

Project Update: October 2018

Summer aspect

Preparing equipment, organizing the field study in summer

Equipment was obtained in July and adapted to spring ecosystems including kick net device, probes for measuring concentration and saturation of oxygen, temperature, pH, conductivity and necessary chemicals. The route was planned in such a way that samples for chemical analysis could be quickly transported to the laboratory at maintained low temperatures (in a handheld fridge).

In August and September, activities included mapping the terrain and determining suitable study sites, as well as making test samples and measuring physicochemical parameters: oxygen concentration, oxygen saturation, pH value, temperature and conductivity. It was necessary to choose the most representative localities. Each locality was photographed and coordinates were recorded.

A briefing lecture, introducing the students with project goals, methodology and study field, was organized at the premises of the Faculty of Sciences and Mathematics in Niš.

After choosing 12 localities for the study, the sampling methodology was determined according to their type. Samples used both capped and uncapped springs, as one of the goals of this study was to determine the degree of anthropogenic impact on springs and wildlife.

Autumn aspect

Sampling took place on October 20th 2018, when macroinvertebrates were collected by using kick nets. Samples were conserved in 70% ethanol and immediately transported to the lab for processing.

Following parameters were measured in the field: oxygen concentration, oxygen saturation, temperature, pH, conductivity and estimate of representation of each substrate type. Samples were collected for analyses of BPK and determining the concentration of ammonium ions, phosphates and nitrates.

Field studies were successful and samples were taken from all 12 springs. After that, samples were transported in a handheld fridge to the laboratory of Faculty of Sciences and Mathematics for determination and further processing.

The total number of recorded individuals was 871, belonging to 18 families. The best-represented families were Chironomidae with 430 individuals and Gammaridae with 264 individuals. The final report will include a detailed report on recorded species and results of chemical analyses.

Promotion of project was successfully realized through printed flyers and presentations to university and school students, as well as the local community.





Zaštita izvorišnih ekosistema na području Vlasinske visoravni

Izvori pitkih voda je sve manje. Nedovoljno da budu za generacije budu. Zato pozivamo i zaštitimo prirodni. Zato pozivamo i zaštitimo prirodni. Zato pozivamo i zaštitimo prirodni. Zato pozivamo i zaštitimo prirodni.

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Zašto baš izvori?

Izvori predstavljaju karakterističan biotop mnogih reliktnih i endemičnih vrsta obitavaju na to da predstavljaju preklap između podzemnih i nadzemnih voda. Na samom Vlasinskoj visoravni ali i oko Vlasine registrovan je velik broj izvora.

Makroinvertebrate

Termin "makroinvertebrate" se odnosi na invertebrate koje se zadržavaju u mrežici ili su dimenzija 100 µm. Diversitet makroinvertebrate je visok u izvornim. Najveći broj ovih organizama u izvornim su hemipteri predstavljajući 10% iz invertebratskih redova. Makroinvertebrate su suštinski bioindikator stanja ekosistema jer dolazi do promena u sastavu i strukturi ove zajednice uzrok delovanja antropogenog faktora. Obzirom na povezanost ovih organizama u lancima ishrane sa makrofitima i ribama, na osnovu broja i strukture zajednice makroinvertebrate, dobijemo procenu stepena narušenosti izvorišnih ekosistema.

Kako sačuvati izvore?

Antropogeni uticaj u vidu zagađenja i kaprovanje izvora sa potrebe industrijalizacije i turizma predstavljaju najveću pretnju za izvorišne ekosisteme. Podizanje ljudske svesti o važnosti očuvanja prirode je neophodno. Zaštita izvora na području Vlasinske visoravni je prioritet i vrlo je bitno kako bi očuvali tih svet na ovom području kao i ljudsko zdravlje.

http://www.rufford.org/projects/milica_alekic/CMS/
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