

## Peer-Reviewed publications

### 2015

- 24 **Wiesmeier M**, Hübner R, Kögel-Knabner I (2015) Stagnating crop yields: An overlooked risk for the carbon balance of agricultural soils? *Science of the Total Environment*, DOI: 10.1016/j.scitotenv.2015.07.064
- 23 **Wiesmeier M**, Munro S, Barthold F, Steffens M, Schad P, Kögel-Knabner I (2015) Carbon storage capacity of semi-arid grassland soils and sequestration potentials in Northern China. *Global Change Biology*, DOI: 10.1111/gcb.12957.
- 22 **Wiesmeier M**, Lungu M, Hübner R, Cerbari V, Kögel-Knabner I (2015) Remediation of degraded arable steppe soils of Moldova using vetch as green manure. *Solid Earth*, accepted.
- 21 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I. Land use effects on organic carbon storage in soils of Bavaria: the importance of soil types. *Soil and Tillage Research*, 146, 296-302

### 2014

- 20 **Wiesmeier M**, Barthold FK, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Angst G, von Lützow M, Kögel-Knabner I (2014) Estimation of total organic carbon storage and its driving factors in soils of Bavaria (southeast Germany). *Geoderma Regional*, 1, 67-78.
- 19 **Wiesmeier M**, Hübner R, Dechow R, Maier, H, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Angst, G., von Lützow M, Kögel-Knabner I (2014) Estimation of past and recent carbon input by crops into agricultural soils of Bavaria. *European Journal of Agronomy*, 61, 10-23.
- 18 Garcia-Franco N, **Wiesmeier M**, Goberna M, Martinez-Mena M, Albaladejo J (2014) Carbon dynamics after afforestation of semiarid shrublands: Implications of site preparation techniques. *Forest Ecology and Management*, 319, 107-115.
- 17 **Wiesmeier M**, Schad P, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I (2014) Quantification of functional soil organic carbon pools for major soil units and land uses in southeast Germany (Bavaria). *Agriculture, Ecosystems and Environment*, 185, 208-220.
- 16 **Wiesmeier M**, Hübner R, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I (2014) Carbon sequestration potential of soils in southeast Germany derived from stable soil organic carbon saturation. *Global Change Biology* 20(2), 653-665.

## 2013

- 15 Poeplau C, Don A, Dondini M, Leifeld J, Nemoto R, Schumacher J, Senapati N, **Wiesmeier M** (2013) Reproducibility of a soil organic carbon fractionation method to derive RothC carbon pools. *European Journal of Soil Science* 64(6), 735-746.
- 14 **Wiesmeier M**, Hübner R, Barthold FK, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I (2013) Amount, distribution and driving factors of soil organic carbon and nitrogen in cropland and grassland soils of southeast Germany (Bavaria). *Agriculture, Ecosystems and Environment* 176, 39-52.
- 13 **Wiesmeier M**, Prietzel J, Barthold FK, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I (2013) Storage and drivers of organic carbon in forest soils of southeast Germany (Bavaria) – Implications for carbon sequestration. *Forest Ecology and Management* 295, 162-172.
- 12 Barthold FK, **Wiesmeier M**, Breuer L, Frede H-G, Wu J, Blank FB (2013) Land use and climate control the spatial distribution of soils in the grasslands of Inner Mongolia. *Journal of Arid Environments* 88, 194-205.

## 2012

- 11 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Haug S, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I (2012) Soil organic carbon stocks in southeast Germany (Bavaria) as affected by land use, soil type and sampling depth. *Global Change Biology* 18, 2233-2245.
- 10 Schönbach P, Wolf B, Dickhöfer U, **Wiesmeier M**, Chen W, Wan H, Gierus M, Butterbach-Bahl K, Kögel-Knabner I, Susenbeth A, Zheng X, Taube F (2012) Grazing effects on the greenhouse gas balance of a temperate steppe ecosystem. *Nutrient Cycling in Agroecosystems* 93(3), 357-371.
- 9 **Wiesmeier M**, Kreyling O, Steffens M, Schoenbach P, Wan H, Gierus M, Taube F, Kölbl A, Kögel-Knabner I (2012) Short-term degradation of semi-arid grasslands – results from a controlled grazing experiment in Northern China. *Journal of Plant Nutrition and Soil Science* 175, 434-442.
- 8 Honghui W, **Wiesmeier M**, Yu Q, Steffens M, Han X, Kögel-Knabner I (2012) Labile organic C and N mineralization of soil aggregate size classes in semi-arid grasslands as affected by grazing management. *Biology and Fertility of Soils* 48, 305-313.
- 7 **Wiesmeier M**, Steffens M, Mueller CW, Kölbl A, Reszkowska A, Peth S, Horn R, Kögel-Knabner I (2012) Aggregate stability and physical protection of soil organic carbon in semi-arid steppe soils. *European Journal of Soil Science* 63, 22-31.

## 2011

- 6 Kölbl A, Steffens M, **Wiesmeier M**, Hoffmann C, Funk R, Krümmelbein J, Reszkowska A, Zhao Y, Peth S, Horn R, Giese M, Kögel-Knabner I (2011) Grazing changes topography-controlled topsoil properties and their interaction on different spatial scales in a semi-arid grassland of Inner Mongolia, P.R. China. *Plant & Soil* 340, 35-58.
- 5 **Wiesmeier M**, Barthold FK, Blank FB, Kögel-Knabner I (2011) Digital mapping of soil organic matter stocks using Random Forest modeling in a semi-arid steppe ecosystem. *Plant & Soil* 340, 7-24.

## 2010

- 4 Yao Z, Wolf B, Chen W, Butterbach-Bahl K, Brüggemann N, **Wiesmeier M**, Dannenmann M, Blank B, Zheng X (2010) Spatial variability of N<sub>2</sub>O, CH<sub>4</sub> and CO<sub>2</sub> fluxes within the Xilin River catchment of Inner Mongolia, China: a soil core study. *Plant & Soil* 331, 341-359.

## 2009

- 3 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I (2009) Degradation and small-scale spatial homogenization of topsoils in intensively grazed steppes of Northern China. *Soil and Tillage Research* 104, 299-310.
- 2 **Wiesmeier M**, Dick DP, Rumpel C, Dalmolin RSD, Hilscher A, Knicker H (2009) Depletion of soil organic carbon and nitrogen under *Pinus taeda* plantations in Southern Brazilian grasslands (*Campos*). *European Journal of Soil Science* 60, 347-359.

## 2008

- 1 Knicker H, **Wiesmeier M**, Dick DP (2008) A simplified method for the quantification of pyrogenic organic matter in grassland soils via chemical oxidation. *Geoderma* 147, 69-74.

## Books/Book Chapters

### 2015

- 7 **Wiesmeier M** (2015) Environmental indicators of dryland degradation and desertification. In: Environmental indicators (ed. Armon, R.H., Hänninen, O.), Springer, Dordrecht, 239-250, ISBN 978-94-017-9499-2.

### 2014

- 6 **Wiesmeier M** (2014) Der Humuskörper bayerischer Böden im Klimawandel – Auswirkungen und Potenziale. UmweltSpezial, Bayerisches Landesamt für Umwelt, Hof.

### 2013

- 5 **Wiesmeier M** (2013) Recovery of degraded steppe soils of Northern China after grazing exclusion. In: Steppe ecosystems: biological diversity, management and restoration (ed. Morales Prieto MB, Traba Diaz J), Nova Science Publishers, New York, 221-251, ISBN 978-1628082982.
- 4 **Wiesmeier M** (2013) Blumenwanderungen in den Münchner Hausbergen. Rosenheimer Verlagshaus, Rosenheim, ISBN 978-3-475-54192-6.

### 2011

- 3 **Wiesmeier M** (2011) Blütenwanderungen in Oberbayern – Die schönsten Streifzüge zu besonderen Pflanzen. AT Verlag, Baden und München, ISBN 978-3-03800-501-8.
- 2 **Wiesmeier M** (2011) Das Edelweiß in Deutschland und Österreich. In: Das Edelweiß – Botanik, Mythos und Kultur einer geheimnisvollen Alpenpflanze (Rey C, Rey S, Vouillamoz JF, Baroffio CA, Roguet D), AT Verlag, Baden und München, ISBN 978-3-03800-565-0

### 2010

- 1 **Wiesmeier M** (2010) Degradation and spatial variability of soil organic matter at different scales in grazed semi-arid grasslands of Northern China. Shaker Verlag, Aachen, ISBN 978-3-8322-9427-4.

## Oral presentations

### 2015

- 22 **Wiesmeier M**, Munro S, Barthold F, Steffens M, Schad P, Kögel-Knabner I. Carbon storage capacity of semi-arid grassland soils and sequestration potentials in Northern China. European Geosciences Union General Assembly, Vienna, Austria, April 2015.
- 21 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützw M, Kögel-Knabner I. Soil organic carbon stocks in southeast Germany (Bavaria) as affected by land use, soil type and sampling depth. Werkstattgespräche der Bayerischen Landesanstalt für Wald- und Forstwirtschaft (LWF), Freising, Germany, March 2015 (invited).

### 2014

- 20 **Wiesmeier M**, Hübner R, Dechow R, Maier, H, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützw M, Kögel-Knabner I. Is climate change responsible for a stagnation of the carbon input into agricultural soils of southeast Germany? Conference "The Earth Living Skin: Soil, Life and Climate Changes", Bari, Italy, September 2014.
- 19 Hübner R, **Wiesmeier M**. Socioeconomic conditions for successful soil protection – technology, economics and stakeholder engagement. Sino-German Workshop on Sustainable Management of Mollisols in China, Harbin, China, July 2014 (invited).
- 18 **Wiesmeier M**. Carbon sequestration in agriculturally used soils. Institute for Pedology, Agrochemistry and Soil Protection "Nicolae Dimo", Chisinau, Republic of Moldova, April 2014 (invited).

### 2013

- 17 **Wiesmeier M**, von Lützw M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Organischer Kohlenstoff in den Böden Bayerns: Vorräte, Verteilung, Steuergrößen, Sequestrierungs- und Verlustpotentiale. Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF), Müncheberg, Dezember 2013 (invited).
- 16 **Wiesmeier M**, von Lützw M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Organischer Kohlenstoff in den Böden Bayerns: Vorräte, Verteilung, Steuergrößen, Sequestrierungs- und Verlustpotentiale. Seminar Nutzpflanzenwissenschaften, Christian-Albrechts-Universität zu Kiel, November 2013 (invited).

- 15 **Wiesmeier M**, von Lützow M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Vorräte, Steuergrößen und Sequestrierungspotentiale organischen Bodenkohlenstoffs in Bayern. DBG Jahrestagung, Rostock, September 2013.
- 14 **Wiesmeier M**, von Lützow M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Organische Kohlenstoffvorräte in den Böden Bayerns – Verteilung, Einflussfaktoren, Sequestrierungsmöglichkeiten, Fraktionen. Thünen-Institut für Agrarklimaschutz, Braunschweig, August 2013 (invited).
- 13 **Wiesmeier M**, von Lützow M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Quantification of functional soil organic carbon pools for different soil units and land uses in southeast Germany (Bavaria). Conference soil carbon sequestration for climate, food security and ecosystem services, Reykjavik, Iceland, May 2013.
- 12 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I. Der Humuskörper bayerischer Böden im Klimawandel – Auswirkungen und Potentiale. Seminarreihe „Aspekte der Waldökosystemforschung“, Bayerische Landesanstalt für Wald- und Forstwirtschaft (LWF), Freising, Germany, January 2013 (invited).

## 2012

- 11 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I. Der Humuskörper bayerischer Böden im Klimawandel – Auswirkungen und Potentiale. Bayerisches Landesamt für Umwelt (LfU), Hof, Germany, July 2012.
- 10 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Haug S, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I. Soil organic carbon stocks in southeast Germany as affected by land use, soil type and sampling depth. Eurosoil 2012, Bari, Italy, July 2012.
- 9 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützow M, Kögel-Knabner I. Soil organic carbon stocks in southeast Germany as affected by land use, soil type and sampling depth. European Geosciences Union General Assembly, Vienna, Austria, April 2012.
- 8 **Wiesmeier M**. Die Haut der Erde – Eine Reise in die Welt des Bodens. Deutsches Museum, München, Germany, February 2012 (invited).

## 2011

- 7 **Wiesmeier M**, Spörlein P, Reischl A, Schilling B, von Lützw M, Kögel-Knabner I. Organische Kohlenstoffvorräte in land- und forstwirtschaftlich genutzten Böden Bayerns. DBG Jahrestagung, Berlin, Germany, September 2011.
- 6 **Wiesmeier M**. Präsentation des Buchs „Blütenwanderungen in Oberbayern – Die schönsten Streifzüge zu besonderen Pflanzen“. Wolfratshausen, Germany, May 2011.
- 5 **Wiesmeier M**, Spörlein P, Reischl A, Schilling B, von Lützw M, Kögel-Knabner I. Der Humuskörper bayerischer Böden im Klimawandel – Auswirkungen und Potentiale. Bayerische Landesanstalt für Wald- und Forstwirtschaft (LWF), Freising, Germany, February 2011.

## 2010

- 4 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Soil organic matter stabilization in degraded semi-arid grasslands after grazing cessation. 19th World Congress of Soil Science, Brisbane, Australia, August 2010.

## 2009

- 3 **Wiesmeier M**, Barthold FK, Blank B, Kögel-Knabner I. Digital mapping of soil organic carbon in a semi-arid grassland of Northern China. International Conference Soil Geography: New Horizons. Huatulco Santa Cruz, Mexico, November 2009.

## 2008

- 2 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Increasing amount and spatial heterogeneity of soil organic carbon after grazing exclusion at semi-arid grasslands of Inner Mongolia, P.R. China. AGU Fall Meeting, San Francisco, USA, December 2008.
- 1 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Intensive grazing leads to degradation and spatial homogenization of topsoils in two major steppe types in Inner Mongolia, P.R. China. Eurosoil 2008, Vienna, Austria, August 2008.

## Poster presentations

### 2013

- 10 **Wiesmeier M**, von Lützw M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Kohlenstoffvorräte und Sequestrierungspotentiale in den Böden Bayerns. Kongress Klimaforschung Bayern, München, Germany, June 2013.
- 9 **Wiesmeier M**, von Lützw M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Carbon sequestration potential of soils in southeast Germany derived from stable soil organic carbon saturation. Conference soil carbon sequestration for climate, food security and ecosystem services, Reykjavik, Iceland, May 2013.
- 8 **Wiesmeier M**, von Lützw M, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, Kögel-Knabner I. Quantification of functional soil organic carbon pools for different soil units and land uses in southeast Germany (Bavaria). European Geosciences Union General Assembly, Vienna, Austria, April 2013.

### 2012

- 7 **Wiesmeier M**, Spörlein P, Geuß U, Hangen E, Reischl A, Schilling B, von Lützw M, Kögel-Knabner I. Soil organic carbon stocks in southeast Germany as affected by land use, soil type and sampling depth. International Symposium on Managing Soils for Food Security and Climate Change Adaptation and Mitigation, FAO/IAEA, Vienna, Austria, July 2012.
- 6 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Soil degradation in semi-arid grasslands due to intensive grazing in Northern China. European Geosciences Union General Assembly, Vienna, Austria, April 2012.

### 2011

- 5 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Carbon sequestration in degraded semi-arid grasslands of Northern China. European Geosciences Union General Assembly, Vienna, Austria, April 2011.

### 2010

- 4 **Wiesmeier M**, Barthold FK, Blank B, Kögel-Knabner I. A multi-model approach to map soil organic carbon in a semi-arid steppe ecosystem. 4th International Workshop on Digital Soil Mapping, Rome, Italy, May 2010.



## 2009

- 3 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Die kleinskalige räumliche Verteilung der organischen Bodensubstanz in beweideten und unbeweideten Grasländern der Inneren Mongolei, Nordchina. DBG Jahrestagung, Bonn, Germany, September 2009.

## 2008

- 2 **Wiesmeier M**, Steffens M, Kölbl A, Kögel-Knabner I. Intensive grazing leads to degradation and spatial homogenization of topsoils in two major steppe types in Inner Mongolia, P.R. China. XXI International Grassland Congress, VIII International Rangeland Congress, Hohhot, China, July 2008.

## 2007

- 1 **Wiesmeier M**, Dick D, Hilscher A, Knicker H. Veränderung der organischen Bodensubstanz nach Aufforstungen brasilianischer Grasländer mit *Pinus spp.* DBG Jahrestagung, Dresden, Germany, September 2007.

### Reviewer for:

Journal of Arid Land; Pedosphere; Journal of Geophysical Research – Biogeosciences; Agriculture, Ecosystems and Environment; Agronomy Journal; Applied Soil Ecology; Biology and Fertility of Soils; Catena; Ecosystems; Ecological Applications; European Journal of Soil Biology; European Journal of Soil Science; Environmental Management; Forest Ecology and Management; Forests; Global Change Biology; Geoderma; Integrated Environmental Assessment and Management; Journal of Arid Environments; Journal of Environmental Quality; Journal of Integrative Agriculture; Journal of Soils and Sediments; Natural Resources Research; Plant and Soil; Plos One; Soil Science Society of America Journal; Soil and Tillage Research; Urban Forestry & Urban Greening; Ecological Indicators; Biogeochemistry; Journal of Soil Science and Plant Nutrition; Journal of Geochemical Exploration; Carbon Management; Global Ecology and Biogeography; Climate Research

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