

The study includes over 25 000 individual specimens taken from more than 100 localities, that were analysed and identified to species level. Sixteen species were identified so far, including seven that have previously not been recorded in Iceland. These include some widespread species, such as *Candona candida* and *Cypria ophtalmica*, as well as species that are geographically more confined, such as *Tonnacypris glacialis*, a species that only inhabits the world's northernmost countries. The newly recorded species are *Potamocypris fulva*, *Potamocypris villosa*, *Cryptocandona reducta*, *Bradleystrandesia reticulata*, *Limnocythere inopinata*, *Ilyocypris bradyi* and *Ilyocypris decipiens*.

Preliminary results also indicate that the species composition might be tied to certain characteristics of the habitat, such as water depth. For example, *Cytherissa lacustris* is abundant in large, deep lakes, and almost absent in smaller, shallower waterbodies. The next step in the project will be to look at various ecological parameters in relation to the species distribution and attempt to determine the species that could most reliably be used as bioindicators for Icelandic waterbodies.

PRESENTER: Výravský, David

TITLE: Ostracods in a heterogeneous spring fen: what drives the spatial and seasonal variation at fine scale

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ABSTRACT: Western Carpathian (Central Europe) spring fens are unique and pristine biotopes, hosting high diversity of various groups of organisms, including many ostracod species. This study is focused on small scale, which have been almost unexplored in this type of environment. A total of 108 samples were taken from 4 mesohabitats in a heterogeneous calcareous spring fen during three occasions (spring, summer and autumn).

The studied site hosts eleven ostracod species, differing in their strength of association with spring environment and most of them showing strongly patchy distributions. Water depth/temperature and amount of dissolved organic carbon were identified as the most significant environmental variables, but these variables only partly accounted for the patchy distribution of ostracods, leaving quite a large part of the variability unexplained. The recorded seasonal changes in ostracod distribution were relatively small, except for an exceptionally wide distribution of the crenobiont species *Cypria reptans* over the site in autumn.

Since springs have been considered a relatively stable environment, greater influence of biotic interactions on the ostracod assemblages can be expected in this habitat and the patchiness in ostracod distribution might be therefore connected with interspecies competition or predation by macroinvertebrate predators.

PRESENTER: Wrożyna, Claudia

TITLE: Quantitative morphological variability of Neotropical Cytheridella

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ABSTRACT: Understanding the morphological variability of ostracod species is crucial for taxonomic decisions, which are in either case the base for any (paleo-)ecological, phylogenetic and biostratigraphic considerations.

Geometric morphometrics offer effective methods to obtain information about shape and shape variability. In ostracodology, however, landmark-based methods are so far not well established. Modern *Cytheridella* populations were sampled during fieldworks from 2013 to 2016 in Florida, Yucatán, Colombia, and Brazil. Valves were analyzed using a combination of landmarks and semi-landmarks. Analyses were performed for entire ontogenetic datasets as well as separately for females, males, and juvenile stages down to A-4. Ratios of podomere and setae lengths of the antennae, and the first and second thoracopod served as base for quantitative analyses of the appendages.

The analyses show that the primary pattern in shape variation is ontogenetic allometry, supporting a clear separation of adults and juveniles. Shape changes are relatively small during ontogeny from A-4 to A-1. Greatest modification of valve shape occurs during the last molt phase. Females with less developed brood pouches cause insufficient differentiation of sexes. Non-size dependent shape changes reveal regional differences between populations of *C. ilosvayi*. Limb traits reveal also distinct geographical patterns identifying regional morphotypes. The distribution of the morphotypes coincides with flyways of American water birds. According to significant differences in the valve shapes Yucatanian *Cytheridella* is considered as a new species while Florida and Brazilian populations relate to *C. ilosvayi*. The co-existence of two species in a lake in Yucatán indicates, however, that the distribution of species is not stationary. Colonization may occur occasionally, but the already established species may have adapted better to ecological conditions and/or occupy available niches preventing settling of th