Supplementary materials

Table S1. Individual size, age, and growth characteristics of *M. margaritifera*.

№ of specimen	*n*	*L*, mm	*T*, year	*a*, year^{-1}	*d*, mm/year	*k*, year^{-1}	L_∞, mm
Kem River (estuary)							
Ke-01	26	77.3	37	0.082 ± 0.009	6.5 ± 0.6	0.085 ± 0.010	79.3 ± 1.5
Ke-02	31	91.1	44	0.084 ± 0.006	7.8 ± 0.4	0.087 ± 0.006	93.1 ± 1.2
Ke-03	28	89.9	33	0.071 ± 0.010	6.5 ± 0.7	0.074 ± 0.010	91.3 ± 2.3
Ke-04	24	85.4	32	0.096 ± 0.005	8.5 ± 0.3	0.101 ± 0.005	88.7 ± 0.9
Ke-05	22	84.9	29	0.092 ± 0.011	8.2 ± 0.7	0.097 ± 0.012	89.0 ± 2.1
Ke-06	33	86.5	42	0.080± 0.007	7.0 ± 0.5	0.083 ± 0.008	88.2 ± 1.3
Ke-07	23	85.0	29	0.113 ± 0.006	9.7 ± 0.4	0.120 ± 0.007	86.4 ± 0.9
Ke-08	20	86.4	27	0.102 ± 0.008	9.2 ± 0.6	0.107 ± 0.009	90.3 ± 1.5
Ke-09	20	90.0	37	0.095 ± 0.007	9.1 ± 0.5	0.100 ± 0.008	95.1 ± 1.5
Ke-10	28	83.0	37	0.071 ± 0.004	6.3 ± 0.3	0.074 ± 0.005	88.7 ± 1.2
Ke-11	28	91.3	34	0.065 ± 0.006	6.5 ± 0.5	0.068 ± 0.007	99.2 ± 2.2
Ke-12	21	85.5	36	0.076 ± 0.008	7.0 ± 0.6	0.079 ± 0.009	91.8 ± 1.9
Ke-13	26	80.4	30	0.066 ± 0.005	5.8 ± 0.3	0.069 ± 0.005	87.8 ± 1.4
Ke-14	20	83.0	27	0.100 ± 0.014	8.6 ± 1.0	0.105 ± 0.016	86.1 ± 2.3
Ke-15	20	81.9	27	0.117 ± 0.007	10.0 ± 0.5	0.125 ± 0.008	84.8 ± 0.9

Vozhma River							
Vo-01	89	126.4	112	0.041 ± 0.002	5.0 ± 0.2	0.042 ± 0.002	122.2 ± 0.6
Vo-02	93	131.2	110	0.038 ± 0.002	4.8 ± 0.3	0.039 ± 0.003	126.5 ± 1.1
Vo-03	73	123.8	95	0.033 ± 0.002	4.2 ± 0.2	0.034 ± 0.002	124.8 ± 1.5
Vo-04	27	103.0	33	0.059 ± 0.004	6.9 ± 0.3	0.061 ± 0.004	115.9 ± 2.5
Vo-05	26	104.5	32	0.073 ± 0.004	8.1 ± 0.4	0.076 ± 0.005	111.8 ± 1.7
Vo-06	35	103.7	43	0.046 ± 0.004	5.4 ± 0.3	0.047 ± 0.005	118.1 ± 3.4
Vo-07	46	114.4	55	0.055 ± 0.003	6.3 ± 0.3	0.056 ± 0.004	115.4 ± 1.5
Vo-08	54	115.7	64	0.057 ± 0.003	6.5 ± 0.3	0.059 ± 0.004	112.9 ± 1.1
Vo-09	26	107.9	34	0.055 ± 0.006	6.8 ± 0.5	0.056 ± 0.006	124.7 ± 3.9
Vo-10	14	66.6	19	0.060 ± 0.016	5.7 ± 0.7	0.061 ± 0.017	95.6 ± 10.4
Vo-11	9	74.7	13	0.084 ± 0.018	9.0 ± 0.9	0.087 ± 0.019	107.4 ± 9.6
Vo-12	25	98.9	31	0.083 ± 0.006	8.5 ± 0.4	0.087 ± 0.006	102.3 ± 1.6
Vo-13	33	98.6	40	0.046 ± 0.005	5.3 ± 0.4	0.047 ± 0.005	115.1 ± 4.0
Vo-14	11	78.0	15	0.041 ± 0.016	6.4 ± 0.9	0.042 ± 0.017	157.0 ± 29.8
Vo-15	8	66.0	12	0.065 ± 0.017	8.2 ± 0.7	0.068 ± 0.018	125.8 ± 17.2
Vo-16	10	50.9	16	0.045 ± 0.017	4.6 ± 0.6	0.046 ± 0.018	101.1 ± 17.9
Ukhta River							
Ukh-01	15	106.9	20	0.100 ± 0.006	11.7 ± 0.5	0.106 ± 0.007	116.6 ± 2.0
Ukh-02	32	112.4	40	0.069 ± 0.004	7.9 ± 0.3	0.071 ± 0.004	115.9 ± 1.4

Ukh-03	17	99.4	21	0.094 ± 0.007	10.3 ± 0.5	0.098 ± 0.008	110.4 ± 2.7
Ukh-04	35	114.3	40	0.092 ± 0.004	10.1 ± 0.4	0.096 ± 0.004	109.8 ± 0.7
Ukh-05	21	104.7	26	0.074 ± 0.005	8.7 ± 0.4	0.076 ± 0.005	117.8 ± 2.5
Ukh-06	17	90.9	20	0.119 ± 0.008	11.2 ± 0.6	0.127 ± 0.009	94.2 ± 1.6
Ukh-07	17	103.8	21	0.103 ± 0.006	11.5 ± 0.4	0.109 ± 0.007	111.8 ± 1.9
Ukh-08	33	114.7	40	0.076 ± 0.004	8.6 ± 0.4	0.079 ± 0.005	114.0 ± 1.2
Ukh-09	16	100.4	21	0.114 ± 0.013	11.9 ± 0.9	0.121 ± 0.014	104.5 ± 3.1
Ukh-10	16	94.4	21	0.117 ± 0.010	11.4 ± 0.7	0.124 ± 0.011	98.1 ± 2.2
Ukh-11	15	99.7	19	0.100 ± 0.010	11.1 ± 0.7	0.105 ± 0.011	111.5 ± 3.3
Ukh-12	16	102.8	20	0.094 ± 0.009	10.9 ± 0.7	0.098 ± 0.010	116.5 ± 3.6
Ukh-13	16	91.9	21	0.089 ± 0.011	9.3 ± 0.7	0.093 ± 0.012	104.9 ± 4.0
Ukh-14	16	96.5	18	0.108 ± 0.010	11.6 ± 0.7	0.115 ± 0.012	106.5 ± 3.3
Ukh-15	14	96.6	18	0.081 ± 0.009	9.8 ± 0.6	0.085 ± 0.010	120.5 ± 5.2

Notes: n - the number of annual rings measured; L - the shell length. T - the age of the individual; a. d - the coefficients of the growth equation (2); k. L_∞ - the coefficients of the growth equation (1).