

Interactive comment on “Editorial “The Interdisciplinary Nature of SOIL”” by E. C. Brevik et al.

E. C. Brevik et al.

eric.brevik@dickinsonstate.edu

Received and published: 6 December 2014

Reviewer 1 Comments

I would suggest to go again through the entire manuscript and to remove some of the examples in order to get the paper shorter. On the other hand, references have to be added for all of the given examples/arguments.

Response: We agree that the manuscript should be as short as possible to ensure as high an impact as possible. However, we also have conflicting recommendations from the reviewers, with a desire from reviewer 1 to see some of the current sections cut and a desire from reviewer 2 to see an expansion such that there are sections that represent each of the 15 topics listed on the webpage (the manuscript currently

C280

has 7 topical sections plus the Introduction and Conclusions). After consideration, we decided that the best middle ground would be to keep the sections we currently have and try to make them as strong as possible with an eye toward being succinct.

My detailed comments: Abstract: I would change the sequence of the “issues impacting the world’s biosphere that require an in-depth understanding of soils”. In my opinion issues as food, water and energy security might be the most important ones.

Response: The issues have been listed alphabetically because they are all important, and in many cases are interrelated. Trying to establish the relative importance of each is beyond the scope of this paper, and no ranking of the relative importance of the topics is meant or implied.

Page 431, lines 10-14: Please rephrase – the sentence is too long at least for an abstract.

Response: The sentence has been rewritten and split into two sentences.

Page 433, 434, lines 24-9: give references

Response: References have been added.

Page 434: I would highlight that we still miss the link between diversity and functionality of the soil microbial community.

Response: Wording has been added to include this.

Page 435: I do not like the title of this section. What’s about ‘Soil and global biogeochemical cycling’?

Response: Change has been made.

Page 436: The NIR example is not very convincing because it does not solve the problem of detecting small changes in C stocks taking the large uncertainty in estimations of the bulk density into account.

Response: The reference to NIR has been removed.

Chapter 6 is by far too long.

Response: We respectfully disagree. This chapter addresses interactions between soils and various social sciences including anthropology, sociology, and economics, meaning it covers a lot of ground. We feel that additional cutting would reduce the breath of this section and hence the multidisciplinary nature of the editorial.

Table 1: Differentiation between the first (formation, texture and structure) and the second set of soil properties (chemical structure and fertility) is a little bit arbitrary. I would remove the term 'texture' from the first part and I would change 'chemical structure' into 'chemical properties'. Furthermore, I would add 'consumption' as an important mechanism to 'Oxygen levels'.

Response: The suggested changes have been made.

Figure1: Please use the same orientation for all of the different parts of the global N cycle ('Global fertilization: : ' is in an opposite direction).

Response: All text is now in the same orientation.

Interactive comment on SOIL Discuss., 1, 429, 2014.