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Comparison of food habits between native Amur three-lips (*Opsariichthys uncirostris uncirostris*) and non-native largemouth bass (*Micropterus salmoides*) in Lake Biwa, Japan

Hiroshi Tsunoda, Takahiro Urano, Mitsuru Ohira

Author correspondence:

Hiroshi Tsunoda

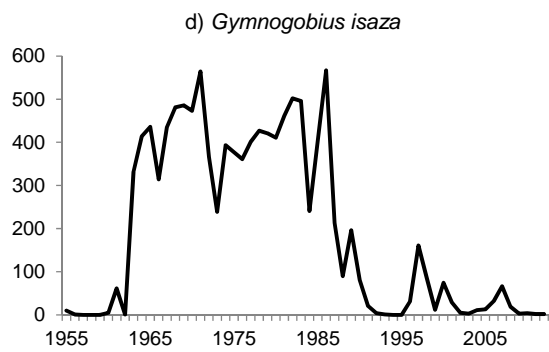
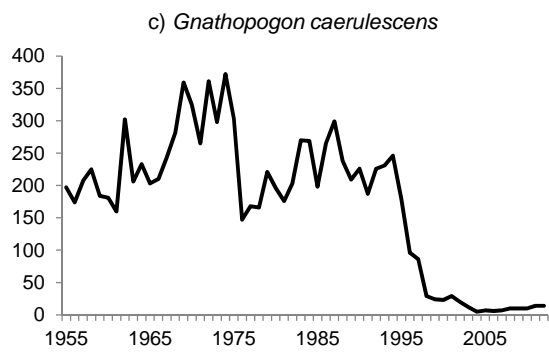
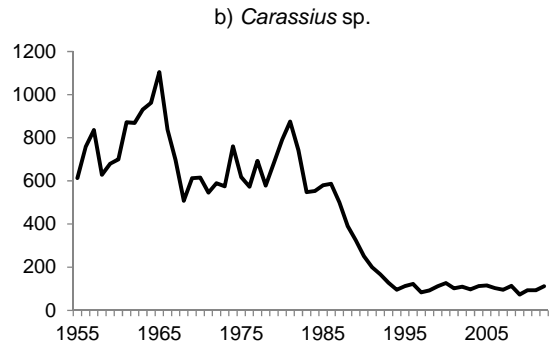
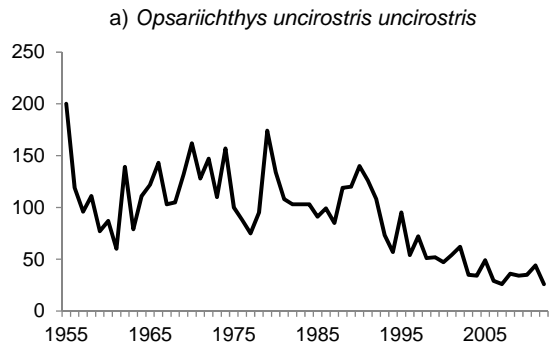
Center for Environmental Science in Saitama,

Kamitanadare 914, Kazo, Saitama 347-0115, Japan

E-mail: tsunoda.hiroshi@gmail.com

Appendix 1 Annual catch (units: ton) of four fish species in Lake Biwa from 1954 to 2012. Source:

Fisheries Agency of Shiga Prefecture (<http://www.pref.shiga.lg.jp/g/suisan/toukei/files/h24gyokakuryo.pdf>, accessed July 15, 2014)



Appendix 2 Gut contents in different body-size classes of Amur three-lips (*Opsariichthys uncirostris uncirostris*; ATL) and non-native largemouth bass (*Micropterus salmoides*; LMB) sampled in Lake Biwa, Japan. %F and %W represent the percentage frequency of occurrence and the percentage of prey weight, respectively.

Size class*	< 120 mm SL				120–180 mm SL				> 180 mm SL			
	ATL		LMB		ATL		LMB		ATL		LMB	
	%F	%W	%F	%W	%F	%W	%F	%W	%F	%W	%F	%W
Fish												
<i>Plecoglossus altivelis altivelis</i>			2.78	7.21	13.64	77.23	4.55	21.68	13.64	41.88	30.77	42.07
<i>Pseudogobio esocinus</i>							2.27	1.64				
<i>Micropterus salmoides</i>							2.27	8.31				
<i>Odontobutis obscura</i>							2.27	0.93				
<i>Gymnogobius urotaenia</i>			1.39	0.86			2.27	0.48				
<i>Tridentiger obscurus</i>			1.39	1.43			2.27	1.52				
<i>Rhinogobius</i> sp.			2.78	2.52			4.55	2.16			15.38	2.58
Unidentified gobiidae fish			8.33	4.07	4.55	0.72	6.82	0.85				
Unidentified species	50.00	42.33	20.83	13.55	27.27	11.32	40.91	21.51	45.45	40.74	38.46	11.88
Large crustacean												
<i>Palaemon paucidens</i>			6.94	6.60			6.82	2.62			7.69	8.95
<i>Macrobrachium nipponense</i>			16.67	19.05			9.09	4.64			7.69	2.96
<i>Paratya compressa</i>							2.27	0.62				
Unidentified shrimp/prawn	25.00	28.22	41.67	42.57	11.36	2.42	45.45	30.46	4.55	8.06	46.15	31.56
Unidentified Isopoda			1.39	0.002								
Terrestrial insects												
Carabidae							2.27	0.21	4.55	2.46		
Leiodidae									4.55	3.93		
Unidentified Coleoptera									4.55	2.13		
Unidentified Diptera					4.55	0.004						
Formicidae					9.09	2.66			4.55	0.25		
Unidentified Hymenoptera					29.55	2.55			4.55	0.06		
Gryllidae							2.27	2.37				
Unidentified species					27.27	3.01			18.18	0.42		
Aquatic insects												
Notonectidae			1.39	0.07								
Chironomidae					2.27	0.002						
Unidentified Odonata (larva)			1.39	2.05								
Unidentified prey	50.00	29.45	2.00	0.002	2.27	0.09			4.55	0.06		
Proportion of empty gut (%)	33.33		31.33		38.89		43.59		67.16		18.75	
Total number of sampled fish	6		83		72		78		67		16	
Number of gut with food	4		57		44		44		22		13	

* SL: standard length