

Title: SOME CONDITIONS FOR THE DISTRIBUTION AND ABUNDANCE OF CILIATES (PROTOZOA) IN RUNNING WATERS - DO WE REALLY FIND EVERY SPECIES EVERYWHERE?

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Abstract: Approximately 36000 identifications were made in

Title: NUTRIENTS REGENERATION BY ROTIFERS IN TEMPERATE NORTH-EASTERN AMERICAN BOGS

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Abstract: Limnologists have rarely accounted for rotifer's contribution of N and P to bogs. We studied N and P dynamics as a function of rotifer density in pore-water in sphagnum bogs, and as inquilines in pitcher-plants (*Sarracenia purpurea*). Rotifers can account for the majority of N and P input into pitcher plants (8.8-43 mg of N and 18.2-88 mg of P over the growing season into a single leaf). Rotifers within pore-water also contribute significant amounts of N and P. *Habrotrocha rosa* alone, consisting of > 60% of all rotifer in these bogs, contributes 46-232 mg N and 175-875 mg P/ha/yr.

Title: DO PHOSPHORUS-LIMITED ALGAE TAKE UP NUTRIENTS WHILE PASSING THROUGH THE GUT OF ZOOPLANKTERS?

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Abstract: Nutrient-limited algae are known to be a food source of inferior quality for zooplankters. Three factors determine this poor quality: direct mineral limitations of the algae, biochemical limitations and an increased resistance to digestion because of an increase in cell wall thickness. This increase in cell wall thickness can be interpreted as a defence mechanism of the algae against predation by herbivorous zooplankton. Not only do they pass the gut of these zooplankters unharmed, they might actually benefit from this passage as the nutrient-limited algae might actually take-up nutrients while going through the digestive tract of herbivorous zooplankters. In this study, we present results of different experiments investigating whether this increase in cell wall thickness can indeed be seen as an defence mechanism against zooplankters, and whether nutrient-limited algae take-up the limiting nutrient in the guts of their predators.

Title: THE REGULATION OF THE COMMUNITIES OF LARGE SHALLOW LAKES IN THE NORTH-WEST OF EUROPEAN RUSSIA

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Abstract: The changes of phytoplankton, zooplankton, zoobenthos and fish under anthropogenic pressure in large shallow lakes at the 1970-1990s are compared. These three fishery lakes are located in the north-west of European Russia. The general trend is toward the eutrophication of lakes. According to the hypothesis "tropical cascade" the regulation of trophic level in Vozhe lake is "bottom-up" control. Kubenskoe lake illustrates the possibility of mixed regulation as "bottom-up" and