In the paper the authors aim to test (1) how familiarity, dominance rank, age and sex can affect sociality (social centrality) in *Bos taurus,* and how transfer(s) (linked to farmer management) of individuals in the studied groups can affect this sociality according to the socio-demographic parameters previously cited. I find the paper really interesting and well writing. I have just some minor corrections to suggest and some propositions for improving the reading of the manuscript.

Abstract:
- the repetition line 13 needs to be corrected.

Introduction:
- page 3 lines 27-29, can you reword the sentence?
- page 4 and 5: the paragraph lines 19-29 is a detailed description of your "material and methods" part and the last following paragraph (lines 30-end of introduction) lists your expected results. Is it really necessary to detail your material and methods so much in this introduction? Maybe go to the line (line 20) and do an only one paragraph with a short part on what you have done (more synthetically) and then make your assumptions/expectations. As for these expectations, could you classify them to make them easier to read? Perhaps in the same form as your "material and methods" part with 1. effect of socio-demographic factors on associations/sociability and 2. the effect of changes.

Material and methods:
- you have (in table 1) surfaces very variable between your observation sites. Can it have an effect on the groups? Could you add this information in your paper? In this table 1, in the column "obs. time", can you add "period 1" and "period 2" before the dates?
- page 5 b. lines 24-25 when you cite the supp info, could you add the names of the files (S1 to S5)
- page 6 line 11: about the 90% of groundcover, how have you estimate this area? Add the information please (GIS?)
- page 6 line 16: can you add fig. 1 to complete the Table 1.
- page 6 part c.
For the group "Rob", notably rob 5 (line 27), I count 11 and not 12 females (14+7-13+3=11), isn't it? Correct this point in the text and in fig 1 and table 2.
- page 7 line 2: can you add the age of the juvenile female as in the other localities?
- page 8 The abbreviation MDS can appear the first time when " the Modified David Score" is cited (line 10 I think) and after you can use "MDS" line 14 and line 16, or you can use the "Modified David Score" without abbreviation in all the text. Please homogeneise.
- page 9 part f. "we" and not "We" line 25.
- Page 10: line 4, add the R version please. You give the information page 12 but it could be done before.
- page 11 line 19: I am not familiar with the average of statistics of different models using $\Delta AICc < 10$, could you add reference(s) on this point or explain why and how you do this (and why you have not take the best model (the best AIC)? I think it is important for understanding your result part.
-page 12 line 5 Table S1 represents more figures than tables, please correct in the text and in supp info.

Results:
- you have an inversion of legends between fig 3 and 4. Please correct.
- concerning the tables 4 to 7, please homogeneise the typo of "PPerm" or "Pperm".
- Table 3, why don't you give the global results by locality (in addition to the global results for any locality)?

-Page 13 part c.: line 16-20, we don't understand why you do not add sex in the variables. Perhaps, it is linked to the previous comment in mat and meth on the average of statistics, but it is important to clarify this point.

Perhaps, the tables S2 to S5 in supp info can be used to clarify this point, by putting in bold the models and the variables retained for example? In these tables, why sex has not numerical value, what means the +? Please clarify.

- page 14 line 1: "RIV" or "rvi"? Please homogenize in the manuscript.

Discussion:

- page 14 line 29, please remove "in figure 2".

- page 16 line 10, please remove the point before citations.

- page 16 lines 10 to 12: do you consider that you have tested the correlation between landscape and sociality? I don't think. Could you modulate this point?

References:

- page 21 Farine, D.R. 'n.d.', is it the references of 2017? Please correct.

- page 23 Villaret and Ron: please correct the typo (not all names in capital).

Supplementary information:

- figures S1 to S5: on the maps, it lacks north orientation, the legend (dotted or solid lines) and the map source. You say in mat and meth that there is forest in all sites, could you add a legend about this? This could complete the landscape point previously suggested.

- as said previously, table S1 is not table, please correct.

- For the tables S2 to S5, their names will change (S1 to S4, also in the text of manuscript), as previously said, you could put in bold the model lines and the variables retained finally in your results and clarify in the text why sex has not numerical value (what means the +).