

Impacts of an invasive fish on benthic communities in the upper St. Lawrence River

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Invasive species session



**CENTRE DE LA SCIENCE DE LA BIODIVERSITÉ DU QUÉBEC
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Impacts of invasive aquatic predators

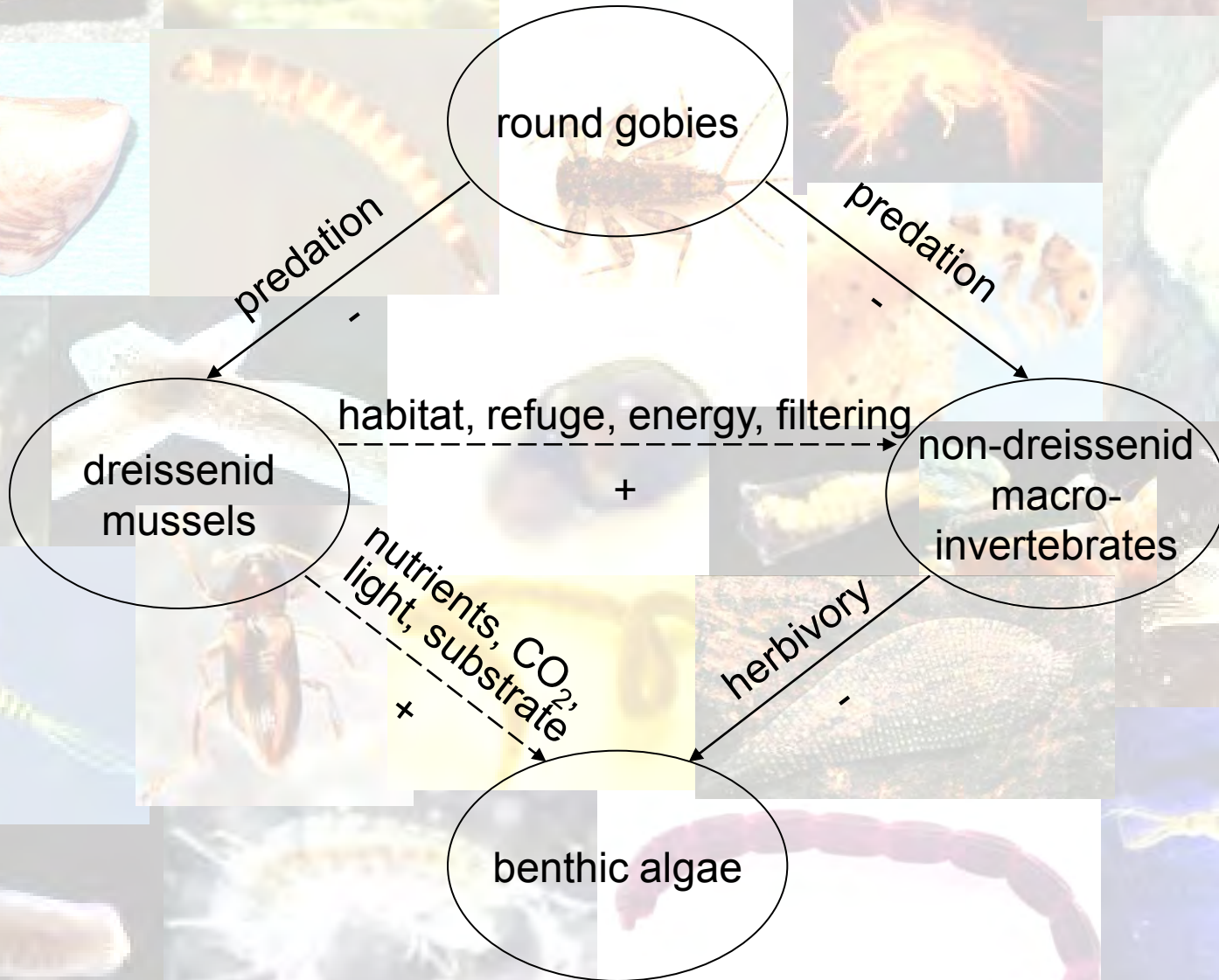
- **Restructure communities & ecosystems (e.g.**



- **Round goby:**

- **Ponto-Caspian species introduced to GL ~1990**
- **aggressive & abundant benthic mesopredator**

Round goby structuring effects

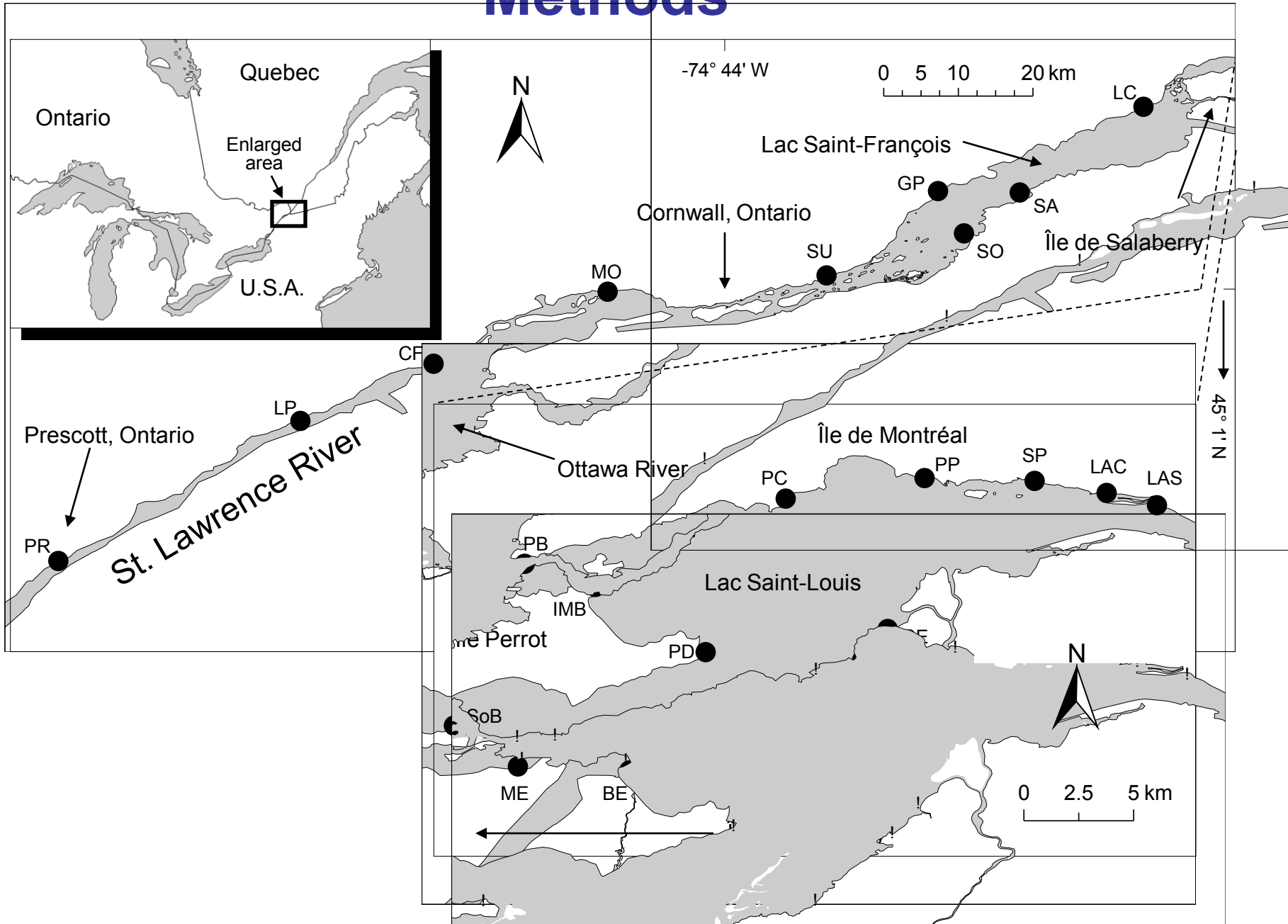


Hypotheses

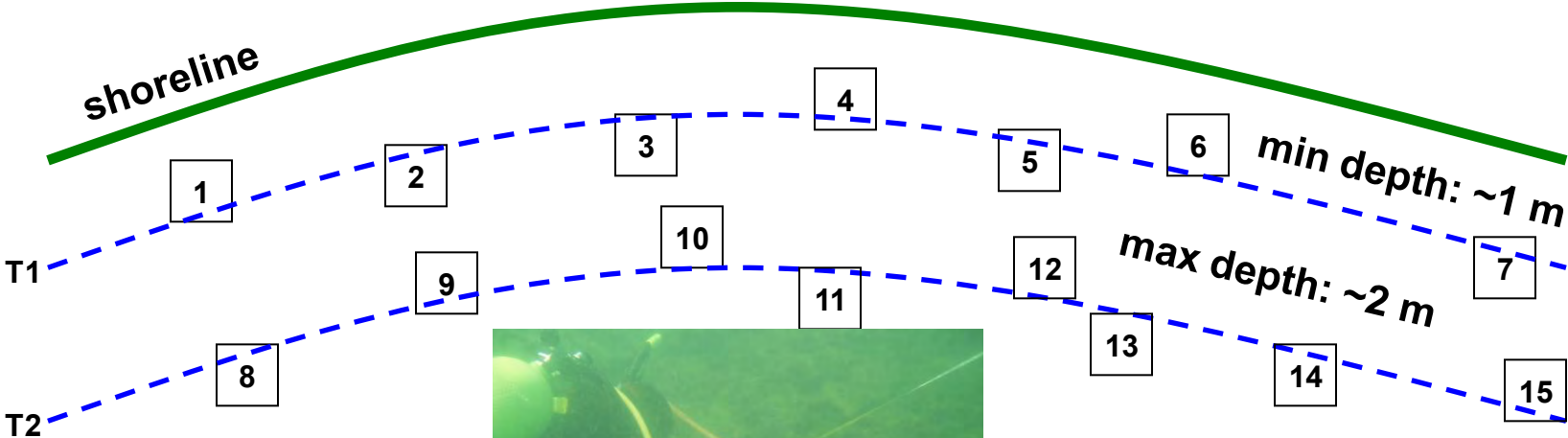
As goby density \uparrow :

- 1) Macroinvert community composition will change
- 2) Diversity, biomass & abundance of macroinverts will \downarrow
- 3) Benthic algal biomass will \uparrow

Methods

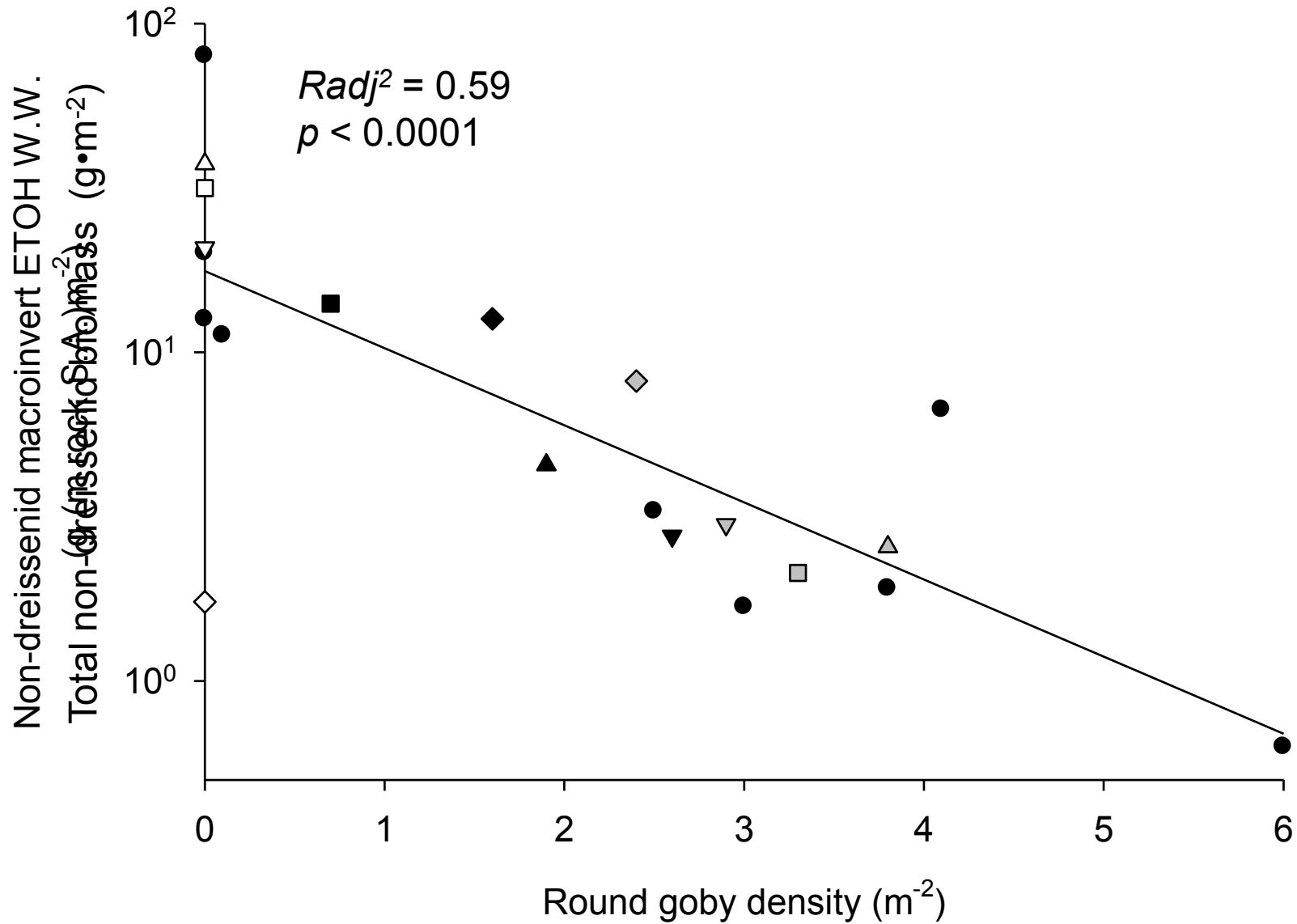


Methods

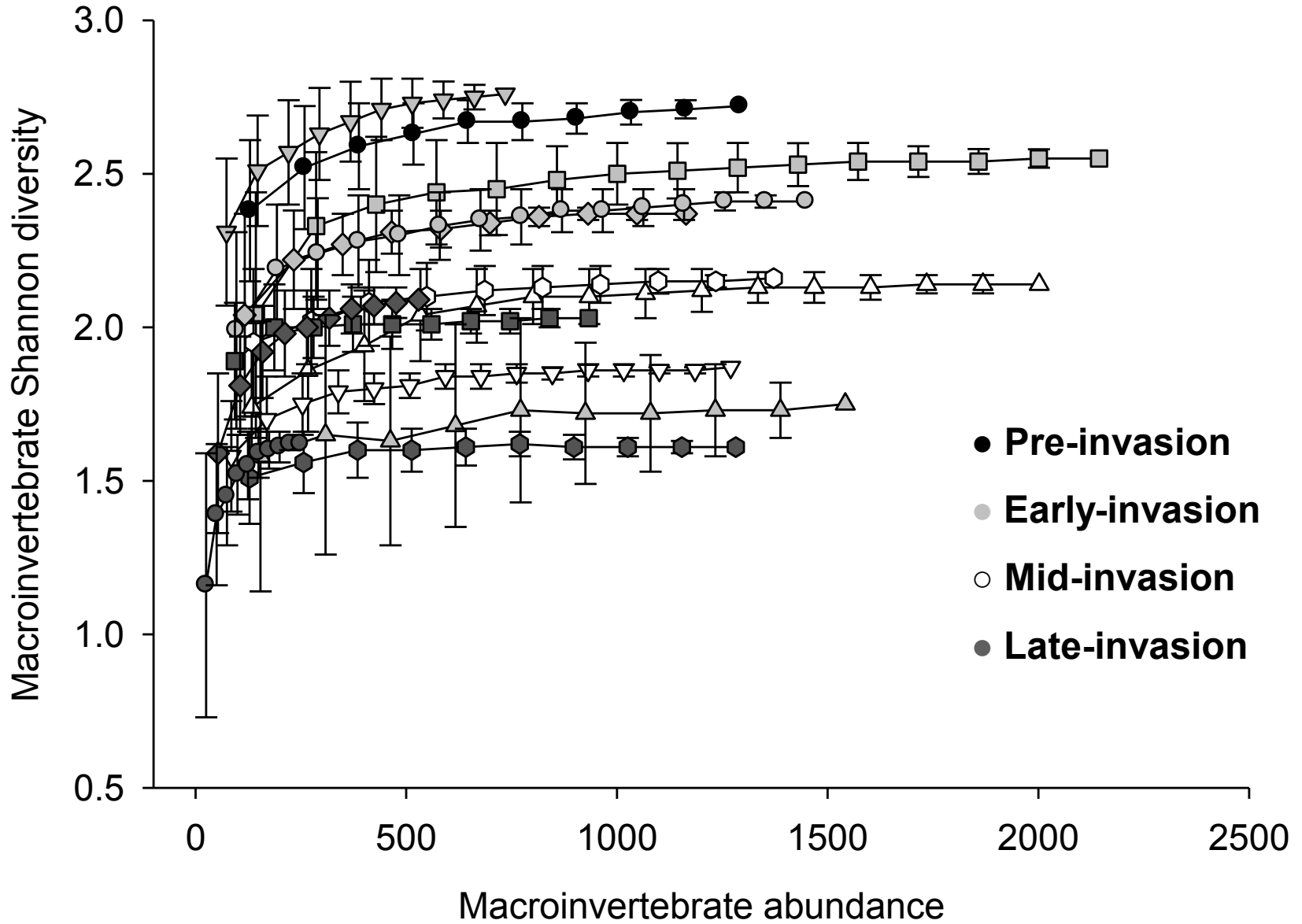


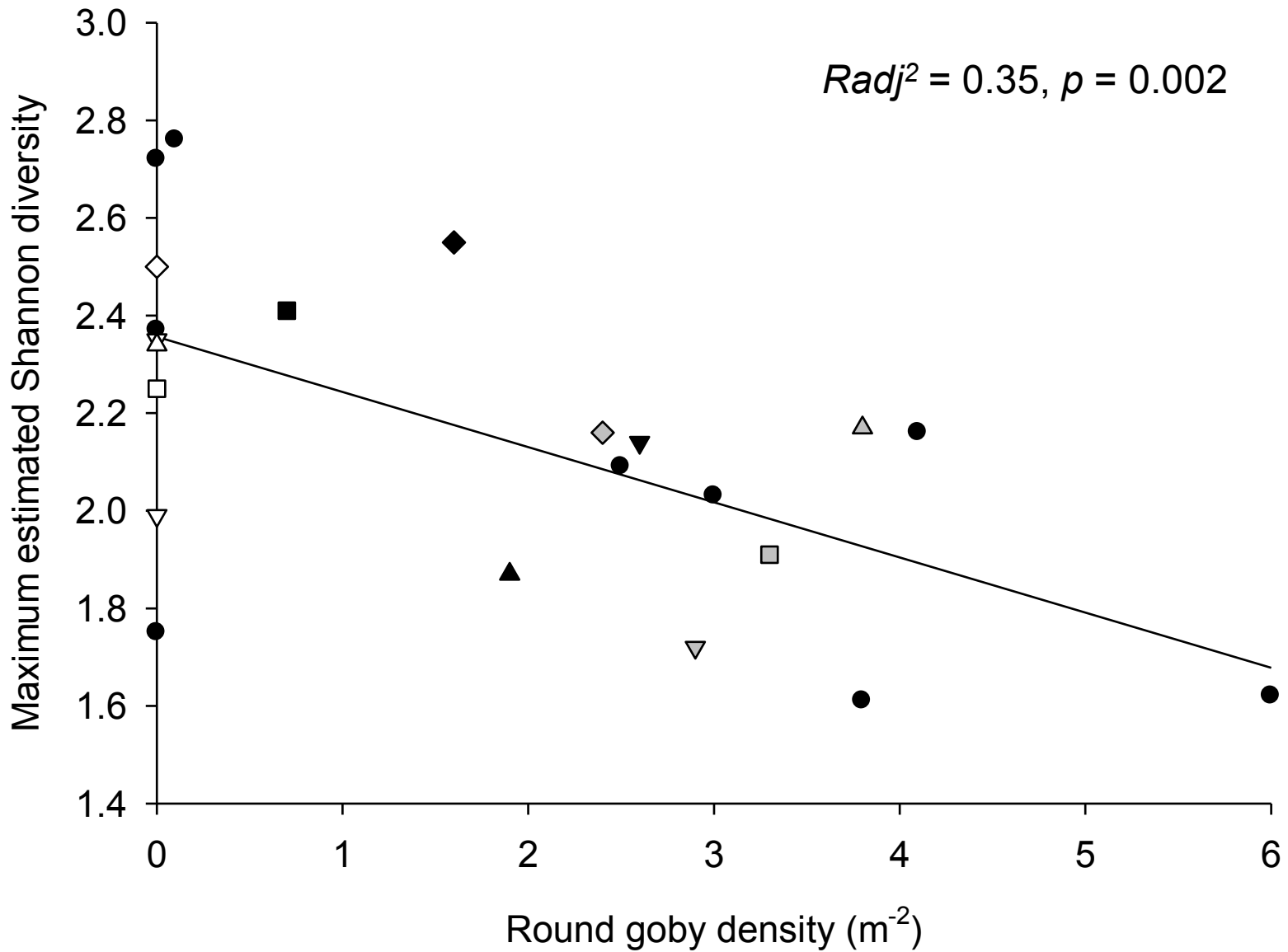
individua
quadrat:
0.25 m²



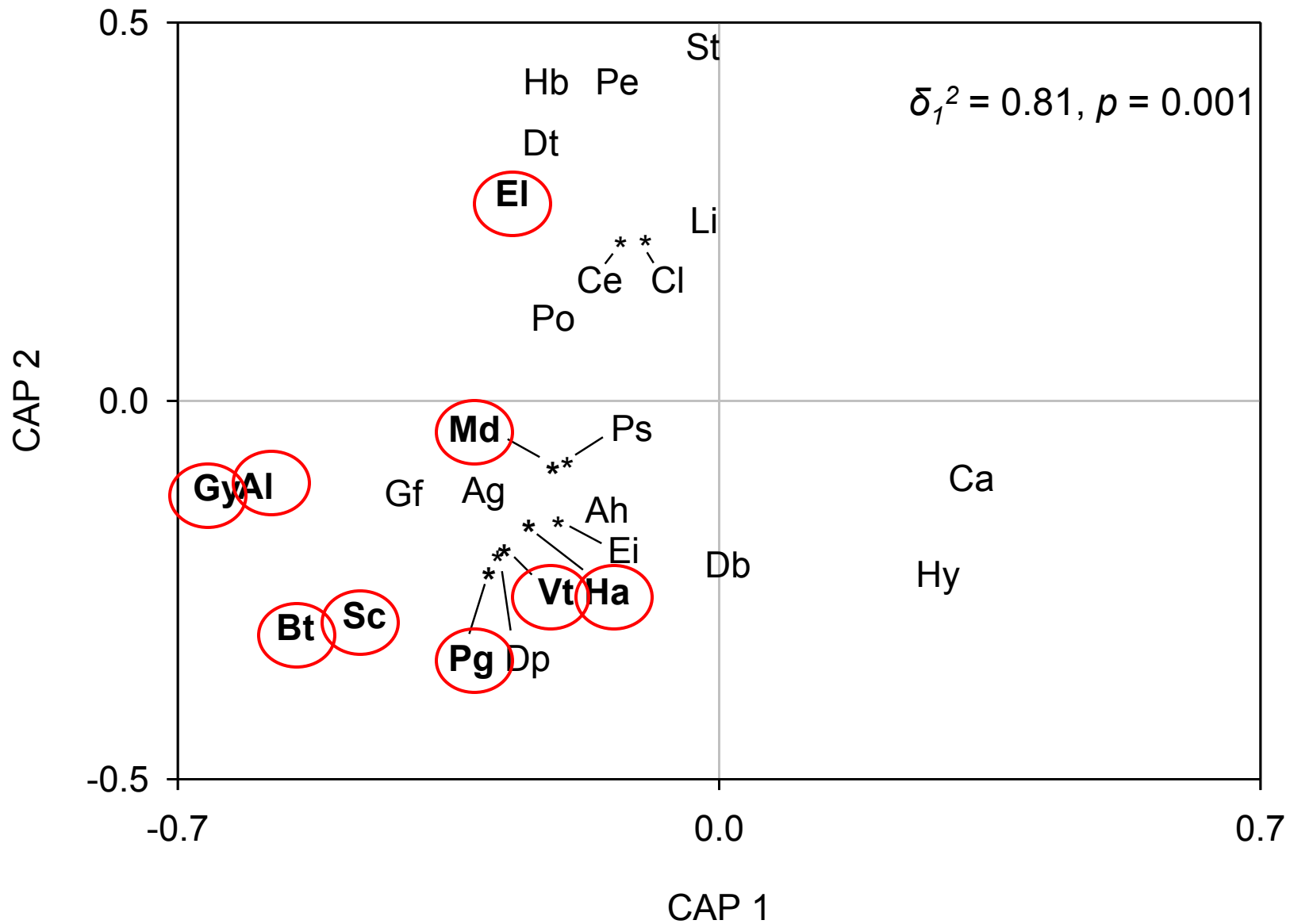


Results

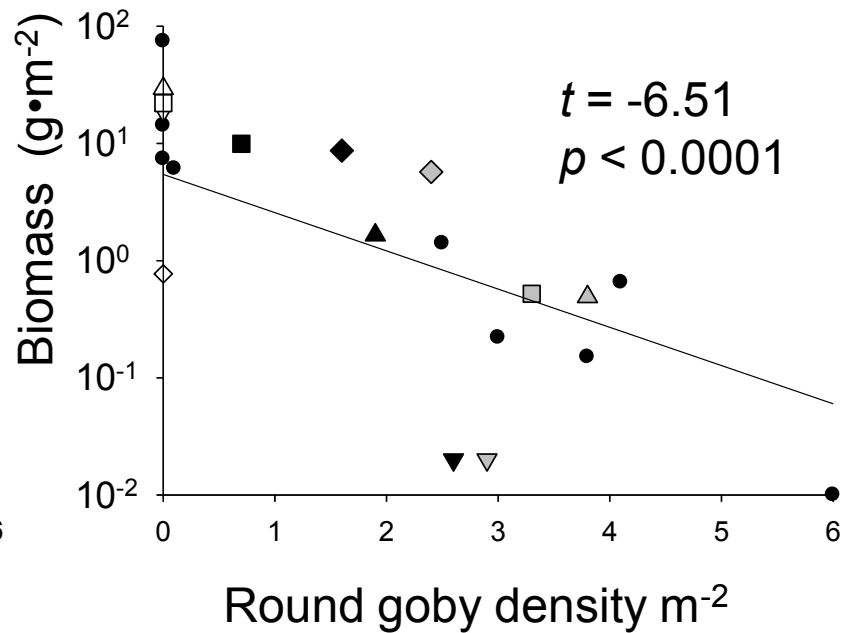
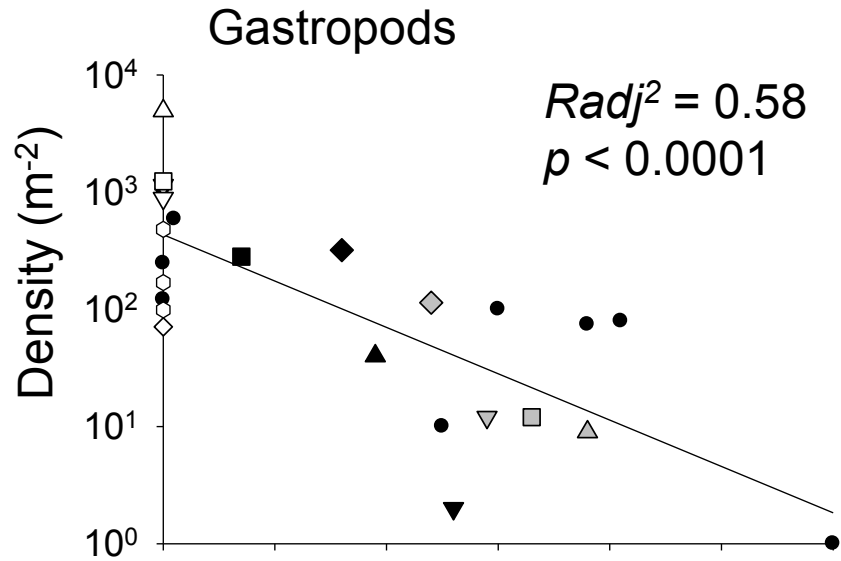




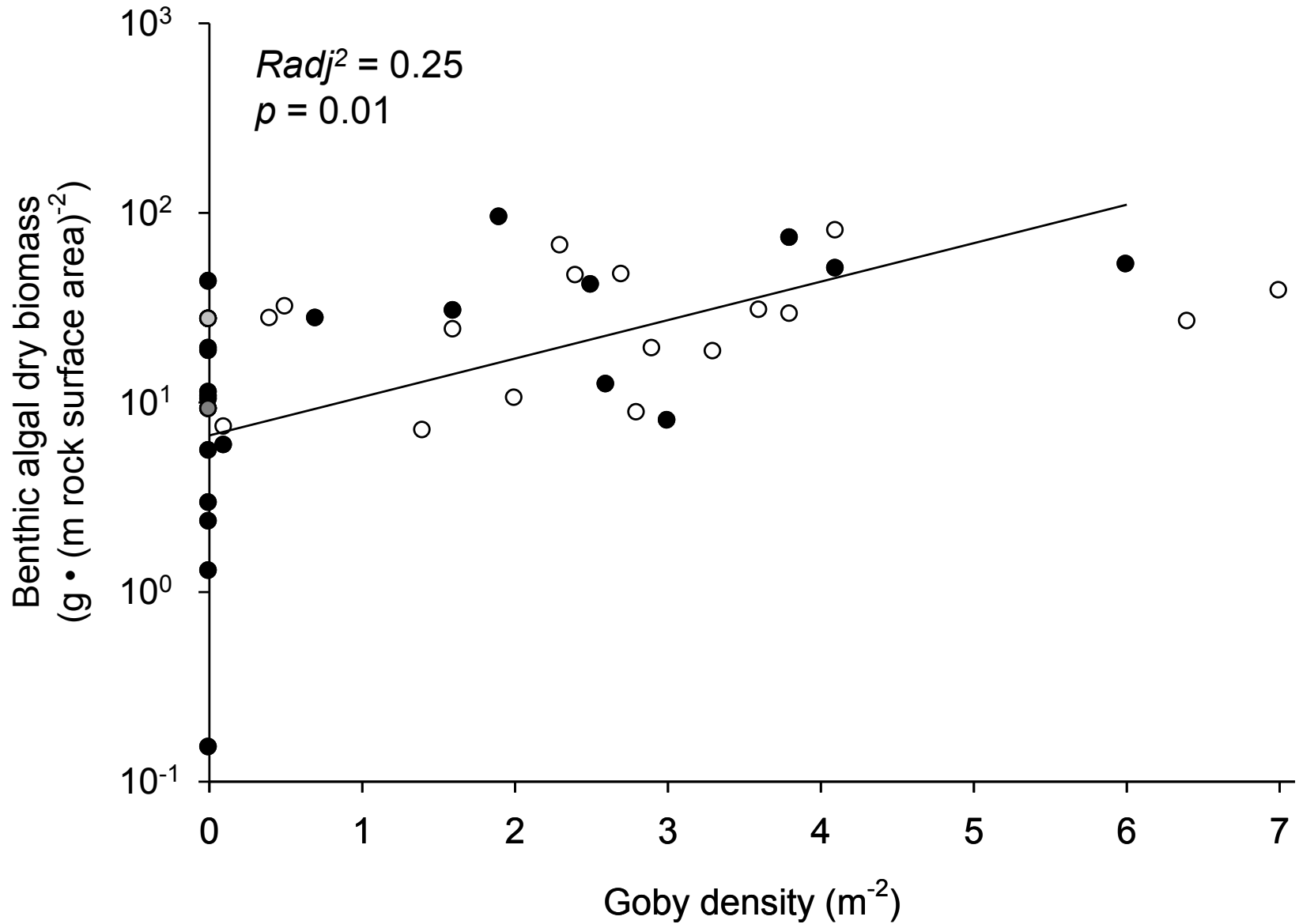
Results



Results



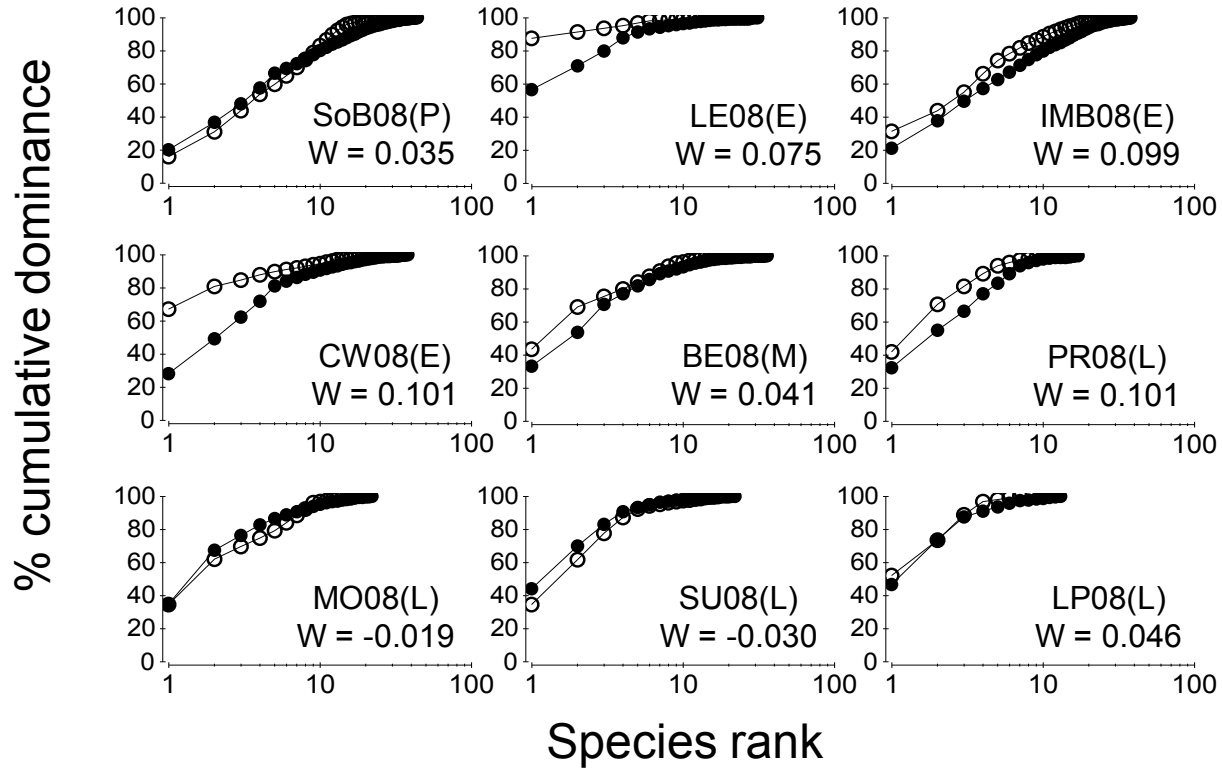
Results

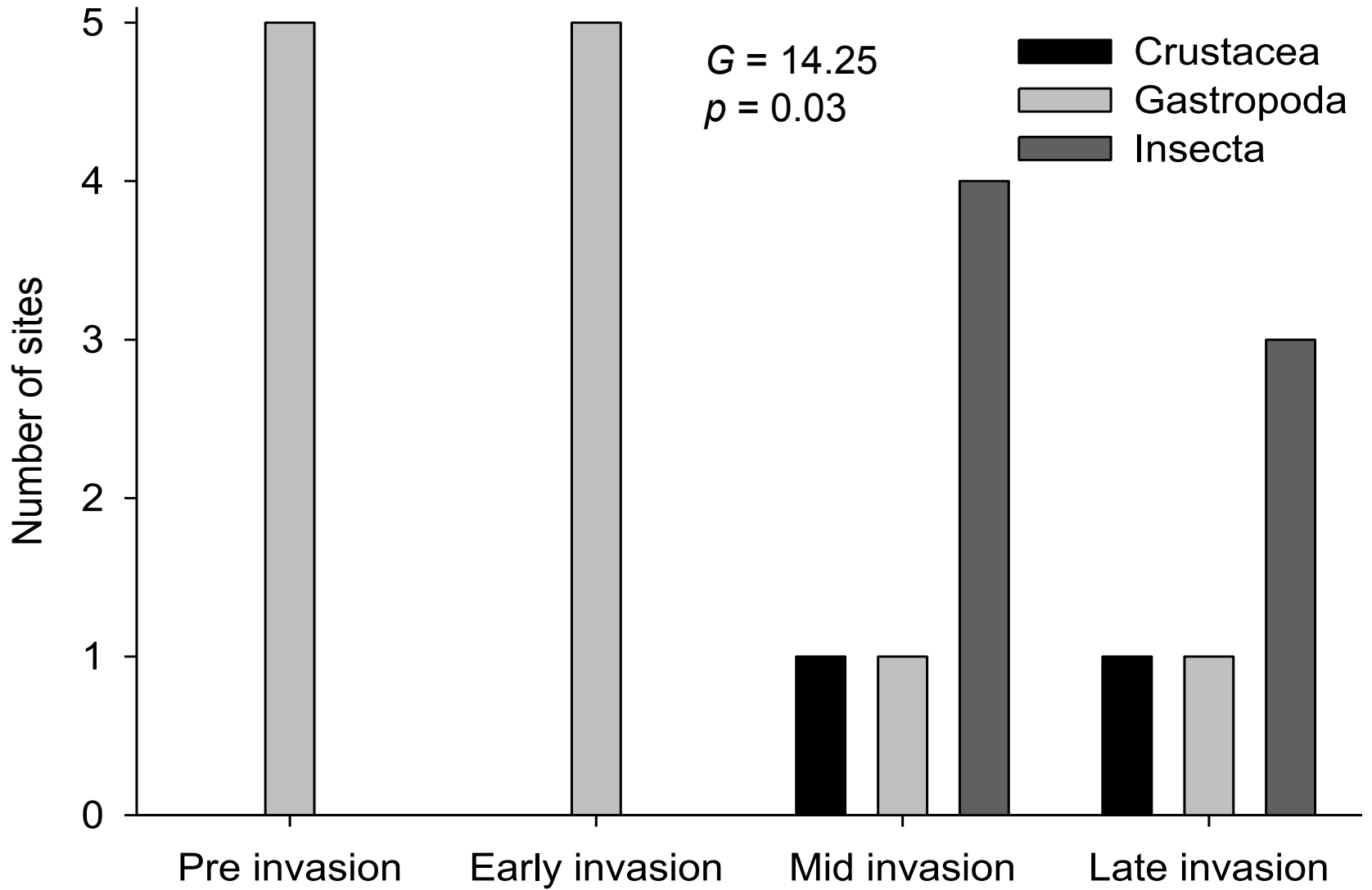


Conclusion

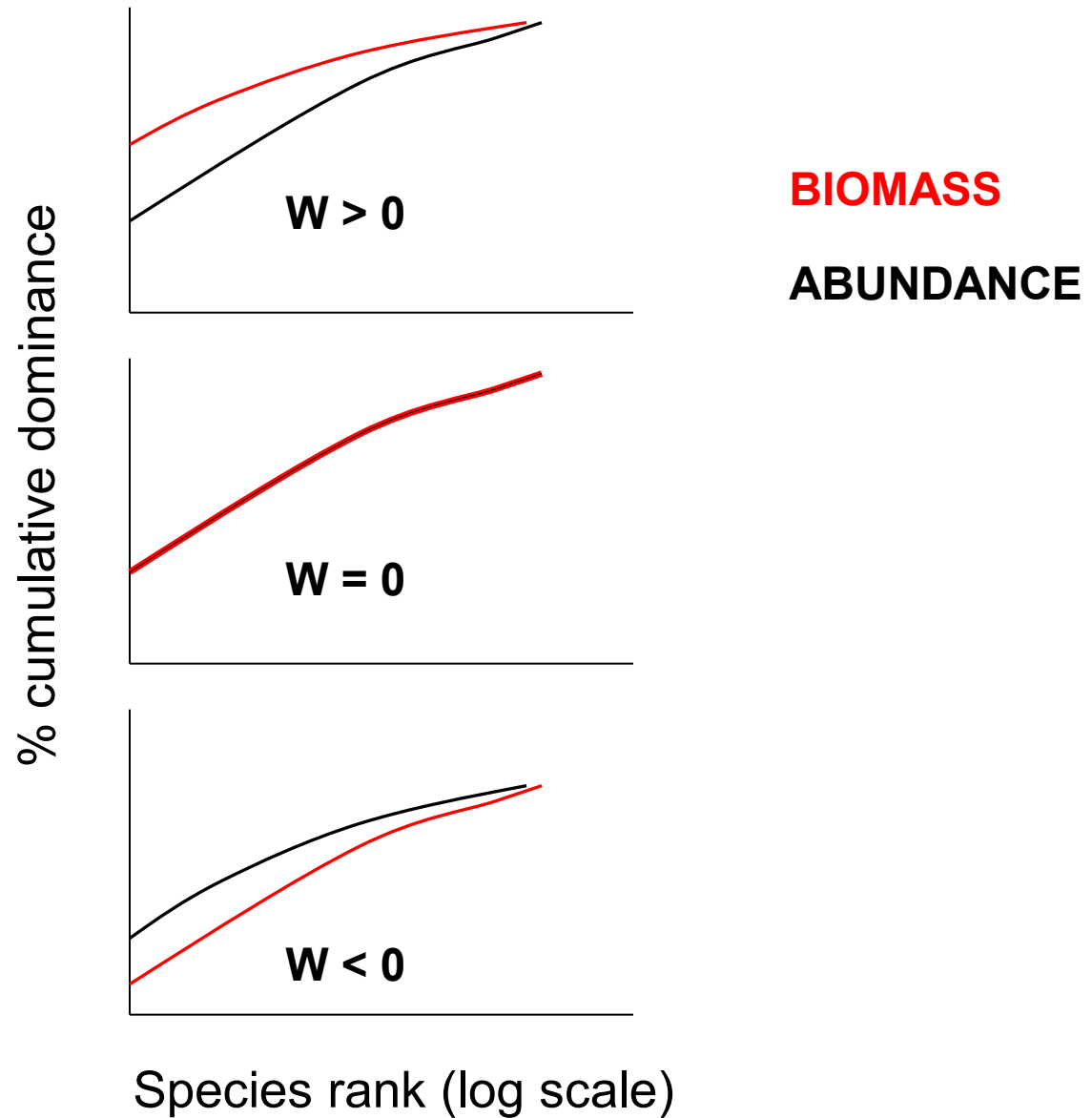
- **Changes to macroinvertebrate communities in upper St. Lawrence River**
- **Suggestion of a trophic cascade**
- **Implications for native fish species & ecosystem functioning**

Results



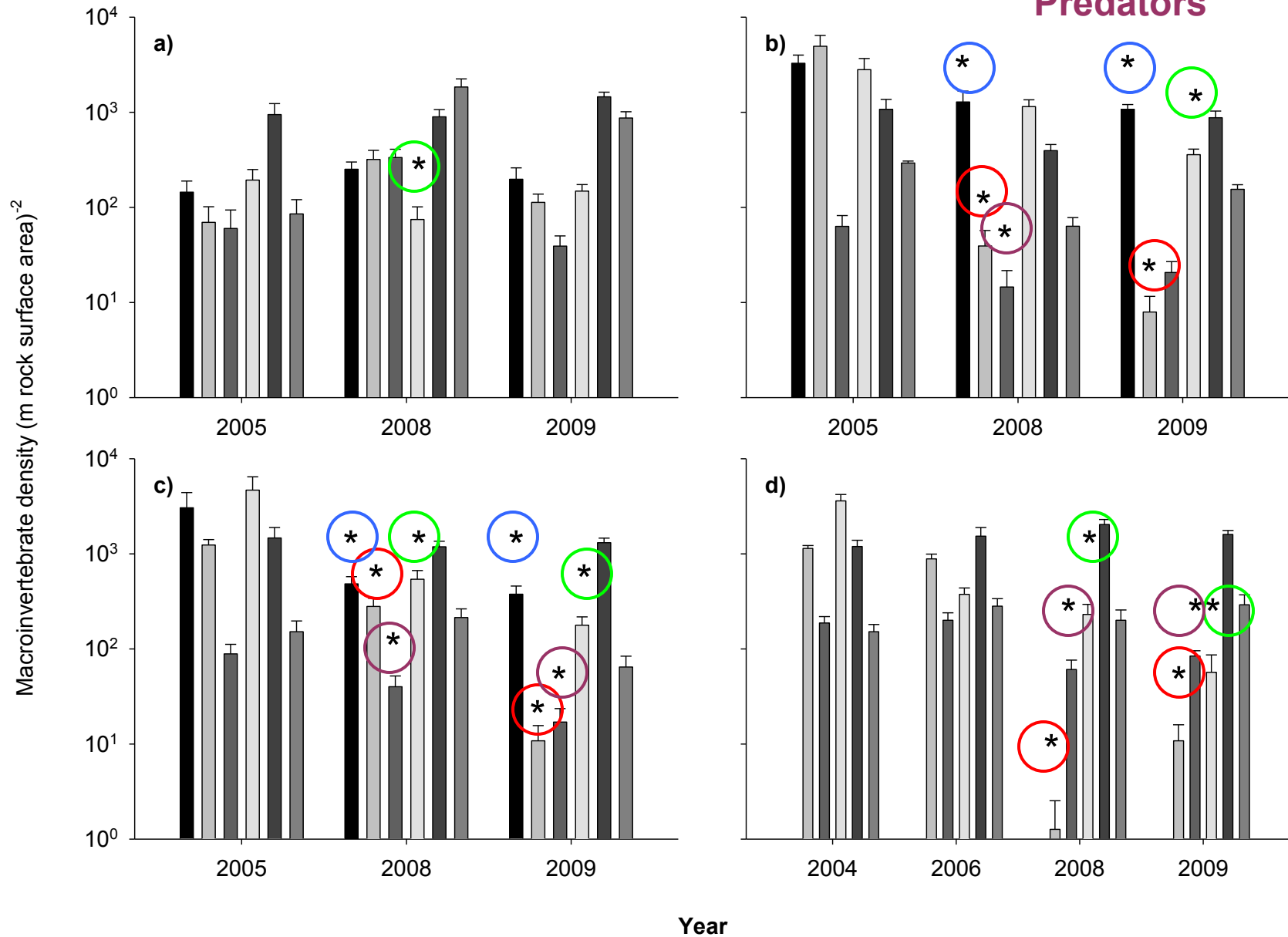


Results



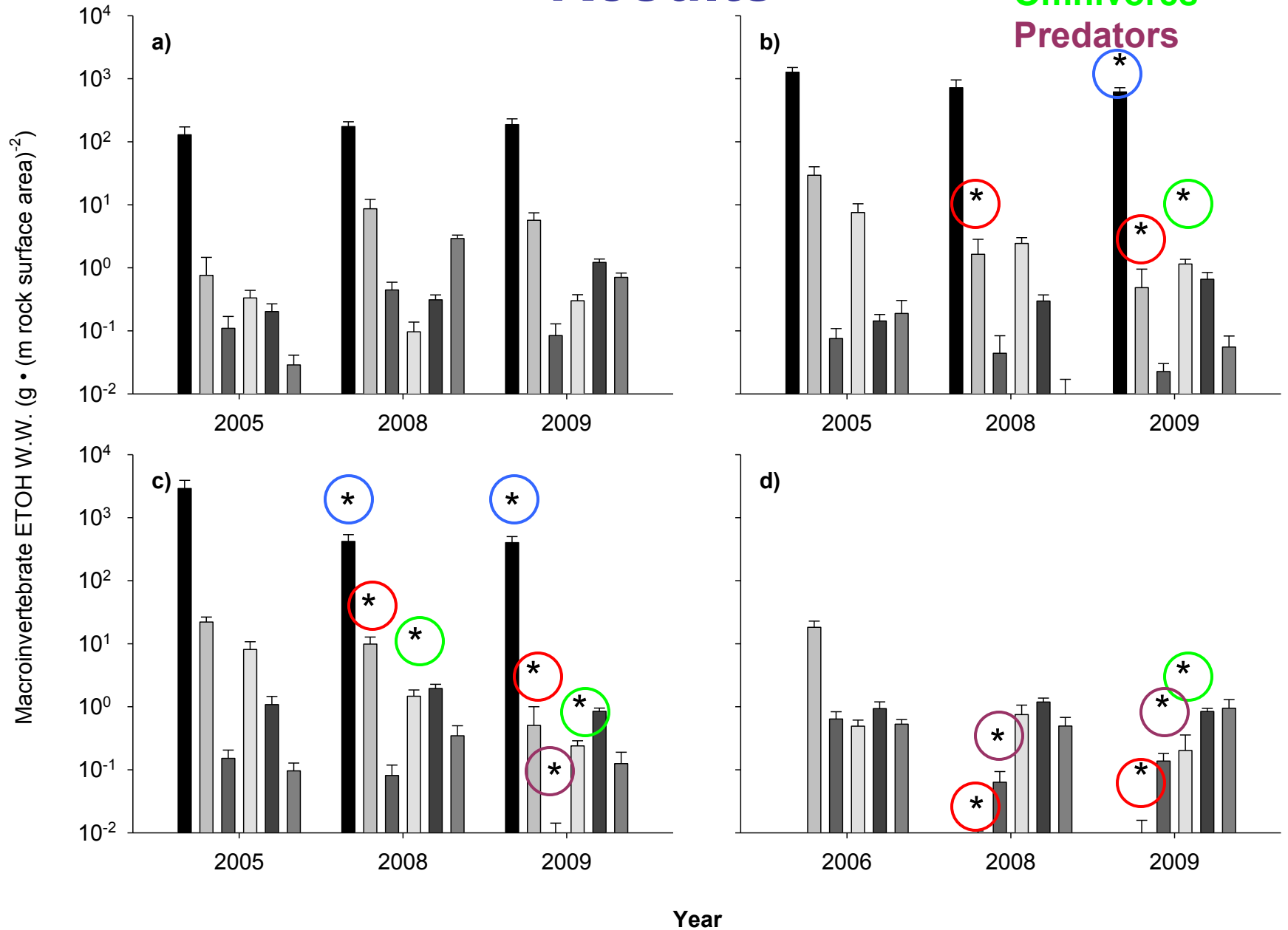
Results

Gastropods
Dreissenids
Omnivores
Predators



Results

Gastropods
Dreissenids
Omnivores
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Results

