**Editors comments:**

* *As you can see from these re-reviews, there is disagreement among the two referees regarding the focus of the text (Referee #1 feels that it should be more narrowly focused on cumulative meta-analysis, whereas Referee #2 feels it should more broadly encompass other aspects of evidence synthesis). As such, we propose a compromise whereby the suggestion by Referee #1 of including a research decision workflow can be incorporated into the text: we suggest including this 'Researcher perspective' in a separate Box 1, and moving the current Fig 1 into this Box.*
* *This Box 1 should have a short title (e.g. "Case study" or "“Using cumulative meta-analysis to make research decisions” or "Example decision workflow from a researcher perspective") and include a brief outline of the decision process suggested by Referee #1 (perhaps with each stage separated by bullet points). You can then also incorporate Fig 1 into this Box, so that you only have two display items (Box 1 and Table 1). See this example for a Box/Fig combination: Bull et al* [*https://rdcu.be/b0lBh*](https://rdcu.be/b0lBh)

Thank you for the clear direction on how to proceed. We have made the changes suggested by adding a box entitled “Using cumulative meta-analysis to make research decisions”.

*Other Editorial Requests:*

* *- Please upload the main text as a Word (or LaTex) file, and the figure as a vector file (PDF, AI, EPS). Figure legends, Tables and Boxes should remain in the main text, at the end of the document (after the References)*
* *- Please include more detail in the legend to Fig 1 about what is shown (ie. what the green dotted line represents, what types of error bars are being used etc. The legend should guide the reader through what is being shown -- for example that top to bottom represents change through time, and define what error bars beyond the green dotted line represent.*
* *Please include a list of Acknowledgements, and a Declaration of Competing Interests (see policy here:* [*https://www.nature.com/nature-research/editorial-policies/competing-interests*](https://www.nature.com/nature-research/editorial-policies/competing-interests)*)*
* *Please upload all supplementary files as a single, separate document.*
* *Please change the names of the Supplementary files to:*

*Supplementary Methods*

*Supplementary Figure 1*

*Supplementary References*

* *Please ensure that each supplementary item is referenced somewhere in the main text.*

We have made these changes and checks

* *Figure legends must provide a brief description of the figure and the symbols used, within 100 words. This must include definitions of any error bars employed in the figures.*
* *Please try to limit the number of references to no more than 15.*

References in the main text are limited to 15. There are 3 supplementary references.

**Reviewer Comments:**

**Reviewer 1**

We have added a box as suggested by the editor to encompass the comments of Reviewer 1.

In addition we have added text to the maintext (or incorporated in the box text) to address the following two points from Reviewer 1:

* *One question that arises for me is, how many studies should there be in the literature before cumulative meta-analysis is warranted. Obviously, if there is only one study, it doesn’t make sense… but if there are 2 or 3 studies you still mightn’t have enough evidence to determine whether saturation has been reached… therefore you could theoretically skip straight to doing the study without doing a cumulative meta-analysis. I think a discussion of this might add value to the manuscript.*

Our current caveats section does address this issue (Line 75 to Line 81) - that there might not be enough evidence of sufficient quality to carry out cumulative meta-analysis. We have added a sentence to identify that there are statistical approaches (i.e. power-analysis) that can be used in the context of [cumulative]meta-analysis to determine how much primary literature is needed.

* *The section between lines 111 and 116 is a bit vague. This might be a good place to mention the Nichols et al paper and the possibility of deliberate programs of sequential research.*

We have added reference to Nichols et al. in this section now (Line 90 to Line 92).

**Reviewer 2**

* *CMA can be used to identify publication bias against results that contradict a paradigm/the dominant outcome direction (reference 13). Funnel plots are used to identify the non-publication of results (e.g. those of small effect size). Recommend that the authors acknowledge this.*

We have added a sentence that acknowledges this (Line 84 to Line 85)

* *The line added (ln119-120) does not address the trade-off in time. I suggest that it be extended to include the reasoning for suggesting that researchers and funders search for existing syntheses.*

We have added an acknowledgement of the time trade-off and linked to the PredicTER project on github (Line 58 to Line 60).

* *The focus is much improved and the MS flows better with the improved structure. The text in lines 26-29 states that the MS will focus on evidence synthesis as a tool to reduce research waste at the question setting stage, but Table S1 includes evidence synthesis both within the question setting box and as a separate line in the table, i.e. a separate stage. I recommend clarifying this within the text and/or table- the text within the table is relevant only to the question setting stage, though evidence synthesis can also minimise research waste by providing suggestions for appropriate study design and methods.*

We have added acknowledgment of this (that Evidence synthesis can aid at all stages of the research process) in the table legend.

* *Lines 52-56 point to MA as a tool, but the authors do not point to the issue with Garbage-In-Garbage-Out when MA is used commonly i.e. without a SR to precede it. A short acknowledgement of this is recommended, due to its importance and general lack of understanding/distinction between SR and MA etc. in the community.*

We do highlight the need to carry out Meta-analysis after systematic review in the section “The answer is already known with certainty” (Line 54 to Line 55). We state that meta-analysis follows on from the process of systematic review. We do not feel the specific phraseology of the Reviewer is therefore required.

* *As mentioned in my first review, there is no reference for an accepted “4 stages of research”, in Reference 2 (Chalmers and Glasziou). In that paper, the 4 stages are “stages of research waste”, rather than “stages of research”. The lack of attention to this distinction leads to the problem below:*
* *Table 1 and Figure S1. I still find difficulty with the way “stages” of research are titled. At current, the stage titles are optimal situations within the research process, and not the stages themselves. My suggestion is to change, for example “Questions relevant to stakeholders” should be changed to “Research question”; “Appropriate design and methods” should be “Study design and methodology”; “Unbiased reporting” should be “Reporting”.*

We have changed the titles in  Table 1 and Supplementary Figure 1 to reflect the Reviewer’s comment and altered the phrasing in the main text to avoid this confusion.

* *In its current state, S1 is still confusing. I suggest either changing the titles as suggested above, OR moving the red boxes in line with the blue, so that it is clear that each red box is a sub-optimal situation , and each blue box is the optimal situation within the research process.*

We have updated Supplementary Figure 1 (the titles) as suggested by the reviewer.

* The current CMA indicates a stable ES at 0.07 and a CI that crosses the line of no effect. In this scenario, if further studies were to be added to the CMA, the CI is likely to decrease and this would mean that there would be a small, yet significant ES. Can the authors acknowledge this potential point of confusion for the reader, as some may pick it up (i.e. perhaps authors can demonstrate what the magnitude of the ES relates to in the context of bird detection- that it is of negligible impact, I assume!)

We have added (to Box 1) an expression of the effect size in number of bird species recorded.