

Wednesday, February 26, 2025

Dear Dr Plagányi and Dr Corley:

We write to report on what we believe to be violations of COPE standards and the Ecological Society of America code of ethics for an article published in Ecological Applications. The article in question is:

Sells, S.N., Podruzny, K.M., Nowak, J.J., Smucker, T.D., Parks T.W., Boyd, D.K., Nelson, A.A., Lance, N.J., Inman, R.M., Gude, J.A. and Bassing, S.B., 2022. Integrating basic and applied research to estimate carnivore abundance. Ecological Applications, 32(8), p.e2714.

We have two items to bring to your attention.

Item 1: We received notification from a colleague that Montana Fish, Wildlife, and Parks (auspices of multiple co-authors of this paper) responded in writing to the discovery request below by stating the hunter survey data (the main input data to estimate wolf abundance) could not be produced because it is not retained (see just below).

Item 2: Our team successfully communicated with Dr Sarah Sells (senior author) since she was first contacted on Feb 14, 2023. Since then, we corresponded 10 times up until the email request below which was sent to all three of her email addresses. There was no reply. This was one of multiple requests so that my team could obtain data and analysis results needed to reproduce their methods and results. It is pasted below.

All of this appears to contravene COPE standards and what they state in their published paper. We ask you to investigate this matter for possible retraction or editorial flag of concern pending the sharing of data.

Sincerely,

Dr Robert (Bob) Crabtree, Chief Scientist, YERC

Dr Adrian Treves, University of Wisconsin-Madison

p.s. Could you please confirm that this email was sent to the editors addressed above? Also, let us know if there is another or better email address to send this inquiry to.

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Request: Please provide copies of any notes, recordings, or electronic data documenting the "wolf sighting reports" collected through "Hunter Harvest Surveys," which are referenced on p.36 of the 2023 Draft Wolf Plan as a primary source of data used to estimate wolf location and abundance (see also, 2023 Wolf Plan EIS at p. 47). If

this data was entered directly into a computer spreadsheet or database during phone interviews, then a copy of the spreadsheet, database entry forms, or database report(s) for the requested period, as well as any recording of calls would be responsive to this request. Please also provide copies of any survey instrument that includes questions pertaining to “wolf sighting reports,” including the questions and any instructions for implementing the survey and recording the responses.

Response: You are requesting the “Hunter Harvest Surveys.” Are you looking for the post-season surveys? If so, those are all conducted via telephone and do not have a document associated with the information obtained. We could provide you a list of the questions asked for each year, but anything beyond that we do not retain. Moreover, in the event you want the questions, please let me know what species you would like them for. We conduct harvest surveys for multiple species.

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----- Forwarded message -----

From: **Robert Crabtree** <[crabtree@yellowstoneresearch.org](mailto:crabtree@yellowstoneresearch.org)>  
 Date: Thu, Sep 19, 2024 at 2:33 PM  
 Subject: Re: major issue  
 To: Sells, Sarah <[sarah.sells@mso.umt.edu](mailto:sarah.sells@mso.umt.edu)>, <[ssells@usgs.gov](mailto:ssells@usgs.gov)>, Sarah Sells <[SarahNSells@gmail.com](mailto:SarahNSells@gmail.com)>

Hi Sarah,

Thank you for your update below, which I find a bit confusing because the purpose of our preprint (any preprint) is to gain feedback on possible corrections and/or improvements to the preprint prior to publication. We appreciate your response to our preprint—they were helpful. You and your colleagues began the process of iPOM improvement in our email exchanges (see below) and you will also see a few of my questions remain unanswered; I would appreciate answers to those at your earliest possible convenience as well as a continued collegial exchange.

As we continue our work to prepare the final manuscript, we also request further assistance. Following the principles of open science to which the journal Ecological Applications is a signatory (<https://www.esa.org/publications/our-policies/>), the **data** you all used should be shared in a form that allows replication of your findings. Under COPE, the Committee on Publication Ethics, the journal has a duty to take seriously any letters of concern, especially those that can point to evidence for incomplete data sharing and the impossibility of replication. Therefore, so that we can reproduce your results (and thus, reproduce the iPOM method), we ask for the following data:

### **Estimation of Area Occupied (AO)**

1. Your input encounter histories for the dynamic occupancy model for each year of your analysis (five week period). Please include a labeling of each cell in MT by “uncertain”

and “uncertain” or any other categorical descriptor. We are not asking at this time for MFWP hunter observation data nor the MFWP wolf specialist verifications using (trail cameras, visual observations, track surveys, howl surveys, depredation locations, and wolf mortality locations) to account for potential misidentification or misreporting.

2. Your output (table, spreadsheet, or preferably labeled map) of the probabilities of occupancy for each 600km<sup>2</sup> cell across Montana for each year. You alluded to these values in your Billings Gazette response (e.g., average occupancy = 0.20; means ranged 0.13 – 0.23 per year).

3. Your variance estimates of the dynamic occupancy models for each cell (or region) across the state of Montana for each year. Preferably the variance estimates would appear next to the probabilities of occupancy in #2 above.

4. In addition to #2, your estimates of (a) true positive detection probability, and (b) certain detections for each cell across the state of Montana for each year. Please include the estimate of variance for each.

5. Centroid locations or approximate territory centroids of documented wolf territories each year.

6. The number and location of wolf telemetry collars each year across the entire state of Montana that were used in the determination of centroid locations.

Questions:

1. It appears that the five listed covariates used (see your section entitled Occupancy Model) were in addition to two other covariates used (patch area to account for varying grid cell sizes and recency). Were there seven total used for each cell?

2. You mention, “we included covariates on the probability of occurrence, colonization, and local extinction. Are these parameters used in the iPOM dynamic occupancy model? And if so, how?

3. You mention, “We centered and scaled six variables and considered principal components (PC) with eigen values > 1.0. What six covariates are these?

### **Mechanistic Territory Model**

1. The empirical data that was extracted from field sampling efforts each year to determine territory size using your agent-based model.

### **Group Size Model**

1. The empirical data that was extracted from field sampling efforts each year to determine group (pack) size?

## **Lone Wolf Rate**

1. The values used to determine a mean of 1.125 for the lone wolf multiplier?
2. The values used from Fuller et al (2003) to determine the actual proportion of lone wolves in the population each year?

In addition, please consider this request as a formal written request for public information and/or publication documents under state and federal statutes. We would prefer to receive the information requested in electronic, native format. We look forward to receiving a response in a timely manner so that we can complete our work of replication (being able to reproduce your method).

Best regards,

Bob  
406-570-9545 (cell)