

Peer Review: Spatial and temporal activity of wildlife on and surrounding cannabis farms

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Collaborators: Bryn Evans & Matthew Hyde + 3 other reviewers

Credibility Score

100%

Accepted by 5 of 5 reviewers

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Conflicts of Interest

The authors declare no conflicts of interest.

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Reviewer Summaries

Bryn Evans

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

What did the authors do a good job with?

The discussion section was thorough and addressed all of their findings, provided several suggestions for reasons behind the observations, and placed in in context with other literature.

How do you think this research will contribute to the field?

Evidence of wildlife response to cannabis cultivation can help inform policy (e.g. what kinds of operations are licensed) and is of general interest to wildlife managers in western North America, with potential application as legal cannabis expands.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

The study design with sites along a gradient of distances from several different cannabis cultivation sites is solid, though authors should acknowledge the limited scale (both in number of cameras and length of deployment) more directly.

The methods will require fairly substantial re-writing to remove all the lines that are self-plagiarized, including a new map.

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

Analyses are solid, I do not personally think that the equations add very much to the paper, and if they are not the direct brain-child of these authors they need to be better attributed to their sources. Figures 2-4 are very nice, figure 5 is a nice creative format but needs to be made clearer and more legible for those with color / vision issues

Is there anything else you think the authors need to fix in their article to be fit for publication?

Even though I do not think it was intended maliciously, the plagiarism is a pretty serious issue in my book that needs to be resolved before this paper should be published. I compared line-for-line with the Parker-Shames et al 2020 paper, and found numerous instances in the introduction and methods that would compromise the reputation of the authors and of The Stacks if they were reprinted. I did not pursue other publications, for one since it is double blind and I only know that at least some of the same authors are involved from one mention, and also because I am hoping that there is software / AI that can do that?

Do you have any concerns about the ethics of this research?

No, they used un-baited trail cameras and so the impact on wildlife should be negligible

Do you believe the article, in its current form, is fit for publication?

Revise and resubmit



Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

None

What else do the authors need to fix for this article to be ready for publication?

Nothing beyond resolving minor edits and comments

If the authors make these changes, will the article be ready for publication?

Yes

Should this article be published?

Yes - accept with the revisions I mentioned

Do you need to see the article again before it gets published?

No - I don't need to see it again

Would you like to be listed as a Collaborator on the final publication?

Yes, please list me as a Collaborator

Joseph Hinton

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

What did the authors do a good job with?

Data analyses and presentation of results. Easy to follow.

How do you think this research will contribute to the field?

Very regional focused both in scale and ag commodity.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

Link analysis with appropriate or more sophisticated ecological questions. Maybe consider classifying wildlife by functional groups or something (e.g., predator/omnivore/herbivore and/or small/medium/big).

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

Overall, I think the paper has a weak conceptual framework. The primary problem for the authors is finding a good balance of background, data presentation, and interpretative discussion that doesn't lead to over-extrapolation or over-selling the novelty.

Is there anything else you think the authors need to fix in their article to be fit for publication?

Present the study as a regional one.

Do you have any concerns about the ethics of this research?

No

Do you believe the article, in its current form, is fit for publication?

Revise and resubmit



Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

None. Thought they did really well handling reviewer feedback.

What else do the authors need to fix for this article to be ready for publication?

Nothing that I can see. One of the other reviewers got to the paper before I did and provided some edits that I would have suggested.

If the authors make these changes, will the article be ready for publication?

Yes

Should this article be published?

Yes - accept with the revisions I mentioned

Do you need to see the article again before it gets published?

No - I don't need to see it again

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator

Matthew Hyde

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No, I do not.

What did the authors do a good job with?

The authors did a good job with this manuscript. It is well-written, provides clear justification for the purpose of the study, and results are clearly explained and relevant to the methods and purpose they laid out. They also do a good job of addressing limitations in their study. The figures are great, and the code is very clean and easily understood.

How do you think this research will contribute to the field?

This research is valuable to understanding the impacts of new types of agriculture on wildlife and the authors made a strong case that the unique layout of cannabis farms near public land warrants this research.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

In general, I thought the methods were well described and clear. I included some minor comments on the camera trapping section (dates?) and on the equations. It's interesting to see one model applied to a set of 13 species, as I'm used to seeing hypotheses for factors affecting occupancy for each species individually, then some sort of model selection to determine fit. I don't think that's necessary here as the purpose is to define whether these common factors influenced a group of species, but I do think it would be good to quantify the model fit to the detection history of each species rather than just parameter estimates with R^2 values or assessing traceplots. The lingering question that I had after reading the methods, results, and discussion is why would distance from cannabis farms be a more relevant covariate



for space use that humans or dogs, especially for some species that displayed avoidance. As of now, HAI and DAI are only on detectability, but in the discussion the authors mention that the presence of some species is affected by the presence of humans or dogs. I wonder if a multispecies model or multi-scale occupancy model would be better served in this case, but I think the manuscript as it stands does a nice job with the methodology. Maybe just justifying why HAI and DAI would or would not affect occupancy would be good.

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

I think the analysis and interpretation of the findings is clear and aligned with the methods and objectives of the study. The authors do a nice job of describing both occupancy and diel responses with figures and descriptions.

Is there anything else you think the authors need to fix in their article to be fit for publication?

No, I think all my comments were addressed in other sections or throughout the manuscript.

Do you have any concerns about the ethics of this research?

No, I do not have any concerns about the ethics of this research.

Do you believe the article, in its current form, is fit for publication?

Revise and resubmit

Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

There's the possibility that one of the authors is my future employer. However, I'm not sure that's the case and I don't think it affects my ability to provide an unbiased review of the material.

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

N/A

What else do the authors need to fix for this article to be ready for publication?

I think there were some minor changes to be made on wording, but everything else looks good.

If the authors make these changes, will the article be ready for publication?

Yes

Should this article be published?

Yes - accept with the revisions I mentioned

Do you need to see the article again before it gets published?

No - I don't need to see it again

Would you like to be listed as a Collaborator on the final publication?

Yes, please list me as a Collaborator

Gary Roloff

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No



What did the authors do a good job with?

Well written and easy to understand. I could focus on content and not get distracted by poor writing and organization.

How do you think this research will contribute to the field?

The authors couched this paper in the context of landscape frontiers and agriculture, which gives the paper broad context. The specific topic (cannabis) is novel with little available information in the published literature, hence I believe this will be a relatively novel contribution.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

Just a few more details on a few things. I articulated these as comments in the marked up document.

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

Same as above, I just had a few specific questions that can likely be answered with a couple of additional sentences.

Is there anything else you think the authors need to fix in their article to be fit for publication?

No that hasn't already been covered.

Do you have any concerns about the ethics of this research?

No

Do you believe the article, in its current form, is fit for publication?

Revise and resubmit

Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

no

How well did the authors respond to your comments?

5/5

What - if any - feedback do you feel the authors did not adequately respond to?

They did a very nice job; super thorough!

What else do the authors need to fix for this article to be ready for publication?

I drew attention to a potential messaging issue in the abstract for their consideration.

If the authors make these changes, will the article be ready for publication?

Yes

Should this article be published?

Yes - accept with the revisions I mentioned

Do you need to see the article again before it gets published?

No - I don't need to see it again

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator

Greta Wengert

Initial Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?



No

What did the authors do a good job with?

The authors tackled a pressing conservation concern in a novel way. Care was taken to ensure results and interpretation were in line with the findings and limitations of the methods. The Discussion highlighted the ability of the study to inform future research and management, but did not stretch their ability for broad conclusions to be made.

How do you think this research will contribute to the field?

Very little empirical data and studies have occurred on this subject to date, so this study can serve as a solid baseline for future studies and provide direction on limitations in how Wildlife and cannabis farming can be managed towards conservation.

Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?

The study design was adequate to achieve the goals of the study, and did not overreach. There were a few instances where methods could have been explained more clearly and possible additional covariates that could be included to enhance the value of the study and add to the robustness of any conclusions being drawn. I indicated in the MS a couple minor analyses that might enhance the paper,,though some.of my suggestions may include the need for data it's possible the authors don't possess. If that's the case,,that lack of data should be explicitly discussed, as I do understand the sensitivities of the study system

Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?

Again, I mentioned above that there are a couple analyses that could be added to enhance the study. They are explained in the MS but include consideration of terrain ruggedness as a covariate (in addition to distance to farm), consideration of whether dogs are present/owned/used for security on the property, a consideration of other nearby cannabis farms, and possibly a binary covariate for the presence of larger predators (even when they are not quantified).

Is there anything else you think the authors need to fix in their article to be fit for publication?

There are several instances where the methods explanations need to be tightened up quite a bit, as there seemed to be recurring questions and uncertainties by thr reviewers. The map needs improvement and the tables should be made more concise or put in an appendix or supplementary materials.

Do you have any concerns about the ethics of this research?

No

Do you believe the article, in its current form, is fit for publication?

Revise and resubmit

Revised Submission

Do you have any conflicts of interest that could bias your ability to provide an independent review?

No

How well did the authors respond to your comments?

4/5

What - if any - feedback do you feel the authors did not adequately respond to?

The authors responded to all my comments but there was one in particular I thought they could do a better job addressing. I included this thought as a comment in the review, specifically addressing dog activity as both a dependent and independent covariate and how that may have shaped the results. I suggested they include more thoughts on this in the discussion.



What else do the authors need to fix for this article to be ready for publication?

The map figure could benefit by a bit more resolution including the subwatersheds within which the study sites occurred. I commented on this in the ms.

If the authors make these changes, will the article be ready for publication?

Yes

Should this article be published?

Yes - accept with the revisions I mentioned

Do you need to see the article again before it gets published?

No - I don't need to see it again

Would you like to be listed as a Collaborator on the final publication?

No, I do not want to be listed as a Collaborator