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| Thank you for your submission to PeerJ. I am writing to inform you that in my opinion as the Academic Editor for your article, your manuscript "Morphological diversity in tenrecs (Afrosoricida, Tenrecidae): comparing tenrec skull diversity to their closest relatives" (#2015:01:3895:0:0:REVIEW) requires some minor revisions before we could accept it for publication.  The comments supplied by the reviewers on this revision are pasted below. My comments are as follows:  **Editor's comments**  Overall, I think this is an excellent, well presented study that will be suitable for publication in Peer J following minor revisions. Both reviewers share a similar, positive view of the manuscript and have provided some helpful suggestions that I ask the authors to please consider carefully when revising their manuscript. Particularly,   1. Reviewer #1 has noted that the bibliography could be improved, and that a number of references are duplicated throughout the text. I agree with this statement, and see several areas where the authors could qualify their statements with stronger referencing. For example, the statement that tenrecs are commonly considered an example of adaptive radiation, needs to be better qualified, or wording needs to be amended accordingly. 2. Reviewer #1 has also made some important suggestions regarding improving aesthetic of the Figures. Similarly, Reviewer #2 has suggested Fig. 1 could be moved to supplementary information given the extensive details provided on the method (though currently sample size is ommitted?) 3. Reviewer #2 has made an important point regarding the use of “morphological diversity” rather than “disparity” and suggested some key citations that should be included. I am in strong agreement with their statement that at present the authors have over stated the lack of quantitative approach in this area – please check those comments and revisit that statement. Doing so will not detract from the importance of this article.  4. Reviewer #2 has queried the approach used to quantify disparity, I agree with their comment here, and ask the authors to please either consider extending their analytical approach or providing further justification for their choice of method  In addition to the reviewer comments, please find below some additional points from my review of the manuscript. Importantly, I suggest that the authors should please reconsider to revise their first paragraph, which at the moment does not lead into the paper, or do justice to the importance of your study.   Specific points:  Abstract I think that the first statement is not accurate. There exist a large number of studies on morphological diversity (disparity) that encapsulate both extant and extinct groups.  Introduction Pg2, ln8-18. I think this first paragraph is generally confused in that the authors deal with research areas that are vast within very few qualified sentences that do not relate directly to the topic in hand. For example, adaptive radiation is not something studied here, (or if it is, then it needs to be signaled much earlier in the paper, directly and with numerous examples for tenrecs). The references do not include classical works such as Schluter 2000, and could easily comprise many review papers (e.g. Gavrilets and Losos 2009;Salzburger 2009; Salzburger et al. 2014; Kocher 2004; Gavrilets and Vose 2005…) rather than a repetition of Olson and Arroyo-Santos 2009.  In a related matter, morphological convergence is introduced without a clear explanation about its relationship to adaptive radiation, or ecomorphological variation, niche exploitation. I suggest that the authors re-phrase this paragraph to better introduce their study. Also, somewhere you should provide a definition of morphological diversity (variation in form) or more commonly referred as, disparity. Consider citing Foote. Pg2, ln22: I think this is a slight over statement, there are really many studies of morphological diversity (disparity). Please see for example papers by Drake and Klingenberg (dogs), Gerber, Polly, Weisbecker, Sears… Pg2, ln29: OK, but see e.g. Polly and MacLeod eigensurface, or papers on statistical atlases (e.g. Fatah et al. 2012 AJPA) that allow entire shapes to be appreciated rather than single traits.  Pg3, ln46: the references cited here do not reflect the statement – I would expect to find cichlids, anoles, icefishes, stickelbacks, Darwin’s finches in any recent review or book on adaptive radiation, could you cite similar references for tenrecs? Also, see Poux et al. 2008 – BMC Evol Biol and their statements on diversification rates in tenrecs. - doi:10.1186/1471-2148-8-102 Pg6, ln101: please could you provide specimen numbers here – you mention that much later (ln140), but I think it would be helpful for the reader to have that information right away. Pg7, ln141: should be “the” rather than “that” Figure 2: I suggest the authors use colour here. For instance, you could colour the landmarks e.g. red, which would help distinguish those against the photographs. At present it is difficult to see the landmarks easily. Pg14, ln304: agreed, however it might also equally suggest that a complete 3D GMM approach would also be fitting. Pg15, ln310 – you may also want to check Goswami’s early papers (e.g. 2006 in Am Nat; 2007 in PLoS ONE) in which she defines a subset of homologous landmarks for a wide variety of mammalian clades.  Pg312: I think you could add citations for papers by Norberto Giannini or David Flores here (extensive work on cranial anatomy) Pg16, ln3338: agreed, but I think you put your study down here! The skull is an excellent model that shows a high diversity in form related to function, and that has been widely studied. Pg16, ln345: another suggestion might be to consider exploring the ontogenetic basis for differing levels of morphological diversity? For example, check papers by Daisuke Koyabu on mammalian cranial development. (Nat Comm, PNAS)  If you are willing to undertake these changes, please [submit your revised manuscript](https://peerj.com/manuscripts/3895/edit/) (with any rebuttal information\*) to the journal within 45 days.   |  | | --- | | **\* Resubmission checklist:**  When resubmitting, in addition to any revised files (e.g. a clean manuscript version, figures, tables, which you will add to the "Primary Files" upload section), please also provide the following two items:   1. A rebuttal Letter: A single document where you address all the Editor and reviewers' suggestions or requirements, point-by-point. 2. A 'Tracked Changes' version of your manuscript: A document that shows the tracking of the revisions made to the manuscript. You can also choose to simply highlight or mark in bold the changes if you prefer.   Accepted formats for the rebuttal letter and tracked changes document are: docx (preferred), doc, or PDF. |   Laura Wilson  Academic Editor for PeerJ |