

## **Distribution of intertidal molluscan species around Motoshima Island, 2010**

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Distribution of intertidal molluscs was investigated around Motoshima Island, at the mouth of Tanabe Bay, central Japan (33°44'N, 135°21'E; Fig. 1). The survey was undertaken in 2010, using the same method as in the previous survey in 2005 (Ohgaki et al. 2007). The entire coast of the island was divided into 45 plots. All the molluscan species encountered were identified and their densities were evaluated in each plot. The field censuses were carried out at the spring low tides during 10–26th, July, 2010. One or two researchers investigated one plot, and the time spent for each plot was 16–35 min. Ninety-six species were recorded from the study area. The results are shown in Table 1. The author thank K. Komemoto and N. Funayama for their help in the field survey.

### Reference

Ohgaki S, Komemoto K, Funayama N (2007) Distribution of intertidal molluscan species around Motoshima Island, 2005. *Argonauta*, 13, 26–38

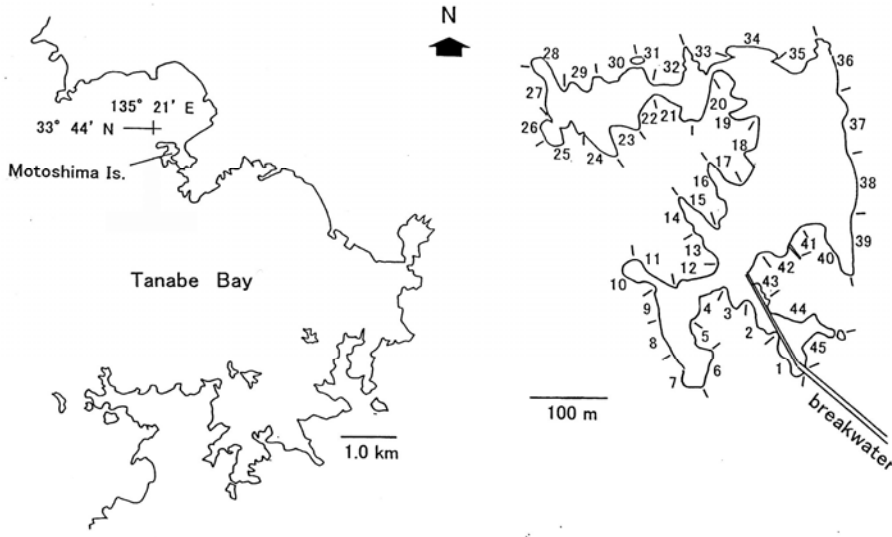


Fig. 1. Study area. Numerals in the right figure are plot codes.

Table 1. List of the molluscan species recorded in the study area. *Italic numerals* in the first column are species codes and those in the first row are codes of survey plots (Fig. 1). The numeral in each cell indicates the maximum density of the species (no./ m<sup>2</sup>) in each plot: 1, 1–9; 2, 10–99; 3, 100–999; 4, 1000–5000). ①, only one individual was encountered in the plot.

Table 1-1

	Japanese name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	POLYPLACOPHORA																			
	多板綱																			
1	<i>Ischnochiton comptus</i>											1								
2	<i>Acanthopleura japonica</i>	2	1	1	2	1	2	2	3	2	2	2	2	2	2	1	2	1	2	2
3	<i>Acanthopleura lochooana</i>							1		1			1							①
4	<i>Onithochiton hirasei</i>	1	①			1			①	1		1			①	1	1	①		
5	<i>Acanthochitona achates</i>				①		①		1		①	①	①	①	①	1				①
	GASTROPODA																			
6	<i>Scutellastra flexuosa</i>	①								1					①					
7	<i>Cellana grata</i>	1	①					①	2	2	2				1	1				
8	<i>Cellana nigrolineata</i>		1	2	1	1				1	1		1	2		2	1		1	
9	<i>Cellana toreuma</i>	1	2	2	2	1	1			1	1	2	2	2	1	1	2		①	
10	<i>Patelloida saccharina lanx</i>			1	2	1			1	1	1	1		2	2	1	2			2
11	<i>Patelloida pygmaea heroldi</i>									1		1		1						
12	<i>Nipponacmea schrenckii</i>																			
13	<i>Lottia langfordi</i>													1						
14	<i>Lottia kogamogai</i>	1	①		1			1	1						1		2	1	2	
15	<i>Lottia tenuisculpta</i>							1										1		
16	<i>Nipponacmea nigrans</i>										1									
17	<i>Haliotis varia</i>							①			1	1	①							
18	<i>Montfortula picta</i>				1				1	1	2		1	2		1	1	①	①	
19	<i>Chlorostoma lischkei</i>																	①		
20	<i>Chlorostoma xanthostigma</i>																			
21	<i>Omphalius rusticus</i>																			
22	<i>Omphalius nigerrimus</i>																			
23	<i>Trochus maculatus</i>					1		1	1	1	1						①		2	
24	<i>Trochus rota</i>	1		①		1				1		1	1			①	2			
25	<i>Tectus pyramis</i>				①	①						①	①			1				
26	<i>Tectus conus</i>																			
27	<i>Fossarina picta</i>							①												1

Table 1-2

	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	No plots	
1							1																				2	
2	2	1	1	1	2	2	2	2	1	2	1	1	2	1	1	2	2	1	1	1	1	1	①	①	①	1	43	
3				①																							5	
4				①	1	1	1	1							①												16	
5	1	①		1	1	1	①	1	1					①													17	
6																												5
7						①																						9
8	①		2													①		①									15	
9	1	2	1	1	1	1	1	2	1	1	1	1	2	2	2	1	1	1	1								30	
10		2	1	1			2		2	1	2	1			1	1	2								1		23	
11	①		1														①	1		1	①						9	
12																	①	1	1								3	
13																											1	
14	2		1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						23	
15			1															1									5	
16																	①	1	1	1	1						4	
17					①	1	1																				7	
18			①	①		1									①	1											15	
19																											1	
20									①																		1	
21																			1								1	
22							1																				1	
23				①	①	1	①		1	1	1	①	1												①		16	
24		1		1	1	1	1	1	1	1	1	1	1	1	1												16	
25																1											6	
26								①																			1	
27																											2	

Table 1-3

	Japanese name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
28	<i>Monodonta labio confusa</i>			1												1				1
29	<i>Diloma suavis</i>	1			1		①		2	2	1	1	1	1						
30	<i>Calliostoma unicum</i>																			
31	<i>Angaria neglecta</i>																			
32	<i>Astrarium haematragum</i>																			
33	<i>Turbo coronatus coreensis</i>			2												1	①		①	2
34	<i>Nerita albicilla</i>		2	1		1			2	1	2	2	2	2	1	①	2			1
35	<i>Cerithium coralium</i>																			
36	<i>Clypeomorus bifasciata</i>																			
37	<i>Planaxis sulcatus</i>		2	2					1					2		2	3			2
38	<i>Batillaria cumingii</i>																			
39	<i>Peasiella habei</i>	1	2	2	3	4	2	3	4	3	3	3	4	4	3	3	4	3	3	3
40	<i>Nodilittorina radiata</i>	4	3	4	4	4	4	4	3	3	3	3	3	4	3	3	3	3	3	4
41	<i>Nodilittorina trochoides</i>	1	1	1		1			2			1								1
42	<i>Nodilittorina vidua</i>					1														
43	<i>Littorina brevicula</i>		1							1	2	2								
44	<i>Hipponix conica</i>							1					①		1					
45	<i>Hipponix trigona</i>																			①
46	<i>Serpulorbis imbricatus</i>	①	1	2	2	1			2	2	2	2	2	2	1	2	1	2	2	2
47	<i>Cypraea mihialis</i>											①								
48	<i>Cypraea boivinii</i>										1									
49	<i>Cypraea annulus</i>								①	1	1	1	1	1						
50	<i>Cypraea caputserpentis</i>							1	1	1	1	1	1		1		①			
51	<i>Natica gualteriana</i>																			
52	<i>Cronia margariticola</i>				1						1	2				1		2	1	1
53	<i>Muricodrupa fusca</i>																			
54	<i>Morula musiva</i>	2	2	3	3	2	1	1	2	3	3	3	3	3	3	3	3	3	2	2
55	<i>Morula granulata</i>	①				①	①	①	1			1	1	①						
56	<i>Morula iostoma</i>															1				

Table 1-4

	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	No. plots
28	2	2							1		1	1	①		2	2	1	2	2	1	1	1	①				16
29	①		1	①	1																						13
30							①				①																1
31		①																									2
32			①	①				1			1			1	①												6
33	1	1	1						①		1	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	24
34	1	1	1	1	1	1	2	1	2	1	1	①	1	1	1	1				1	1	①	1	1	1	1	29
35																							3				1
36																						1					1
37	2									2	2	2	2	1	1						2	2	2	1	1	1	17
38																						3	3	2	2		6
39	3	2	2	3	2	2	1	2	1	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	41
40	4	4	3	3	4	2	3	3	4	4	4	2	3	3	4	4	2	4	3	3	1	1	2	2	3	1	44
41	1	1	1	1							1	1	1	1	1							1					14
42	1																										2
43	1	1	1	1	1		1				3			1	1			①	①	①	①	1		①	2	16	
44																											3
45																											1
46	2	1	2	1	1	1	1	1	1	1	①	①	1	2	1	1	2	1	1	1	2		2	1	2	2	39
47																											1
48																											1
49																											2
50				①	①		2	1	1																		13
51																							①				1
52	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	①	1	1	1	1					1	1	24
53																			①	①	1	①			①	4	
54	2	2	3	3	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1			1	1	40
55				1	①	1	1	1	①							①											15
56				①	①	①	①	1																			6

Table 1-5

	Japanese name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
57	<i>Mancinella bufo</i>									①										
58	<i>Mancinella siro</i>														①					
59	<i>Thais clavigera</i>	1	2	2	1	2	1	1	2	2	2	2	2	1	2	1	2	1	2	1
60	<i>Thais luteostoma</i>	①						2			1	1	1	1	1					
61	<i>Thais bronni</i>							①	1	1	1	1	1	1	1			①		1
62	<i>Euplica scripta</i>																			
63	<i>Mitrella bicincta</i>																			
64	<i>Reticunassa festiva</i>																			
65	<i>Enzinopsis menkeana</i>									①										
66	<i>Strigatella scutulata</i>									①	1									
67	<i>Dolabella auricularia</i>																			
68	<i>Peronia sp. cf. verruculata</i>																			
69	<i>Siphonaria japonica</i>												1						①	①
70	<i>Siphonaria sirius</i>	1	1					1	1	1	1	2	1	1	1	1				1
71	<i>Siphonaria acmaeoides</i>																			
	BIBALVIA																			
72	<i>Barbatia lima</i>																			1
73	<i>Barbatia virescens</i>	1			①			①	1	1	1	1	1	1	1	1	1	①		1
74	<i>Arca boucardi</i>																			
75	<i>Mytilus coruscus</i>														①					
76	<i>Xenostrobilus atratus</i>	1	2	3	3	2			1	3	1	3	3	3	4	3	4	3	4	4
77	<i>Mytilus galloprovincialis</i>												4							
78	<i>Septifer bilocularis</i>	1	①			3		1						1		1			3	3
79	<i>Hormomya mutabilis</i>																			
80	<i>Septifer virgatus</i>	3	1					4	4	3	1									①
81	<i>Pinctada martensii</i>							①				①								
82	<i>Isochnomon acutirostris</i>									①									①	
83	<i>Hyotissa chemnitzii</i>										1	1	1	①	1	1	2		2	
84	<i>Crassostrea nippona</i>								1	1					①	1	1		①	①

Table 1-6

	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	No. plots
57																											1
58															1												2
59	1	2	2	1	1	1	2	2	1	2	1	2	1	2	1	1		①	①						1		34
60			2	2	1	1	1	1	1	1	①	①	1	1	1	1											18
61	①					1	1	1																			13
62							①	1	1	1																	3
63							①								2												2
64																						1					1
65																											1
66												①											①				3
67																											1
68						①																					1
69																											3
70	2	2	2	1		1	1	1	1	1	1	1	1	1	1	2								1		23	
71													1														1
72	1																										2
73		1	1	1	1	1	1	1	1	①		1	1	1	1	1	①	1	1	1	1	1	1	1	1	1	30
74				①																							1
75																											1
76	4	4	4	4	4	3	2	3	4	4	4	4	3	3	4	2	4	3	3	2	3	3	3	4	3	4	43
77																											1
78	2	2	2	1	1	1			1	1	1	2			2			①	1								21
79	4	4	4	3	3	4					3	3		3		4	3	3	3		3	3	3	4	4	4	24
80					3	3	3					1						①	1								13
81																											2
82																				①							3
83	2	2	1	1	1	1	1	1	2	1	①	1	1	1	1												20
84								①		1				2	1			1	1	1	1	1	①	1	1	1	14



Table 1-7

	Japanese name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
85	<i>Saccostrea mordax</i>	3	3	2	2	2	2	2	3	3	2	2	1	3	3	3	3	2	2	3
86	<i>Saccostrea glomerata</i>																			
87	<i>Crassostrea gigas</i>																			
88	<i>Saccostrea kegaki</i>	4	4	3	4	3	3	3	3	2	4	4	4	4	3	4	4	4	3	4
89	<i>Dendostrea crenulifera</i>																			
90	<i>Lasaea undulata</i>									1										
91	<i>Cardita leana</i>						①													①
92	<i>Chama japonica</i>									2	1	1							1	1
93	<i>Pseudochama retroversa</i>																			1
94	<i>Chama brassica</i>																			①
95	<i>Claudiconcha japonica</i>						1													
	No. species	23	21	21	18	22	17	23	23	24	32	36	29	26	26	30	26	24	23	28

Table 1-8

	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	No. plots
85	2	2	2	2	2	2	2	2	3	2	1	1	1			1	1										34
86																				1	1	1	1	1			5
87																		1	1	1	2	2	2	2	2	1	9
88	4	3	4	4	4	3	3	4	4	4	3	3	3	4	4	4	3	4	4	3	3	2	3	3	3	3	45
89			1																								1
90																											1
91	①																										3
92		1	1			①			1	1	1			1	1												13
93																											1
94																											1
95				1				1								①			1								5
No.sp	24	28	29	33	28	29	29	28	24	24	23	19	23	26	24	24	21	23	23	15	20	12	15	15	12	17	