Dear Dr de Vries,

Thank you for resubmitting the pre-print and taking on board where possible all the helpful suggestions of the two reviewers. We have enjoyed reading this paper: it gives a very clear overview of complex ideas in evolutionary biology, and hence lives up to the promise of its title. We like the following about the paper and have decided to recommend it for publication:
1. It provides an assessable account of William's classic hypothesis and why it has been debated.
2. It synthesizes earlier modelling papers and empirical observations in a way non-theoreticians can understand.
3. It set out 10 (new) models which are easy for many to understand and clearly show when William, Null and Anti-William conditions would arise
4. It provides its limitations and set out future agenda

We provide a few minor suggestions you may want to consider for updating your pre-print:
1. l.125 "An example free of trade-offs.." Do you mean "A trade-off free example..." - anyway, it is a bit hard to understand
2. l.127-8 Avoid repeating 'e.g.' so sentence could read: "While this is clearly not the only reason for general patterns like bat lifespans exceeding those of similarly sized rodents (as other factors, e.g. hibernation, play a role, see Wilkinson and Adams 2019),..."
3. l.169 would add 'for any positive value of fecundity F' (worth repeating fecundity as key point here)
4. l.169-170. would expand this sentence to clarify link to main point of paragraph (at a quick first read seems contradictory: 'terms' in the growth rate equation are 'identical', yet growth rate for bats is higher than for mice. I think that the point is implicit in earlier lines so would just remove this phrase ('the terms containing...') unless can clarify without being repetitive that this is driven by sb > sm.
5. l.178 Kokko 2021 - this is not in the ref section. Please double-check your refs
6. l.268 Strong statement here - would it be worth adding 'and trade-offs between survival and fecundity' to reflect this is based on simple heuristic model rather than a general result?
7. l.302 (in parentheses) mathematical explanation for slowed down population growth - why is this here rather than at l.294?
8. l.314 'the initial elevation of extrinsic mortality' - I find this hard to follow, can this be reworded for clarity?
9. l.358 I'd phrase this 'scenarios of density dependence' rather than 'density-dependent scenarios'
10. l.384 The part of sentence after colon does not clarify what comes before (I was expecting this to explain the type of trade-off considered rather than how fast/slow are contrasted) - could this be rephrased?
11. l.401 "significantly higher" should be "substantially higher" as "significant" often means statistically significant in the scientific literature. The same for l.402.
12. l.632 References - check formatting as there is a mix of sentence case and capitalised article titles. Figure 1 legend: missing closing parenthesis after 'much faster than mice'

Figures:

Fig 1 & 2: We like these very much. In the same manner, can you visualise the condition where even in the presence of density dependence, slow individuals do not gain = Null (if difficult, no need to do this). I am saying I want a visualisation of the text around line 310.
Fig 3 - add labels a,b,c,d onto the figure itself.
Fig 5. please put what mu is in the legend.

Yours sincerely,
Sinead English and Shinichi Nakagawa