Support Information

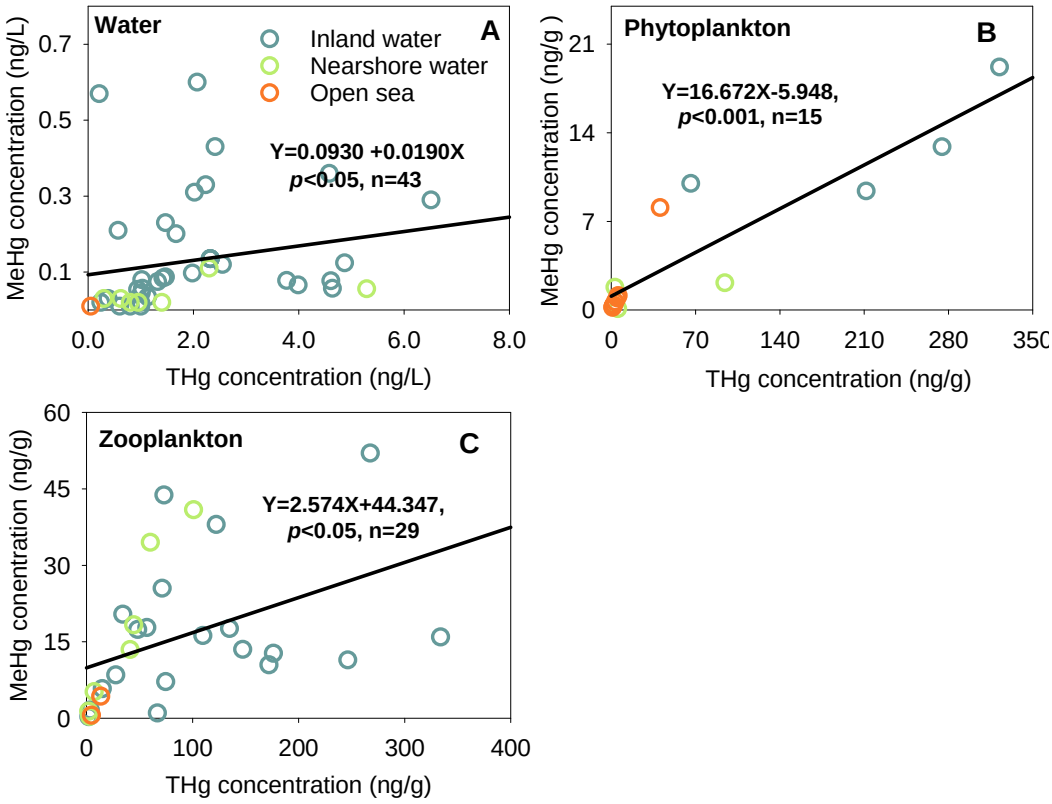

Fig. S1 Relationships between THg and MeHg in the waters (A) and plankton (B and C)

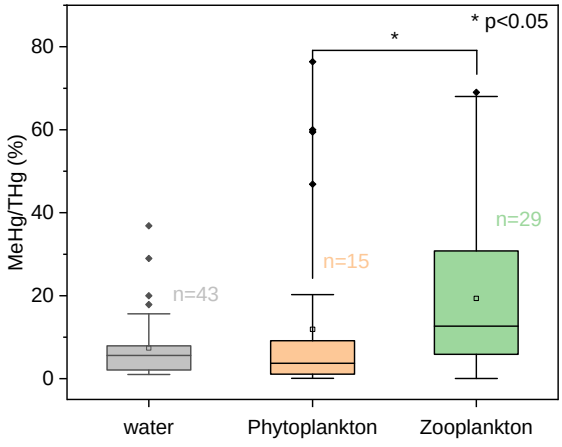

Fig. S2 Percentage of MeHg in THg (%) in the water, phytoplankton and zooplankton

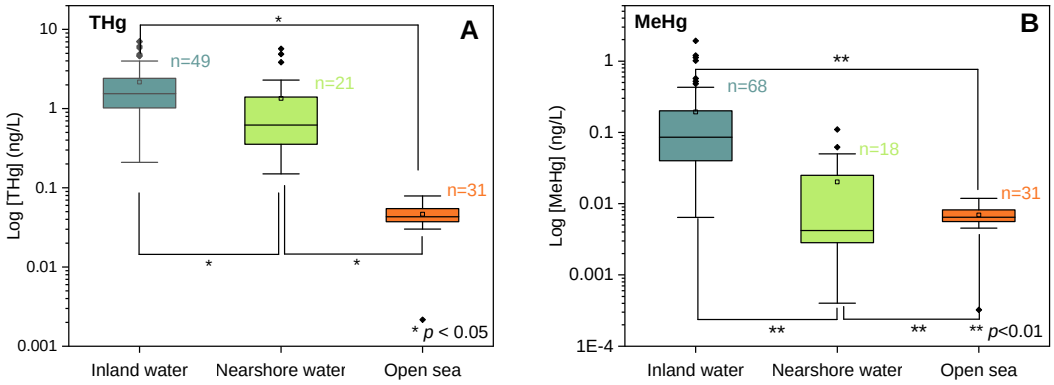

Fig. S3 Comparison of THg (A) and MeHg (B) concentrations in inland waters, nearshore waters and open seas

12

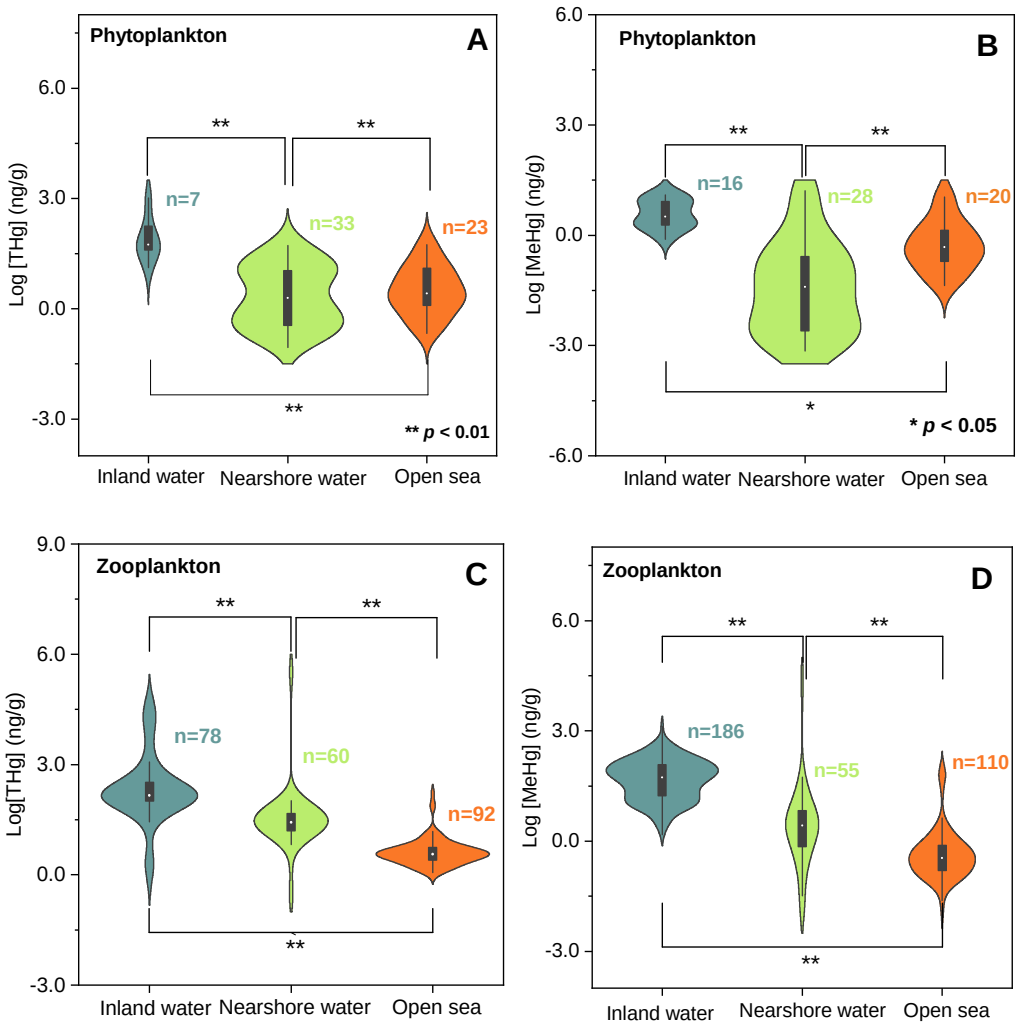

Fig. S4 Comparison of THg, MeHg in phytoplankton (A and B) and zooplankton (C and D) from inland waters, nearshore waters and open seas

Table S1 A summary of Hg concentrations in the phytoplankton in aquatic ecosystems

Latitude	Longitude	Ecosystems types	Locations	Water		Phytoplankton		Log [BAF]		References
				THg (ng/L)	MeHg (ng/L)	THg (ng/g)	MeHg (ng/g)	THg (L/kg)	MeHg (L/kg)	
54.690	18.605	Nearshore water	southern Baltic, Europe	1.3	–	41.3	–	4.5	–	Bełdowska and Mudrak-Cegiołka, 2017
54.667	18.473	Nearshore water	southern Baltic, Europe	2.3	–	70.9	–	4.5	–	
54.494	18.571	Nearshore water	southern Baltic, Europe	3.9	–	53.9	–	4.2	–	
−38.184	176.431	Inland water	Tarawera, New Zealand	0.6	0.2	5105	–	7.0	–	Verburg et al., 2014
−38.265	176.435	Inland water	Rotomahana, New Zealand	4.6	0.4	899	–	5.3	–	Verburg et al., 2014
−38.102	176.275	Inland water	Rotorua, New Zealand	1.5	0.2	200	–	5.1	–	Verburg et al., 2014
−23.071	−44.138	Nearshore water	Ilha Grande Bay, Brazil	–	–	3	1.8	–	–	Guedes Seixas et al., 2014
45.996	−73.993	Inland water	Lake Geai, Canada	–	0.5	–	61.5	–	5.1	Le Jeune et al., 2012
45.992	−74.014	Inland water	Croche, Canada	–	0.04	–	31.5	–	5.9	Le Jeune et al., 2012
−22.799	−43.154	Nearshore water	Guanabara Bay, Brazil	–	–	101.6	59.1	–	–	Kehrig et al., 2009a
−3.617	−55.316	Inland water	Tapajós River, Brazil	1.3	0.08	66	10	4.7	5.1	Roulet et al., 2000

48.516	−92.780	Inland water	Voyageurs National Park, USA	–	0.2	–	9.1	–	4.6	Rolfhus et al., 2011
48.010	−88.879	Inland water	Isle Royale, USA	–	0.03	–	13.4	–	5.6	Rolfhus et al., 2011
47.065	−90.626	Inland water	Apostle Islands, USA	–	2.2	–	51.6	–	4.4	Rolfhus et al., 2011
48.010	−86.902	Inland water	Open Lake Superior, USA	–	0.01	–	3.9	–	5.8	Rolfhus et al., 2011
46.780	−90.769	Inland water	Chequamegon Bay, USA	–	0.1	–	5.6	–	4.6	Rolfhus et al., 2011
42.846	−88.991	Inland water	Southern Wisconsin, USA	–	0.2	–	9.4	–	4.7	Rolfhus et al., 2011
46.230	−89.583	Inland water	northern Wisconsin, USA	–	0.2	–	33.3	–	5.3	Rolfhus et al., 2011
51.460	−91.934	Inland water	ELA Flooded Uplands, USA	–	0.5	–	61.2	–	5.1	Rolfhus et al., 2011
48.306	−79.648	Inland water	mouse lake, Canada	48.3	–	212.2	–	–	5.4	Kirkwood et al., 1999
45.185	−78.844	Inland water	ranger lake Canada	45.2	–	208.5	–	–	5.7	Kirkwood et al., 1999
8.364	−74.553	Inland water	Grande Marsh, Mojana region, Colombia	330	–	520	–	3.2	–	Marrugo-Negrete et al., 2008
37.796	−122.356	Nearshore water	San Francisco Bay, USA	–	–	94.2	1.5	–	–	Luengen and Flegal, 2009
22.902	120.260	Inland water	Erh-Jen, China	30050	–	5872825	–	5.5	–	Tien, 2004
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (black)	2.4	0.4	322.4	19.2	5.1	4.7	Vieira et al., 2018
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (clear)	2.0	0.3	274.6	12.9	5.1	4.6	Vieira et al., 2018
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (white)	2.2	0.3	211.6	9.4	5.0	4.5	Vieira et al., 2018

17	−154.4	Open sea		–	–	5.7	1.1	5.2	5.7	
8	−156	Open sea		–	–	40.5	8.1	6.1	6.5	
0.36	−157.87	Open sea		–	–	1.0	0.2	5.3	4.9	
−3.5	−160.77	Open sea		–	–	4.7	1.0	6.2	5.3	
−5.96	−162.61	Open sea	Pacific Ocean	–	–	3.2	0.6	6.1	5.3	Gosnell and Mason, 2015
−9.25	−165.36	Open sea		–	–	1.7	0.3	6.0	5.2	
−12	−167.56	Open sea		–	–	1.9	0.4	5.4	5.3	
−15	−173.1	Open sea		–	–	1.3	0.3	5.0	4.9	
30	−130	Open sea		0.004	–	–	0.8	–	5.3	
40.992	−73.490	Nearshore water	Long Island Sound, USA	–	–	5.4	0.1	3.5	3.8	Gosnell et al., 2017

Table S2 A summary of Hg concentrations in Zooplankton in aquatic ecosystems

Latitude	Longitude	Ecosystems types	Locations	Water		Zooplankton		Log [BAF]		References
				THg (ng/L)	MeHg (ng/L)	THg (ng/g)	MeHg (ng/g)	THg (L/kg)	MeHg (L/kg)	
17	−154.4	Open sea	Pacific Ocean	–	–	–	–	4.6	5.3	Gosnell and Mason, 2015
8	−156	Open sea		–	–	–	–	6.1	5.9	
0.36	−157.87	Open sea		–	–	–	–	6.3	5.6	
−3.5	−160.77	Open sea		–	–	–	–	6.5	5.2	
−5.96	−162.61	Open sea		–	–	–	–	6.6	6.2	
−9.25	−165.36	Open sea		–	–	–	–	5.9	5.0	
−12	−167.56	Open sea		–	–	–	–	6.2	5.4	
−15	−173.1	Open sea		–	–	–	–	5.9	5.6	
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (black)	2.4	0.4	–	–	5.2	4.8	Vieira et al., 2018
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (clear)	2.0	0.3	333.9	15.9	5.2	4.7	Vieira et al., 2018
−6.372	−62.095	Inland water	Rio Madeira Basin, Amazon (white)	2.2	0.3	246.3	11.4	5.0	4.5	Vieira et al., 2018
45.996	−73.993	Inland water	Lake Geai, Canada	–	–	–	134.5	–	5.4	Le Jeune et al., 2012
45.992	−74.014	Inland water	Croche, Canada	–	–	–	58.0	–	6.1	Le Jeune et al., 2012
47.8125	−86.87988	Nearshore water	Lake Superior (April), USA	–	–	101.0	40.9	–	–	Back et al., 2003
			Lake Superior	–	–	44.5	18.3	–	–	Back et al., 2003

			(august), USA							
43.419	−89.731	Inland water	Devil's Lake,USA	2.1	0.6	–	143	–	5.9	Herrin et al., 1998
−38.184	176.432	Inland water	Rotorua, New Zealand	0.2	0.6	902	–	6.6	–	Verburg et al., 2014
53.619	108.160	Inland water	Lake Baikal, Russia	0.2	0.02	2.1	0.3	3.9	4.2	Meuleman et al., 1995; Perrot et al., 2010
55.680	101.883	Inland water	Bratsk Water Reservoir, Russia	1.0	0.08	3.6	1.6	3.6	4.3	Meuleman et al., 1995; Perrot et al., 2010
−22.806	−43.150	Nearshore water	southern Coast, Brazil	–	–	60.2	34.5	–	–	Kehrig et al., 2009b
13.609	45.685	Nearshore water	Gulf of Trieste, Slovenia	5.3	0.06	366000	30000	7.8	8.6	Faganeli et al., 2003
48.516	−92.780	Inland water	Voyageurs National Park, USA	0.2	–	120	–	–	5.8	Rolfhus et al., 2011
48.010	−88.879	Inland water	Isle Royale, USA	0.08	–	53	–	–	5.9	Rolfhus et al., 2011
47.065	−90.626	Inland water	Apostle Islands, USA	1.9	–	375	–	–	5.3	Rolfhus et al., 2011
46.373	−93.669	Inland water	North–east Minnesota, USA	0.1	–	106	–	–	6.0	Rolfhus et al., 2011
48.010	−86.902	Inland water	Open Lake Superior, USA	0.006	–	30	–	–	6.7	Rolfhus et al., 2011
46.780	−90.769	Inland water	Chequamegon Bay, USA	0.1	–	43	–	–	5.6	Rolfhus et al., 2011
42.846	−88.991	Inland water	Southern Wisconsin, USA	0.2	–	143	–	–	5.9	Rolfhus et al., 2011

46.230	−89.583	Inland water	northern Wisconsin, USA	0.2	–	57	–	–	5.4	Rolfhus et al., 2011
51.460	−91.934	Inland water	ELA Flooded Uplands, USA	1.0	–	423	–	–	5.6	Rolfhus et al., 2011
51.460	−91.934	Inland water	ELA Flooded Uplands, USA	1.1	–	275	–	–	5.4	Rolfhus et al., 2011
26.545	106.403	Inland water	Hongfeng Reservoir, China	4.6	0.08	172.0	10.5	4.6	5.1	Yao et al., 2020
26.652	106.512	Inland water	Baihua reservoir, China	2.3	0.1	134.8	17.6	4.8	5.1	Yao et al., 2020
26.5407	106.644	Inland water	Aha Wetland, China	2.0	0.1	74.7	7.2	4.6	4.9	Yao et al., 2020
26.847	104.234	Inland water	Caohai Wetland, China	1.7	0.2	66.8	1.0	4.6	3.7	Yao et al., 2020
39.055	−121.310	Inland water	Camp Far West, USA	173.0	0.07	42.7	–	5.7	–	Stewart et al., 2008
31.301	116.292	Inland water	Fozlling, China	40.0	0.02	73	43.8	3.3	6.3	Razavi et al., 2015
32.000	118.941	Inland water	Hengshan, China	0.8	0.01	27.6	8.5	4.5	5.9	Razavi et al., 2015
31.305	116.749	Inland water	Longhekou, China	40.0	0.01	34.2	20.4	2.9	6.3	Razavi et al., 2015
32.439	118.798	Inland water	Meishan, China	20.0	0.01	48.3	17.4	3.4	6.2	Razavi et al., 2015
29.577	118.932	Inland water	Qiandao, China	0.6	0.01	71.3	25.5	5.1	6.4	Razavi et al., 2015
29.938	121.061	Inland water	Siming, China	1.0	0.01	56.9	17.8	4.8	6.3	Razavi et al., 2015

31.286	119.419	Inland water	Tianmu, China	1.0	0.02	14.9	5.8	4.2	5.5	Razavi et al., 2015
60.117	−85.078	Nearshore water	Hudson Bay, Canada	–	–	41.0	13.5	–	–	Foster et al., 2012
70.313	−171.387	Open sea	Chukchi Sea, Canada	–	–	13.4	4.3	–	–	Fox et al., 2017
46.001	−75.798	Inland water	Gatineau Park, Canada	0.4	0.03	–	24	–	5.9	Chételat et al., 2018
55.459	−77.915	Nearshore water	Kuujjuaraapik, Canada	2.3	0.1	–	93	–	5.9	Chételat et al., 2018
63.193	−67.544	Nearshore water	Iqaluit, Canada	1.0	0.02	–	49	–	6.4	Chételat et al., 2018
75.410	−94.395	Nearshore water	Resolute Bay, Canada	0.6	0.03	–	65	–	6.3	Chételat et al., 2018
40.725	−8.622	Nearshore water	Laranjo Bay, Portugal	18.3	–	171	–	3.6	–	Cardoso et al., 2014
44.533	−73.257	Inland water	Malletts Bay, USA	–	–	267.5	52	–	–	Chen et al., 2012
45.027	−73.191	Inland water	Missisquoi Bay, USA	–	–	109.7	16.2	–	–	Chen et al., 2012
26.652	106.512	Inland water	Reservoirs in Guizhou, China	6.5	0.3	147.3	13.5	4.3	4.6	Long et al., 2018
26.652	106.512	Inland water	Baihua Reservoir Upstream, China	2.3	0.1	1350.0	9.3	5.6	4.8	Wang et al., 2011
26.652	106.512	Inland water	Baihua Reservoir middle, China	2.3	0.1	176.3	12.8	4.8	5.0	Wang et al., 2011
26.652	106.512	Inland water	Baihua Reservoir downstream, China	2.3	0.1	122.3	38.0	4.7	5.4	Wang et al., 2011

44.30	−65.33	Inland water	Beaverskin, Canada	0.9	0.05	–	101.4	–	6.2	Clayden et al., 2013
44.45	−65.27	Inland water	Big Dam East, Canada	1.5	0.09	–	128.6	–	6.1	Clayden et al., 2013
44.45	−65.28	Inland water	Big Dam West, Canada	4.9	0.1	–	160.7	–	6.0	Clayden et al., 2013
44.32	−65.23	Inland water	Cobrielle, Canada	1.0	0.06	–	147.4	–	6.3	Clayden et al., 2013
44.45	−65.22	Inland water	George, Canada	3.8	0.08	–	140.0	–	6.2	Clayden et al., 2013
44.28	−65.23	Inland water	Hilchemakaar, Canada	2.6	0.1	–	115.0	–	5.9	Clayden et al., 2013
44.33	−65.23	Inland water	North Cranberry, Canada	1.4	0.08	–	216.7	–	6.4	Clayden et al., 2013
44.30	−65.35	Inland water	Pebbleloggitch, Canada	4.6	0.06	–	86.7	–	6.1	Clayden et al., 2013
44.32	−65.28	Inland water	Peskowesk, Canada	4.0	0.07	–	218.3	–	6.4	Clayden et al., 2013)
44.32	−65.23	Inland water	Puzzle Canada	1.1	0.04	–	168.6	–	6.6	Clayden et al., 2013)
44.28	−65.25	Inland water	Upper Silver, Canada	1.0	0.05	–	90.0	–	6.2	Clayden et al., 2013
–	–	Open sea	North–west Atlantic Ocean, USA	0.05	0.01	4.7	0.6	4.9	4.8	Hammerschmidt et al., 2013
53.394	−60.205	Nearshore water	Goose Bay, Canada	1.4	0.02	7.2	5.2	3.7	5.0	
53.751	−59.573	Nearshore water	Lake Melville, Canada	0.8	0.02	2.0	1.4	3.3	4.4	Schartup et al., 2015

54.311	−57.766	Nearshore water	Groswater Bay, Canada	0.3	0.03	2.9	0.4	3.7	3.9	
54.690	18.605	Nearshore water	Chałupy, Poland	1.3	–	66.0	–	4.7	–	Bełdowska and Mudrak–Cegiołka, 2017
54.667	18.473	Nearshore water	Osłonino, Poland	2.3	–	78.0	–	4.5	–	
54.494	18.571	Nearshore water	Gdynia, Poland	3.9	–	70.0	–	4.3	–	

Table S3 Volume, surface area and surface (SA)/volume (V) ratios of phytoplankton species

Phytoplankton type	**Species**	**Volume (μm^3)**	**Area (μm^2)**	**SA/V (μm^{-1})**	**References**
green algae	*S. capricornutu*	11.8	1156.0	0.01	Miles et al., 2001
green algae	*Cosmarium botrytis*	113040.0	11304.0	0.1	
green algae	*Chlamydomonas reinhardtii*	118.0	114.0	1.0	Pickhardt and Fisher, 2007
cyanobacteria	*Schizothrix calcicola*	212.0	567.0	2.7	Miles et al., 2001
cyanobacteria	*Synechocystis sp.*	4.5	13.3	3.0	
diatom	*Thallasiosira spp*	955.4	460.6	0.5	Pickhardt and Fisher, 2007
cryptophyte	*Cryptomonas ozolini*	267.0	224.0	0.8	

Table S4 Relationships between chlorophyll-a and THg and MeHg concentrations, and their BAF values

Latitude	Longitude	Sites	THg (ng/g)	MeHg (ng/g)	Log(BAF_{THg}) (L/kg)	Log(BAF_{MeHg}) (L/kg)	chlorophyll–a (μg/L)	References
44.533	−73.191	Malletts Bay, USA (2005, August)	78	18	–	–	3.8	
44.533	−73.191	Malletts Bay, USA (2006, August)	71	28	–	–	4.5	
44.533	−73.191	Malletts Bay, USA (2007, June)	333	25	–	–	2.9	
44.533	−73.191	Malletts Bay USA (2007, August)	620	–	–	–	3.0	
44.533	−73.191	Malletts Bay, USA (2008, August)	308	91	–	–	2.4	
44.533	−73.191	Malletts Bay, USA (2008, August)	195	98	–	–	3.7	Chen et al., 2012
45.027	−73.257	Missisquoi Bay, USA (2005, August)	24	3	–	–	29	
45.027	−73.257	Missisquoi Bay, USA (2006, August)	30	10	–	–	14	
45.027	−73.257	Missisquoi Bay, USA (2007, June)	65	33	–	–	21.3	
45.027	−73.257	Missisquoi Bay, USA (2007, August)	440	–	–	–	4.8	
45.027	−73.257	Missisquoi Bay, USA (2008, June)	74	31	–	–	14.6	
45.027	−73.257	Missisquoi Bay, USA (2008, June)	25	4	–	–	26.8	
46.001	−75.798	Gatineau Park, Canada	–	24	–	5.9	1.8	
55.459	−77.915	Kuujjuaraapik, Canada	–	93	–	5.9	1.9	Chételat et al., 2018
63.193	−67.544	Iqaluit, Canada	–	49	–	6.4	0.5	
75.410	−94.395	Resolute Bay, Canada	–	65	–	6.3	0.3	
26.632	106.499	Yanjiaozhai, China	222.8	20.8	4.5	4.8	11.1	
26.652	106.534	Qushuiko, China	135.4	13.5	4.4	4.8	10.7	Long et al., 2018
26.670	106.551	Bengfang, China	122.3	11.2	4.3	4.8	11.1	
26.683	106.534	Daba, China	108.7	8.6	4.2	4.8	7.8	
31.301	116.292	Fozlling, China	73	43.8	3.3	6.3	1.9	Razavi et al., 2015
32.000	118.941	Hengshan, China	27.6	8.5	4.5	5.9	2.9	

31.305	116.749	Longhekou, China	34.2	20.4	2.9	6.3	8.2	
32.439	118.798	Meishan, China	48.3	17.4	3.4	6.2	1.8	
29.577	118.932	Qiandao, China	71.3	25.5	5.1	6.4	1.5	
29.938	121.061	Siming, China	56.9	17.8	4.8	6.3	6.5	
31.286	119.419	Tianmu, China	14.9	5.8	4.2	5.5	23.7	
39.055	−121.309	Camp Far West Reservoir, USA (2002 fall)	383.2	3.64	–	4.8	21	
39.055	−121.309	Camp Far West Reservoir, USA (2002 winter)	139.2	54.3	–	6.0	9.8	
39.055	−121.309	Camp Far West Reservoir, USA (2003 winter)	171.4	36	–	5.8	11	Stewart et al., 2008
39.055	−121.309	Camp Far West Reservoir, USA (2002 spring)	106.2	72.2	–	5.9	2	
39.055	−121.309	Camp Far West Reservoir, USA (2002 spring)	122.4	80.8	–	6.0	3.4	
39.055	−121.309	Camp Far West Reservoir, USA (2002 summer)	184.9	15.9	–	5.3	4	
39.055	−121.309	Camp Far West Reservoir, USA (2003 summer)	103.4	36.2	–	5.8	3.9	
26.683–26.7	106.45–106.567	Baihua Reservoir, China (upstream)	1350.0	9.3	5.6	4.8	7.5	Wang et al., 2011
		Baihua Reservoir, China (middle)	176.3	12.8	4.8	5.0	10.5	
		Baihua Reservoir, China (downstream)	122.3	38.0	4.7	5.4	9.6	
26.546	106.403	Hongfeng Reservoir, China	172.0	10.5	4.6	5.1	8.9	
26.652	106.512	Baihua Reservoir, China	134.8	17.6	4.8	5.1	9.2	Yao et al., 2020
26.541	106.645	Aha Reservoir, China	74.7	7.2	4.6	4.9	13.5	
26.847	104.234	Caohai Wetland, China	66.8	1.0	4.6	3.7	8.0	
−22.806	−43.150	Guanabara Bay, Brazil	60.2	34.5	–	–	16.4	Kehrig et al., 2009b
−41.035	−71.481	Lake Nahuel Huapi, Brazil	14244.9	10.5	–	–	14	Rizzo et al., 2014
−38.184	176.432	Tarawera, NewZealand	902	–	6.6	–	1.6	Verburg et al., 2014

40.992	−73.490	Western end of Long Island Sound (LIS), USA (spring)	9.2	1.7	3.9	5.6	28.8	
40.992	−73.490	Western end of LIS, USA (summer)	9.3	2.2	4.1	5.4	11.6	
40.181	−71.802	Eastern end of LIS, USA (spring)	49.2	3.4	5.0	5.7	1.4	
40.181	−71.802	Eastern end of LIS, USA (summer)	28.6	2.3	4.7	6.2	10.3	Gosnell et al., 2017
40.992	−73.490	western end of LIS, USA (fall)	16.3	2.9	4.6	5.6	3.5	
40.181	−71.802	Eastern end of LIS, USA (fall)	52.4	2.6	5.1	5.76	1.3	
41.071	−72.951	Central LIS, USA (fall)	50.4	2.8	5.2	5.52	3.9	
40.942	−71.192	shelf break region of LIS, USA	32.3	2.8	5.2	5.98	0.5	
40.593	−71.241	mid–shelf of LIS, USA	23.9	1.0	5.2	5.53	0.1	

Table S5 Relationships between zooplankton biomasses and THg and MeHg concentrations, and their BAF values

Latitude	Longitude	Sites	THg (ng/g)	MeHg (ng/g)	Log(BAF_{THg}) (L/kg)	Log(BAF_{MeHg}) (L/kg)	Biomass (μg/L)	References
31.301	116.292	Fozlling, China	73	43.8	3.3	6.3	142.5	
32.000	118.941	Hengshan, China	27.6	8.5	4.5	5.9	62.2	
31.305	116.749	Longhekou, China	34.2	20.4	2.9	6.3	58.5	
32.439	118.798	Meishan, China	48.3	17.4	3.4	6.2	79.2	Razavi et al., 2015
29.577	118.932	Qiandao, China	71.3	25.5	5.1	6.4	71.4	
29.938	121.061	Siming, China	56.9	17.8	4.8	6.3	66.7	
31.286	119.419	Tianmu, China	14.9	5.8	4.2	5.5	30.9	
39.055	−121.309	Camp Far West Reservoir, USA (2002 fall)	383.2	3.6	–	4.8	1.5	
39.055	−121.309	Camp Far West Reservoir, USA (2002 winter)	139.2	54.3	–	6.0	93	
39.055	−121.309	Camp Far West Reservoir, USA (2003 winter)	171.4	36	–	5.8	12	
39.055	−121.309	Camp Far West Reservoir, USA (2002 spring)	106.2	72.2	–	5.9	138	Stewart et al., 2008
39.055	−121.309	Camp Far West Reservoir, USA (2002 spring)	122.4	80.8	–	6.0	83	
39.055	−121.309	Camp Far West Reservoir, USA (2002 summer)	184.9	15.9	–	5.3	4.6	
39.055	−121.309	Camp Far West Reservoir, USA (2003 summer)	103.4	36.2	–	5.8	11	

References

Back R C, Gorski P R, Cleckner L B, Hurley J P (2003). Mercury content and speciation in the plankton and benthos of Lake Superior. Science of the Total Environment, 304(1–3): 349–354 doi:10.1016/S0048-9697(02)00580-6

Bełdowska M, Mudrak-Cegiołka S (2017). Mercury concentration variability in the zooplankton of the southern Baltic coastal zone. Progress in Oceanography, 159: 73–85 doi:10.1016/j.pocean.2017.09.009

Cardoso P G, Pereira E, Duarte A C, Azeiteiro U M (2014). Temporal characterization of mercury accumulation at different trophic levels and implications for metal biomagnification along a coastal food web. Marine Pollution Bulletin, 87(1–2): 39–47 doi:10.1016/j.marpolbul.2014.08.013

Chen C, Kamman N, Williams J, Bugge D, Taylor V, Jackson B, Miller E (2012). Spatial and temporal variation in mercury bioaccumulation by zooplankton in Lake Champlain (North America). Environmental Pollution, 161: 343–349 doi:10.1016/j.envpol.2011.08.048

Chételat J, Richardson M C, MacMillan G A, Amyot M, Poulain A J (2018). Ratio of methylmercury to dissolved organic carbon in water explains methylmercury bioaccumulation across a latitudinal gradient from North-Temperate to arctic lakes. Environmental Science & Technology, 52(1): 79–88 doi:10.1021/acs.est.7b04180

Clayden M G, Kidd K A, Wyn B, Kirk J L, Muir D C G, O'Driscoll N J (2013). Mercury biomagnification through food webs is affected by physical and chemical characteristics of lakes. Environmental Science & Technology, 47(21): 12047–12053 doi:10.1021/es4022975

Faganeli J, Horvat M, Covelli S, Fajon V, Logar M, Lipej L, Cermelj B (2003). Mercury and methylmercury in the Gulf of Trieste (northern Adriatic Sea). Science of the Total Environment, 304(1–3): 315–326 doi:10.1016/S0048-9697(02)00578-8

Foster K L, Stern G A, Pazerniuk M A, Hickie B, Walkusz W, Wang F, Macdonald R W (2012). Mercury biomagnification in marine zooplankton food webs in hudson bay. Environmental Science & Technology, 46(23): 12952–12959 doi:10.1021/es303434p

Fox A L, Trefry J H, Trocine R P, Dunton K H, Lasorsa B K, Konar B, Ashjian C J, Cooper L W (2017). Mercury biomagnification in food webs of the northeastern Chukchi Sea, Alaskan Arctic. Deep-sea Research. Part II, Topical Studies in Oceanography, 144: 63–77 doi:10.1016/j.dsr2.2017.04.020

Gosnell K J, Balcom P H, Tobias C R, Gilhooly W P III, Mason R P (2017). Spatial and temporal trophic transfer dynamics of mercury and methylmercury into zooplankton and phytoplankton of Long Island Sound. Limnology and Oceanography, 62(3): 1122–1138 doi:10.1002/lno.10490

Gosnell K J, Mason R P (2015). Mercury and methylmercury incidence and bioaccumulation in plankton from the central Pacific Ocean. Marine Chemistry, 177: 772–780 doi:10.1016/j.marchem.2015.07.005

Guedes Seixas T, Moreira I, Siciliano S, Malm O, Kehrig H A (2014). Mercury and selenium in tropical marine plankton and their trophic successors. Chemosphere, 111: 32–39 doi:10.1016/j.chemosphere.2014.03.003

Hammerschmidt C R, Finiguerra M B, Weller R L, Fitzgerald W F (2013). Methylmercury accumulation in plankton on the continental margin of the northwest atlantic ocean. Environmental Science & Technology, 47(8): 3671–3677 doi:10.1021/es3048619

Herrin R T, Lathrop R C, Gorski P R, Andren A W (1998). Hypolimnetic methylmercury and its uptake by plankton during fall destratification: A key entry point of mercury into lake food chains. Limnology and Oceanography, 43(7): 1476–1486 doi:10.4319/lo.1998.43.7.1476

Kehrig H A, Palermo E F A, Seixas T G, Branco C W C, Moreira I, Malm O (2009a). Trophic transfer of methylmercury and trace elements by tropical estuarine seston and plankton. Estuarine, Coastal and Shelf Science, 85(1): 36–44 doi:10.1016/j.ecss.2009.05.027

Kehrig H D A, Seixas T G, Palermo E A, Baêta A P, Castelo-Branco C W, Malm O, Moreira I (2009b). The relationships between mercury and selenium in plankton and fish from a tropical food web. Environmental Science and Pollution Research International, 16(1): 10–24 doi:10.1007/s11356-008-0038-8

Kirkwood A E, Chow-Fraser P, Mierle G (1999). Seasonal mercury levels in phytoplankton and their relationship with algal biomass in two dystrophic shield lakes. Environmental Toxicology and Chemistry, 18(3): 523–532 doi:10.1002/etc.5620180322

Le Jeune A, Bourdiol F, Aldamman L, Perron T, Amyot M, Pinel-Alloul B (2012). Factors affecting methylmercury biomagnification by a widespread aquatic invertebrate predator, the phantom midge larvae Chaoborus. Environmental Pollution, 165: 100–108 doi:10.1016/j.envpol.2012.02.003

Long S, Hamilton P B, Yang Y, Wang S, Huang W, Chen C, Tao R (2018). Differential bioaccumulation of mercury by zooplankton taxa in a mercury-contaminated reservoir Guizhou China. Environmental Pollution, 239: 147–160 doi:10.1016/j.envpol.2018.04.008

Luengen A C, Flegal A R (2009). Role of phytoplankton in mercury cycling in the san francisco bay estuary. Limnology and Oceanography, 54(1): 23–40 doi: 10.4319/lo.2009.54.1.0023

Marrugo-Negrete J, Benitez L N, Olivero-Verbel J (2008). Distribution of mercury in several environmental compartments in an aquatic ecosystem impacted by gold mining in northern colombia. Archives of Environmental Contamination and Toxicology, 55(2): 305–316 doi:10.1007/s00244-007-9129-7

Meuleman C, Leermakers M, Baeyens W (1995). Mercury speciation in Lake Baikal. Water, Air, and Soil Pollution, 80(1–4): 539–551 doi:10.1007/BF01189704

Miles C J, Moye H A, Phlips E J, Sargent B (2001). Partitioning of monomethylmercury between freshwater algae and water. Environmental Science & Technology, 35(21): 4277–4282

Perrot V, Epov V N, Pastukhov M V, Grebenshchikova V I, Zouiten C, Sonke J E, Husted S, Donard O F X, Amouroux D (2010). Tracing sources and bioaccumulation of mercury in fish of lake baikal− angara river using hg isotopic composition. Environmental Science & Technology, 44(21): 8030–8037 doi:10.1021/es101898e

Pickhardt P C, Fisher N S (2007). Accumulation of inorganic and methylmercury by freshwater phytoplankton in two contrasting water bodies. Environmental Science & Technology, 41(1): 125–131 doi:10.1021/es060966w

Razavi N R, Qu M, Chen D, Zhong Y, Ren W, Wang Y, Campbell L M (2015). Effect of eutrophication on mercury (Hg) dynamics in subtropical reservoirs from a high Hg deposition ecoregion. Limnology and Oceanography, 60(2): 386–401 doi:10.1002/lno.10036

Rizzo A, Arcagni M, Campbell L, Koron N, Pavlin M, Arribére M A, Horvat M, Ribeiro Guevara S (2014). Source and trophic transfer of mercury in plankton from an ultraoligotrophic lacustrine system (Lake Nahuel Huapi, North Patagonia). Ecotoxicology (London, England), 23(7): 1184–1194 doi:10.1007/s10646-014-1260-4

Rolfhus K R, Hall B D, Monson B A, Paterson M J, Jeremiason J D (2011). Assessment of mercury bioaccumulation within the pelagic food web of lakes in the western Great Lakes region. Ecotoxicology (London, England), 20(7): 1520–1529 doi:10.1007/s10646-011-0733-y

Roulet M, Lucotte M, Guimarães J R D, Rheault I (2000). Methylmercury in water, seston, and epiphyton of an Amazonian river and its floodplain, Tapajós River, Brazil. Science of the Total Environment, 261(1–3): 43–59 doi:10.1016/S0048-9697(00)00594-5

Schartup A T, Balcom P H, Soerensen A L, Gosnell K J, Calder R S D, Mason R P, Sunderland E M (2015). Freshwater discharges drive high levels of methylmercury in Arctic marine biota. Proceedings of the National Academy of Sciences of the United States of America, 112(38): 11789–11794 doi:10.1073/pnas.1505541112

Stewart A R, Saiki M K, Kuwabara J S, Alpers C N, Marvin-DiPasquale M, Krabbenhoft D P (2008). Influence of plankton mercury dynamics and trophic pathways on mercury concentrations of top predator fish of a mining-impacted reservoir. Canadian Journal of Fisheries and Aquatic Sciences, 65(11): 2351–2366 doi:10.1139/F08-140

Tien C (2004). Some aspects of water quality in a polluted lowland river in relation to the intracellular chemical levels in planktonic and epilithic diatoms. Water Research, 38(7): 1779–1790 doi:10.1016/j.watres.2003.12.043

Verburg P, Hickey C W, Phillips N (2014). Mercury biomagnification in three geothermally-influenced lakes differing in chemistry and algal biomass. Science of the Total Environment, 493: 342–354 doi:10.1016/j.scitotenv.2014.05.097

Vieira M, Bernardi J V E, Dórea J G, Rocha B C P, Ribeiro R, Zara L F (2018). Distribution and availability of mercury and methylmercury in different waters from the Rio Madeira Basin, Amazon. Environmental Pollution, 235: 771–779 doi:10.1016/j.envpol.2018.01.020

Wang Q, Feng X, Yang Y, Yan H (2011). Spatial and temporal variations of total and methylmercury concentrations in plankton from a mercury-contaminated and eutrophic reservoir in Guizhou Province, China. Environmental Toxicology and Chemistry, 30(12): 2739–2747 doi:10.1002/etc.696

Yao C, He T, Xu Y, Ran S, Qian X, Long S (2020). Mercury bioaccumulation in zooplankton and its relationship with eutrophication in the waters in the karst region of Guizhou Province, Southwest China. Environmental Science and Pollution Research International, 27(8): 8596–8610 doi:10.1007/s11356-019-07479-8