Supplementary material

Table S1. Linear regression equations and adjusted R² presenting the phosphate concentrations as a function of time in control and nitrogen-treated units at different temperatures.

	Temperature (°C)	Equation	R ²
Control	10	y = -0.0117x + 0.56	0.93
	13	y = -0.0143x + 0.59	0.91
	16	y = -0.0166x + 0.53	0.94
N-addition	10	y = -0.037x + 0.57	0.96
	13	y = -0.039x + 0.59	1
	16	y = -0.038x + 0.61	0.97

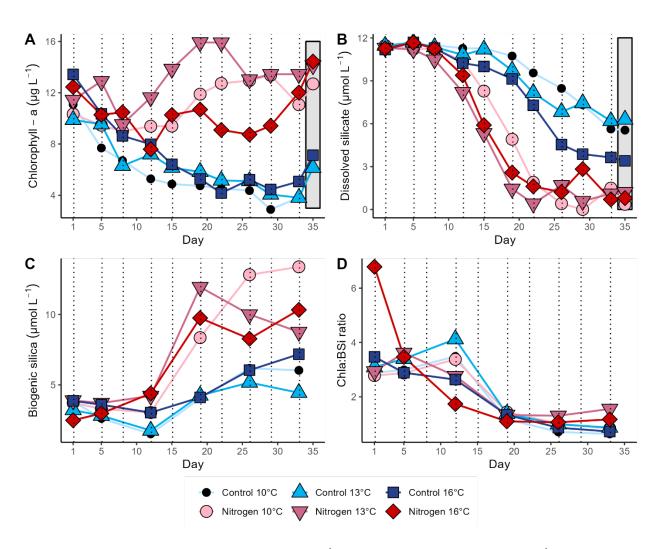


Fig. S1. Concentrations of Chlorophyll-a (µg L⁻¹) (A), dissolved silicate (µmol L⁻¹) (B), biogenic silica (µmol L⁻¹) (C), and the ratio between Chlorophyll-a and biogenic silica (D). Vertical lines illustrate nitrate addition after sampling in the nitrogen-amended units (red symbols). Grey boxes in panels A and B indicate the last sampling when sedimented material was included. Biogenic silica was not measured on day 35.

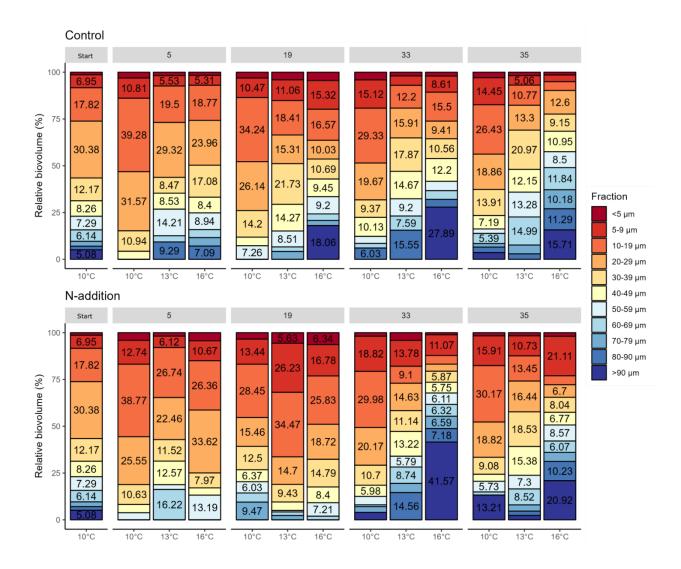


Fig. S2. The contribution (%) of different size fractions to the total biovolume measured by FlowCam at the start of the experiment and on experiment days 5, 19, 33, and 35. Values >5 % are shown in the graph.

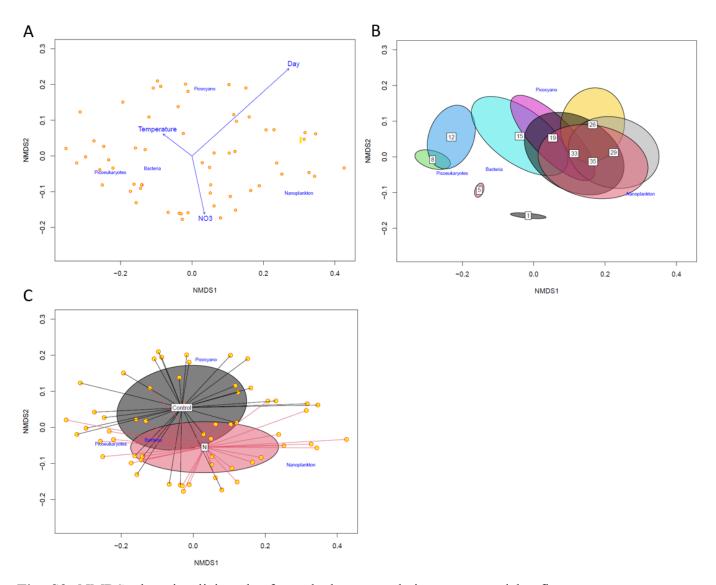


Fig. S3. NMDS plot visualizing the four plankton populations measured by flow cytometry (heterotrophic bacteria (=Bacteria), *Synechococcus*-like picocyanobacteria (=Picocyano), picoeukaryotes, and nanophytoplankton (=Nanoplankton)) along environmental vectors (temperature, NO₃- concentration, and experiment day) (A) and an ordiellipse plot using experiment day as the grouping factor, showing the shift of the plankton community over time (B). In the ordiellipse plot (C), N-treatment and Control were used as grouping factors.

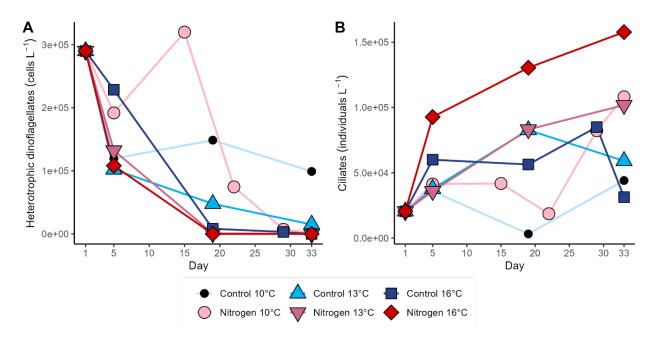


Fig. S4. Development of the abundance of heterotrophic dinoflagellates (A) and ciliates (B) over time.