Answers to reviewers

Reviewer D

Comment. Regarding intraspecific differences, discussion needs a better explanation of found patterns.

Answer. Discussion was improved and the patterns were better explained.

Comment. “The manuscript still needs some work, mostly in the introduction and discussion”.

Answer. We think this is an unclear and vague comment about the introduction and discussion with no specific points raised. As such, we are unable to understand what the reviewer wants, and thus cannot address this request in an objective manner.

Comment. “Figures need some edition. for example, Y-axis reach 110%, and numbers and words are quite small in my opinion”.

Answer. Figures were corrected.

**#961 Review**

Comment. “make clearer that such approach involves the utilization of food items that are “strange” for the animals, and also include a couple of **specific** examples (considering other studies) of how this approach elucidated ecological questions, as a way to “convince” the readers of the importance of such studies (and yours).”

Answer. This is a common concern raised regularly by reviewers when dealing with results from these experiments. However, we are convinced that food preference measured in laboratory conditions, as we did, corroborates field methods and improves current knowledge on feeding habits of small mammals. This is a research program at the Laboratório de Vertebrados at UFRJ since the 1980’s, with several papers and book chapters published addressing specifically these points. These works were discussed and cited in the manuscript. Readers are directed to those works and will be able to decide whether the present work, and those cited, are convincing. See for example in the introduction:

Line 59 - “Studying experimentally comparative diet selection, independently from resource availability, and without any accessibility restrictions reflects more clearly the intrinsic factors that lead to distinct food preferences by each species, because it removes the effects of variation that are related to accessibility to and availability of food resources (Astúa de Moraes *et al*. 2003). Such studies also allow a quantitative nutritional assessment of the diet and its relation to the consumed items and to morphological features of the trophic apparatus, which are more difficult to study with field data (Astúa de Moraes *et al*. 2003, Finotti *et al*. 2012, Santori *et al*. 2012)… “;

Line 98 - “Experimental studies on feeding habits of didelphid marsupials in captivity have revealed important differences in nutritional contents between the diets of *Philander frenatus* and *Didelphis aurita* (Astúa de Moraes *et al*. 2003, Santori *et al*. 2012)… ”;

Line 116 - “… studying comparisons of intraspecific food habits variations in captivity can provide insights to understand the effects of differential use of food resources on niche differentiation and diversification between Didelphidae species (Périssé *et al*. 1988, Santori *et al*. 1997)… ”;

Rev. Comment. “some skepticism can arise among the readers due to the “unnatural” resources used. In other words, convince the readers that this laboratory approach worth it, even using these kind of resources.”

Answer. Actually, we advocate that this approach is worth because of the use of such resources, not in spite of them. The use of standardized resources allows for comparisons between tests performed in different times of the year (without limitation of food resource availability), allows for a precise estimate of nutritional contents of preferred diet (which would be impossible with “natural” resources with unknown nutritional contents, and allows for these tests to be performed by different researchers in different regions and institutions. We believe the best way to convince readers about possible skepticism on the method we used was by citing others studies where the same method was used and including them in discussion. Additionally, any work is subject to skepticism, and it is up to the reader to decide whether arguments provided here and in the cited works are sufficient to support the reliability of this approach.

Rev. Comment 2: lines 127/128 – If I understood correctly change “but” to “However” and “conformed” to “were according”.

Answer. Corrected.

Rev. Comment 3: line 142 - *ad libitum* **(i.e., freely)**. It is possible that some readers are not familiarized with this Latin term.

Answer. Changed.