

# Peer Review: Space use and fate of a three-legged coyote - a case study

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*Collaborators: Alex Jensen, Michelle Lute, & Dustin Ranglack + 2 other reviewers*

## Credibility Score

80%

Accepted by 4 of 5 reviewers

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## Conflicts of Interest

The authors declare no conflicts of interest.

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# Reviewer Summaries

## Alex Jensen

### Initial Submission

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

No, unless knowing who at least one of the authors is counts as conflict of interest

**What did the authors do a good job with?**

Introduction flowed well and covered appropriate information. Very detailed methods and results section. Generally did well to caveat their findings due to small sample size.

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

This paper suggests that animals seriously injured during research activities do not always need to be euthanized. It also is a rare glimpse into how injured/maimed individuals may behave differently than normally abled animals.

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

The surgery section seems overly technical

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

Conclusions about minimizing contact with humans should be softened given sample size and coyote's experience. Distance to road thing not that convincing from Figure 4 - also difference between day and night. Not clear how avoiding snares would be bold or exploratory

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

Is there a lesson to be learned about using drags? Seems like too much detail on non-peg leg coyotes. Group them together. Align axes in Figure 4 ○Rename coyotes to Amp, Cont1, Cont2, Cont3 so easier to follow.

**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?**

Not sure if this counts, but I know who one of the authors is.

**How well did the authors respond to your comments?**

3/5

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

I suggested that the authors not use field IDs, but rather rename them. They did rename partway through but I don't understand why they continue to use field IDs at all. Several reviewers and I had comments



about hypotheses and citations at the end of the introduction. The authors improved that paragraph but there are still some issues.

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

Nothing

**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

## Michelle Lute

### 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?**

Great detail (perhaps too much unless methodology isn't published elsewhere), clearly written, unique study despite the limited sample size

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

This study is a useful contribution to not only researchers who use leghold traps but also for understanding the implications of trap use more generally

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

N/A

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

Minor details noted by several of the other reviewers in the document

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

No

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

No but as noted in the doc, more discussion of the ethical considerations were greatly enhance the contribution of this paper

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

Accept

### 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?**

N/A

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

N/A

**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

## Dustin Ranglack

### 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 were very thorough and detailed in their writing and in justifying why it is important that we consider alternatives to humane euthanasia when animals are injured during research activities.

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

The impact of this particular paper is relatively limited due to the small sample size and differences in age/sex class of the various study animals. However, it does present a unique case study that may have limited application.

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

The comparisons between the different age/sex classes need to be further justified and discussed, as many of the differences noted may simply be due to the differences in age and sex. The method by which "available" is defined for the RSF needs to be reconsidered.

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

I believe the authors need to greatly expand upon the discussion section so that it actually places the results into context instead of a restatement of the results. I would also like to see a broader discussion of the ethical and practical considerations of euthanasia versus amputation combined with a specific justification as to why amputation was chosen in this case, given the advanced age of the subject.

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

My main concerns revolve around the advanced age of the coyote and the decision to amputate in this case. I can understand the value of testing to see if amputation is a viable alternative, but given the age of this particular coyote I don't believe it was the right choice in this case. As such, I would like to see a much more thorough justification of this decision and discussion of the ethical, moral, practical, etc. considerations for researchers to consider when making these decisions.



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

I personally feel in this case that they should have humanely euthanized this animal instead of testing whether amputation was viable. At 10 years of age even captive coyotes are beginning to show declining quality of life, with extremely worn teeth and arthritis. I think this coyote was a poor candidate for the 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?**

No

**How well did the authors respond to your comments?**

3/5

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

I don't feel that the authors have adequately described the ethical considerations involved in making the decision to provide treatment vs. euthanasia, the factors they considered, and with whom they consulted in the process. I would like to see that expanded, both specific to this case, as well as provide a broad outline of the process for others to use when faced with these questions. This is important work that lays a foundation for future studies to use treatment/rehab that should be fully outlined/explored so others can make ethical and responsible decisions.

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

The article is still too long and overly detailed in places. The clarity would be much better if it was more concise. As I mentioned previously, I also think they need to provide a broad overview of the considerations people should take when making decisions of treatment vs euthanasia. Lastly, the RSF analysis should be presented as a figure as well as the table, as it is often easier to interpret visually.

**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?**

Yes - I'd like to see it again

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

Yes, please list me as a Collaborator

## Nathaniel Wehr

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?**

Their study is novel and their introduction to the topic is quite good

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



This case study will likely be used as a reference for other instances of 3-legged quadrupeds

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

Making the methods more concise and placed more aptly in the context of being a case study

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

The results are highly repetitive and need shortened. Interpretation overreaches a bit

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

Please see specific comments

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

One reviewer pointed out an ethical dilemma and I am unsure which way I feel about this. Regardless, I do think the authors should seriously consider that reviewer's comments

**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 feedback they didn't respond to was primarily minor things/personal nuance. Given the volume of comments on the first draft, I didn't find this unreasonable

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

My primary concern with this article is the quality of writing. Sentences could be made much more concise, and there are numerous minor grammatical errors

**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

## Kara White

#### 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 did well highlighting the current limitations and need for more research on post-release outcomes of rehabilitated animals. They provided a valuable insight into the spatial behavior and fate of



a rehabilitated wild coyote in comparison to a group of non-injured wild coyotes. This demonstrated the potential for rehabilitated animals to survive and adapt, and suggests the importance of thinking critically about animal welfare in research practices.

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

This research contributes to the field by demonstrating the practical integration of wildlife rehabilitation with scientific research to study spatial behavior of rehabilitated animals in natural settings. It shows how rehabilitated animals, even those with significant injuries like amputation, can adapt, survive, and be monitored effectively using GPS technology. This research suggests how animal welfare might be enhanced by offering an alternative to euthanasia for injured research animals, and encourages a discussion on ethical approaches and informative studies of rehabilitated animals.

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

To improve the study design and methods, the authors might consider the following:

1. Streamline details that have been identified as excessive.
2. Areas identified as lacking detail should be bolstered with additional information.
3. Possibly refine control comparisons. If possible consider using control animals (from the wider genetic study) that more closely matched the rehabilitated individual in terms of age, sex, and residency status to control for these potential confounding factors.

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

To approve upon the analysis and interpretation of findings, the authors might consider the following:

1. Use consistent terminology (e.g., pick a unit of measurement and use same unit through out).
2. Provide a deeper interpretation of their findings within a broader ecological context, including potential implications for wildlife management and conservation strategies.
3. Further elaborate on the ethical considerations of the study, including the decision-making process for rehabilitation vs. euthanasia, and the potential implications of those decisions.
4. Clearly articulate the study's limitations, e.g., small sample size and the challenge of drawing a conclusion from a single case study.
5. Suggest specific areas for future research based on the study's findings and limitations.

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

The manuscript should be edited for clear and concise language, as well as proof-read to correct any spelling, grammar, or punctuation errors. The manuscript should connect to existing literature by discussing how the study fills gaps in the literature, contrasts with, or supports existing findings and theories. Please review figures and consider adjustments that increase accessibility.

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

No. This research highlights the potential for injured animals to adapt and survive even after significant interventions like amputation. By providing detailed monitoring of the rehabilitated animal's behavior and survival in comparison to uninjured individuals, this research may contribute to our understanding of wildlife resilience and adaptability. It also presents a possible alternative to euthanasia, offering an insight into the viability and release strategies for research animals and potentially for wildlife conservation efforts broadly.

**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?**

3/5

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

While I appreciate the authors' efforts in incorporating many of the suggestions provided, I believe there are areas where the manuscript quality could have been improved further. In some responses to the comments, the authors appeared defensive and did not adequately justify why they did not incorporate specific feedback. For example, their justification that certain information "was common knowledge" is not acceptable, as it is still standard practice to cite sources even for commonly known information.

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

I felt that the overall quality of writing could be significantly enhanced to improve conciseness and clarity. The manuscript would benefit from a more thorough revision to address these concerns comprehensively.

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

No

**Should this article be published?**

Reject