Jake:

1. I’m assuming Reviewer #1 is Hayward. If so, he is citing (his own) published data and, implicitly, asking why we dared to not find the same thing that he found. The answer is that this is a study in field ecology. In the past, we’ve had similar issues with this reviewer and Caroline Ng’weno’s work on lions. While it’s tempting to dismiss his comments, I’ve found that it’s better in the long run to placate this reviewer simply by citing his work somewhere in the Discussion, if only to signal that we’re aware of its existence. Given that there’s a non-trivial chance he’ll see this ms again, I think it’s in our best interests to cite him preemptively.

1. If possible, could we please insert line numbers on future versions?

1. Bottom of pg 3, sentence beginning “Hence, with respect to…”. To me, this sentence muddies our hypotheses, because it basically says “we expect temperature to do something to predator-prey interactions for endotherms”. When first I read it, I thought there was a typo, as points (1) and (2) contradict each other. Because both can’t be true in the same study system at the same time, the ‘and’ should be changed to ‘or’.

I think re-wording this sentence to highlight the tension between these mutually exclusive outcomes could help shape the ms. A bit more space could be devoted to why either outcome could make sense: we either expect predators to target smaller prey (because of some combination of higher abundances of smaller prey, and shorter chase times for smaller prey), or we expect predators to target larger prey (because larger prey are more vulnerable to overheating from chases).

1. It could help to distinguish between ambient and body temperatures throughout the ms. Usually, this is specified, but there are several instances where just ‘temperature’ is used. By itself, ‘temperature’ is ambiguous.

1. Table 1 is quite helpful, but I’m not understanding why we include anything about predicted foraging by impala and dik-dik under Scenario 1 and Scenario 2. Unlike AWD, we have no idea how to link movements (or lack thereof) by impala and dik-dik to foraging. IOW, when AWD move a lot around a central location, we know they’re hunting—not so with impala and dik-dik. Even if we could measure shifts in foraging by impala and dik-dik, it seems that we could always concoct an argument for any scenario—that they should forage more during hot days (when AWD are less active) or that they should forage less during hot days (when there are greater physiological costs of doing so).

Reviewer #2 mentions this as well, and doesn’t understand why impala would still be reliably found in glades at night if AWD started hunting in glades more at night. This is a good point. If impala don’t adjust what they do in response to AWD hunting in glades more at night, I suspect it has something to do with leopards being more important drivers of impala habitat selection, as Rosie mentions.

In sum, we might help our cause by not including predictions about how impala and dik-dik should forage at high ambient temperatures, even if those predictions are ‘they shouldn’t change what they do’. By getting rid of four of the ‘not tested’ cells, this would also alleviate the perception (by all three reviewers) that we only partially test each scenario.

1. I think it’s important for tables and figures to stand alone. Readers/reviewers should be able to look at the figures and tables and quickly assess the punchlines of the ms, even if they’re not thoroughly reading the ms. For this reason, I find Scenario 4 in Table 1 confusing. We’re stating that some combination of 3 things have to happen for this scenario to be supported--intermediate reduction in running speed of AWD, greatest reduction in running speed of impala, and/or smallest reduction in running speed of dik-dik. We test none of these, and still conclude that there is no support for this scenario, just because of the outcome (AWD consume more dik-dik when it’s hot). I’m either missing something, or this should be adjusted (or maybe deleted altogether, and relegated to the Discussion).

1. Reviewer #3 thinks that too many scenarios are being tested, but that too few scenarios are being tested thoroughly. I agree, somewhat. To my understanding, there is some confusing overlap in the wording between Scenario 1 (reduced foraging time) and Scenario 4 (chase overheating), because risk of overheating is the mechanism by which we expect reductions in foraging time, if I’m understanding the logic correctly. Add to this that we have no data on running speed, and it seems like Scenario 4 is something we should avoid. Or, maybe it’s as simple as clarifying the wording.

Scenario 2 is both valid and interesting, I think, but the links to glade use are not. While impala and dik-dik comprise the vast majority of AWD diets, I don’t think the reciprocal—that AWD are the primary source of mortality for impala and dik-dik—is true. Even if it is, we don’t have the data to show it. This reciprocal would have to be true for impala and dik-dik to change their habitat selection. Therefore, I think predictions associated with Scenario 2 should just include that top row.

This will lead to a combination of support for Scenario 1 (reduced foraging time) and Scenario 2 (nocturnal hunting), which is fine. I agree with Rosie that, by abandoning the testing of these scenarios, the ms could unravel. But I think we could be more targeted in the ones we test, and more explicit in our assumptions (for example, chase times are shorter with dik-dik compared to impala) vs our hypotheses (risk of overheating associated with longer chase times should favor consumption of dik-dik over impala).

1. A few final/minor comments with Table 1:

--‘selection’ and ‘preference’ are used interchangeably in Scenario 3. They mean slightly different things.

--if possible, it might help with the logic to have the right-most column (predicted change in predation rate) just to the right of the ‘Explanation’ column, and then a ‘Scenario Supported?’ column on the far right with ‘yes’ or ‘no’ in each cell.

-- Per Reviewer #3, I think ‘nocturnal hunting’ is a more intuitive label for Scenario 2 than ‘nocturnal prey switching’.

Referees' comments to the author(s):  
  
Referee: 1  
  
Comments for the Authors  
This is a beautifully written paper that tests some possible scenarios of how climate change will impact predator-prey interactions. I have a couple of key points that I would like you to clarify. Firstly, you acknowledge that Mpala wild dogs are atypical in that they persist on what I would argue to be suboptimal prey, but use this population to draw broad conclusions about wild dogs across their range. I think you need to either tone down your conclusions about the scale of your results or justify why the ecology of wild dogs at Mpala is representative of wild dogs throughout their range.  
  
I was also somewhat frustrated that only partial aspects of each scenario were actually tested. No one entire scenario was fully tested or fully supported. Hence, I'd like to see some acknowledgement of the limitations of this.  
  
Beyond those issues, I have only minor comments:  
- use line numbers to make this process easier please.  
  
- Page 4, first line of paragraph 2: I'd add a hyphen for 'predator-prey'.  
  
- Page 4, 2nd paragraph, last sentence: I think it is worth pointing out that the high rate of consumption of dikdiks at Mpala is atypical as they are not a preferred prey or fit within the preferred prey weight range of the wild dog throughout the rest of the species range (Hayward, M.W., O'Brien, J., Hofmeyr, M., Kerley, G.I.H., 2006. Prey preferences of the African wild dog Lycaon pictus: ecological requirements for their conservation. Journal of Mammalogy 87, 1122-1131.; Clements, H.S., Tambling, C.J., Hayward, M.W., Kerley, G.I.H., 2014. An objective approach to determining the weight ranges of prey preferred by and accessible to the five large African carnivores. PLoS ONE 9, e101054.).   
  
- Page 5, last sentence on page: Is there any data on chase distances of wild dogs for different sized prey? Reich (1981) found that wild dogs would chase optimal prey further than suboptimal prey (Reich, A., 1981. The Behavior and Ecology of the African Wild Dog ( Lycaon pictus ) in the Kruger National Park. Yale University.). I'd have expected something similar with wild dogs investing more in chasing larger prey than smaller?   
  
- Page 6, Study area: I'd like to see more details on the abundance of (at least) dikdik and impala to rule out pure preferential predation issues.  
  
- Page 6, Study area, "Mpala also supports six species of large predator: ..." - should this be 'large carnivore' given stripies are generally considered more scavenger than predator?  
  
- Page 7-8, Identifying hunting periods: did you validate these criteria with field observations to confirm the distinctions?  
  
- Page 11, 2nd paragraph: to provide more confidence in your use of the frequency of impalas killed by wild dogs in the chase overheating scenario, could you provide some information on the throughput of food through wild dog guts (I've seen them defecate at a kill site, but I don't know whether that was from the current meal or a previous one). Also, what proportion of scats are produced near kill sites cf further afield?  
  
- Page 12, 2nd paragraph: Did the dogs actually catch prey on these hotter days or are you relying on an early start/cessation of hunting as a proxy for an early kill? Please be clear on this.   
  
- Page 15, last paragraph, 1st sentence: What is the effect size here? Will impala keel over 1000 m before dikdiks or 1 m?   
  
- Table 1: As I stated above, I find this a bit frustrating given only 12 of 20 changes were tested, and 4 of 20 were upheld. Only Scenario 3 was fully tested.  
  
I hope this is helpful.  
  
Sincerely  
  
Matt Hayward  
  
Referee: 2  
  
Comments for the Authors  
The authors use a 3-species predator-prey system (wild dogs, impala and dik-dik) to test the role of environmental temperature and body size in shaping trophic interactions that only involve endotherms. As the authors detail, the vast majority of previous work in this area (especially temperature) has focused on ectothermic interactions, or those that involve both an ectotherm and endotherm. This is a worthy goal, because a better understanding of thermal effects on trophic interactions is required in the face of global change. While I found the general topic to be important and novel, I had a number of questions about i) the nature of the 4 proposed scenarios detailed in Table 1 and the main text, ii) the extent and suitability of the data presented, and iii) the complexity of statistical results presented which made the main points difficult to follow. I also think the entire MS could benefit from a thorough edit, to clarify the storyline and reduce unnecessary detail. Below I detail some of these general comments, followed by a number of more specific points.  
  
General comments:  
• I think the entire MS would benefit from a strong edit to tighten the story and remove unnecessary tangents. The main message too often gets lost by detail that I don’t think is central to the story. I think this is especially true for the Introduction, Methods, and Discussion. For example, the first three paragraphs of the MS seem to cover most of the relevant points, but I’m not sure it’s done in the clearest way. I think the picture of why previous authors have assumed thermal effects are mostly limited to ectotherms needs to be spelled out more. This may include making explicit the link between environmental and body temperature and its importance for the lives of animals (i.e. physiology, movement, interactions). The subsequent text on why interactions involving endotherms may also be influenced by temperature is clear, but the following text on your scenarios/predictions I again found complex and difficult to follow. Similarly, the Methods seemed to me much too long and convoluted. I wonder if some of the details (and those presented in the 5 tables of the results) can’t be moved to the Supp Info, where you would have the space (if you really need) to provide a clearer description of what you did and what you found.  
• Table 1 (and the associated text about your proposed scenarios) raised more questions for me than it addressed. While I understand the point of outlaying 4 different scenarios, to me they mostly come across as “just so” stories, and it in fact turns out that you only can test half of them. I think the MS would probably be improved by primarily focusing on Scenario 4 – which I think most directly relates to previous work in this area on ectotherms. It also seems to get most directly at the mechanisms underlying scenarios 1-3 – namely that different sized endotherms are likely to respond to environmental temperature differently. It strikes me that the mechanisms and patterns invoked in scenarios 1-3 all seem like they would also occur in interactions involving ectotherms, it’s just that most research in this area directly focusing on thermal effects of temperature have to date focused on metabolically derived effects (from body temperature). In order for temperature to change the outcome of interactions there needs to be differential effects on the predator and prey - if the effect of temperature is the same for both, then the outcome should stay the same just that processes run faster at higher temperature and slower at lower temperatures. I think this needs to be a bigger focus of the MS - i.e. how might endotherms that interact with each other be variously affected by temperature, so that different temperatures sway the outcome of the interaction between the predator and prey.  
• To my mind your 4 scenarios don’t seem to be mutually exclusive, so if the goal here is to use your data to select most likely scenarios then I’m not sure this is possible (both due to the complexity of your scenarios, their overlap in predictions, and the lack of your ability to test so many of the assumptions of each scenario with your data). For example, Scenarios 1 and 2 seem essentially to be different sides of the same coin to me, and I’m not sure of the temperature dependence in Scenario 2 (i.e. it just seems to naturally follow if Scenario 1 holds).  
• If I am reading it correctly, out of the 11 predictions you make in Table 1, six are not upheld. To then have confidence in inferring mechanistic drivers at play for the 5 upheld predictions seems a little misplaced to me. It seems you may not have the best data to address each of the scenarios properly, so I wonder if these are the right questions to address with your unique dataset.  
• I think there are too many tables in the main text that show the results of statistical analysis - these are difficult to parse for salient points. Perhaps some of these could be moved to the Supp Info, or reworked so that the salient results are made clearer.  
  
Specific comments  
• Title: I think the title needs to better highlight your focus on the endothermic parts of the community. Ditto for your abbreviated title. What about adding the word ‘mammal’ in there somewhere? It would immediately get across that you are focusing on endotherms.  
• Page 2; Abstract: I think the abstract can be made quite a bit clearer, including setup of the problem and description of results.  
• Page 2; Line 6-8: Among many other things of course.  
• Page 3; Line 7-12: It’s unclear to me what you mean here by 'indirect'. Presumably there are some direct effects from climate on at least one of the species in a trophic interaction in order for there to be an indirect effect, or am I misunderstanding what you mean by ‘indirect’ vs ‘direct’. Either way, this should be clarified.  
• Page 3; Line 21: Aren’t "individual behavioral shifts' a direct effect of temperature on a species?  
• Page 3; Line 28: Also see new paper on this by Grady et al (Metabolic asymmetry and the global diversity of marine predators. Science 363:6425)  
• Page 4; Line 14-16: You say you examined 'movement', but it’s unclear exactly what data you used here.  
• Page 4; Line 39: But in the paragraph above you say that wild dogs are crepuscular, not dirunal.  
• Page 4; Line 44-57: But if wild dogs reduce their daytime foraging effort because of high temperatures, then I don’t understand why you have both impala and dik-dik listed as "unchanged foraging during daytime" in Table 1 for the first scenario? Surely, they would be under the same broad thermal constraints? Or perhaps it’s even more severe for the larger impala?  
• Page 5; Line 2-21: As currently proposed, Scenario 2 strikes me as a bit of a just-so story that doesn’t necessarily relate directly to effects of environmental temperature. It’s also a little confusing to follow. First, it’s not clear that impala occur in glades at night simple due to higher day time temperatures as there are likely to be other important effects at play here (i.e. alterations in detection distance by both predator and prey between day and night). Second - this scenario seems quite circular, as the predicted change in predation rate states that impala are predictably located in glades as does the explanation. Third, why do you expect wild dogs to increase their use of glade use but no change expected for the two prey species? If dogs do use glades more at night, then surely the prey species would also acclimate and shift their nocturnal habitat preferences? Lastly, if the location of impala are so predicable at night then why don’t the dogs hunt at night in glades during colder periods?   
• Page 5; Line 23-37: Doesn’t Scenario 2 also rely on changes to habitat selection (i.e. dogs hunt more in glades at night)?  
• Page 5; Line 35-37: Why are per capita predation rates for impala higher in habitats with more physical complexity? Also, wild dogs might indeed be seeking shade more during hot weather, but are they actually hunting more in the shade? Presumably wild dogs have evolved to hunt more effectively in open habitats, so it would surprise me if temperature fundamentally alters the aspects of trophic interactions that initially selected for dogs to hunt in open habitats (i.e. increased visibility, reduced shelter for prey to hide).  
• Page 5; Line 39-42: Scenario 4 seems more directly related to previous analysis of thermal effects on interactions involving ectotherms, and so I was hoping that this would be a bigger focus of the paper. But it seems from Table 1 that you really don’t have sufficient data to test this hypothesis directly. Really need data on individual interactions involving dogs and their prey - such as speeds reached, duration of attacks, attack success, etc., but it doesn’t seem like you have this data. So much of Scenario 4 in Table 1 is 'not tested'.  
• Page 5; Line 51: is 'coursing' meant to be 'chasing'?  
• Page 6; Line 35-42: Can you provide some numbers as to the importance of wild dogs in relation to the other predators? I.e. are they more/less abundant? effective? etc.  
• Page 7; Line 25-28: Are these the same dogs as were collared? If so then mention it, if not then it seems a little troublesome for the strength of your conclusions.  
• Page 7; Line 26-46: The relationship of the tracking data to the fecal data to the meteorological data for the wild dogs is unclear to me. Primarily, it’s unclear to me whether these data were all collected from the same set of individuals or not.  
• Page 8; Line 3-7: How did you come up with these criteria? Were they ground-truthed in any way?  
• Page 8; Line 16-21: Did your analysis account for variation in sunrise/sunset times for these categories, or is this unnecessary due to the latitude of your study or its seasonal duration?  
• Page 8; Line 28-44: It’s unclear to me why your categorization of prey time periods depended on the hunting times of dogs - shouldn’t all species have independently categorized activity periods? if not, then please explain why in the text.  
• Page 9; Line 2-4: How did you do this exactly? Was it automated, or did a human observed make these decisions about the proportion of woody cover?  
• Page 10; Line 29-20: Where are the temperature effect in here? As worded, it just seems like a day vs nighttime effect you are describing.  
• Page 10; Line 32-34: Again, where is the temperature component of this scenario - as worded it just seems like a light effect you are attempting to test.  
• Page 11; Line 25-30: But don’t you also need to know the outcome of the attack?  
• Page 10; Line 37: As I understand it your nocturnal prey-switching scenario (2) did not rely on testing the hypothesis that dogs killed impala more frequently on hot days. Maybe you mean after hot days, or hot nights?  
• Page 12; Line 2-7: Can you not also provide some description of the daily movement patterns for the other species? Also, since the paper is about temperature it seems like you should describe in this paragraph how temperature affected movement patterns (I know your data is limited in this regard, but it seems like you could provide some preliminary insight here).  
• Page 12; Line 35-37: Are you referring to hunting activity here, or just general activity? If the latter, then this should probably be in the preceding paragraph.  
• Page 16; Line 9-14: Energy expenditure would also presumably increase for the dogs at higher temperatures.  
  
  
  
Referee: 3  
  
Comments for the Authors  
Overall comments:   
  
The manuscript poses some very interesting and well-formulated hypotheses about the relationship between warming and predator-prey interactions in large endotherms. I have three primary concerns with the manuscript as written:  
  
1) The hypotheses and predictions do not match the analyses and results. Scenario 1 is the “reduced foraging time” scenario, yet the duration of hunting periods is the metric used (which may actually imply reduced hunting success rather than increased foraging time). Scenario 2 is deemed the “prey-switching” scenario, yet does not examine prey-switching. Scenario 3 is the “shade-seeking” scenario, yet seeking implies selection, and only utilization is assessed. Scenario 4 is the “chase overheating” scenario, yet there are no data on chase duration or overheating – in this scenario, only the occurrence of impala in wild dog scats is assessed. I don't deny that hypotheses must sometimes be addressed by proxy, but in this case I don’t believe the data test the hypotheses on a number of occasions. If these data are to be used to test these four hypotheses, more explanation is needed to justify and link the two together.   
  
2) The methods section needs much more detail on the modeling approaches. In many cases covariates are used in one analysis but not another or are summarized in one analysis and not another. There also seems to be a tendency to test every possible model rather than a few key models selected to best address the proposed hypotheses, increasing the risk of a Type I error. I suggest adoption of a more parsimonious modeling approach, which will assist in the clarity of the methods section and tying the approach to the questions at hand.  
  
3) The lag after the collection of the scat data is concerning and there is not enough information about the scat sampling approach. I would suggest cutting the scat analysis. However, if the scat data remain, they should be accompanied by a detailed supplement explaining how the two sampling periods are similar enough environmentally and ecologically to justify the inclusion of these data. There should also be data on the prevalence of dikdik in scats, and preferably relative abundance of each species across the landscape (to allow for estimation of diet preference).   
  
Specific comments:  
  
Page 6, lines 34-41: With so many other predators, do you expect that impala and dikdik behavior might be influenced by multi-predator effects? Are either impala or dikdik among the most common prey items for any other widespread carnivore in the area? What is the significance of the focal carnivore in this study being among the smallest of the local carnivore species? Some context on these issues would help instill confidence in if your hypotheses can be addressed soundly in this system.  
  
Page 7, line 7: Why were dik-diks monitored for such a brief time period? Were they all killed by predators or was this an intentional decision by the researchers? How does this limited time period affect comparisons to the other focal species, which were monitored across seasons? Please clarify this in the text.  
  
Page 7, line 28: The large gap in time between scat sample collection and movement data collection is problematic. For you to be able to use scat collected a decade before any of the movement tracks in a combined analysis, it is necessary to show that there were no major changes in the environment or ecology between those time periods. I would suggest a supplement with two components. First, illustrate that the environmental conditions are the same by examining environmental data from 2000 – 2016 (the range of collected data, plus one year before in case of lag effects), including mean and max summer temperature, min/mean/max precipitation in the rainy season, and an appropriate vegetation index for the region, and any relevant indices of human activity/development. Secondly, if any of the focal species or major interacting species (i.e. a large or medium carnivore or herbivore) had any substantial population swings or extirpations/recolonizations between the two sampling periods, disclose them. It would be helpful to see any longitudinal demographic data or movement data that span both sampling periods for focal or highly-associated species; Mpala is an incredibly productive place, so this may be possible. If it turns out that the two time periods are not comparable, I would suggest eliminating all analyses that include the scat data.  
  
Page 7, lines 37-46: Each sentence in this paragraph could use a bit more explanation. What is the meteorological data used for? Why collect pack size and denning data?   
  
Page 8, line 7: What is the significance of the 500 cutoff? Did you use machine learning on validated hunting behavior to get this value? Please explain how you derived criteria (ii).   
  
Page 9, lines 23-25: Please be explicit about what you are modeling and which hypothesis this modeling exercise addresses.  
  
Page 9, line 28: Specify whether covariates were scaled and centered.  
  
Page 9, lines 46-56: I’m not sure I understand your analytical approach. Are there 11 total model sets, one for each response variable? If you are interested in time spent hunting as a function of temperature, why not just model (duration ~ max daily temperature + covariates) as a single model? Examining start and stop times addresses a different question: how early (or how late) can wild dogs hunt as a function of temperature. I also am not sure why you split the analyses by times of day. Do wild dogs hunt during all periods in a day, or just once a day? Perhaps higher total hunting duration is a function of more failed hunts rather than greater opportunity for hunting. I think this analysis could be done in a more parsimonious way that doesn’t require so many disparate model sets, which would also help to clarify how the model is specifically testing the hypothesis.  
  
Page 10, lines 14-16: Please explain why you used different temperature measures for the different time periods. I would assume that the best temperature proxy would be max temp during each of the specific periods, since in the introduction you described the importance of immediate responses to temperature. You hint at this in Scenario 2 in the introduction, but some further justification about your variable choices here would be very helpful.  
  
Page 10, lines 39-44: I am struggling with understanding the modeling approach here. Was the impala data included in the wild dog analysis? Or, if it was a response variable in its own analysis, how does that address the hypothesis that wild dogs will select for glades at night following hot days? In the wild dog analysis, did you account for the circular distribution of time of day in the model? Is temperature the max temp from the previous day (as in the previous analysis)? Please clarify details regarding the calculation of covariates, the structure of your models, and how your approach directly provides inference to test your competing hypotheses.  
  
Page 11, lines 7 & 14: Please specify what the response variables are – as written it seems that there are models for each species in each of four daily time periods in which the response variable is woody cover (what is the unit?) averaged over the four daily time periods. The large number of models makes it challenging to avoid a Type I error. As in my comment above, I suggest trying to find a more parsimonious approach. I’m also slightly concerned that the time periods are not of the same length, giving more weight to the woody cover values from morning and evening when averaged. Lastly, I think a habitat selection analysis would likely be a better approach for looking at use of woody areas, particularly if individuals have different availability of woody habitat or if availability changes day-to-day.  
  
Page 11, line 23: Why is rainfall phase included in the habitat analysis but not the activity analysis?  
  
Page 11, lines 25-35: This differs substantially from the predictions in the introduction. The intro (Scenario 4) leads the reader to believe that the rate of overheating will be analyzed. If you are only looking at diet, it would be best to make that clear in your initial predictions section, where you can explain how it approximates your overarching hypothesis about chase distances. You also said in the intro that you would be examining impala predation relative to dikdik predation, and yet your analysis only looks at the proportion of scats containing impala remains.   
  
Page 11, line 39: Please more explicitly tie the scat analysis to the other scenario predictions. For example, in Scenario 3, you predict that higher impala prevalence in scat will be related to their use of woody areas. This is directly testable, which would be a preferred approach to indirect inferences that both are related to temperature.  
  
Page 11, line 44: How were scats collected – opportunistically or on transects? Were only relatively fresh samples used? Did sampling cover the same area as the collar data distribution? Why is land use considered in this analysis but no other? Much more information is needed to assess the validity of using the scat data and its relevance to other components of the paper.  
  
Page 14, lines 21 & 39-41: To infer preference for a particular prey item, we need to know the availability (relative abundance) of these prey. Please specify that you are looking at utilization, not preference, and make the appropriate conclusions based on that acknowledgement.  
  
Page 15, lines 37-42: It is possible that the discrepancy between impala behavior and predation patterns lies in the large time lag between the two datasets. Consider discussing this point, particularly if there was been considerable warming, environmental change, or ecological change in the area between the datasets.  
  
Page 15, lines 56-58: I don’t see where predation on impala relative to dikdik was examined. Greater prevalence of impala in scat does not necessarily indicate less consumption of dikdik. This is an important distinction that should be made clear in the text.  
  
Figure S4: Please include error bars for these data.  
  
Jake:

1)      I’m assuming Reviewer #1 is Hayward. If so, he is citing (his own) published data and, implicitly, asking why we dared to not find the same thing that he found. The answer is that this is a study in field ecology. In the past, we’ve had similar issues with this reviewer and Caroline Ng’weno’s work on lions. While it’s tempting to dismiss his comments, I’ve found that it’s better in the long run to placate this reviewer simply by citing his work somewhere in the Discussion, if only to signal that we’re aware of its existence. Given that there’s a non-trivial chance he’ll see this ms again, I think it’s in our best interests to cite him preemptively.

2)      If possible, could we please insert line numbers on future versions?

3)      Bottom of pg 3, sentence beginning “Hence, with respect to…”. To me, this sentence muddies our hypotheses, because it basically says “we expect temperature to do something to predator-prey interactions for endotherms”. When first I read it, I thought there was a typo, as points (1) and (2) contradict each other. Because both can’t be true in the same study system at the same time, the ‘and’ should be changed to ‘or’.

I think re-wording this sentence to highlight the tension between these mutually exclusive outcomes could help shape the ms. A bit more space could be devoted to why either outcome could make sense: we either expect predators to target smaller prey (because of some combination of higher abundances of smaller prey, and shorter chase times for smaller prey), or we expect predators to target larger prey (because larger prey are more vulnerable to overheating from chases).

4)      It could help to distinguish between ambient and body temperatures throughout the ms. Usually, this is specified, but there are several instances where just ‘temperature’ is used. By itself, ‘temperature’ is ambiguous.

5)      Table 1 is quite helpful, but I’m not understanding why we include anything about predicted foraging by impala and dik-dik under Scenario 1 and Scenario 2. Unlike AWD, we have no idea how to link movements (or lack thereof) by impala and dik-dik to foraging. IOW, when AWD move a lot around a central location, we know they’re hunting—not so with impala and dik-dik. Even if we could measure shifts in foraging by impala and dik-dik, it seems that we could always concoct an argument for any scenario—that they should forage more during hot days (when AWD are less active) or that they should forage less during hot days (when there are greater physiological costs of doing so).

Reviewer #2 mentions this as well, and doesn’t understand why impala would still be reliably found in glades at night if AWD started hunting in glades more at night. This is a good point. If impala don’t adjust what they do in response to AWD hunting in glades more at night, I suspect it has something to do with leopards being more important drivers of impala habitat selection, as Rosie mentions.

In sum, we might help our cause by not including predictions about how impala and dik-dik should forage at high ambient temperatures, even if those predictions are ‘they shouldn’t change what they do’. By getting rid of four of the ‘not tested’ cells, this would also alleviate the perception (by all three reviewers) that we only partially test each scenario.

6)      I think it’s important for tables and figures to stand alone. Readers/reviewers should be able to look at the figures and tables and quickly assess the punchlines of the ms, even if they’re not thoroughly reading the ms. For this reason, I find Scenario 4 in Table 1 confusing. We’re stating that some combination of 3 things have to happen for this scenario to be supported--intermediate reduction in running speed of AWD, greatest reduction in running speed of impala, and/or smallest reduction in running speed of dik-dik. We test none of these, and still conclude that there is no support for this scenario, just because of the outcome (AWD consume more dik-dik when it’s hot). I’m either missing something, or this should be adjusted (or maybe deleted altogether, and relegated to the Discussion).

7)      Reviewer #3 thinks that too many scenarios are being tested, but that too few scenarios are being tested thoroughly. I agree, somewhat. To my understanding, there is some confusing overlap in the wording between Scenario 1 (reduced foraging time) and Scenario 4 (chase overheating), because risk of overheating is the mechanism by which we expect reductions in foraging time, if I’m understanding the logic correctly. Add to this that we have no data on running speed, and it seems like Scenario 4 is something we should avoid. Or, maybe it’s as simple as clarifying the wording.

Scenario 2 is both valid and interesting, I think, but the links to glade use are not. While impala and dik-dik comprise the vast majority of AWD diets, I don’t think the reciprocal—that AWD are the primary source of mortality for impala and dik-dik—is true. Even if it is, we don’t have the data to show it. This reciprocal would have to be true for impala and dik-dik to change their habitat selection. Therefore, I think predictions associated with Scenario 2 should just include that top row.

This will lead to a combination of support for Scenario 1 (reduced foraging time) and Scenario 2 (nocturnal hunting), which is fine. I agree with Rosie that, by abandoning the testing of these scenarios, the ms could unravel. But I think we could be more targeted in the ones we test, and more explicit in our assumptions (for example, chase times are shorter with dik-dik compared to impala) vs our hypotheses (risk of overheating associated with longer chase times should favor consumption of dik-dik over impala).

8)      A few final/minor comments with Table 1:

--‘selection’ and ‘preference’ are used interchangeably in Scenario 3. They mean slightly different things.

--if possible, it might help with the logic to have the right-most column (predicted change in predation rate) just to the right of the ‘Explanation’ column, and then a ‘Scenario Supported?’ column on the far right with ‘yes’ or ‘no’ in each cell.

-- Per Reviewer #3, I think ‘nocturnal hunting’ is a more intuitive label for Scenario 2 than ‘nocturnal prey switching’.