Comments from reviewer:

General

The topic of this article is well chosen and up to date as it deals with carbon and nitrogen cycle. Indeed the effect of human management on ecosystems, such as re-introduction of wild ungulates, is important to be well known in order to adapt our actions and modify our impact.

All parts of this article are well written, in a good English. The study is well designed and the protocol complete. In the discussion, ideas are well supported by the results and clearly explained. The conclusion brings the most important results as a key home message. I really suggest publication of this study after some clarifications.

Few sentences may not be totally clear to me and I detailed below the points that could be improved.

Abstract

Line 32-33: At the first read, it is not clear what you mean by "reduce carbon and nitrogen loss". Is it from the soil compartment, or the vegetation compartment? When we have not read the article yet, it can be unclear. Just indicate that it is in litterbags.

Introduction

Line 57-58: it seems to me that the situation in Europe and in North America may be different. When you say "farm abandonment and reversion to forest": is it really the case in Europe as well? In France, the development of agriculture offered food to wild ungulates and the hunting practices influence strongly the population of wild ungulates (cf. review of Barrio Garcia et al. 2012). You may complete this idea, or indicate that it is only the case in North America. To be confirmed…

Line 89-95: The impact of wild ungulates on soils may also affect litter decomposition processes… Some studies related to "soils" and wild boars are of interest and could be cited here. For example: Bueno, Cuevas, Wirthner, Parkes… it is to open to other wild ungulates than only deer.

119-127: This part is not very clear at first read… either some information are missing, or too many information are given. I am waiting the material and methods to clarify.

What means "community scale": please, detail a bit more.

It is not clear yet how you choose litter representative of herbivory levels. (I am sure it comes later in the text, but we need some understanding at this point, or not to talk about it yet and wait for the material and method section).

What do you mean by "home field advantage" in this case?

Material and Methods

Line 135: what means BEC subzone and CWHwh1… ?

Line 149: do you have any information about soil type on each island as it may influence strongly soil decomposition?

Line 211: why 5 mm? We usually use 2mm before soil analyses.

Results

Fig.1D: you indicate in the text that soil pH decreased with increasing deer browsing pressure (with a P value<0.05), however, on the figure the letter does not show any significant differences (only "a"). Can you check?

Line 278: I am not familiar with this test, and it needs some more details for better understanding it. Could you precise the unit of the Y axis in the graph 2B if there is one?

Line 283: can you remind here what means "litter quality". I had to go back to material and methods.

Line 291: you do not say anything about fig 2D litter quality… just one sentence to indicate that it was significant…

Line 308: table S2: what means Rao litter?

Line 319: in table S2, is there any data concerning the coarse mesh litterbags? Where can we see the 26 and 38% lower values? Ok, I just find out this result in fig S2. Please just indicate that it comes from figure S2 on line 322.

For Fig S2 I would add mass loss in fine mesh litterbag (and coarse mesh litterbag) on the Y axis for more clarity.

Line 338: are you sure that it is seen on Fig S2? I do not see any results about feces on fig S2. It should be S3?

Discussion

Line 392-395: I am not very convinced by this explanation. On fig. 1B, we do not see that CWM litter C:N ratio is higher for intermediate pressure. Can you check this point?

Line 404: it could be useful to rewrite the figure where we can see each result you indicate in the discussion. It allows the reader to go back to the good graph directly.

Line 412: I am sure this hypothesis is based on literature. Can you cite on article related to this point? Does Prescott, 2010 talk about this? Just indicate it in the text earlier.