees of the Agricultural Institute of Slovenia: preparation of materials, field work and mentoring (expert help and presentations);
- Slovenian forestry institute: preparation of materials, field work and mentoring (expert help and presentations).

3. Course of the *Summer school*

- Monday, 16th of June 2014:
 - Morning: Arrival
 - Forenoon: Formation of the groups, the introduction of groups with demonstrations prepared by TNP, AIS and BF-Uni supervisors and mentors.
 - Afternoon: Practical implementation in work in different locations depending on the group
- Tuesday:
 - Practical / field work in groups
- Wednesday – Thursday:
 - During the day: Practical work in groups
 - Late afternoon – evening hours: Theme lectures (different each day)
- Friday:
 - Morning: presentation of activities and presentation of first results
 - Afternoon: departure



4. Groups

Groups of 5 students. Each group of students has a school mentor and a project partner scientific mentor who lead a group.

5. Working groups

Natural resources – SOIL

Mentor: dr. Borut Vrščaj, AIS. School mentor: (ms. Renata Capuder /ms. Rafaela Kožlakar)

Soil working group activities

- Excavation and description of representative soil profiles;
- identifications and description of horizons;
- Sampling and field analysis (pH, sekera etc.);
- augering in the soil profile area e and linking structure of profiles to micro relief features;
- Prediction of soils biomass production capacity
- Soils importance for food/agricultural production
- The role of soils in identification of biodiversity

The content:

- **Excavation and description of soil profiles.** Four profiles are planned: identification of soil horizons, sampling and field analyst (pH, soil structure and stability according to Sekera). Probing transects around each profile describing the connections between the soil structure, micro relief and the land use. Use of standard form for the description of soil profile (mentor).
- **Preliminary preparations:** soil profile description methodology; standard form for profile description; presentation of how the form is completed, field work / activities (Both initially at the beginning of the school - all preparing mentor).
- **Integration / joint work** working together with the groups for Botany and Biomass and others.

Biodiversity - BOTANY

Mentor: Andrej Arih, TNP. School mentor: ms. Anita Mencingar

Botanic working group activities

- To identify different plant species
- Identify differences in species composition and abundance between forest communities
- Inform the team with the basic methodology of plant taxonomy and field sampling
- Inform the team with the methodology of preparing plants for the production of herbarium
- Recognize some of the endangered and protected species of flora
- Inform the team with some aspects of FLORA protection

The content:



Species inventory and composition of higher plants (ferns and seed plants), to detect the presence of indicator plant species for each forest type, identify and inventory the various groups in representative locations. Making of herbarium. The use of standard census form.

Preliminary preparation: a list of indicator / protected / special species of plants, census methodology; presentation of how to complete standard enumeration form, - all the preparation by the mentor.

Integration / joint work with the group Soil, Biomass and others.

Biodiversity – ZOOLOGY

Mentor: field supervisor from TNP and Andrej Arig, TNP. School mentor: yet to be decided

The content:

The list of indicator species, signs of the description, the methodology of inventory. Inventory of typical species of insects on predefined locations. The use of a standard inventory form. The presentation of the direct and indirect signs of present species, the methodology and observation – prepared by the mentor

Preliminary preparation: a list of indicator / protected / special species inventory methodology; standard form, presentation of how to complete the form

Energy – BIOMASS for ENERGY

Mentor: dr. Aleš Poljanec and Rok Pisek, UB. School mentor: Mr. Andrej Čeč

- To identify key tree species and their suitability/use
- Recognize methods of measurement of wood mass and review assortment composition of forest stands
- Assess the possibilities of using wood for energy
- Understand the use of wood and links to biodiversity

The content:

Measurement and evaluation of the quantities of biomass depending on the type of forest vegetation (diameter, height, age of trees), photographic records; all in the research locations. Rating the assortment composition of forest stands and the potential for exploitation of wood for energy.

Preliminary preparation: assessment of wood mass selected forest types, census methodology and estimates the amount of biomass; standard form census, presentation of work and methodology at the beginning of the school - preparing a mentor.

Integration / joint work; with the group Soils, Botany and others.

Ecosystem – ECOSYSTEM SERVICES (ESS)

Mentor: Dr Aleš Poljanec and dr. Tina Simončič. School mentor: Ms. Barbara Bedenik

ESS working group activities

- Identifying ecosystem functions (ESS) in the protected area;
- determination the importance of the ESS, setting of priorities and/versus needs;



- ESS ranking by importance and priorities,
- Description and presentation ESS.

The content:

Spatial evaluation of ecosystem services: an overview of important bases overview of the field, recording / mapping of the spatial characteristics analysis of the field visit, the evaluation and ranking of the importance of ecosystem services.

Preliminary preparation: Basic literature of the concept of ecosystem services and the management of the region; important substrates (eg, map functions of the forest), the methodology for the evaluation of the environment and identify ESS (blank map, questionnaire, etc..).

Integration / synthesis of joint work with other groups.

Final conclusion and summary of the summer school

November / December 2014 The exhibition space TNP Bled

- Presentation of individual research groups (by Summer School group leader)
- Presentation topics: pptx presented by each group with the support of a mentor
- Presentation of results: reports, posters, common flyer
- Awards
- Opening of the exhibition of posters and photos in premises of TNP