Dear Editor,

We have significantly edited the manuscript following both general and specific suggestions from the reviewers. Below are the comments from editors with our responses in italics.

Sincerely,

Claire Rutledge and Robert Clark

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Independent Review Report, Reviewer 2  
EVALUATION  
Please list your revision requests for the authors and provide your detailed comments, including highlighting limitations and strengths of the study and evaluating the validity of the methods, results, and data interpretation. If you have additional comments based on Q2 and Q3 you can add them as well.

The authors of this manuscript present interesting long-term data obtained from a unique method of surveying for emerald ash borer via a dominant predator, Cerceris fumipennis. I find the data presented to be suitable for publication and of interest to a general audience, but that the manuscript requires major revisions. I have embedded edits and comments within the attached PDF and outline a summary of my concerns and suggested revisions below.

1) My most significant concerns for this manuscript are statistical. No statistical comparison between the theoretical and observed population curves is presented and this hinders interpretation of the results and the ability to discuss observed trends. Additionally, the temporal data (proportion EAB in wasp prey capture ~ year post-detection) appear to be fitted with a linear quadratic model, while a logistic model is most suitable for proportion-based dependent variables. I suggest refitting the data using logistic regression and, if possible, constructing a theoretical curve for direct comparison. This approach will greatly strengthen the interpretation of the results. The spatial data appear to be handled appropriately, although it would be nice to see some statistics associated with the rate of spread illustrated by the Empirical Bayesian Kriging interpolation maps.

*Thank you for the suggestions. We agree with the reviewer and have revised our analysis of the empirical data, using a significantly more robust mixed modelling approach (logistic GLMM) that is better suited to our proportion data (Figure 2).*

*Empirical-theoretical comparison is a good suggestion and one we considered and attempted during revisions. However, the theoretical curve is not set up as a parameterized model that can be tested explicitly with a model based on sample data. Figure 1 in the original draft is more an illustration of past patterns observed, and our comparisons are qualitative. Like traditional hypothesis testing we just wanted to see if our data strongly contradicted what is predicted in the literature.*

*Additionally, we have estimated a rate of spread to complement figure 3, but it was apparent this analysis was incomplete given the structure of the data. To truly address rate of spread correctly is outside the scope of this paper so we have opted to omit this point.*

*For empirical Bayesian kriging we reassessed the spatial relationships to make sure our maps were valid and based on detectable levels of spatial autocorrelation. This was completed in ArcGIS (Table 1 and Supplemental Table 2). We also checked Moran’s I values using an additional analytical package in R and were able to produce very similar I values and p-values.*

2) Content-wise, there are some important omissions from the text of the manuscript. Critically, text explaining how the data for Figure 2 were handled and analyzed is missing from the methods section. The methods section in general should be updated to illustrate approaches to data collection and analyses more clearly, which will in turn increase reproducibility. All figure and table captions should be reviewed, and information added (especially location), to render them as stand-alone entities.

*Methods have been revised to reflect the updated analyses. New figures and captions have been rendered and added to the manuscript. With respect to figure 2 we have now completed an entirely new analyses and removed the analysis from the original submission pertaining to this figure.*

*…*

3) This paper would benefit from some restructuring, particularly in the methods and results sections. As I have indicated throughout the PDF, there is content present in incorrect sections of the manuscript and reorganization, while retaining flow, is recommended.

*As part of our revisions all sections of the manuscript have been edited significantly, including methods and results.*  
  
4) Minor and moderate punctuation, tense, and sentence structure, and formatting errors are present throughout the manuscript. I have edited through many of these, but careful attention should be paid before resubmitting the next version of the document. There is also a substantial section of duplicated text in the discussion.

*We thank the reviewer for their suggestion, and attention has been paid to the entire manuscript. Our editing effectively touched on every sentence in this manuscript and we hope the reviewers and editor are happy with the changes.*  
  
I am optimistic that by addressing the revisions I have outlined above and in the attached PDF the authors will produce a manuscript suitable for publication in Frontiers in Insect Science and a valuable contribution to the EAB literature.