Supplemental Information 3: Planktonic dynamics in Lake Kleiner Gollinsee

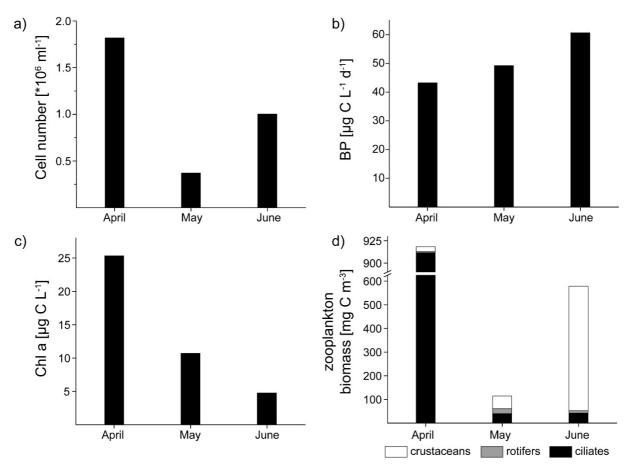


Figure 1. Plankton dynamics in Lake Gollin in April (6. Apr. 2010), May (4. May 2010) and June (1. Jun. 2010): a) bacterial cell number via epifluorescence microscopy; b) bacterial production via ¹⁴C leucine incorporation; c) chlorophyll a concentration; and d) zooplankton biomass in the pelagic zone from Brothers et al. (2013), Hilt et al. (2015), and Lischke et al. (2016).

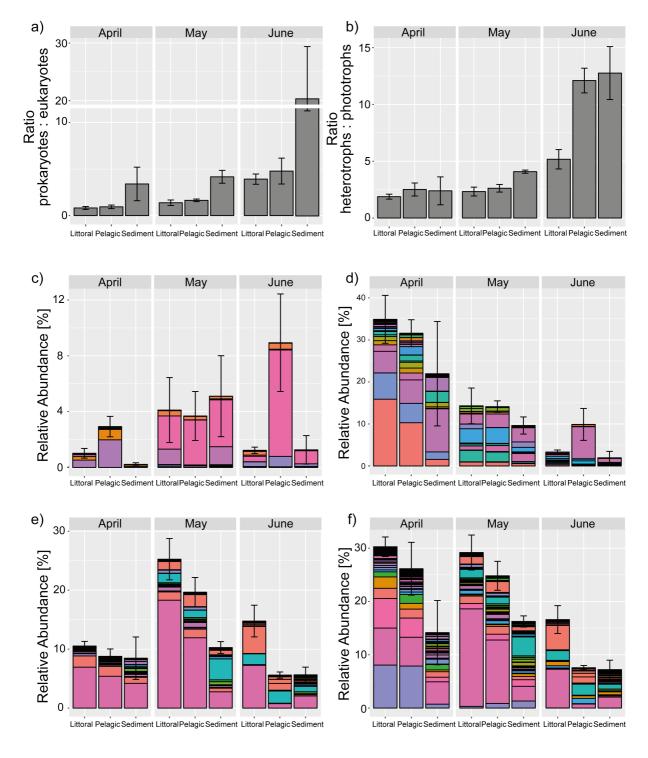


Figure 2. Variations in the ratio of a) prokaryotes: eukaryotes, b) heterotrophs: phototrophs, and relative read abundances of c) zooplankton excluding ciliates (32 OTU), d) zooplankton including ciliates (121 OTU), e) phytoplankton excluding chloroplasts (186 OTU) and f) phytoplankton including chloroplasts (330 OTU) in Lake Gollin in April (21. Apr. 2010), May (19. May 2010), and June (16. Jun. 2010) in the littoral, and pelagic zone and above the sediment (mean \pm standard deviations). The data was calculated based on the number of sequences assigned to prokaryotes (Archaea and Bacteria) and eukaryotes, and to heterotrophic organisms (all organism classified below the domain level, but the groups mentioned under phototrophic organisms) and phototrophic organisms (all

eukaryotic algae, Cyanobacteria, chloroplasts). For zooplankton all Animalia data was summarized and for phytoplankton all algal data. Each colour represents an individual OTU in c-f.

References

Brothers SM, Hilt S, Attermeyer K, Grossart HP, Kosten S, Lischke B, Mehner T, Meyer N, Scharnweber K, Köhler J. (2013). A regime shift from macrophyte to phytoplankton dominance enhances carbon burial in a shallow, eutrophic lake. *Ecosphere* 4(11): 137.

Hilt S, Wanke T, Scharnweber K, Brauns M, Syväranta J, Brothers S et al. (2015). Contrasting response of two shallow eutrophic cold temperate lakes to a partial winterkill of fish. *Hydrobiologia* 749: 31-42.

Lischke B, Weithoff G, Wickham SA, Attermeyer K, Grossart HP, Scharnweber K et al. (2016). Large biomass of small feeders: ciliates may dominate herbivory in eutrophic lakes. *J Plankton Res* 38(1): 2–15.