**TABLE S1** Description of the sediment samples. Color description is expressed using Munsell Color. NA means “not analyzed”.

**TABLE S2** List of ostracode images. Abbreviation: LV = left valve, RV = right valve, SEM = Scanning Electron Microscope.

**TABLE S3** List of ostracode taxa. Abbreviation: A = adult, J= juvenile, C = carapace, LV = left valve, RV = right valve.

**TABLE S4** Ostracode abundance (ind.), density (ind./10 cm2), species richness, and the inverse Simpson index (*N2*).

**TABLE S5** Weights (mg) of ostracode valves, carapaces, and fragments and the occurrence of the colored specimens. Abbreviation: + = presence, - = absence.

**TABLE S6** Measurements and calculation of total carbon (TC), total nitrogen (TN), total organic carbon (TOC), total inorganic carbon (TIC), the TOC/TN ratio, and CaCO3.

**TABLE S7** Dataset for a meta-analysis. Abbreviation: Rho = Spearman’s rank correlation coefficient, N = the number of samples.