

Soil Science

[View Online](#)

-
1. Baath, E., Wallander, H.: Soil and rhizosphere microorganisms have the same Q₁₀ for respiration in a model system. *Global Change Biology*. 9, 1788–1791 (2003). <https://doi.org/10.1046/j.1365-2486.2003.00692.x>.
 2. Andrews, J.A., Schlesinger, W.H.: Soil CO₂ dynamics, acidification, and chemical weathering in a temperate forest with experimental CO₂ enrichment. *Global Biogeochemical Cycles*. 15, 149–162 (2001). <https://doi.org/10.1029/2000GB001278>.
 3. Aber, J.D.: Nitrogen cycling and nitrogen saturation in temperate forest ecosystems. *Trends in Ecology & Evolution*. 7, 220–224 (1992). [https://doi.org/10.1016/0169-5347\(92\)90048-G](https://doi.org/10.1016/0169-5347(92)90048-G).
 4. Evans, C.D., Goodale, C.L., Caporn, S.J.M., Dise, N.B., Emmett, B.A., Fernandez, I.J., Field, C.D., Findlay, S.E.G., Lovett, G.M., Meesenburg, H., Moldan, F., Sheppard, L.J.: Does elevated nitrogen deposition or ecosystem recovery from acidification drive increased dissolved organic carbon loss from upland soil? A review of evidence from field nitrogen addition experiments. *Biogeochemistry*. 91, 13–35 (2008). <https://doi.org/10.1007/s10533-008-9256-x>.
 5. Guo, L.B., Gifford, R.M.: Soil carbon stocks and land use change: a meta analysis. *Global*

Change Biology. 8, 345–360 (2002). <https://doi.org/10.1046/j.1354-1013.2002.00486.x>.

6.

Farley, K.A., Piñeiro, G., Palmer, S.M., Jobbágy, E.G., Jackson, R.B.: Stream acidification and base cation losses with grassland afforestation. Water Resources Research. 44, n/a-n/a (2008). <https://doi.org/10.1029/2007WR006659>.

7.

GERSHENSON, A., BADER, N.E., CHENG, W.: Effects of substrate availability on the temperature sensitivity of soil organic matter decomposition. Global Change Biology. 15, 176–183 (2009). <https://doi.org/10.1111/j.1365-2486.2008.01827.x>.

8.

Giardina, Christian P.: Evidence that decomposition rates of organic carbon in mineral soil do not vary with temperature. Nature. 404, (2000).

9.

Emmett, B.A., Beier, C., Estiarte, M., Tietema, A., Kristensen, Hanne.L., Williams, D., Peñuelas, J., Schmidt, I., Sowerby, A.: The Response of Soil Processes to Climate Change: Results from Manipulation Studies of Shrublands Across an Environmental Gradient. Ecosystems. 7, (2004). <https://doi.org/10.1007/s10021-004-0220-x>.

10.

HANSEN, K., ROSENQVIST, L., VESTERDAL, L., GUNDERSEN, P.: Nitrate leaching from three afforestation chronosequences on former arable land in Denmark. Global Change Biology. 13, 1250–1264 (2007). <https://doi.org/10.1111/j.1365-2486.2007.01355.x>.

11.

Haygarth, P.M., Ritz, K.: The future of soils and land use in the UK: Soil systems for the provision of land-based ecosystem services. Land Use Policy. 26, S187–S197 (2009). <https://doi.org/10.1016/j.landusepol.2009.09.016>.

12.

Robert L. Crocker and Jack Major: Soil Development in Relation to Vegetation and Surface Age at Glacier Bay, Alaska. *Journal of Ecology*. 43, 427–448 (1955).

13.

CONANT, R.T., DRIJBER, R.A., HADDIX, M.L., PARTON, W.J., PAUL, E.A., PLANTE, A.F., SIX, J., STEINWEG, J.M.: Sensitivity of organic matter decomposition to warming varies with its quality. *Global Change Biology*. 14, 868–877 (2008).
<https://doi.org/10.1111/j.1365-2486.2008.01541.x>.

14.

Brantley, S.L.: GEOLOGY: Understanding Soil Time. *Science*. 321, 1454–1455 (2008).
<https://doi.org/10.1126/science.1161132>.

15.

Dawson, J.J.C., Smith, P.: Carbon losses from soil and its consequences for land-use management. *Science of The Total Environment*. 382, 165–190 (2007).
<https://doi.org/10.1016/j.scitotenv.2007.03.023>.

16.

Bormann, B.T., Wang, D., Snyder, M.C., Bormann, F.H., Benoit, G., April, R.: Rapid, plant-induced weathering in an aggrading experimental ecosystem. *Biogeochemistry*. 43, 129–155 (1998). <https://doi.org/10.1023/A:1006065620344>.

17.

Hodge, I., Reader, M.: The introduction of Entry Level Stewardship in England: Extension or dilution in agri-environment policy? *Land Use Policy*. 27, 270–282 (2010).
<https://doi.org/10.1016/j.landusepol.2009.03.005>.

18.

Wesselink, L.G., Meiws, K.-Joseph., Matzner, Egbert., Stein, Alfred.: Long-Term Changes in Water and Soil Chemistry in Spruce and Beech Forests, Solling, Germany. *Environmental Science & Technology*. 29, 51–58 (1995). <https://doi.org/10.1021/es00001a006>.

19.

Vesterdal, L., Ritter, E., Gundersen, P.: Change in soil organic carbon following afforestation of former arable land. *Forest Ecology and Management*. 169, 137–147 (2002).
[https://doi.org/10.1016/S0378-1127\(02\)00304-3](https://doi.org/10.1016/S0378-1127(02)00304-3).

20.

Smith, P., Powlson, D.S., Smith, J.U., Falloon, P., Coleman, K.: Meeting Europe's climate change commitments: quantitative estimates of the potential for carbon mitigation by agriculture. *Global Change Biology*. 6, 525–539 (2000).
<https://doi.org/10.1046/j.1365-2486.2000.00331.x>.

21.

SMITH, P., POWLSON, D., GLENDINING, M., SMITH, J.: Potential for carbon sequestration in European soils: preliminary estimates for five scenarios using results from long-term experiments. *Global Change Biology*. 3, 67–79 (1997).
<https://doi.org/10.1046/j.1365-2486.1997.00055.x>.

22.

Trumbore, S.E., Czimczik, C.I.: GEOLOGY: An Uncertain Future for Soil Carbon. *Science*. 321, 1455–1456 (2008). <https://doi.org/10.1126/science.1160232>.

23.

L., R., J., C., G., M., R., N., M., A., H., J., C., J., G., Not Available, N.A.: A meta-analysis of the response of soil respiration, net nitrogen mineralization, and aboveground plant growth to experimental ecosystem warming. *Oecologia*. 126, 543–562 (2001).
<https://doi.org/10.1007/s004420000544>.

24.

Post, W.M., Kwon, K.C.: Soil carbon sequestration and land-use change: processes and potential. *Global Change Biology*. 6, 317–327 (2000).
<https://doi.org/10.1046/j.1365-2486.2000.00308.x>.

25.

Robinson, G.M.: Ontario's Environmental Farm Plan: Evaluation and research agenda. *Geoforum*. 37, 859–873 (2006). <https://doi.org/10.1016/j.geoforum.2005.05.002>.

26.

OH, N.-H., HOFMOCKEL, M., LAVINE, M.L., RICHTER, D.D.: Did elevated atmospheric CO₂ alter soil mineral weathering?: an analysis of 5-year soil water chemistry data at Duke FACE study. *Global Change Biology*. 13, 2626–2641 (2007). <https://doi.org/10.1111/j.1365-2486.2007.01452.x>.

27.

Ostle, N.J., Levy, P.E., Evans, C.D., Smith, P.: UK land use and soil carbon sequestration. *Land Use Policy*. 26, S274–S283 (2009). <https://doi.org/10.1016/j.landusepol.2009.08.006>.

28.

Palmer, S.M., Driscoll, C.T., Johnson, C.E.: Long-term trends in soil solution and stream water chemistry at the Hubbard Brook Experimental Forest: relationship with landscape position. *Biogeochemistry*. 68, 51–70 (2004). <https://doi.org/10.1023/B:BIOG.0000025741.88474.0d>.

29.

MORRIS, S.J., BOHM, S., HAILE-MARIAM, S., PAUL, E.A.: Evaluation of carbon accrual in afforested agricultural soils. *Global Change Biology*. 13, 1145–1156 (2007). <https://doi.org/10.1111/j.1365-2486.2007.01359.x>.

30.

Magill, A.H., Aber, J.D., Currie, W.S., Nadelhoffer, K.J., Martin, M.E., McDowell, W.H., Melillo, J.M., Steudler, P.: Ecosystem response to 15 years of chronic nitrogen additions at the Harvard Forest LTER, Massachusetts, USA. *Forest Ecology and Management*. 196, 7–28 (2004). <https://doi.org/10.1016/j.foreco.2004.03.033>.

31.

McLauchlan, K.K.: Effects of soil texture on soil carbon and nitrogen dynamics after cessation of agriculture. *Geoderma*. 136, 289–299 (2006).

[https://doi.org/10.1016/j.geoderma.2006.03.053.](https://doi.org/10.1016/j.geoderma.2006.03.053)

32.

A. David McGuire, Leif G. Anderson, Torben R. Christensen, Scott Dallimore, Laodong Guo, Daniel J. Hayes, Martin Heimann, Thomas D. Lorenson, Robie W. Macdonald and Nigel Roulet: Sensitivity of the Carbon Cycle in the Arctic to Climate Change. Ecological Monographs. 79, 523–555 (2009).

33.

MacDonald, J.A., Dise, N.B., Matzner, E., Armbruster, M., Gundersen, P., Forsius, M.: Nitrogen input together with ecosystem nitrogen enrichment predict nitrate leaching from European forests. Global Change Biology. 8, 1028–1033 (2002).
<https://doi.org/10.1046/j.1365-2486.2002.00532.x>.

34.

Lovett, G.M., Weathers, K.C., Arthur, M.A., Schultz, J.C.: Nitrogen cycling in a northern hardwood forest: Do species matter? Biogeochemistry. 67, 289–308 (2004).
<https://doi.org/10.1023/B:BIOG.0000015786.65466.f5>.

35.

Lovett, G.M., Goodale, C.L.: A New Conceptual Model of Nitrogen Saturation Based on Experimental Nitrogen Addition to an Oak Forest. Ecosystems. 14, 615–631 (2011).
<https://doi.org/10.1007/s10021-011-9432-z>.

36.

Jobbágy, E.G., Jackson, R.B.: Patterns and mechanisms of soil acidification in the conversion of grasslands to forests. Biogeochemistry. 64, 205–229 (2003).
<https://doi.org/10.1023/A:1024985629259>.

37.

Kay, P., Edwards, A.C., Foulger, M.: A review of the efficacy of contemporary agricultural stewardship measures for ameliorating water pollution problems of key concern to the UK water industry. Agricultural Systems. 99, 67–75 (2009).
<https://doi.org/10.1016/j.agsy.2008.10.006>.

38.

Kirchner, J.W., Lydersen, Espen.: Base Cation Depletion and Potential Long-Term Acidification of Norwegian Catchments. *Environmental Science & Technology*. 29, 1953–1960 (1995). <https://doi.org/10.1021/es00008a012>.

39.

KIRK, G.J.D., BELLAMY, P.H., LARK, R.M.: Changes in soil pH across England and Wales in response to decreased acid deposition. *Global Change Biology*. no-no (2009). <https://doi.org/10.1111/j.1365-2486.2009.02135.x>.

40.

LAGANIÈRE, J., ANGERS, D.A., PARÉ, D.: Carbon accumulation in agricultural soils after afforestation: a meta-analysis. *Global Change Biology*. 16, 439–453 (2010). <https://doi.org/10.1111/j.1365-2486.2009.01930.x>.

41.

KIRSCHBAUM, M.: The temperature dependence of organic-matter decomposition—still a topic of debate. *Soil Biology and Biochemistry*. 38, 2510–2518 (2006). <https://doi.org/10.1016/j.soilbio.2006.01.030>.

42.

Kirschbaum, M.U.F.: Will changes in soil organic carbon act as a positive or negative feedback on global warming? *Biogeochemistry*. 48, 21–51 (2000). <https://doi.org/10.1023/A:1006238902976>.

43.

Wright, R.F., Larssen, T., Camarero, L., Cosby, B.J., Ferrier, R.C., Helliwell, R., Forsius, M., Jenkins, A., Kopáček, J., Majer, V., Moldan, F., Posch, M., Rogora, M., Schöpp, W.: Recovery of Acidified European Surface Waters. *Environmental Science & Technology*. 39, 64A-72A (2005). <https://doi.org/10.1021/es0531778>.

44.

KIRK, G.J.D., BELLAMY, P.H., LARK, R.M.: Changes in soil pH across England and Wales in response to decreased acid deposition. *Global Change Biology.* no-no (2009).
<https://doi.org/10.1111/j.1365-2486.2009.02135.x>.

45.

Mørth, C.-M., Torssander, P., Kjønaas, O.J., Ø Stuanes, A., Moldan, F., Giesler, R.: Mineralization of Organic Sulfur Delays Recovery from Anthropogenic Acidification. *Environmental Science & Technology.* 39, 5234–5240 (2005).
<https://doi.org/10.1021/es048169q>.

46.

White, R.E., MyiLibrary: Principles and practice of soil science: the soil as a natural resource. Blackwell, Malden, Massachusetts (2006).

47.

Schjønning, P., Elmholt, S., Christensen, B.T., ebrary, Inc: Managing soil quality: challenges in modern agriculture. CABI Pub, Wallingford, Oxon (2004).

48.

Schaetzl, R.J., Anderson, S.: Soils: genesis and geomorphology. Cambridge University Press, Cambridge (2005).

49.

Yong, R.N., Nakano, M., Pusch, R.: Environmental soil properties and behaviour. CRC Press, Boca Raton, FL (2012).

50.

Nathanail, C.P., Bardos, P.: Reclamation of contaminated land. Wiley, Chichester, West Sussex, England (2004).

51.

National Research Council (U.S.), ebrary, Inc: Sustainable agriculture and the environment in the humid tropics. National Academy Press, Washington, D.C. (1993).

52.

ebrary, Inc: Soil and water quality: an agenda for agriculture. National Academy Press, Washington, D.C. (1993).

53.

Jenny, H.: Factors of soil formation: a system of quantitative pedology. McGraw-Hill, New York (1941).

54.

Haygarth, P.M., Jarvis, S.C., ebrary, Inc: Agriculture, hydrology, and water quality. CABI, Wallingford (2002).

55.

Gardiner, D.T., Miller, R.W.: Soils in our environment. Pearson/Prentice Hall, Upper Saddle River, N.J. (2004).

56.

Wall, D.H.: Soil ecology and ecosystem services. Oxford University Press, Oxford (2012).

57.

Bohn, H.L., O'Connor, G.A., McNeal, B.L.: Soil chemistry. John Wiley & Sons, New York (1985).

58.

Bardgett, R.D.: The biology of soil: a community and ecosystem approach. Oxford University Press, New York (2005).

59.

Brady, N.C., Weil, R.R.: The nature and properties of soils. Prentice Hall, Upper Saddle River, N.J. (1998).

60.

Ashman, M.R., Puri, G., MyiLibrary: Essential soil science: a clear and concise introduction to soil science. Blackwell Science, Oxford (2002).

61.

Ågren, G.I., Andersson, F.: Terrestrial ecosystem ecology: principles and applications. Cambridge University Press, Cambridgey (2012).