

Interactive comment on “Land use effects on soil organic carbon sequestration in calcareous leptosols in former pastureland – a case study from the Tatra Mountains (Poland)” by K. Wasak and M. Drewnik

Anonymous Referee #2

Received and published: 9 June 2015

Dear authors,

your paper is important contribution to the understanding of soil organic carbon in high mts. (and in the region of Carpathians) under different land use. I fully support its publication in the Solid Earth.

I suggest to more specify the description of the history of land management of each plot in the section 2.1, as for me is unclear: 1. What is the current management of each plot. Are the plots actively managed (e.g. is the timber harvested, if yes, how?; similarly for meadows-are they mowed, occasionally grazed, etc.) or they are left to ecological

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succession? 2. When exactly the management was changed (in all the plots in the same time? What is the age of the forest?). Have been the plots managed since then in the same way?

More information on the state of degradation (soil and soil organic matter) before the grazing had stopped, or comparison with soil organic carbon in grazed leptosols in mts would be helpful for improved understanding of the benefits of the management change.

Technical comments: I would suggest to include the management in the Figure 5, units in Table 1. And I would consider to include a map of the plots with localisation of the sampling points (e.g. on a background of an aerial image/ soil map).

I wish you lot of success in your work and looking forward to your response.

Interactive comment on Solid Earth Discuss., 7, 1577, 2015.