Dear editor and reviewers,

Please find enclosed our revised manuscript entitled: “Local environment and sampling bias drive parasite prevalence estimates in freshwater fish communities*”,* which we would like you to consider for publication in *Oikos*. We appreciate the opportunity to resubmit the manuscript, and gratefully acknowledge the degree to which these reviews have improved it.

We carefully addressed and integrated the comments. We believe these changes help clarify our main messages and the significance of our contribution.

The following points summarize the major changes we have made to the manuscript:

- Following comments from Subject Editor and Reviewer 1, we added a “Speculations” section too address pooling of black spot trematodes species.

- Following comments from Reviewer 2, we improved articulation of contributions statement.

- Following comments from Reviewer 2, we improved articulation of the interrelationship between sampling design and local environment as both main elements of contributions.

We provide below a point-by-point response to each comment.

We look forward to hearing back from you.

Sincerely,

On behalf of all authors

REVIEWER 1

[1] First, is it normal in this journal to have a "Speculations" section at the end? I feel this paragraph would fit better as part of the discussion. Also, the authors could expand a little more their considerations regarding the pros and cons of pooling black spot species. For instance, the argument in their response letter that these trematodes have "similar ecological requirements" is surely incorrect, as the different trematode species probably use different species of snail intermediate host.

Thank you for this suggestion. The “Speculations” paragraph has been moved to the discussion section (LXXX) and we developed furthermore pros and cons of pooling black spot species.

[2] Second, the analyses summarised with figures in the response letter focusing on pumpkinseed only are great, and would be a nice addition as a supplementary material. This would only require adding 1-2 sentences to the main text, saying a parallel population-level analysis was done on one fish species to contrast with the community-level one, it uncovered similar patterns, see Suppl mat...

We added a mention to population-level prevalence analyses in the second paragraph of the results section (LXXX) and joined the figures in Appendix S2: Figure S1-S3.