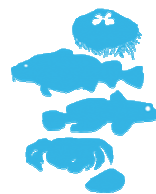


Feeding activity and diet composition of round goby (*Neogobius melanostomus*) in the coastal waters of SE Baltic Sea

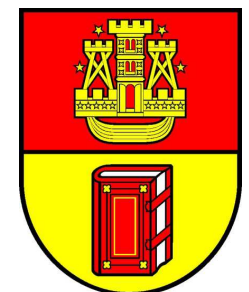
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² Lithuanian Sea Museum, Smiltynės 3, LT-93100, Klaipėda, Lithuania



BIO-C3



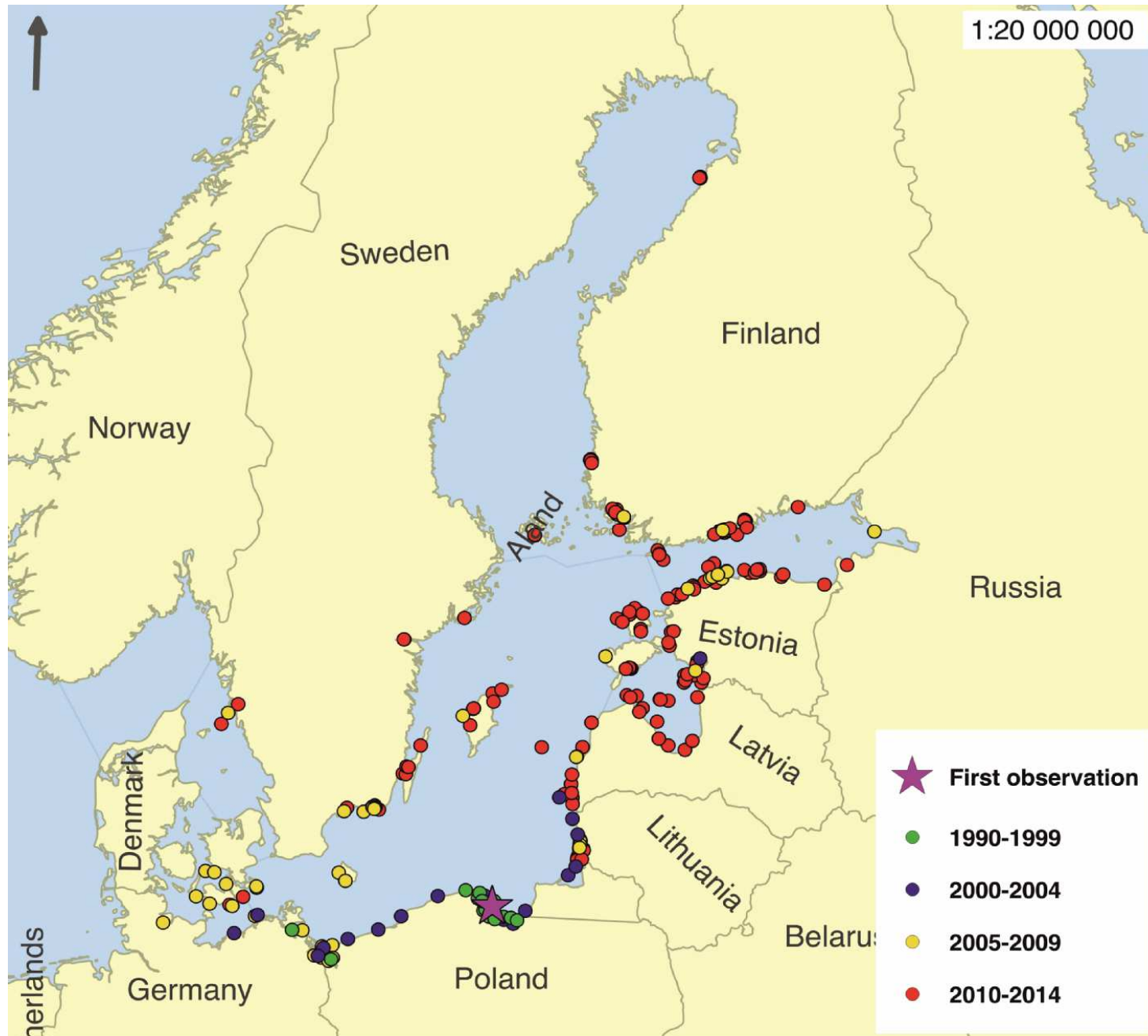
Introduction



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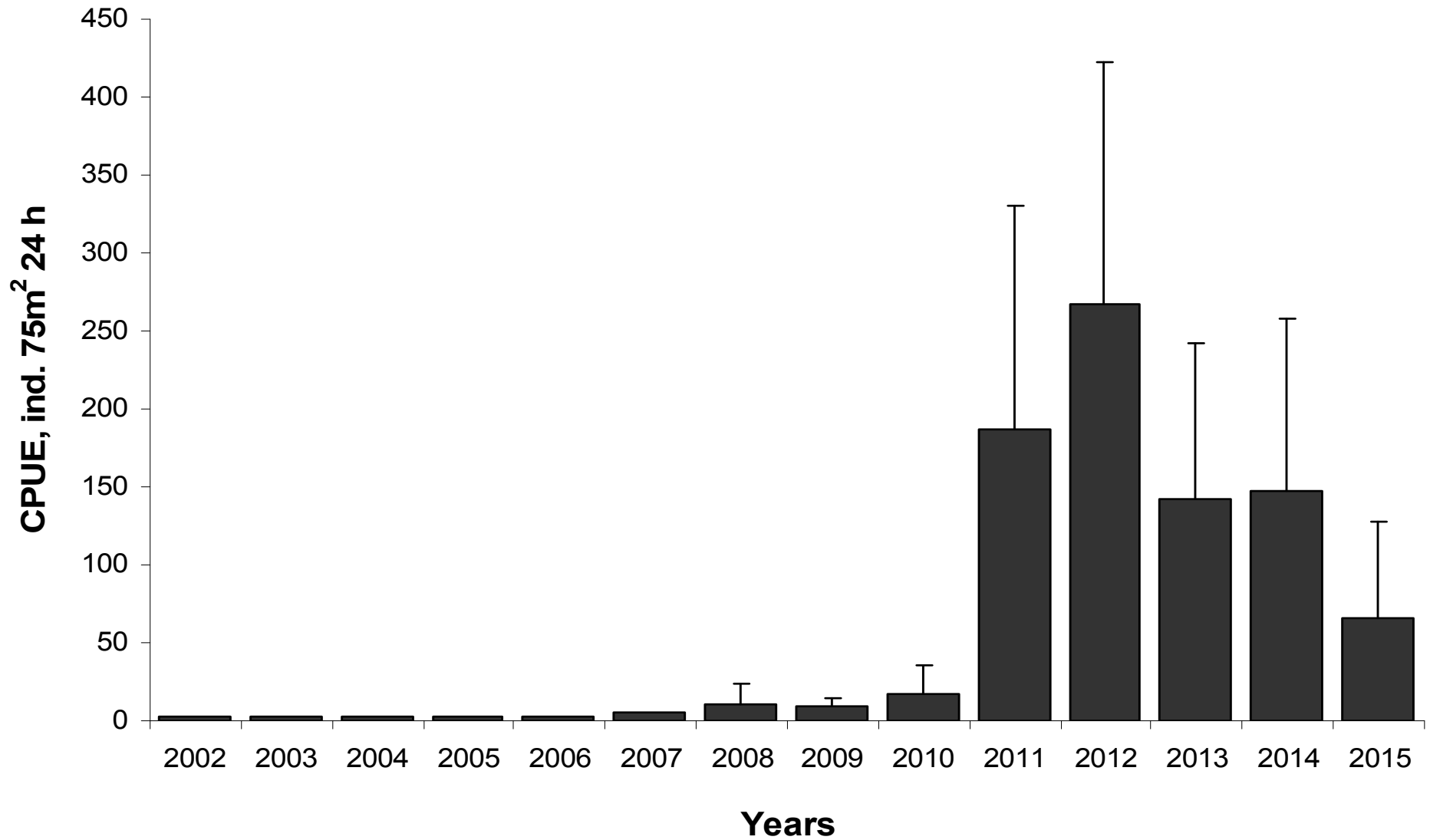
Round goby (*Neogobius melanostomus*)

Dispersion pattern of round goby in the Baltic Sea



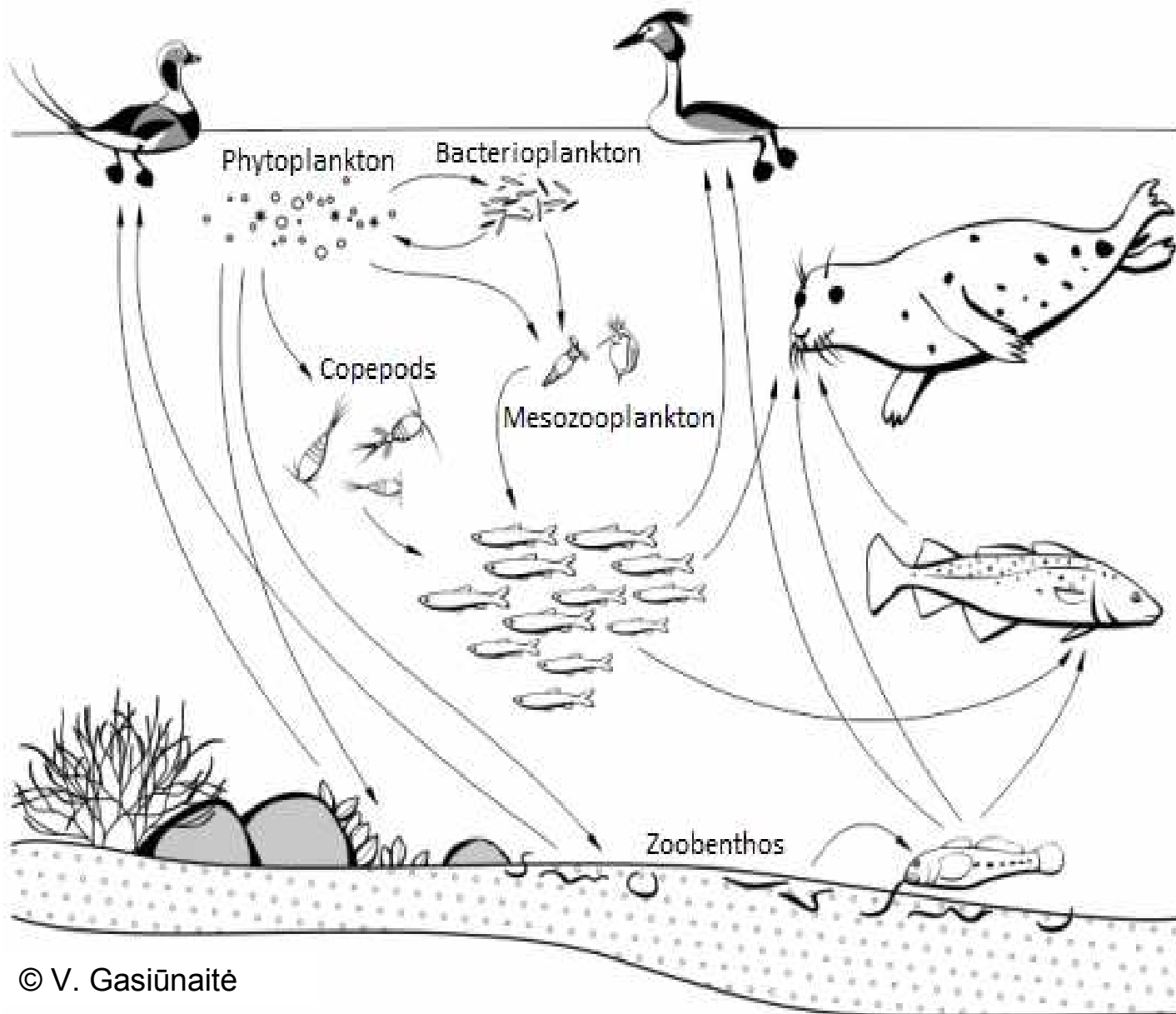
Kotta et al., under review

Abundance dynamics of round goby in the Lithuanian coastal waters of the Baltic Sea



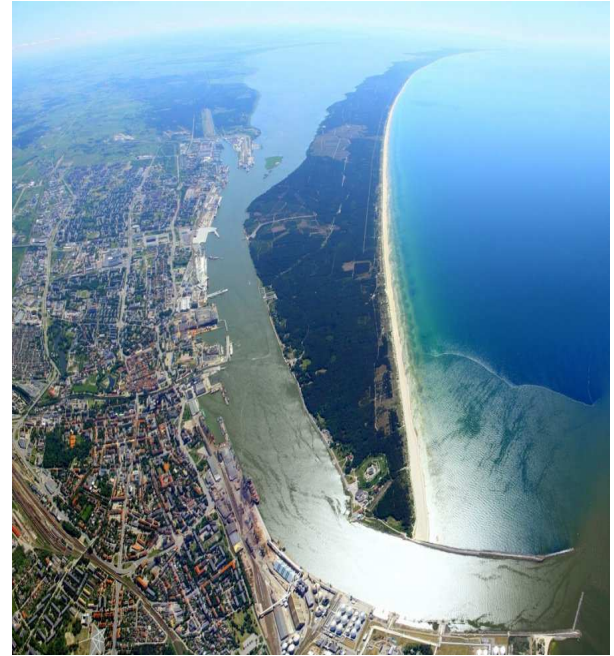
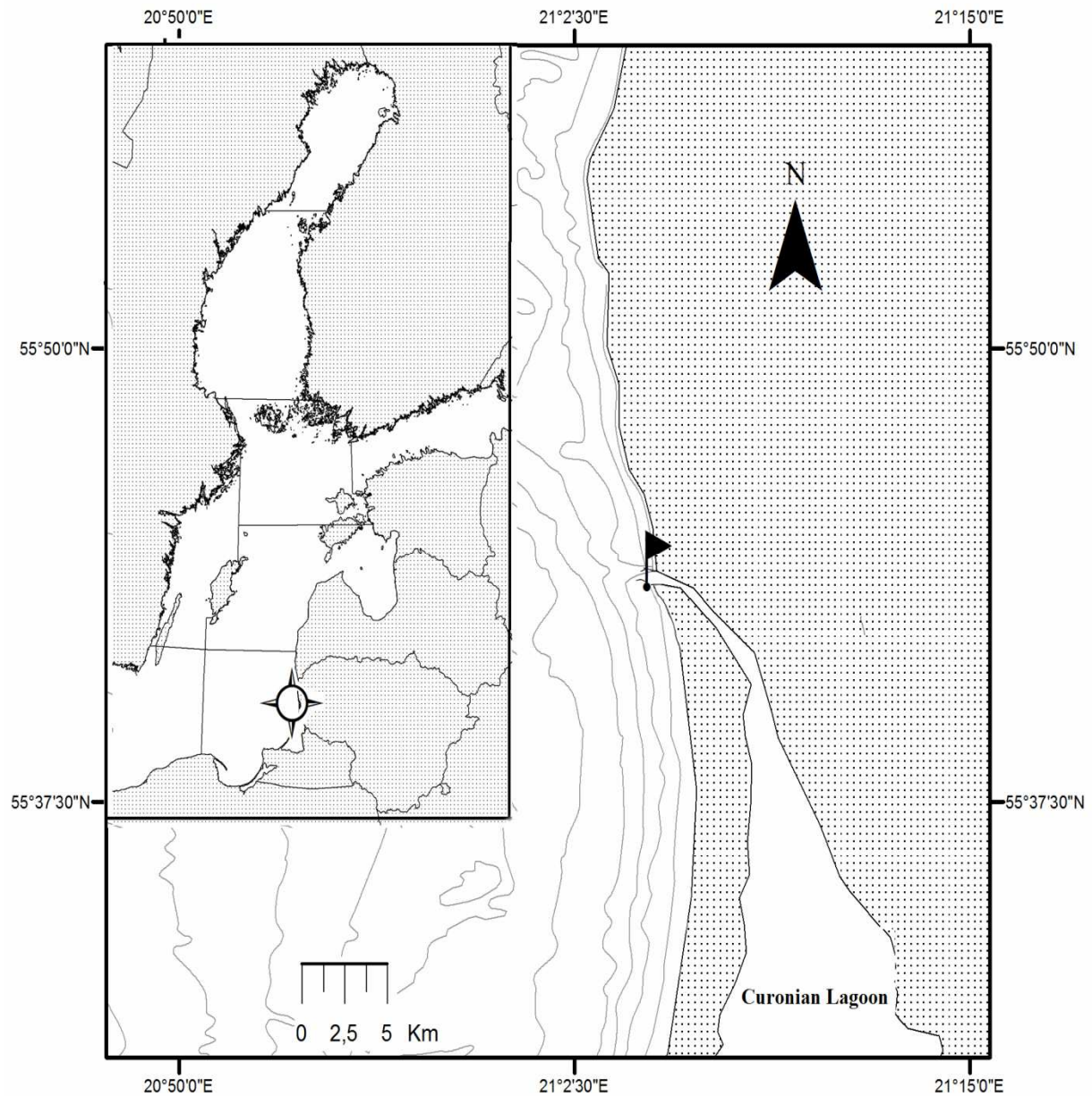
Monitoring data of the Fisheries Service under the Ministry of Agriculture of the Republic of Lithuania

Role of round goby in the food web of the Baltic Sea coastal ecosystem

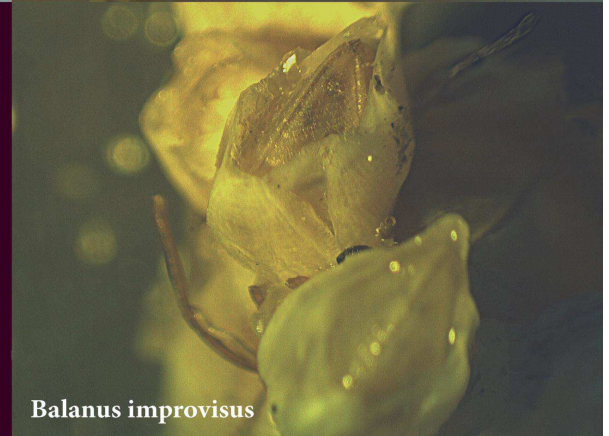
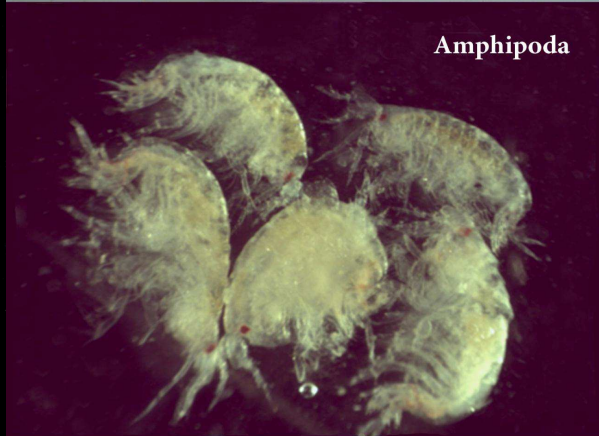


Round goby changes invaded ecosystem by reducing abundances of its feeding objects, competing for food resources with native demersal fish and bird species and becoming an important component in the diet of piscivorous fish, birds and mammals.

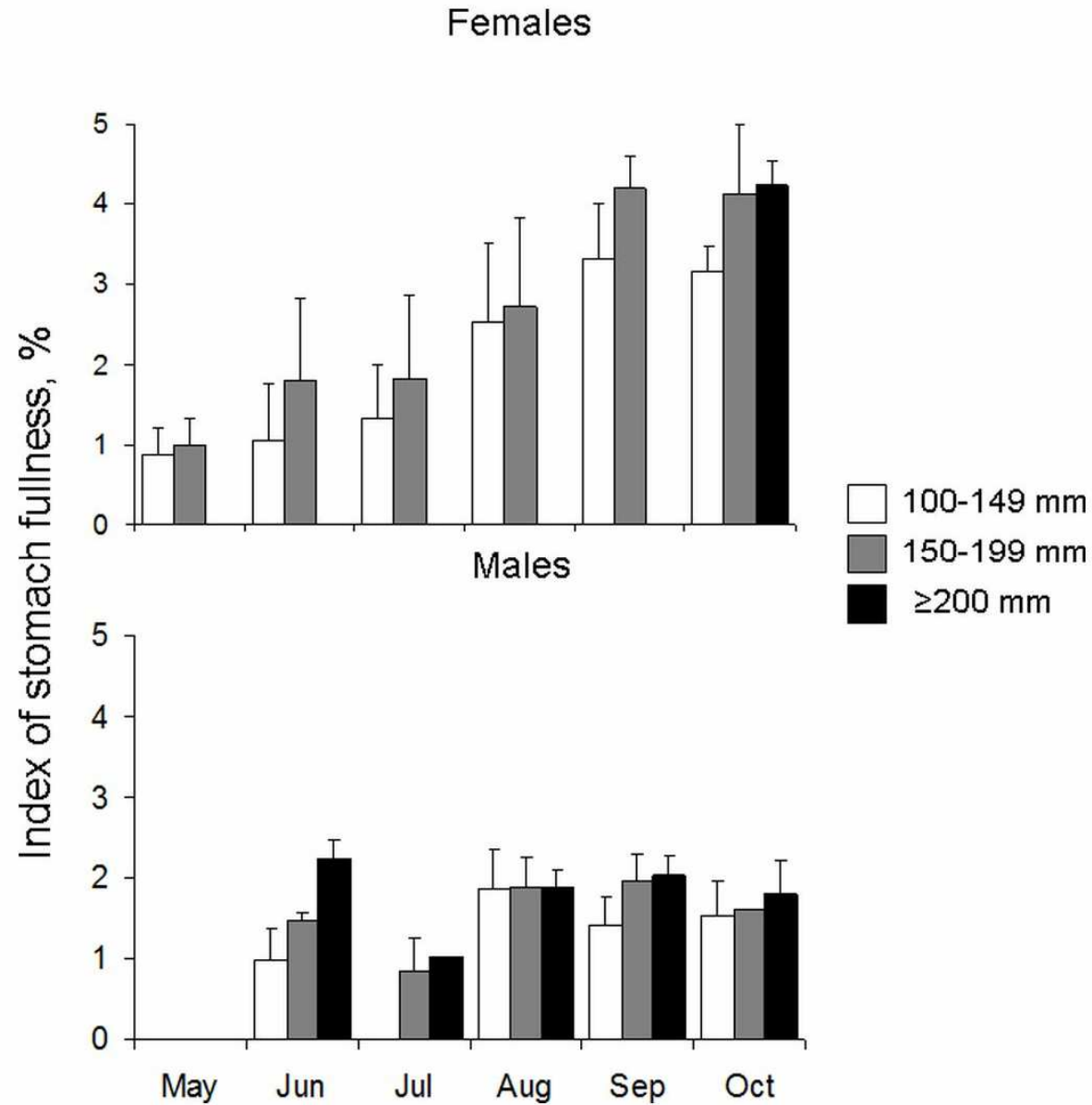
Study site and sampling



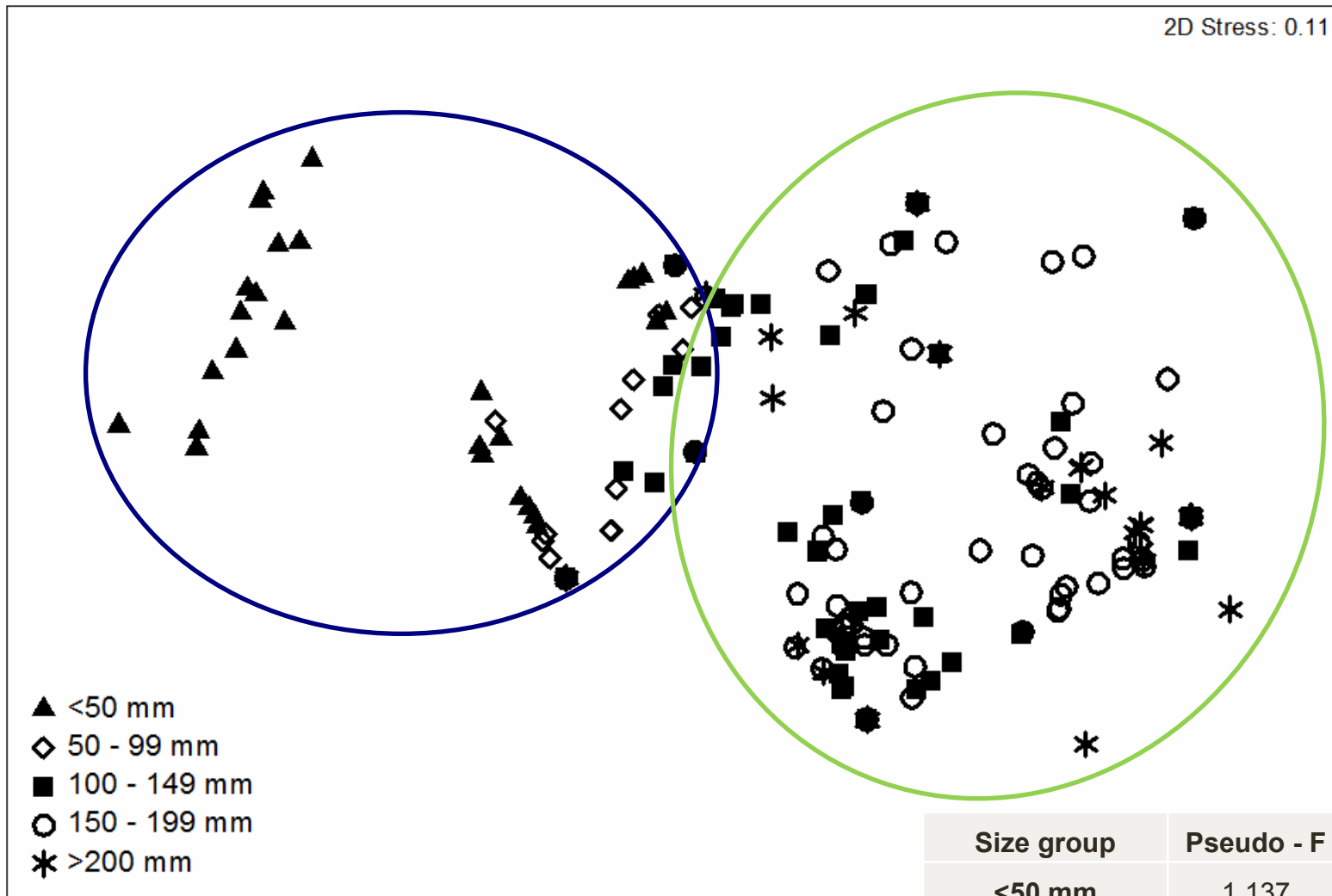
Main prey items of round goby



Changes of feeding activity of differently sized female and male round gobies during May-October 2012.



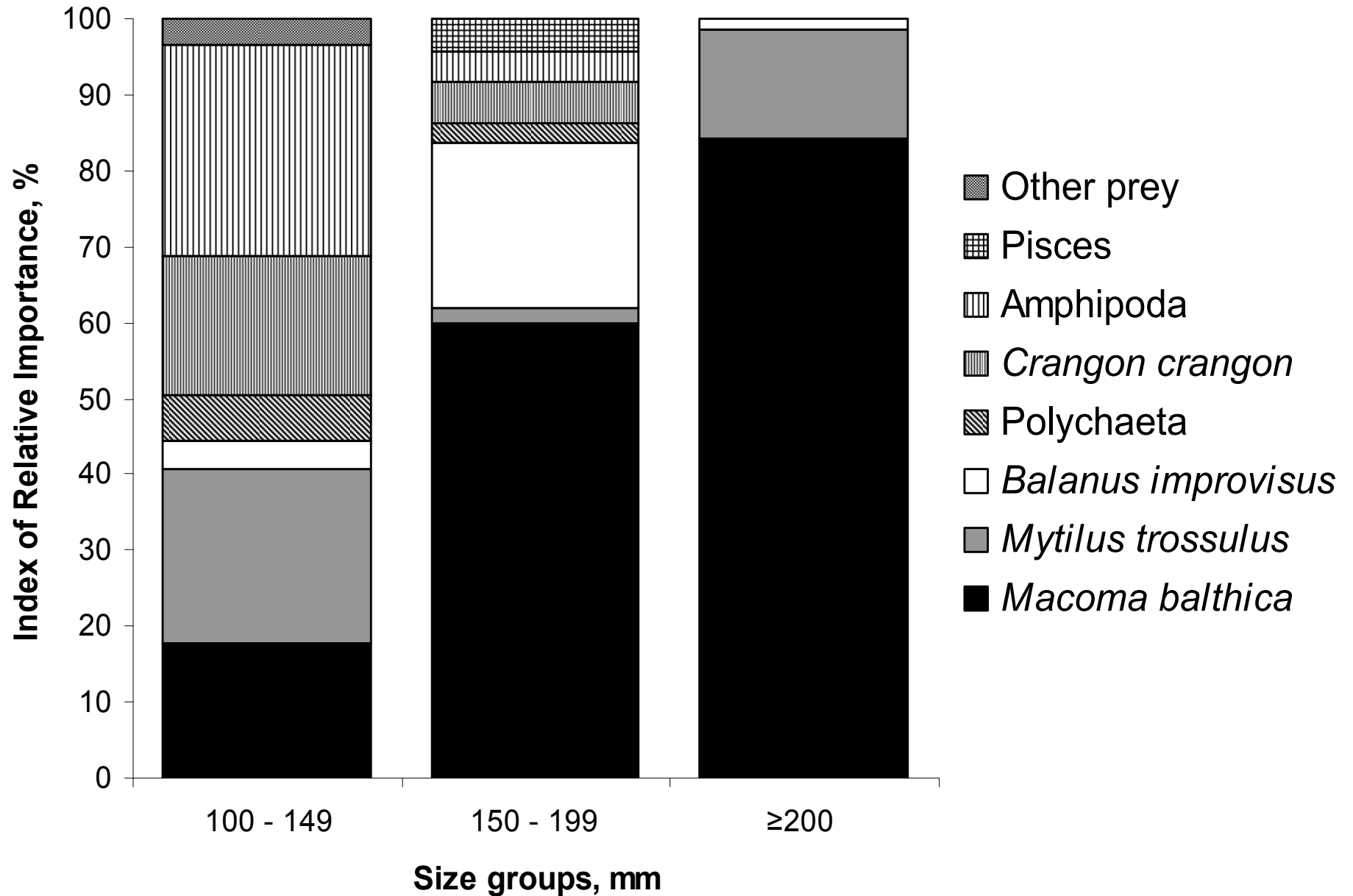
Ontogenetic and seasonal dietary changes of the round goby



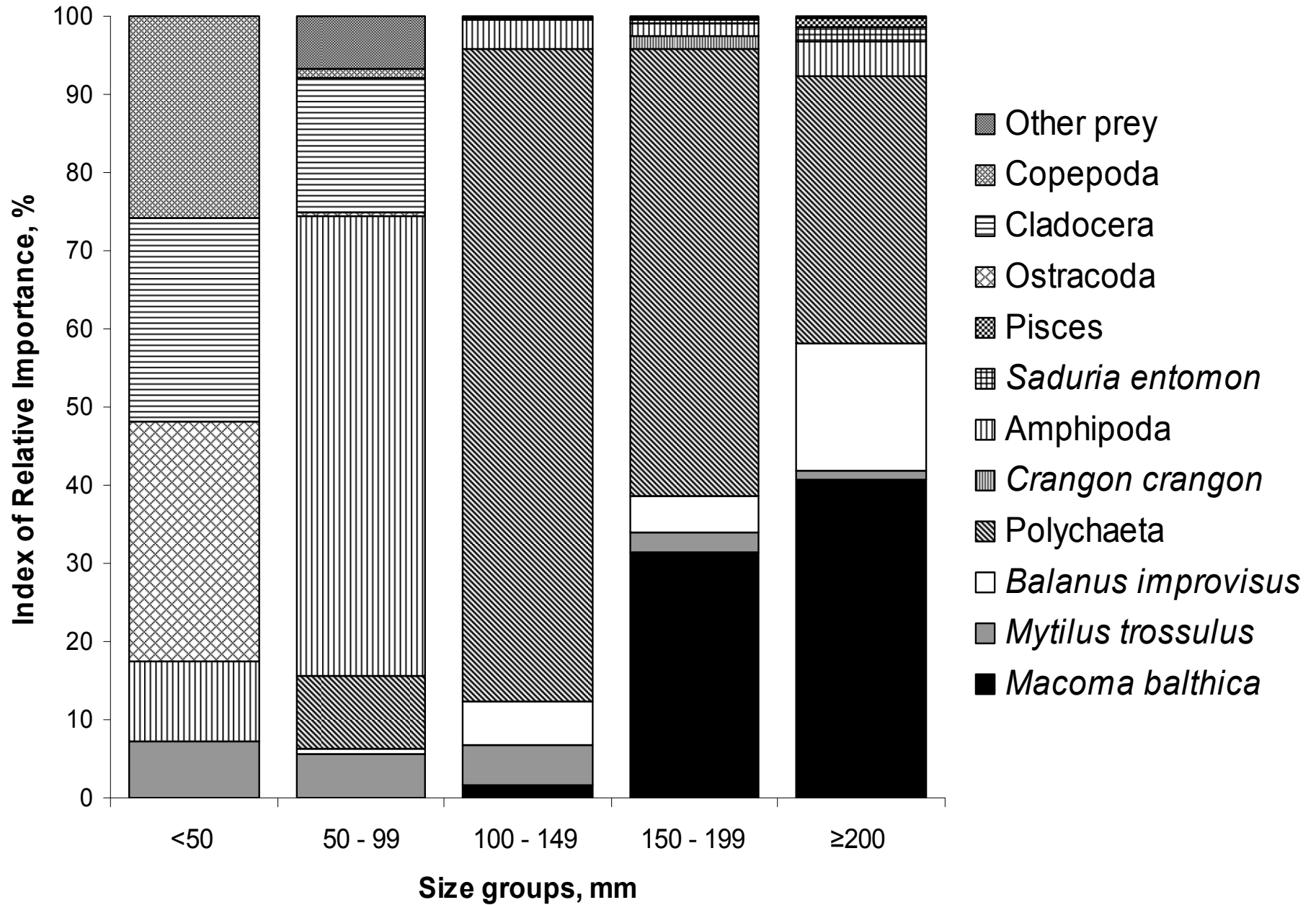
PERMANOVA results of season effect on the diet composition of differently sized individuals.

Size group	Pseudo - F	P
<50 mm	1.137	0.304
50 - 99 mm	1.132	0.270
100-149 mm	2.457	0.012
150-199 mm	2.145	0.047
≥200 mm	1.691	0.183

Seasonal dietary changes of the round goby. Spring



Summer



Conclusions

- Feeding activity of round goby varied depending on body size, sex and stage of the reproduction period;
- Ontogenetic dietary shift from zooplankton, meiobenthos and amphipods towards mollusks occurred at the size of 100 mm;
- Diet composition of round gobies <100 mm and ≥ 200 mm was relatively constant, while individuals of the intermediate 100-200 mm length had more variable ration, which changed depending on the season;

Thank you for your attention