

Interactive comment on “Knowledge needs, available actions and future challenges in agricultural soils” by G. Key et al.

G. Key et al.

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Dear Ilan,

Thank you for your comments, which highlight the importance of using recognised terminology and areas that this manuscript did not cover. We agree with your suggestions for changes in terminology, and have made your suggested changes throughout, which we believe will make the manuscript clearer. In particular we have modified the word ‘action’ for ‘practice’ to describe agricultural practices, the seven beneficial actions have been numbered in the abstract, and we have changed the terminology for the individual practices as recommended.

With respect to your comment that we should provide more information on major threats to soil health, we now include more detail, identifying the complete list of threats

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to soil health identified by UK Soil Association (Marmo 2012), the Department for Environment, Food and Rural Affairs (Defra, 2009), and Scottish Environment Protection Agency (SEPA). In addition to the threats previously mentioned in the manuscript, secondary threats, including carbon loss, pollution and flooding, have been included in lines 13-15 on page 4. These were selected as being the most relevant threats to soil health in the UK and other temperate zones, which we now make clearer in our methods section (page 4).

Regarding your comment on the lack of integrated pest management covered in this manuscript, we did not include this because it was not identified as a major threat to soil health in our initial scoping exercise. However, as requested we have added text to our discussion (page 10) to identify the omission of this and other practices, such as stubble grazing, as a limitation of the study and as areas that warrant further research. We also stress that this study was part of a larger project reviewing practices that can deliver conservation benefits in agro-ecosystems, and aspects of IPM were considered by another group (see Sutherland et al 2015 for more detail).

As requested we checked our conclusions section and removed the one citation that we included (Garnett et al. 2013).

Please see the adjusted manuscript for changes.

William J. Sutherland, Lynn V. Dicks, Nancy Ockendon and Rebecca K. Smith, What Works in Conservation Series, vol. 1 | ISSN: 2059-4232 (Print); 2059-4240 (Online), 2015.

Please also note the supplement to this comment:

<http://www.soil-discuss.net/soil-2016-17/soil-2016-17-AC2-supplement.pdf>

Interactive comment on SOIL Discuss., doi:10.5194/soil-2016-17, 2016.

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