Table S1. UV-A and UV-B doses (kJ m^{-2}) over the experimental period of UV treatment (i.e., ultraviolet radiation (UVR)) and at 280, 295, 305, 320, 335, 345, and 360 nm (weighted for the DNA Setlow action spectrum).

	UVR	**280 nm**	**295 nm**	**305 nm**	**320 nm**	**335 nm**	**345 nm**	**360 nm**
After 1 h								
UV-B	2.70	2.29	1.88	1.66	0.13	0.00	0.00	0.00
UV-A	62.13	56.56	55.99	55.20	47.95	39.55	22.30	10.84
After 1.5 h								
UV-B	4.06	3.44	2.83	2.49	0.19	0.00	0.00	0.00
UV-A	93.19	84.83	83.98	82.80	71.93	59.33	33.44	16.26
After 2.5 h								
UV-B	6.76	5.73	4.71	4.14	0.32	0.00	0.00	0.00
UV-A	155.32	141.39	139.97	137.99	119.88	98.88	55.74	27.10
After 3.5 h								
UV-B	9.46	8.02	6.60	5.80	0.45	0.00	0.00	0.00
UV-A	217.45	197.95	195.96	193.19	167.83	138.44	78.03	37.94
After 4 h								
UV-B	10.81	9.16	7.54	6.63	0.51	0.00	0.00	0.00
UV-A	248.51	226.23	223.96	220.79	191.80	158.21	89.18	43.36
After 4.5 h								
UV-B	12.17	10.31	8.48	7.46	0.57	0.01	0.00	0.00
UV-A	279.57	254.50	251.95	248.39	215.78	177.99	100.33	48.78
After 5.5 h								
UV-B	14.87	12.60	10.36	9.12	0.70	0.01	0.00	0.00
UV-A	341.70	311.06	307.94	303.58	263.73	217.54	122.62	59.62
After 6 h								
UV-B	16.22	13.74	11.31	9.94	0.76	0.01	0.00	0.00
UV-A	372.77	339.34	335.94	331.18	287.71	237.32	133.77	65.04
After 6.5 h								
UV-B	17.57	14.89	12.25	10.77	0.83	0.01	0.00	0.00
UV-A	403.83	367.62	363.93	358.78	311.68	257.09	144.21	70.46
After 7.5 h								
UV-B	20.28	17.18	14.13	12.43	0.96	0.01	0.00	0.00
UV-A	465.96	424.17	419.92	413.98	359.63	296.65	167.21	81.30

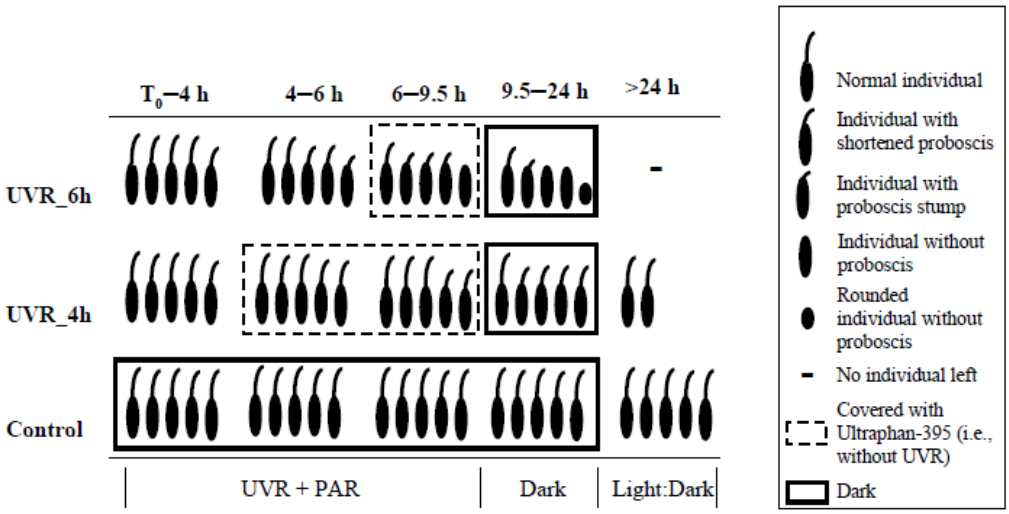
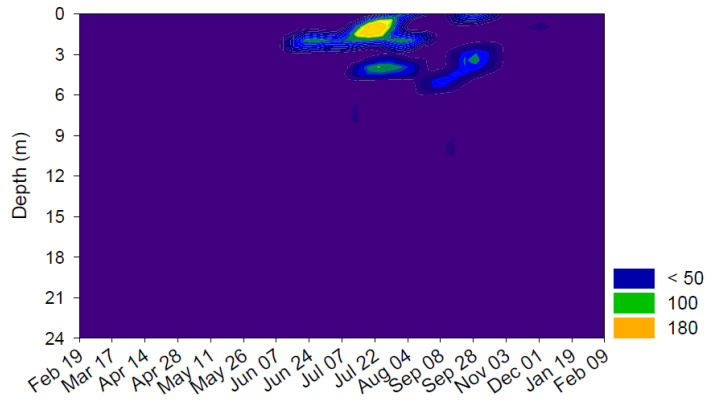
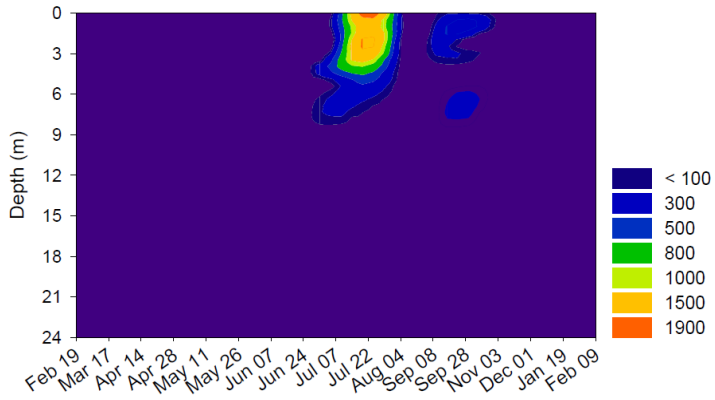


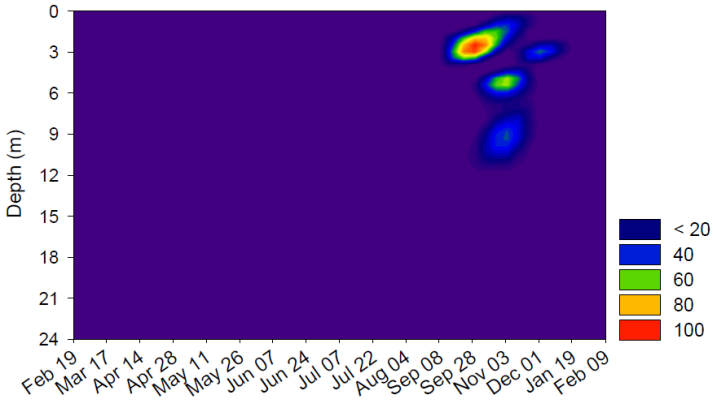
Figure S1. Scheme of the morphological changes of *Pelagodileptus trachelioides* observed under irradiation conditions described for exp 3 (i.e., photoenzymatic repair experiment). Ciliates were kept under UVR for 6 h (UVR_6h treatment) and 4 h (UVR_4h treatment) against a dark control. After the respective UV period, the experimental wells were covered with an Ultraphan-395 foil that lets pass only photosynthetically active radiation (PAR). After 9.5 h, all wells were kept in the dark until the next day, where ciliates were consecutively incubated under ambient light/dark conditions (see text).



(**a**)



(**b**)



(**c**)

Figure S2. Seasonal and spatial occurrence and abundance (Ind. L^{-1}) of *Pelagodileptus trachelioides* (**a**), *Vorticella chlorellata* (**b**), and *Stokesia vernalis* (**c**) in Piburgersee in 2004–2005. Ciliate samples were assessed over a one-year cycle (for time points, see x-axis) along a depth gradient (y-axis) by applying the quantitative protargol staining technique [54].