

Education

- 2003- 2009 **PhD Soil Biology**
Wageningen University, Wageningen, the Netherlands (0.8 fte)
- 1996- 2003 **BSc and MSc Environmental Sciences (Milieuhygiëne), specialisation Soil Quality**
Wageningen University, Wageningen, the Netherlands

Appointments

- 2019-present **Professor of Earth Surface Science**, Department of Ecosystem and Landscape Dynamics, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, The Netherlands
- August 2017-
March 2018 **Maternity leave**
- 2017-2020 **Senior Research Fellow (Associate Professor)/ BBSRC David Phillips Fellow**, School of Earth and Environmental Sciences, The University of Manchester, United Kingdom (20% appointment from January 2019).
- 2015-2017 **BBSRC David Phillips Fellow**, Faculty of Life Sciences, The University of Manchester, United Kingdom.
- July- 2014-
January 2015 **Maternity leave**
- 2013-2015 **Faculty Fellow**, Faculty of Life Sciences, The University of Manchester, United Kingdom.
- 2012-2013 **Senior Research Associate** within EU-funded Ecofinders project in the Soil and Ecosystem Ecology group, Lancaster Environment Centre, Lancaster University, United Kingdom. P.I.: Prof. Richard Bardgett
- 2009- 2012 **Research Associate** within EU-funded project SOILSERVICE in the Soil and Ecosystem Ecology group, Lancaster Environment Centre, Lancaster University, United Kingdom. P.I.: Prof. Richard Bardgett

Awards/ esteem and memberships

- Since 2024 Mercator Fellow of **The Jena Experiment**
- Since 2021 Clarivate **Highly Cited Scientist**
- Since 2019 Faculty Member of **Faculty Opinions** (formerly F1000)
- 2011-2018 **Ecological Society of America**
- 2012-2015 Associate Member of **F1000**
- Since 2009 **British Ecological Society**

Leadership and external responsibilities

Current

- Since 2024 Member of the “Wild thinktank” of **ARK Rewilding**

- Since 2024 Chair of the **International Advisory Board of the Institute of Botany of the Czech Academy of Sciences**
- Since 2023 Member of the core steering group of the **National Centre for Soil Ecology**
- Since 2023 Member of the **Publications Committee of the British Ecological Society**
- Since 2023 Expert for the **Dutch Ecological Authority** (Ecologische Autoriteit)
- Since 2023 Core member of **BBSRC Research Committee B** (funding assessment committee)
- Since 2022 Writer/columnist for **De Levende Natuur** – the oldest nature magazine of the Netherlands
- Since 2022 Blogger for **Klimaatverandering** (klimaatveranda.nl)
- Since 2022 Member of the **Netherlands Plant Eco-Phenotyping Centre (NPEC) user platform**
- Since 2021 Kennisdrager (“knowledge bearer”) **G1000Landbouw**
- Since 2020 Member of the Editorial Board of **Ecology Letters**
- Since 2019 Member of the Editorial Board of **Soil Organisms**
- Since 2017 Curator and founder of list “**Women in soil science**”
- Since 2013 Associate Editor of **Journal of Ecology**

Past

- 2024 Member of the **BBSRC-UKRI Land Use for Net Zero panel** (grant proposal assessment committee)
- 2012-2023 Member of the **Review College** of the **British Ecological Society**
- 2020-2023 Member of the scientific reflection committee (klankbordgroep) of the **Mesdag zuivelfonds nitrogen project**
- 2019-2023 Chair of the International Scientific Program Committee for the **Third Global Soil Biodiversity Conference 2023** (postponed to 2023 because of COVID19)
- 2022 Member of the **NERC Highlight Topics Panel** (grant proposal assessment committee)
- 2021-2022 Member of **BBSRC Committee B** (grant proposal assessment committee)
- 2017-2022 Member of the **BBSRC Pool of Experts**
- 2020-2021 Member of **Klimaatpanel** (“climate panel”) of the **Leeuwarder Courant** (regional newspaper in the North of the Netherlands)
- 2020-2021 Additional member of **BBSRC Committee E** (fellowship proposal assessment committee)
- 2019-2020 Member of the Scientific Theme Committee ‘Climate Action’ for **Eurosoil 2020** (postponed because of COVID19)
- 2018 Editor, **Frontiers in Microbiology Special Research Topic** “The soil microbiome and multi-trophic interactions that regulate soil carbon and nutrient flux”, together with Eoin Brodie, Diana Wall, Stefan Geisen, and Javier Ceja Navarro
- 2017-2019 **500 Women Scientists Manchester Pod** coordinator

- 2014-2019 Member of the Editorial Board of **Oxford Bibliographies Online Ecology**
- 2013-2019 Trustee of the **Ecological Continuity Trust**
- 2013-2019 Member of the Editorial Board of **Ecosystems**
- 2017-2018 Leading the set up of the **European Chapter of 500 Women Scientists**
- 2016-2017 Member of the International Scientific Committee for the **Second Global Soil Biodiversity Conference**, China, 2017
- 2016 Member of the leadership team of **500 Women Scientists**
- 2012-2016 Secretary and founder of the **British Ecological Society special interest group Plants, Soils, Ecosystems** (currently >300 members)
- 2013-2014 Member of the Advisory Board for the **NERC Knowledge Exchange Programme on Sustainable Food Production**
- 2011 **Mentor** in the **Mentoring Scheme for Women in Ecology of the British Ecological Society**

Reviewing

Manuscripts: Nature, Science, PNAS, Nature Climate Change, Nature Communications, Nature Ecology and Evolution, Nature Plants, The ISME Journal, Ecology Letters, Global Change Biology, Journal of Ecology, Functional Ecology, Basic and Applied Ecology, Biogeochemistry, Ecosystems, and Soil Biology & Biochemistry

Grants: ERC Starting Grants, BBSRC GCRF, Dutch National Science Foundation (NWO), NERC Soil Security Independent Research Fellowships 2016, BiodivERsA International Research Proposals 2016, National Research Foundation of South Africa, NERC standard grants, BBSRC standard grants, BBSRC David Phillips Fellowships

Member of internal and external promotion and recruitment committees

BAC Full professorship of Gerard Velthuis, Wageningen University (2023)
 Assistant Professor in Carbon Cycle Dynamics, University of Amsterdam (2023)
 Evaluation of promotion to Distinguished Professor Dr. J. Rudgers, University of New Mexico, USA (2023)
 Advice for promotion to Full Professor of Dr. K. Rebel, Utrecht University (2022)
 Evaluation of promotion to Laboratory Fellow Dr. V.L. Bailey, PNNL, USA (2022)
 Evaluation Special Chair Dr. V. Merckx, University of Amsterdam (2022)
 Curatorium Special Chair in Aquatic Ecology, University of Amsterdam (2022)
 BAC Full Professorship Prof. J.W. van Groenigen, Wageningen University (2021)
 Tenure Track position in Ecology and Biodiversity, Utrecht University (2020)
 Tenure Track position in Ecology and Biodiversity, Utrecht University (2020)
 Assistant Professor in Soil Carbon Cycling, University of Amsterdam (2020)
 Promotion to Associate Professor Dr. H. van den Burg, University of Amsterdam (2019)
 Promotion to Special Chair M. Verheij, University of Amsterdam (2019)

Internal responsibilities and leadership

- 2023-present Member of the **IBED Laboratory and Infrastructure Committee**
- 2023-present Advisor for the **IBED Job Seekers Group**
- 2023-present Member of the **IBED Diversity, Equity, and Inclusion Council**
- 2023-present Additional member of the **Senate of the University of Amsterdam**
- 2022-present **Head of the Plant-Soil-Ecology lab group**, currently consisting of three PIs, five PhD students, three postdocs, two technicians, three MSc students, and one placement student
- 2020-present **Line manager** of six permanent staff members within the Ecosystem and Landscape Dynamics department

2019-2023	Chair and organiser of Plant-Soil-Landscape meetings (bi-weekly meetings of people working on interactions between plants, soils, and landscape processes)
2021-2022	Member of reflection committee of the restructuring of the MSc Earth Sciences programme
2017-2018	Member of the Equality and Diversity committee of the School of Earth and Environmental Sciences, University of Manchester
2017-2018	Member of the Athena Swan self-assessment team of the School of Earth and Environmental Sciences, University of Manchester
2016-2018	Member of Faculty of Science and Engineering internal evaluation panel for NERC Discovery Grants
2015-2018	Member of mock interview panel for several fellowship applicants
2015-present	Mentoring early career scientists for fellowship applications and providing feedback on proposals (internal and external), including blog post about fellowship applications and sharing successful proposals
2015-present	Conducting UCAS interviews with final year high school students
2015	Panel member for NERC DTP PhD studentship selection

Grant funding

2024	EU Biodiversa project GRASS4FUN “Monitoring the contribution of European grasslands to the conservation of soil biodiversity and ecosystem function in a changing world” – 300k (University of Amsterdam), 3 years – UvA PI (with CSIC Spain, University of Leipzig, Agroscope Zürich, INRAE, University of Coimbra)
2023	NWO Large-Scale Research Infrastructure Grant LTER-LIFE : a research infrastructure to develop Digital Twins of ecosystems in a changing world – €20M, 10 years – Co-I (University of Amsterdam PI Daniel Kissling, with NIOO-KNAW, NIOZ, RIVM, Wadden Academie, and Wageningen University)
2022	NWA (National Science Agenda)-call for Climate-friendly agricultural soils consortium grant “Harnessing root-microbe-mineral interactions for climate friendly soils” – €1.38M, 5 years – Lead PI (with Amsterdam Green Campus, Statistics Netherlands (CBS), Eurofins Agro, and Lawrence Livermore Natural Laboratory)
2021	Provincie Flevoland funded project “The effects of large herbivores and geese on nutrient and carbon flows in a eutrophic wetland” – €450k, 4 years – co-I (Lead PI Kenneth Rijdsdijk, with Staatsbosbeheer)
2021	EU H2020 project SOILGUARD “Sustainable soil management to unleash soil biodiversity potential and increase environmental, economic and social wellbeing” – €6.9M (University of Amsterdam €360k), 3 years, – UvA PI
2021	NWA (National Science Agenda) programme consortium grant “Transition to a sustainable food system” – €2.8M, 4 years – Co-I with 20 partners
2020	ERC Starting Grant SHIFTFEEDBACK “Ecosystem response to drought: unravelling the unexplored role of plant-soil feedback” – €1.5M, 5 years - PI
2020	NWO National Roadmap Large-scale Research Infrastructure Grant NIEBA-ARISE – €13M, 5 years – Co-I (University of Amsterdam PI Annemarie van Wezel, with Naturalis Biodiversity Centre, Westerdijk Fungal Biodiversity Institute, and University of Twente)
2017	NERC Standard Grant (NE/P01206X/1) “Developing a trait-based framework for predicting soil microbial community response to extreme events” – £800k (University of Manchester £648,189), 3 years – Lead PI (with co-I Chris Knight (University of Manchester), Rob Griffiths (CEH Wallingford), and 12 collaborators across 10 European countries)
2017	NERC Soil Security Programme (NE/P013708/1) “Resilience and regime shifts in peatland soil microbial communities: implications for soil functioning” - £311,595, 18 months – Co-I (Lead PI Richard Bardgett)
2015	NERC/BBSRC Soil Security Programme (NE/M017028/1) “Controls on the stability of soils and their functioning under land use and climate change” - £1.6 million, 3 years - Co-I (Lead PI Richard Bardgett, University of Manchester £576,982, with Aberdeen University and Queens University Belfast).
2015	BBSRC David Phillips Fellowship (BB/L02456X/1) “The root to stability – the role of plant roots in ecosystem response to climate change” - £1.3M, 5 years - PI

- 2013 **Royal Society International Exchanges Grant** “Ecosystem stability along a primary succession gradient” - £11,282, 24 months - **Lead PI.** (Co-I Wolfgang Wanek, University of Vienna, Austria).
- 2012 **NERC Life Sciences Mass Spectrometry Steering Committee Grant** analytical costs “Primary succession and ecosystem nitrogen retention in glacier forelands” - £14.000 - **PI**
- 2012 **British Ecological Society Early Career Project Grant** “Primary succession and ecosystem nitrogen retention in glacier forelands” - £19.640, 18 months - **PI**

Peer-reviewed publications

Total citations 13,343, h-index 45

Papers submitted:

77 Gao, C., S. E. Hannula; P. M. van Bodegom, T. M. Bezemer, **F. T. de Vries**, J. Hassink, M. H. in 't Zandt, G. Y. K. Moinet (2024) Land use intensity differently affects soil microbial functional communities in arable fields.

76 Van Loon, A.F., S. Kchouk, A. Matanó, F. Tootoonchi, C. Alvarez-Garretón, K.E.A. Hassaballah, M. Wu, M.L.K. Wens, A. Shyrokaya, E. Ridolfi, R. Biella, V. Nagavciuc, M.H. Barendrecht, A. Bastos, L. Cavalcante, **F.T. de Vries**, M. Garcia, J. Mård, I.N. Streefkerk, C. Teutschbein, R. Tootoonchi, R. Weesie, V. Aich, J.P. Boisier, G. Di Baldassarre, Y. Du, M. Galleguillos, R. Garreaud, M. Ionita, S. Khatami, J.K.L. Koehler, C.H. Luce, S. Maskey, H.D. Mendoza, M.N. Mwangi, I.G. Pechlivanidis, G.G. Ribeiro Neto, T. Roy, R. Stefanski, P. Trambauer, E.A. Koebele, G. Vico, M. Werner. (2024) Drought as a continuum: memory effects in interlinked hydrological, ecological, and social systems.

75 Veresoglou, S., R. D. Bardgett, A. Broadbent, M. Chomel, I. Cordero, L. Gruenfeld, M. Mola, B. Thornton, **F. T. de Vries**, D. Wang, D. Johnson (2024) A new phospholipid lipid fatty acid derived indicator predicts net primary productivity across ecosystems.

74 Knight, C. G., O. Nicolitch, R. I. Griffiths, T. Goodall, B. Jones, C. Weser, J. Davison, A. Dellavalle, N. Eisenhauer, K. Gongalsky, A. Hector, E. Jardine, P. Kardol, F. Maestre, M. Schädler, M. Semchenko, C. Stevens, M. Tsiapouli, O. Vilhelmsson, W. Wanek and **F. T. de Vries** (2024) Soil microbiomes show consistent and predictable responses to extreme events across climates.

Papers accepted/published:

73 Gao, C., T.M. Bezemer, **F.T. de Vries**, P.M. van Bodegom (2024) Trade-offs in soil microbial functions and soil health in agroecosystems. *Trends in Ecology and Evolution*, accepted.

72 Gliesch, M., L. Hinojosa, E. Jongepier, C. Martin, Y. Hu, E. Enderle, A. Tietema and **F. T. De Vries** (2024). Heathland management affects soil response to drought. *Journal of Applied Ecology* 61:1372-1384.

71 He, X., D. Wang, Y. Jiang, M. Li, M. Delgado-Baquerizo, C. McLaughlin, C. Marcon, L. Guo, M. Baer, Y. A. T. Moya, N. von Wirén, M. Deichmann, G. Schaaf, H.-P. Piepho, Z. Yang, J. Yang, B. Yim, K. Smalla, S. Goormachtig, **F. T. de Vries**, H. Hüging, R. J. H. Sawers, J. C. Reif, F. Hochholdinger, X. Chen, P. Yu. (2024). Heritable microbiome variation is correlated with source environment in locally adapted maize varieties. *Nature Plants* 10:598-617.

70 Neyret, M., G. Le Provost, A. L. Boesing, F. D. Schneider, D. Baulechner, J. Bergmann, **F. T. de Vries**, A. M. Fiore-Donno, S. Geisen, K. Goldmann, A. Merges, R. A. Saifutdinov, N. K. Simons, J. A. Tobias, A. S. Zaitsev, M. M. Gossner, K. Jung, E. Kandeler, J. Krauss, C. Penone, M. Schlöter, S. Schulz, M. Staab, V. Wolters, A. Apostolakis, K. Birkhofer, S. Boch, R. S. Boeddinghaus, R. Bolliger, M. Bonkowski, F. Buscot, K. Dumack, M. Fischer, H. Y. Gan, J. Heinze, N. Hölzel, K. John, V. H. Klaus, T. Kleinebecker, S. Marhan, J. Müller, S. C. Renner, M. C. Rillig, N. V. Schenk, I. Schöning, M. Schrupf, S. Seibold, S. A. Socher, E. F. Solly, M. Teuscher, M. van Kleunen, T. Wubet and P. Manning (2024). A slow-fast trait continuum at the whole community level in relation to land-use intensification. *Nature Communications* 15: 1251.

69 Lavalley, J. M., M. Chomel, N. Alvarez Segura, F. de Castro, T. Goodall, M. Magilton, J. M. Rhymes, M. Delgado-Baquerizo, R. I. Griffiths, E. M. Baggs, T. Caruso, **F. T. de Vries**, M. Emmerson, D. Johnson and R. D. Bardgett (2024). Land management shapes drought responses of dominant soil microbial taxa across grasslands. *Nature Communications* 15: 29.

- 68 Fry, E. L., D. Ashworth, K. A. J. Allen, N. I. Chardon, C. Rixen, M. P. Björkman, R. G. Björk, T. Stålhandske, M. Molau, B. Locke-King, I. Cantillon, C. McDonald, H. Liu, **F. T. De Vries**, N. J. Ostle, B. K. Singh and R. D. Bardgett (2023). Vegetation type, not the legacy of warming, modifies the response of microbial functional genes and greenhouse gas fluxes to drought in Oro-Arctic and alpine regions. *FEMS Microbiology Ecology* 99(12).
- 67 Li, P., L. Tedersoo, T. W. Crowther, A. J. Dumbrell, F. Dini-Andreote, M. Bahram, L. Kuang, T. Li, M. Wu, Y. Jiang, Y., L. Luan, M. Saleem, **F. T. de Vries**, Z. Li, B. Wang, & J. Jiang (2023) Fossil-fuel-dependent scenarios could lead to a significant decline of global plant-beneficial bacteria abundance in soils by 2100. *Nature Food* 4:996-1006.
- 66 Heredia-Acuña, C., M. Semchenko, **F. T. de Vries** (2023) Plant diversity and living roots suppress root litter decomposition. *Journal of Ecology* 111: 2519-2531.
- 65 **De Vries, F. T.**, J. Lau, C. Hawkes, M. Semchenko (2023) Plant-soil feedback under drought: history shapes the future. *Trends in Ecology and Evolution* 38: 708-718.
- 64 Rodríguez, A., **F. T. de Vries**, P. Manning, M. T. Sebastià and R. D. Bardgett (2022) Soil abiotic properties shape plant functional diversity across temperate grassland plant communities. *Ecosystems* 26: 1000-1017.
- 63 Chomel, M., J. M. Lavalée, N. Alvarez-Segura, E. M. Baggs, T. Caruso, F. de Castro, M. C. Emmerson, M. Magilton, J. M. Rhymes, **F. T. de Vries**, D. Johnson and R. D. Bardgett (2022) Intensive management disrupts belowground multi-trophic resources transfers in response to drought. *Nature Communications* 13:6991.
- 62 Eisenhauer, N., S. F. Bender, I. Calderón-Sanou, **F. T. de Vries**, J. J. Lembrechts, W. Thuiller, D. H. Wall, R. Zeiss, M. Bahram, R. Beugnon, V. J. Burton, T. W. Crowther, M. Delgado-Baquerizo, S. Geisen, P. Kardol, V. Krashevskaya, C. A. Martínez-Muñoz, G. Patoine, J. Seeber, N. A. Soudzilovskaia, M. Steinwandter, M. Sünemann, X. Sun, M. G. A. van der Heijden, C. A. Guerra and A. Potapov (2022) Frontiers in soil ecology - insights from the World Biodiversity Forum 2022. *Journal of Sustainable Agriculture and Environment* 1:245-261.
- 61 Yu, K., J. van den Hoogen, Z. Wang, C. Averill, D. Routh, G. R. Smith, R. E. Drenovsky, K. M. Scow, F. Mo, M. P. Waldrop, Y. Yang, W. Tang, **F. T. De Vries**, R. D. Bardgett, P. Manning, F. Bastida, S. G. Baer, E. M. Bach, C. García, Q. Wang, L. Ma, B. Chen, X. He, S. Teurlincx, A. Heijboer, J. A. Bradley and T. W. Crowther (2022) The biogeography of soil fungal and bacterial biomass is tied to the efficiency of decomposition at global scale. *Earth System Science Data* 14:4339-4350.
- 60 Wu, M., S. Manzoni, G. Vico, A. Bastos, **F. T. de Vries** and G. Messori (2022) Drought-legacy in sub-seasonal vegetation state and sensitivity to climate over the Northern Hemisphere. *Geophysical Research Letters* 49:e2022GL098700.
- 59 Olf, H., R. Aerts, R. Bobbink, J. H. C. Cornelissen, J. W. Erisman, J. N. Galloway, C. J. Stevens, M. A. Sutton, **F. T. de Vries**, G. W. W. Wamelink and D. A. Wardle (2022) Explanations for nitrogen decline. *Science* 367:1169-1170.
- 58 Semchenko, M., K. E. Barry, **F. T. de Vries**, L. Mommer, M. Moora and J. G. Maciá-Vicente (2022) Deciphering the role of specialist and generalist plant-microbial interactions as drivers of plant-soil feedback. *New Phytologist* 234:1929-1944.
- 57 Williams, A., H. Langridge, A. L. Straathof, H. Muhamadali, K. A. Hollywood, R. Goodacre and **F. T. de Vries** (2022) Root functional traits explain root exudation rate and composition across a range of grassland species. *Journal of Ecology* 110:21-33.
- 56 de Castro, F., S. M. Adl, S. Allesina, R. D. Bardgett, T. Bolger, J. J. Dalzell, M. Emmerson, T. Fleming, D. Garlaschelli, J. Grilli, S. E. Hannula, **F. T. de Vries**, Z. Lindo, A. G. Maule, M. Öpik, M. C. Rillig, S. D. Veresoglou, D. H. Wall and T. Caruso (2021) Local stability properties of complex, species-rich soil food webs with functional block structure. *Ecology and Evolution* 11:16070-16081.

55 **De Vries, F. T.**, C. Thion, M. Bahn, B. Bergk Pinto, S. Cécillon, B. Frey, H. Grant, G. W. Nicol, W. Wanek, J. I. Prosser and R. D. Bardgett (2021) Glacier forelands reveal fundamental plant and microbial controls on short-term ecosystem nitrogen retention. *Journal of Ecology* 109:3710–3723.

54 Williams, A., H. Langridge, A. L. Straathof, G. Fox, H. Muhammadali, K. A. Hollywood, Y. Xu, R. Goodacre and **F. T. de Vries** (2021) Comparing root exudate collection techniques: An improved hybrid method. *Soil Biology & Biochemistry* 161:108391.

53 Rhymes, J. M., I. Cordero, M. Chomel, J. M. Lavalley, A. L. Straathof, D. Ashworth, H. Langridge, M. Semchenko, **F. T. de Vries**, D. Johnson and R. D. Bardgett (2021) Are researchers following best storage practices for measuring soil biochemical properties? *SOIL* 7:95-106.

52 Phillips, H. R. P., E. M. Bach, M. L. C. Bartz, J. M. Bennett, R. Beugnon, M. J. I. Briones, G. G. Brown, O. Ferlian, K. B. Gongalsky, C. A. Guerra, B. König-Ries, J. J. Krebs, A. Orgjazzi, K. S. Ramirez, D. J. Russell, B. Schwarz, D. H. Wall, U. Brose, T. Decaëns, P. Lavelle, M. Loreau, J. Mathieu, C. Mulder, W. H. van der Putten, M. C. Rillig, M. P. Thakur, **F. T. de Vries**, D. A. Wardle, C. Ammer, S. Ammer, M. Arai, F. O. Ayuke, G. H. Baker, D. Baretta, D. Barkusky, R. Beauséjour, J. C. Bedano, K. Birkhofer, E. Blanchart, B. Blossey, T. Bolger, R. L. Bradley, M. Brossard, J. C. Burtis, Y. Capowiez, T. R. Cavagnaro, A. Choi, J. Clause, D. Cluzeau, A. Coors, F. V. Crotty, J. M. Crumsey, A. Dávalos, D. J. D. Cosín, A. M. Dobson, A. Domínguez, A. E. Duhour, N. van Eekeren, C. Emmerling, L. B. Falco, R. Fernández, S. J. Fonte, C. Fragoso, A. L. C. Franco, A. Fusilero, A. P. Geraskina, S. Gholami, G. González, M. J. Gundale, M. G. López, B. K. Hackenberger, D. K. Hackenberger, L. M. Hernández, J. R. Hirth, T. Hishi, A. R. Holdsworth, M. Holmstrup, K. N. Hopfensperger, E. H. Lwanga, V. Huhta, T. T. Hurisso, B. V. Iannone, M. Iordache, U. Irmiler, M. Ivask, J. B. Jesús, J. L. Johnson-Maynard, M. Joschko, N. Kaneko, R. Kanianska, A. M. Keith, M. L. Kernecker, A. W. Koné, Y. Kooch, S. T. Kukkonen, H. Lalthanzara, D. R. Lammel, I. M. Lebedev, E. Le Cadre, N. K. Lincoln, D. López-Hernández, S. R. Loss, R. Marichal, R. Matula, Y. Minamiya, J. H. Moos, G. Moreno, A. Morón-Ríos, H. Motohiro, B. Muys, J. Neiryck, L. Norgrove, M. Novo, V. Nuutinen, V. Nuzzo, P. Mujeeb Rahman, J. Pansu, S. Paudel, G. Pérès, L. Pérez-Camacho, J.-F. Ponge, J. Prietzel, I. B. Rapoport, M. I. Rashid, S. Rebollo, M. Á. Rodríguez, A. M. Roth, G. X. Rousseau, A. Rozen, E. Sayad, L. van Schaik, B. Scharenbroch, M. Schirrmann, O. Schmidt, B. Schröder, J. Seeber, M. P. Shashkov, J. Singh, S. M. Smith, M. Steinwandter, K. Szlavecz, J. A. Talavera, D. Trigo, J. Tsukamoto, S. Uribe-López, A. W. de Valença, I. Virto, A. A. Wackett, M. W. Warren, E. R. Webster, N. H. Wehr, J. K. Whalen, M. B. Wironen, V. Wolters, P. Wu, I. V. Zenkova, W. Zhang, E. K. Cameron and N. Eisenhauer (2021). Global data on earthworm abundance, biomass, diversity and corresponding environmental properties. *Scientific Data* 8(1): 136

51 Guerra, C. A., R. D. Bardgett, L. Caon, T. W. Crowther, M. Delgado-Baquerizo, L. Montanarella, L. M. Navarro, A. Orgjazzi, B. K. Singh, L. Tedersoo, R. Vargas-Rojas, M. J. I. Briones, F. Buscot, E. K. Cameron, S. Cesarz, A. Chatzinotas, D. A. Cowan, I. Djukic, J. van den Hoogen, A. Lehmann, F. T. Maestre, C. Marín, T. Reitz, M. C. Rillig, L. C. Smith, **F. T. de Vries**, A. Weigelt, D. H. Wall and N. Eisenhauer (2021) Tracking, targeting, and conserving soil biodiversity. *Science* 371(6526): 239-241.

50 Gongalsky, K. B., A. S. Zaitsev, D. I. Korobushkin, R. A. Saifutdinov, K. O. Butenko, **F. T. de Vries**, K. Ekschmitt, M. I. Degtyarev, A. Y. Gorbunova, N. V. Kostina, A. A. Rakhleeva, S. V. Shakhb, T. E. Yazrikova, V. Wolters and R. D. Bardgett (2020) Forest fire induces short-term shifts in soil food webs with consequences for carbon cycling. *Ecology Letters* 24:438-450.

49 Sweeney, C. J., **F. T. de Vries**, B. E. van Dongen and R. D. Bardgett (2020) Root traits explain rhizosphere fungal community composition among temperate grassland plant species. *New Phytologist* 229:1492-1507.

48 Shakir, S., S. S.-e.-A. Zaidi, **F. T. de Vries** and S. Mansoor (2020) Plant genetic networks shaping phyllosphere microbial community. *Trends in Genetics* 37:306-316.

47 Hines, J., and **F. T. de Vries** (2020) Dirt is not dead: Land use and living soil. *Frontiers for Young Minds* 8:549486.

46 Guerrero-Ramírez, N. R., L. Mommer, G. T. Freschet, C. M. Iversen, M. L. McCormack, J. Kattge, H. Poorter, F. van der Plas, J. Bergmann, T. W. Kuyper, L. M. York, H. Bruelheide, D. C. Laughlin, I. C. Meier, C. Roumet, M. Semchenko, C. J. Sweeney, J. van Ruijven, O. J. Valverde-Barrantes, I. Aubin, J. A. Catford, P. Manning, A. Martin, R. Milla, V. Minden, J. G. Pausas, S. W. Smith, N. A. Soudzilovskaia, C. Ammer, B. Butterfield, J. Craine, J. H. C. Cornelissen, **F. T. de Vries**, M. E. Isaac, K. Kramer, C. König, E. G. Lamb, V. G.

Onipchenko, J. Peñuelas, P. B. Reich, M. C. Rillig, L. Sack, B. Shipley, L. Tedersoo, F. Valladares, P. van Bodegom, P. Weigelt, J. P. Wright and A. Weigelt (2020) Global Root Traits (GRooT) Database. *Global Ecology and Biogeography* 30:25-37.

45 De Vries, F. T., R. I. Griffiths, C. G. Knight, O. Nicolitch and A. Williams (2020) Harnessing rhizosphere microbiomes for drought resilient crop production. *Science* 368:270-274.

44 Thomas, H. J. D., A. D. Bjorkman, I. H. Myers-Smith, S. C. Elmendorf, J. Kattge, S. Diaz, M. Vellend, D. Blok, J. H. C. Cornelissen, B. C. Forbes, G. H. R. Henry, R. D. Hollister, S. Normand, J. S. Prevéy, C. Rixen, G. Schaeppman-Strub, M. Wilking, S. Wipf, W. K. Cornwell, P. S. A. Beck, D. Georges, S. J. Goetz, K. C. Guay, N. Rüger, N. A. Soudzilovskaia, M. J. Spasojevic, J. M. Alatalo, H. D. Alexander, A. Anadon-Rosell, S. Angers-Blondin, M. te Beest, L. T. Berner, R. G. Björk, A. Buchwal, A. Buras, M. Carbognani, K. S. Christie, L. S. Collier, E. J. Cooper, B. Elberling, A. Eskelinen, E. R. Frei, O. Grau, P. Grogan, M. Hallinger, M. M. P. D. Heijmans, L. Hermanutz, J. M. G. Hudson, J. F. Johnstone, K. Hülber, M. Iturrate-Garcia, C. M. Iversen, F. Jaroszynska, E. Kaarlejarvi, A. Kulonen, L. J. Lamarque, T. C. Lantz, E. Lévesque, C. J. Little, A. Michelsen, A. Milbau, J. Nabe-Nielsen, S. S. Nielsen, J. M. Ninot, S. F. Oberbauer, J. Olofsson, V. G. Onipchenko, A. Petraglia, S. B. Rumpf, R. Shetti, J. D. M. Speed, K. N. Suding, K. D. Tape, M. Tomaselli, A. J. Trant, U. A. Treier, M. Tremblay, S. E. Venn, T. Vowles, S. Weijers, P. A. Wookey, T. J. Zamin, M. Bahn, B. Blonder, P. M. van Bodegom, B. Bond-Lamberty, G. Campetella, B. E. L. Cerabolini, F. S. Chapin, J. M. Craine, M. Dainese, W. A. Green, S. Jansen, M. Kleyer, P. Manning, Ü. Niinemets, Y. Onoda, W. A. Ozinga, J. Peñuelas, P. Poschlod, P. B. Reich, B. Sandel, B. S. Schamp, S. N. Sheremetiev and **F. T. de Vries** (2020) Global plant trait relationships extend to the climatic extremes of the tundra biome. *Nature Communications* 11:1-12.

43 Thakur, M. P., H. R. P. Phillips, U. Brose, **F. T. De Vries**, P. Lavelle, M. Loreau, J. Mathieu, C. Mulder, W. H. Van der Putten, M. C. Rillig, D. A. Wardle, E. M. Bach, M. L. C. Bartz, J. M. Bennett, M. J. I. Briones, G. Brown, T. Decaëns, N. Eisenhauer, O. Ferlian, C. A. Guerra, B. König-Ries, A. Orgiazzi, K. S. Ramirez, D. J. Russell, M. Rutgers, D. H. Wall and E. K. Cameron (2019) Towards an integrative understanding of soil biodiversity. *Biological Reviews* 95:350-364.

42 Williams, A. and **F.T. de Vries** (2019) Plant root exudation under drought: implications for ecosystem functioning. *New Phytologist* 225:1899-1905.

41 Phillips, H. R. P., C. A. Guerra, M. L. C. Bartz, M. J. I. Briones, G. Brown, T. W. Crowther, O. Ferlian, K. B. Gongalsky, J. van den Hoogen, J. Krebs, A. Orgiazzi, D. Routh, B. Schwarz, E. M. Bach, J. M. Bennett, U. Brose, T. Decaëns, B. König-Ries, M. Loreau, J. Mathieu, C. Mulder, W. H. van der Putten, K. S. Ramirez, M. C. Rillig, D. Russell, M. Rutgers, M. P. Thakur, **F. T. de Vries**, D. H. Wall, D. A. Wardle, M. Arai, F. O. Ayuke, G. H. Baker, R. Beauséjour, J. C. Bedano, K. Birkhofer, E. Blanchart, B. Blossey, T. Bolger, R. L. Bradley, M. A. Callahan, Y. Capowiez, M. E. Caulfield, A. Choi, F. V. Crotty, J. M. Crumsey, A. Dávalos, D. J. Diaz Cosin, A. Dominguez, A. E. Duhour, N. van Eekeren, C. Emmerling, L. B. Falco, R. Fernández, S. J. Fonte, C. Fragoso, A. L. C. Franco, M. Fugère, A. T. Fusilero, S. Gholami, M. J. Gundale, M. G. López, D. K. Hackenberger, L. M. Hernández, T. Hishi, A. R. Holdsworth, M. Holmstrup, K. N. Hopfensperger, E. H. Lwanga, V. Huhta, T. T. Hurisso, B. V. Iannone, M. Iordache, M. Joschko, N. Kaneko, R. Kanianska, A. M. Keith, C. A. Kelly, M. L. Kernecker, J. Klaminder, A. W. Koné, Y. Kooch, S. T. Kukkonen, H. Lalthanzara, D. R. Lammel, I. M. Lebedev, Y. Li, J. B. Jesus Lidon, N. K. Lincoln, S. R. Loss, R. Marichal, R. Matula, J. H. Moos, G. Moreno, A. Morón-Ríos, B. Muys, J. Neiryck, L. Norgrove, M. Novo, V. Nuutinen, V. Nuzzo, n. null, J. Pansu, S. Paudel, G. Pérès, L. Pérez-Camacho, R. Piñeiro, J.-F. Ponge, M. I. Rashid, S. Rebollo, J. Rodeiro-Iglesias, M. Á. Rodríguez, A. M. Roth, G. X. Rousseau, A. Rozen, E. Sayad, L. van Schaik, B. C. Scharenbroch, M. Schirrmann, O. Schmidt, B. Schröder, J. Seeber, M. P. Shashkov, J. Singh, S. M. Smith, M. Steinwandter, J. A. Talavera, D. Trigo, J. Tsukamoto, A. W. de Valença, S. J. Vanek, I. Virto, A. A. Wackett, M. W. Warren, N. H. Wehr, J. K. Whalen, M. B. Wironen, V. Wolters, I. V. Zenkova, W. Zhang, E. K. Cameron and N. Eisenhauer (2019) Global distribution of earthworm diversity. *Science* 366: 480-485.

40 Veen, G. F., E. R. J. Wubs, R. D. Bardgett, E. Barrios, M. A. Bradford, S. Carvalho, G. B. De Deyn, **F. T. de Vries**, K. E. Giller, D. Kleijn, D. A. Landis, W. A. H. Rossing, M. Schrama, J. Six, P. C. Struik, S. van Gils, J. S. C. Wiskerke, W. H. van der Putten and L. E. M. Vet (2019) Applying the aboveground-belowground interaction concept in agriculture: spatio-temporal scales matter. *Frontiers in Ecology and Evolution* 7:300.

39 De Vries, F.T., A. Williams, F. Stringer, R. Willcocks, R. McEwing, H. Langridge, A.L. Straathof (2019) Changes in root-exudate-induced respiration reveal a novel mechanism through which drought affects ecosystem carbon cycling. *New Phytologist* 224:132-145.

38 Chomel, M., J.M. Lavalley, N. Alvarez-Segura, F. de Castro, J.M. Rhymes, T. Caruso, **F.T. de Vries**, E.M. Baggs, M.C. Emmerson, R.D. Bardgett, D. Jonhson (2019) Drought decreases incorporation of recent photosynthate into soil food webs regardless of their trophic complexity. *Global Change Biology* 25:3549-3561.

37 Thomas, H., Myers-Smith, I., Bjorkman, A., Elmendorf, S., Blok, D., Cornelissen, J., Forbes, B., Hollister, R., Normand, S., Prevey, J., Rixen, C., Schaepman-Strub, G., Wilmking, M., Wipf, S., Cornwell, W. K., Kattge, J., Goetz, S., Guay, K., Alatalo, J., Anadon Rosell, A., Angers-Blondin, S., Berner, L., Björk, R., Buchwal, A., Buras, A., Carbognani, M., Christie, K., Collier, L., Cooper, E., Eskelinen, A., Frei, E., Grau, O., Grogan, P., Hallinger, M., Heijmans, M., Hermanutz, L., Hudson, J., Hülber, K., Iturrate-Garcia, M., Iversen, C., Jaroszynska, F., Johnstone, J., Kaarlejarvi, E., Kulonen, A., Lamarque, L., Levesque, E., Little, C., Michelsen, A., Milbau, A., Nabe-Nielsen, J., Nielsen, S., Ninot Sugrañes, J.M., Oberbauer, S., Olofsson, J., Onipchenko, V., Petraglia, A., Rumpf, S., Semenchuk, P., Soudzilovskaia, N., Spasojevic, M., Speed, J., Tape, K., Te Beest, M., Tomaselli, M., Trant, A., Treier, U., Venn, S., Vowles, T., Weijers, S., Zamin, T., Atkin, O., Bahn, M., Blonder, B., Campetella, G., Cerabolini, B., Chapin, F., Dainese, M., **De Vries, F.T.**, Diaz, S., Green, W., Jackson, R., Manning, P., Niinemets, Ü., Ozinga, W., Penuelas, J., Reich, P., Schamp, B., Sheremetev, S., and Van Bodegom, P. (2019) Traditional plant functional groups explain variation in economic but not size-related traits across the tundra biome. *Global Ecology and Biogeography* 28:78-95.

36 Bjorkman, A.D., Myers-Smith, I.H., Elmendorf, S.C., Normand, S., Rüger, N., Beck, P.S.A., Blach-Overgård, A., Blok, D., Cornelissen, J.H.C., Forbes, B.C., Georges, D., Goetz, S.J., Guay, K.C., Henry, G.H.R., HilleRisLambers, J., Hollister, R.D., Karger, D.N., Kattge, J., Manning, P., Prevéy, J.S., Rixen, C., Schaepman-Strub, G., Thomas, H.J.D., Vellend, M., Wilmking, M., Wipf, S., Carbognani, M., Hermanutz, L., Lévesque, E., Molau, U., Petraglia, A., Soudzilovskaia, N.A., Spasojevic, M.J., Tomaselli, M., Vowles, T., Alatalo, J.M., Alexander, H.D., Anadon-Rosell, A., Angers-Blondin, S., Te Beest, M., Berner, L., Björk, R.G., Buchwal, A., Buras, A., Christie, K., Cooper, E.J., Dullinger, S., Elberling, B., Eskelinen, A., Frei, E.R., Grau, O., Grogan, P., Hallinger, M., Harper, K.A., Heijmans, M.M.P.D., Hudson, J., Hülber, K., Iturrate-Garcia, M., Iversen, Colleen M., Jaroszynska, F., Johnstone, J.F., Jørgensen, R.H., Kaarlejärvi, E., Klady, R., Kuleza, S., Kulonen, A., Lamarque, L.J., Lantz, T., Little, C.J., Speed, J.D.M., Michelsen, A., Milbau, A., Nabe-Nielsen, J., Nielsen, S., Schøler, Ninot, J.M., Oberbauer, S.F., Olofsson, J., Onipchenko, V.G., Rumpf, S.B., Semenchuk, P., Shetti, R., Collier, L. Siegwart, Street, L.E., Suding, K.N., Tape, K.D., Trant, A., Treier, U.A., Tremblay, J.-P., Tremblay, M., Venn, S., Weijers, S., Zamin, T., Boulanger-Lapointe, N., Gould, W.A., Hik, D.S., Hofgaard, A., Jónsdóttir, I.S., Jorgenson, J., Klein, J., Magnusson, B., Tweedie, C., Wookey, P.A., Bahn, M., Blonder, B., van Bodegom, P.M., Bond-Lamberty, B., Campetella, G., Cerabolini, B.E.L., Chapin, F.S., Cornwell, W.K., Craine, J., Dainese, M., **De Vries, F.T.**, Díaz, S., Enquist, B.J., Green, W., Milla, R., Niinemets, Ü., Onoda, Y., Ordoñez, J.C., Ozinga, W.A., Penuelas, J., Poorter, H., Poschlod, P. Reich, P.B., Sandel, B., Schamp, B., Sheremetev, S., Weiher, E. (2018) Plant functional trait change across a warming tundra biome. *Nature* 562:57-62.

35 Caruso, T., **F.T. de Vries**, R.D. Bardgett, J. Lehmann (2018) Soil organic carbon dynamics matching ecological equilibrium theory. *Ecology and Evolution* 8:11169-11178.

34 **De Vries, F.T.**, R.I. Griffiths, M. Bailey, H. Craig, M. Girlanda, H.S. Gweon, S. Hallin, A. Kaisermann, A. Keith, M. Kretschmar, P. Lemanceau, E. Lumini, K. Mason, A. Oliver, N. Ostle, J. Prosser, C. Thion, B. Thomson, and R.D. Bardgett (2018) Soil bacterial networks are less stable under drought than fungal networks. *Nature Communications* 9:3033.

33 Delgado-Baquerizo, M., E.L. Fry, D.J. Eldridge, **F.T. de Vries**, P. Manning, K. Hamonts, J. Kattge, G. Boenisch, B.K. Singh, R.D. Bardgett (2018) Plant attributes explain the distribution of soil microbial communities in two contrasting regions of the globe. *New Phytologist* 219:574-587.

32 Butler, E.E., A. Datta, H. Flores-Moreno, M. Chen, K.R. Wythers, F. Fazayeli, A. Banerjee O.K. Atkin, J. Kattge, B. Amiaud, B. Blonder, G. Boenisch, B. Bond-Lamberty, K.A. Brown, C. Byun, G. Campetella, B.E.L. Cerabolini, J.H.C. Cornelissen, J.M. Craine, D. Craven, **F.T. de Vries**, S. Diaz, T. Domingues, E. Forey, A. Gonzalez, N. Gross, W. Han, W.N. Hattingh, T. Hickler, S. Jansen, K. Kramer, N.J.B. Kraft, H. Kurokawa, D.C. Laughlin, P. Meir, V. Minden, Ü. Niinemets, Y. Onoda, J. Peñuelas, Q. Read, F. Valladares Ros, L. Sack, B. Schamp, N.A. Soudzilovskaia, M.J. Spasojevic, E. Sosinski, P. Thornton, P.M. van Bodegom, M. Williams, C. Wirth, and P.B. Reich. (2017) Mapping local and global variability in plant trait distributions. *Proceedings of the National Academy of Sciences* 114(51):E10937-E10946

31 Ramirez, K.S., C.G. Knight, M. de Hollander, F.Q. Brearley, B. Constantinides, T.E.A. Cotton, S. Creer, T.W. Crowther, J. Davison, M. Delgado-Baquerizo, E. Dorrepaal, D.R. Elliott, G. Fox, R.I. Griffiths, C. Hale, K.

Hartman, A. Houlden, D.L. Jones, E.J. Krab, F.T. Maestre, K.L. McGuire, S. Monteux, C.H. Orr, W.H. van der Putten, I.S. Roberts, D.A. Robinson, J. Rocca, J. Rowntree, K. Schlaeppli, M. Shepherd, B.K. Singh, A.L. Straathof, J.M. Talbot, C. Thion, M. van der Heijden, and **F.T. de Vries** (2018) Detecting macroecological patterns in bacterial communities across independent studies of global soils. *Nature Microbiology* 3:189-196.

30 Kaisermann, A., **F.T. de Vries**, R.I. Griffiths, and R.D. Bardgett (2017) Legacy effects of drought on plant-soil feedbacks and plant-plant interactions. *New Phytologist* 215:1413-1424.

29 **De Vries, F.T.** and M.D. Wallenstein (2017) Below-ground connections underlying above-ground food production: a framework for optimising ecological connections in the rhizosphere. *Journal of Ecology* 105:913-920.

28 Key, G., M.G. Whitfield, J. Cooper, **F.T. de Vries**, M. Collison, T. Dedousis, R. Heathcote, B. Roth, S. Mohammed, A. Molyneux, W.H. van der Putten, L.V. Dicks, W.J. Sutherland, R.D. Bardgett (2016) Knowledge needs, available actions and future challenges in agricultural soils. *SOIL* 2:511-521.

27 **De Vries, F.T.** and T. Caruso (2016) Eating from the same plate? Revisiting the role of labile carbon inputs in the soil food web. *Soil Biology & Biochemistry* 102:4-9. F1000 recommended: <https://f1000.com/prime/726925296>

26 **De Vries, F. T.**, C. Brown, and C.J. Stevens (2016) Grassland species root response to drought: consequences for soil carbon and nitrogen availability. *Plant and Soil* 409:297-312.

25 Thion, C., J. Poirel, T. Cornulier, **F.T. De Vries**, R.D. Bardgett, and J.I. Prosser (2016) Plant nitrogen-use strategy as a driver of rhizosphere archaeal and bacterial ammonia oxidiser abundance. *FEMS Microbiology Ecology* 92(7) fiw091.

24 Griffiths, B.S., J. Römbke, R. Schmelz, A. Scheffczyk, J. Faber, J. Bloem, G. Pérès, D. Cluzeau, A. Chabbi, M. Suhadolc, P. Sousa, P. Martins da Silva, F. Carvalho, S. Mendes, P. Morais, R. Francisco, C. Pereira, M. Bonkowski, S. Geisen, R. Bardgett, **F.T. de Vries**, T. Bolger, T. Dirilgen, O. Schmidt, A. Winding, N. Hendriksen, A. Johansen, L. Philippot, P. Plassart, D. Bru, B. Thompson, R. Griffiths, A. Keith, M. Rutgers, C. Mulder, E. Hannula, R. Creamer, D. Stone (2016) Selecting cost effective and policy-relevant biological indicators for European monitoring of soil biodiversity and ecosystem function. *Ecological Indicators* 69:213-223.

23 **De Vries, F.T.** and R.D. Bardgett (2016) Plant community controls on short-term ecosystem nitrogen retention. *New Phytologist* 210:861-874. Nature Plants Research Highlight: <http://www.nature.com/articles/nplants20167>

22 Ramirez, K.S., M. Döring, N. Eisenhauer, C. Gardi, J. Ladau, J.W. Leff, G. Lentendu, Z. Lindo, M.C. Rillig, D. Russell, S. Scheu, M.G. St. John, **F.T. de Vries**, T. Wubet, W.H. van der Putten, and D.H. Wall (2015) Towards a global platform for linking soil biodiversity data. *Frontiers in Ecology and Evolution* 3:91.

21 Manning, P., **F.T. de Vries**, J.R.B. Tallwin, R. Smith, S.R. Mortimer, E.S. Pilgrim, K.A. Harrison, D.G. Wright, H. Quirk, J. Benson, B. Shipley, J.H.C. Cornelissen, J. Kattge, G. Bönisch, C. Wirth, R.D. Bardgett (2015) Simple measures of climate, soil properties and plant traits predict national-scale grassland soil carbon stocks. *Journal of Applied Ecology* 52(5):1188-1196.

20 **De Vries, F.T.**, H. Bracht Jørgensen, K. Hedlund, and R.D. Bardgett (2015) Disentangling plant and soil microbial controls on carbon and nitrogen loss in grassland mesocosms. *Journal of Ecology* 103(3):629-640.

19 Tsiafouli, M., E. Thébault, S. Sgardelis, P. de Ruiter, W.H. van der Putten, K. Birkhofer, L. Hemerik, **F.T. de Vries**, R. Bardgett, M. Brady, L. Bjørnlund, H. Jørgensen, S. Christensen, T. D'Hertefeldt, S. Hotes, W.H.G. Hol, J. Frouz, M. Liiri, S. Mortimer, H. Setälä, J. Tzanopoulos, K. Uteseny, Karoline, V. Pižl, J. Stary, V. Wolters, K. Hedlund (2015) Intensive agriculture reduces soil biodiversity across Europe. *Global Change Biology* 21:973-985. Highly Cited Paper on Web of Science (top 1% of its academic field)

18 Bardgett, R.D., L. Mommer, and **F.T. de Vries** (2014) Going underground: root traits as drivers of ecosystem processes. *Trends in Ecology and Evolution* 29:692-699.

17 Setälä, H., R. D. Bardgett, K. Birkhofer, M. Brady, L. Byrne, P. C. de Ruiter, **F.T. de Vries**, C. Gardi, K. Hedlund, L. Hemerik, S. Hotes, M. Liiri, S. R. Mortimer, M. Pavao-Zuckerman, R. Pouyat, M. Tsiafouli, W.H. van der Putten (2014) Urban and agricultural soils: conflicts and trade-offs in the optimization of ecosystem services. *Urban Ecosystems* 17:239-253.

16 **De Vries, F.T.** and A. Shade (2013) Controls on soil microbial community stability under climate change. *Frontiers in Microbiology* 4:265.

15 **De Vries, F.T.**, E. Thébault, M. Liiri, K. Birkhofer, M.A. Tsiafouli, L. Bjørnlund, H. Bracht Jørgensen, M.V. Brady, S. Christensen, P.C. de Ruiter, T. d'Hertefeldt, J. Frouzk, K. Hedlund, L. Hemerik, W.H.G. Hol, S. Hotes, S.R. Mortimer, H. Setälä, S.P. Sgardelis, K. Uteseny, W.H. van der Putten, V. Wolters, and R.D. Bardgett (2013) Soil food web properties explain ecosystem services across European land use systems. *Proceedings of the National Academy of Sciences* 110:14296-14301. Highly Cited Paper on Web of Science (top 1% of its academic field); F1000 Recommended: <http://f1000.com/prime/718101722> ; Nature Research Highlight: http://www.nature.com/nature/journal/v500/n7463/full/500380c.html?WT.ec_id=NATURE-20130822

14 Bardgett, R.D., P. Manning, E. Morriën, and **F.T. de Vries** (2013) Hierarchical responses of plant-soil interactions to climate change: consequences for the global carbon cycle. *Journal of Ecology* 101:334-343.

13 **De Vries, F.T.**, J. Bloem, H. Quirk, C.J. Stevens, R. Bol, and R.D. Bardgett (2012) Extensive management promotes plant and microbial nitrogen retention in temperate grassland. *PLoS ONE* 7:e51201. F1000 Recommended: <http://f1000.com/prime/717968256>

12 **De Vries, F.T.**, P. Manning, J. Tallwin, S.R. Mortimer, E. Pilgrim, K. Harrison, P. Hobbs, H. Quirk, B. Shipley, H.J.C. Cornelissen, J. Kattge, and R.D. Bardgett (2012) Abiotic drivers and plant traits explain landscape-scale patterns in soil microbial communities. *Ecology Letters* 15:1230-1239.

11 **De Vries, F.T.** and R.D. Bardgett (2012) Plant-microbial linkages and ecosystem N retention: lessons for sustainable agriculture. *Frontiers in Ecology and the Environment* 10:425-432.

10 **De Vries, F.T.**, M. Liiri, L. Bjørnlund, H. Setälä, S. Christensen, and R.D. Bardgett (2012) Legacy effects of drought on plant growth and the soil food web. *Oecologia* 170:821-833.

9 Thiele-Bruhn, S., J. Bloem, **F.T. De Vries**, K. Kalbitz, C. Wagg (2012) Linking soil biodiversity and agricultural management. *Current Opinion in Environmental Sustainability* 4:523-528.

8 **De Vries, F.T.**, M. Liiri, L. Bjørnlund, M. Bowker, S. Christensen, H. Setälä, and R.D. Bardgett (2012) Land use alters the resistance and resilience of soil food webs to drought. *Nature Climate Change* 2:276-280. Nature Climate Change News and Views: http://www.nature.com/nclimate/journal/v2/n4/full/nclimate1392.html?WT.ec_id=NCLIMATE-201204

7 **De Vries, F.T.**, J.W. van Groenigen, E. Hoffland, and J. Bloem (2011) Nitrogen losses from two grassland soils with different fungal biomass. *Soil Biology & Biochemistry* 43:997-1005.

6 **De Vries, F.T.**, E. Bååth, T.W. Kuyper, and J. Bloem (2009) High turnover of fungal hyphae in incubation experiments. *FEMS Microbiology Ecology* 67:389-396.

5 Van Eekeren, N., D. van Liere, **F.T. de Vries**, M. Rutgers, R. de Goede, and L. Brussaard (2009) A mixture of grass and clover combines the positive effects of both plant species on selected soil biota. *Applied Soil Ecology* 42:254-263.

4 **De Vries, F.T.**, J. Bloem, N. van Eekeren, L. Brussaard, and E. Hoffland (2007) Fungal biomass in pastures increases with age and reduced N input. *Soil Biology & Biochemistry* 39:1620-1630.

3 Wijnhoven, S., R. Leuven, G. van der Velde, G. Jungheim, E.I. Koelemij, **F.T. de Vries**, H.P.J. Eijsackers, and A.J.M. Smits (2007) Heavy-metal concentrations in small mammals from a diffusely polluted floodplain: Importance of species- and location-specific characteristics. *Archives of Environmental Contamination and Toxicology* 52:603-613.

2 **De Vries, F.T.**, E. Hoffland, N. van Eekeren, L. Brussaard, and J. Bloem (2006) Fungal/bacterial ratios in grasslands with contrasting nitrogen management. *Soil Biology & Biochemistry* 38:2092-2103. Highly Cited Paper on Web of Science (top 1% of its academic field). The work presented in this article featured in the national Dutch A-level (VWO) biology exams in 2013.

1 Postma-Blaauw, M.B., **F.T. de Vries**, R.G.M. de Goede, J. Bloem, J.H. Faber, and L. Brussaard (2005) Within trophic group interactions of bacterivorous nematode species and their effects on the bacterial community and nitrogen mineralization. *Oecologia* 142:428-439.

Other publications

Van der Plas, F., Candel, J., Alblas, E., Bakker, E., ... **De Vries, F.T.**, ...Zwerts, J. (2024) Stem vóór de natuurherstelwet. *Algemeen Dagblad*, 22nd March 2024.

De Vries, F.T. (2024) Wat is biodiversiteit? Ik ben vooral geïnteresseerd in beta-diversiteit. *Foodlog*, 18th March 2024.

De Vries, F.T. (2023) GSB2023 – finally! *Global Soil Biodiversity Initiative Blog*. 26th February 2023.

Dablander, F. G. van Houwelingen, E. Rossi, and **F.T. de Vries** (2023) The fossil industry's real interest is delaying the energy transition. *Folia*, 21st of February 2023.

De Vries, F.T. (2023) Als postdoc kun je een groot probleem hebben als je zwanger wordt. *Folia*, 16th January 2023

De Vries, F.T. (2023) Een postdoc kan beter niet zwanger worden. *ScienceGuide*, 12th January 2023

De Vries, F.T. (2022) Bodembiodiversiteit maximaliseren: binnen of buiten landbouwsystemen? *Beste-ID*, 15th December 2022

De Vries, F.T. (2022) Krijgen we echt een groenere wereld met meer CO₂? *Klimaatverandering*, 22nd September 2022

De Vries, F.T. (2022) Wat is natuur? Biodiversiteit op 1 binnen een visie op de natuur die we willen. *Foodlog*, 7th September 2022

De Vries, F.T. (2022) Hoe veel CO₂ slaat een hectare landbouwgrond op? *Klimaathelpdesk*, 23rd May 2022

De Vries, F.T. (2022) Droogte onder en boven de grond. *Nature Today*, 19th May 2022

Jansen, B., **F.T. de Vries**, and A. van Wezel (2022) We moeten de natuur veel meer inzetten in de strijd tegen klimaatverandering. *Trouw*, 25th April 2022

De Vries, F.T., M. Berg, and A. Tietema (2021) De gevolgen van te veel stikstof voor het bodemleven. In: *Stikstof. De sluipende effecten op natuur en gezondheid*. J.W. Erisman and W. de Vries. (Eds.) Stichting Biowetenschappen en maatschappij.

Van Groenigen, J.W and **F.T. de Vries** (2021) Nederlandse graslanden krioelen van het leven. *NRC*, 3rd November 2021

Beunen, R., **F.T. de Vries**, R. Bobbink, A. van den Burg, S. Turnhout (2021) Het belang van kritische depositiewaarden in het stikstofbeleid. *Nature Today*, 2nd November 2021.

De Vries, F.T. (2021) Humus is dood, leve de bodemorganische stof! *Foodlog*, 6th October 2021

De Vries, F.T. (2021) Glacier forelands reveal fundamental plant and microbial controls on short-term ecosystem nitrogen retention! *Journal of Ecology. The Blog*. 18th August 2021

De Vries, F.T. (2021) Stichting Agrifacts heeft ongelijk over stikstof uit bodems, maar agendeert wel relevante vragen. *Foodlog*, 20th June 2021 [Discussed in Round Table discussion on nitrogen in Dutch parliament](#)

De Vries, F.T. (2021) Landbouw klimaatbestendig? *Leeuwarder Courant*, 1st May 2021

De Vries, F.T. (2020) Droogte schaadst ook ondergronds. *Leeuwarder Courant*, 5th Sept. 2020

Article in Boerderij on the origin and impact of nitrogen deposition: <https://t.co/8EILB8dGhN?amp=1>

Article in Boerderij and Friesch Dagblad on the impacts of nitrogen enrichment on ecosystems (together with 19 other scientists – I initiated and led the effort): <https://t.co/OvknC3rli0?amp=1>

De Vries, F.T. and R.I. Griffiths (2018) Impacts of climate change on microbial communities and their functioning. In: *Changing soil processes and ecosystem properties in the Anthropocene*. W. Howarth and Y. Kuzyakov (Eds.): 111-129.

De Vries, F.T. (2016) Soil organisms and climate change. What are the impacts? *Biological Sciences Review* 29(1):22-26.

Bardgett, R.D., **F.T. de Vries**, W.H. van der Putten (2016) Soil biodiversity and ecosystem functioning. In: *Microbial Biomass – A paradigm shift in terrestrial biogeochemistry*. K. Tate (Ed.): 199-140.

De Vries, F.T. and R.D. Bardgett (2015) Climate change effects on soil biota in the UK. *Terrestrial Biodiversity Climate Change Impacts Report Card Technical paper*. Bodsey Ecology Limited, Huntingdon, UK. Source paper for Biodiversity Climate Change Impacts Report Card 2015.

De Vries, F.T. (2013) A short history of aboveground-belowground interactions. *BES Bulletin* 44(2): 46-47.

De Vries, F.T. and R.D. Bardgett (2012) Soil Ecology. In: *Oxford Bibliographies Online: Ecology*. Ed. D. Gibson. New York: Oxford University Press. <http://www.oxfordbibliographies.com/view/document/obo-9780199830060/obo-9780199830060-0067.xml>

De Vries, F.T. (2012) Hard Core Glacier Sampling. *BES Bulletin* 43(4):48-50.

Ramirez, K.S., R.D. Bardgett, B. Fricks, L. Montanarella, J. Six, W.H. van der Putten, D.H. Wall, N. Ameloot, F. Ayuke, S.A. Banwart, D.E. Bignell, H. Black, D. Bossio, V.J. Bruckman, L. Brussaard, C. Campbell, K. Campbell, T. Soares de Carvalho, J.M. Cooper, H.L. Coutinho, K.W.T. Goulding, R.I. Griffiths, J. Harris, D.W. Hopkins, B. Houskova, W. Jehne, P. Lemanceau, Z. Lindo, P. Murray, A. Muscolo, A. Ogram, K. Ritz, J. Rombke, K. Scow, **F.T. de Vries**, and V. Wolters (2012) White Paper on the First Open Meeting of the Global Soil Biodiversity Initiative (GSBI) Held in London, England, 30 March 2012.

De Vries, F.T. (2011) A peek behind the curtains of the BES mentoring scheme for women in ecology. *BES Bulletin* 42(3):19

Bardgett, R. D., J.N. Quinton, and **F.T. de Vries** (2011) Managing soils for ecosystem services. *Public Service Review: UK Science & Technology* 1:14-15.

De Vries, F.T. (2009) Soil fungi and nitrogen cycling: causes and consequences of changing fungal biomass in grasslands. PhD thesis, Wageningen University.

De Vries, F.T. (2003) Practical use of a hydrological model for peatlands in Borneo. Modeling the Sungai Sebangau catchment in Central Kalimantan, Indonesia. Wageningen, Alterra, Green World Research. Alterra report 797. 87pp.

Best-read blog posts (franciskadevries.wordpress.com):

My recipe for a proposal – 16th January 2022

The reality of maternity leave – 8th March 2018

Soil science. A man's world? – 1st March 2017

On gender bias in research funding – 8th August 2016

Soil boring? My take on the image problem of soil science – 14th October 2015

Invited presentations

Going underground: How root-microbe interactions affect ecosystem functioning under climate change	Keynote at the 12th International Symposium of the International Society of Root Research, 2-7 June 2024, Leipzig, Germany
Going underground: How root-microbe interactions affect ecosystem functioning under climate change	Seminar at Max Planck Institute for Biogeochemistry, 5 June 2024, Jena, Germany
Understanding soil microbiome response to climate change	Opening keynote at Food System Microbiomes conference, 13-17 May 2024, Turin, Italy
Rewilding the soil: can we use soil organisms for creating robust nature?	“Wild Thinktank”, ARK Rewilding, 17 April 2024, Rheden, The Netherlands
Harnessing root-microbe interactions for optimising soil carbon sequestration	Invited speaker at symposium on regenerative agriculture, BES Annual Meeting, 12-15 December 2023, Belfast, UK
Using metagenomics to understand the consequences of extreme climatic events for soil functioning	Invited speaker at KNVM symposium ‘Practical applications of metagenomics towards typing’ 3 February 2023, Westerdijk Institute, Utrecht, Netherlands
Droogte. En waarom het belangrijk is de effecten van droogte op de bodem te begrijpen	Mini-lecture (4x) for prospective BSc students Future Planet Studies, 18 th November 2022, University of Amsterdam
Extreme climatic events induce consistent shifts in soil microbial communities and their functioning	Invited speaker in session ‘Microbes in a changing world: Resilience, responsiveness, and resources’, ISME18, 14-19 August 2022, Lausanne, Switzerland
Harnessing root-microbe interactions for optimising ecosystem functioning	Invited presentation at World Biodiversity Forum, Davos, Switzerland, 26 June- 1 July 2022
Bodemorganische stof: het belang van interacties tussen plantenwortels en micro-organismen	Invited presentation at Soil Team LNV (Dutch Ministry of Agriculture, Nature and Food), online, 7 February 2022
What determines the ability of ecosystems to retain nitrogen? The role of plant-microbial linkages	Invited speaker at PE&RC symposium “Nitrogen: past, present, and future”, 28 October 2021, Amsterdam
Harnessing root-microbe interactions for climate-friendly soils	Keynote speaker at “Soil at Risk”, online, 30 June 2021
Women in science: the numbers	Speaker at MSc Earth Sciences event for International Women’s day, online, 8 March 2021
Root-microbe interactions and climate change	Speaker and panellist in GSBI webinar “Soil Biodiversity & Resilience to Climate Extremes” 17 March 2021
Machiavellian microbes: how drought-induced changes in belowground communities can have aboveground consequences	BES Ecology Live seminar, online, 9 July 2020

Can we use plant traits to increase the resistance of agricultural systems to drought?	Invited speaker at Biodiversa Symposium 'Above- and belowground biodiversity for sustainable ecosystems', 14-15 November, 2019, Zurich, Germany
Soil C cycling in a changing world: the role of root-microbe interactions	Keynote speaker at SOM2019, 6-11 October 2019, Adelaide, Australia
There should be quota for men in science	L'Oréal Foundation breakfast debate (curated by the New York Times), 13 March 2019, Paris, France
Climate change goes underground: Mechanisms through which plant roots modify drought effects belowground	International Symposium 'Plant-soil feedback - Linkages between root traits and soil biota' 7 March 2019, Wageningen, the Netherlands
Climate change goes underground: How plants modify soil microbial responses to drought	Invited speaker in session 'Frontiers of soil microbial ecology', ISME17, 12-17 August 2018, Leipzig, Germany
The root to stability: The role of plant roots in ecosystem response to climate change	BBSRC Council, 29 June 2017, London
The root to stability: The role of plant roots in ecosystem response to climate change	BBSRC Fellows Conference, 13-14 June 2017, Leeds
Careers in academia	Speaker on career panel with moderator Stephen Curry. Naturejobs Career Expo, 16 September 2016, London
Going underground: How plant roots modify belowground response to drought	Keynote speaker at Annual Soil Security Programme conference 6-7 September 2016, Reading
Plant-microbial linkages and N retention	Invited speaker "Elizabeth Kalko Lecture", German Biodiversity Exploratory Assembly, 16-19 February 2016, Wernigerode, Germany
Plant-microbial linkages and N retention	Thematic Symposium 'Ecological and evolutionary risks to agriculture and food production', BES Annual Meeting 2016, 12-16 December 2016, Edinburgh
Going underground: the role of plant roots in ecosystem response to climate change	Keynote speaker, Rhizosphere4, 21-24 June 2015, Maastricht, the Netherlands
The secret life of soils	Pecha kucha presentation, 'Towards and ecology-intensive agriculture', 21 April 2015, Amsterdam, the Netherlands
Moving from temporary to permanent contracts in academia	BES webinar 'Research Careers: Working Towards a Permanent Contract' 20 March 2015
Going underground: ecosystem functioning under global change	Symposium 'The search for tipping points in heterogeneous landscapes' 14 November 2013, Wageningen, the Netherlands
Why and how to apply for grants	BES Grants Workshop, INTECOL 2013, 19-23 August, London, UK

Harnessing soil communities for N retention	Thematic Symposium 'Integrating soil biodiversity into discussions of global sustainability: the time is now' Annual Meeting of the Ecological Society of America, 5-9 August 2013, Minneapolis, USA
A career in academia – do's and don'ts	PhD career event 'Unlocking your potential' BES Annual Meeting 2012, 17-20 December 2012, Birmingham
The weakest link? Soil food webs under stress – implications for ecosystem functioning	PhD course Soil Ecology, 18-23 November 2012, Wageningen, the Netherlands
Land use alters the resistance and resilience of soil food webs to drought	Microbial Community Dynamics: Cooperation and Competition, Joint EU-US Workshop European-United States Task Force on Biotechnology Research, 5-7 November 2012, St. Louis, USA
Plant – soil food web interactions and climate change	Enhancing Biodiversity through Soil Management, IEEM Summer Conference, 13 June 2012, London, UK
Harnessing plant - soil food web interactions for ecosystem services	Waitrose Innovation Forum, 15 February 2012, Royal College of Surgeons of England, London, UK
Grasslands and nitrogen retention	Carbon Storage in UK Grasslands, Defra Project Stakeholder Workshop, 6 October 2011, Colt Park, Ingleton National Nature Reserve, UK
Above-belowground linkages for optimizing N retention	Food Security: Crop Production and Resource use, 7-11 September 2011, Beijing, China
Fungal fields forever – How fungal-dominated soil food webs secure the delivery of ecosystem services	Environmental Sciences Seminars, 21 January 2011, Bangor University, UK
The young/ (relatively) inexperienced referee	Refereeing workshop, BES Annual Meeting 2010, 7-9 September 2010, Leeds, UK
Soil microbes and nitrogen losses	Nitrogen workshop, 5 May 2010, Lancaster University, Lancaster, UK
Soil fungi and nitrogen cycling	Biodiversity and Conservation seminar series, 18 February 2010, Universidad Rey Juan Carlos, Mostoles, Spain
Using stable isotopes to study plant-soil feedbacks	Annual Meeting Defra Grassland Assessment Unit, 29 April 2009, Sandy, UK
Nitrogen dynamics and F/B ratios	Nutrient Management workshop, 7 November 2007, Wageningen, the Netherlands

Chairing and organising conferences, sessions, and workshops

'Microbes in a changing world: resilience, responsiveness, and resources' ISME18, 14-19 August 2022, Lausanne, Switzerland	Co-organiser with Jennifer Pett-Ridge, and speaker
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Open seminar of Katharine Hayhoe at the University of Amsterdam, 30 th May 2022	Organiser and chair, together with Bart Verheggen (AUC)
Annual Meeting of the Plants, Soils, Ecosystems special interest group of the BES, 6-7 April 2016, London	Organiser
'Ecosystems and Climate Change Mitigation' joint conference organised by Plants, Soils, Ecosystems and Climate Change Ecology special interest groups of the BES, 2-3 November 2015, London	Organiser and chair
Plants, Soils, Ecosystems Sequencing metaanalysis workshop, 18-20 May 2015, Manchester	Organiser and chair
'Welcome to the dark side – Opportunities, challenges, and solutions for synthesizing global soil biodiversity' special session at the joint BES-SFE Annual Meeting, 9-12 December 2014, Lille, France	Organiser and chair
'Living apart together: linkages between plants and soil organisms and their implications for ecosystem functioning' session at GSBI conference, 1-4 December 2014, Dijon, France	Organiser
'Digging deeper: Research challenges in plant-soil interactions'. First meeting of the BES special interest group Plants, Soils, Ecosystems, 2-3 October 2013, Charles Darwin House, London	Organiser and chair
Aboveground – belowground interactions session, INTECOL 2013, 18-23 August 2013, London	Chair
Publishing Forum, Faculty of Life Sciences, 14 June 2013, The University of Manchester, Manchester	Organiser
SIBAE2013 – DON workshop, 29 April – 1 May 2013, Storrs Hall, Windermere	Scientific committee
Aboveground – belowground interactions session, BES Annual Meeting 2012, 17-20 December 2012, Birmingham	Chair
Biodiversity and Ecosystem Function session, BES Annual Meeting 2011, 12-14 September 2011, Sheffield	Chair
Reviewing workshop, Lancaster Environment Centre, 1 April 2011, Lancaster University, Lancaster	Organiser

Invited participation in scientific and policy workshops

2023	Workshop on seismology in soil, 28 March, Oxford, UK (online)
2018	iDiv workshop "From predictive modelling to global scale monitoring of soil biodiversity and ecosystem function dynamics" 11-14 September 2018, Leipzig, Germany

2017	sDiv workshop “A global soil biodiversity database and its application to data synthesis and theory development”, 14 – 17 March and 13 – 16 November 2017, Leipzig, Germany
2016	Microbiology Society microbiome stakeholder workshop, 20 October 2016, Manchester
2014	sDiv workshop “A framework to improve our understanding of the distribution of global soil biodiversity: establishing the first quantitative analysis”, 31 March – 4 April 2014, Leipzig, Germany
2012	Microbial Community Dynamics: Cooperation and Competition, Joint EU-US Workshop European-United States Task Force on Biotechnology Research, 5-7 November 2012, St. Louis, USA
2011	Carbon Storage in UK Grasslands, Defra Project Stakeholder Workshop, 6 October 2011, Colt Park, Ingleton National Nature Reserve, UK

Teaching and supervision

Professional teaching development:

2023	Obtained an Uva Grassroots Education Innovation Grant “An interactive 3D model of the plant-soil system” – 8k
2020	Completed BKO (University Teaching Qualification)

Courses developed and coordinated:

From 2023	The Earth System (1 st year MSc, University of Amsterdam)
From 2019	Plant-soil interactions in food production systems (2 nd year BSc, University of Amsterdam)

Courses:

From 2022	Grand challenges in human-ecosystem interactions (1 st year MSc, University of Amsterdam)
From 2020	Geo-ecological systems in a changing world (1 st year MSc, University of Amsterdam)
2020	Challenges in biodiversity and ecosystem services 1 st year MSc, (University of Amsterdam)
From 2019	Plant-soil interactions practical (2 nd year BSc, University of Amsterdam)
2015-2018	Ecology & Ecosystems (2 nd year BSc, University of Manchester)
2014-2018	Human Impacts on the Biosphere (3 rd year BSc and MSc, University of Manchester)
2014-2018	Urban Biodiversity (2 nd year BSc field course, University of Manchester)
2011	Populations to Ecosystems (2 nd year BSc, Lancaster University)

External teaching:

- Organiser and teacher of PE&RC PhD course “Soil Ecology”, Ede, 2022
- VU/ UvA MSc course “Scientific Advocacy”, 2020
- PE&RC PhD course “Soil Ecology”, Lunteren, 2019
- PE&RC PhD course “Soil Ecology”, Wageningen, 2012

PhD students:

Current

2023-present	David Cajas Muños (co-supervisor). Project: Steering carbon and nutrient-related soil functions in agronomic systems by using amendments and inoculants
2022-present	Chupei Shi (NWO funded NWA project). Project: Interactions between plant roots, soil microbes, and soil minerals: controls on soil carbon stabilisation in a changing climate
2022-present	Cynthia Albracht (co-supervisor). Project: Plant diversity effects on AMF communities
2022-present	Emma Polman (Staatsbosbeheer funded). Project: Effects of large herbivores and geese on carbon and nutrient flows in a eutrophic wetland
2021-present	Nan Zhang (Chinese CSC scholarship, co-supervisor). Project: The interplay of biotic- and abiotic processes that stabilize soil organic carbon during water erosion
2020-present	Fangbin Hou (Chinese CSC scholarship). Project: The role of root exudates in drought-induced changes in soil C cycling
2020-present	Eileen Enderle (studentship within my ERC-StG). Project: Microbial mechanisms underlying plant community response to drought

Past

- 2016-2022 Reuben Margerison † (BBSRC DTP studentship). Project: Fundamental controls on plant root exudation under climate change
- 2016-2021 Christopher Sweeney (BBSRC DTP studentship, co-supervisor). Project: Digging deeper: the role of root traits in soil C cycling (now Technical Expert at Syngenta, UK)
- 2016-2020 Cristina Heredia (CONACYT PhD studentship). Project: Root turnover and decomposition effects on soil C cycling (now Clerical Officer at the Department of Social Protection, Ireland)
- 2014-2020 Melanie Edgar (BBSRC CASE studentship, co-supervisor). Project: Landscape scale effects of grazing on soil C stocks (now working at DEFRA, UK)
- 2014-2018 Danielle Satterthwaite (NERC DTP studentship, co-supervisor). Project: Climate effects on C cycling through litter quality

Postdocs:

Current

Natalie Oram – on EU Biodiversa project GRASS4FUN
 Jon de Long – on NWA funded project “Harnessing root-microbe-mineral interactions for climate friendly soils”
 Anna Clocchiatti – on EU funded project SOILGUARD
 Mariana Gliesch – on ERC Starting Grant SHIFTFEEDBACK

Past

Alex Williams – on BBSRC David Phillips Fellowship (2018-2021, now postdoc at the University of Sheffield, UK)
 Océane Nicolitch – on NERC funded project “Developing a trait-based framework for predicting soil microbial community response to extreme events” (2017-2021, now R&I Project Manager at Suez, France)
 Angela Straathof – on BBSRC David Phillips Fellowship (2015-2018, now Director of Research and Knowledge Transfer at Ontario Soil and Crop Improvement Association, Canada)

MSc students:

Current

Anna Zoeters (literature review)

Past

Cristian Corbetta (2023)
 Joris Lugtenburg (2023)
 Anna Müller (2022)
 Yahan Hu (2021, now PhD student at Technische Universität München)
 Celia Martin (2020, now Sales Consultant at BOC Group)
 Megan Barker (2018, now Senior Research Technician at The University of Manchester)
 Anna La (2017)

BSc students:

Current

Hannah Jansen
 Isa Douwes
 Wing Yan Liu

Past

Britt Thielen
 Kiki Boreel
 Hidde Kottman
 Nigar Kasirga
 Emma Schermerhorn
 Abbe Hekkert
 Tom Scheltema
 Yse Tuynman
 Cecile Alsbach
 Eva Dijkstra
 Anniek Kortleve
 Aisha Janssens
 Remy Hogenboom
 Fiona Stringer

Robert Willcocks
Damla Kiral (summer placement student)
Florence Chapple

Visiting scholars hosted

Elsa Medhane (placement student from The University of Manchester, UK, 2022)
Julian Radford-Smith (visiting PhD student from The University of Queensland, Australia, 2022)
Mariona Pagares-Murgó (visiting PhD student from the University of Jaen, Spain, 2022)
Clara Castellano (visiting PhD student from Instituto Pirenaico de Ecología, Spain, 2018)
Eva Couble (MSc student from INSA, France, 2014)

Grants and prizes obtained by my mentees:

FEMS Microbiology Letters Poster Prize at the 3rd Global Soil Biodiversity Conference – Nan Zhang (2023)
International Plant Phenotyping Network travel grant to attend the 3rd Global Soil Biodiversity Conference – Fangbin Hou (2023)
New Phytologist travel grant to attend the New Phytologist next generation scientists conference in Tartu – Eileen Enderle (2022)
BES Travel and Training Grant to attend metabolomics training course at the Birmingham Metabolomics Training Centre – Reuben Margerison (2021)
COB travel grant to perform research in Japan – Reuben Margerison (2018)

PhD examinations

2024

Guiditta Beretta (UvA)
Qiqi Wang (UvA)
Nina Witteveen (UvA)
Jose Manjon-Cabeza Cordoba (University of Lleida, Spain)
Xia Meng (UvA)

2023

Emily Oliveira (ETH Zürich)
Keli Li (NIOO Wageningen)
Ruud Rijkers (VU Amsterdam)
Dominique Narain-Ford (UvA)
Nelleke Buitendijk (UvA)

2022

Milagros Barcelo (University Leiden)

2021

Joachim Deru (Wageningen University)
Anne-Catherine Ahn (UvA)

2020

Olaf Brock (UvA)
Milan Teunissen van Manen (UvA)

2019

Simone Weidner (Utrecht University)
Ben Fungo (UvA)
Francisco Cuesta (UvA)
Marian Cabrera (UvA)

2018

Amber Heijboer (NIOO)

2016

Alberto Canarini (University of Sydney, Australia)

2014

Karst Brolsma (Wageningen University)

Impact, outreach, and in the media

- 2024 Article on Gliesch et al. (2024) “Twintig jaar UvA onderzoek: Door droogte dreigt de heide zijn rol als koolstofput te verliezen”, *Folia*, 2nd May 2024
<https://www.folia.nl/wetenschap/161824/twintig-jaar-uva-onderzoek-door-droogte-dreigt-de-heide-zijn-rol-als-koolstofput-te-verliezen>
- 2023 Featured in “Food, soil, water: how the extinction of insects would transform our planet” *The Guardian*, 10th November 2023
<https://www.theguardian.com/environment/2023/nov/10/food-soil-water-how-the-extinction-of-insects-would-transform-our-planet>
- Speaker at “Aan de landbouwtafel met Charles C. Mann”, event and townhall style discussion about the future of food, agriculture and nature in The Netherlands, De Balie, Amsterdam, 11th October 2023 https://www.youtube.com/watch?v=MG_qE_Q9HLs&t=3s
- Featured in episode 5 of “Govert naar de kern van de aarde”, a popular scientific series on the functioning of the Earth system on Dutch national television, 8th October 2023
https://www.npostart.nl/govert-naar-de-kern-van-de-aarde/08-10-2023/VPWON_1344387
- Podcast “Bacteria: The Tiny Giants. Episode 3: Our Interconnected Planet” *BBC Sounds*, 1st October 2023 <https://www.bbc.co.uk/sounds/play/m001r16k>
- Quoted in article “Red niet alleen de olifant, maar ook de schimmel: Microben zijn het fundament van de biodiversiteit op onze planeet” *De Morgen*, 28th April 2023
<https://www.demorgen.be/beter-leven/red-niet-enkel-de-olifant-maar-ook-de-schimmel-microben-zijn-het-fundament-van-de-biodiversiteit-op-onze-planeet~bea358bf/>
- Mentioned in article “Lekker trollen met Maarten Keulemans” *Frontaal Naakt*, by Peter Breedveld, 4th April 2023 <https://www.frontaalnaakt.nl/archives/lekker-trollen-met-maarten-keulemans.html>
- Mentioned in article “Het effect van stikstof op onze natuur is vaak nauwelijks te onderscheiden van nul” *Wynia’s Week*, by Arnout jaspers, 1st April 2023
- Mentioned in article “Niet alleen onze dombo’s wijzen stikstofgekte af” *Elsevier Weekblad*, by Simon Rozendaal, 25th March 2023
- Quoted in article on the ties between political party BBB and Stichting Agrifacts, *NRC*, 10th March 2023 <https://www.nrc.nl/nieuws/2023/03/10/stichting-agrifacts-geeft-de-bbb-munitie-maar-volgens-caroline-van-der-plas-is-dat-toeval-a4159140>
- Proofread and commented on chapter 1 of the Dutch translation of *Regenesi*s by George Monbiot (translation by Raymond Gijsen)
- Speaker at film premiere of “Onder het maaiveld”, *De Balie*, Amsterdam, 27th February 2023
- Podcast “Kies maar!”, *Het Podcast Kantoor*, March 2023
<https://app.springcast.fm/12361/boeren-moeten-gedwongen-worden-uitgekocht>
- Podcast “Women in soil ecology”, *Solid Science*, *iDiv*, March 2023
<https://open.spotify.com/episode/5vqclfCYq7JnRLkULr9B>
- 2022 Quoted in article “Desinformatie bestrijden” *Bionieuws* 18, 12th November 2022
- Contributed to article in *De Correspondent* about nitrogen in dairy farming:
<https://decorrespondent.nl/13750/voor-deze-landbouwramp-biedt-de-veehouderij-juist-de-oplossing/42164745975000-19821f30>

TED talk “Plant-soil interactions: the cycle of life” TEDxAUCollege event 2022
https://www.ted.com/talks/franciska_de_vries_plant_soil_interactions_the_cycle_of_life_sep_2022

Article on our experiments on drought “Droogte-experiment: Als dit zo doorgaat krijgen we hier een mediterrane ecosysteem”, *Folia*, 8th September 2022
<https://www.folia.nl/wetenschap/153109/droogte-experiment-als-dit-zo-doorgaat-krijgen-we-hier-een-mediterraan-ecosysteem>

Featured in article “Een drietrapsraket belaaft de natuur: hoe droogte, hitte en stikstof elkaars schadelijke effecten versterken” *Volkscrant*, 4th September 2022
<https://www.volkscrant.nl/wetenschap/een-drietrapsraket-belaagt-de-natuur-hoe-droogte-hitte-en-stikstof-elkaars-schadelijke-effecten-versterken~ba4ada04/>

Contributed to op-ed in national newspaper *Trouw* “Pak door met stikstofreductie, dat moet”, with 37 other scientists, in which we argue that nitrogen deposition has to be reduced as soon as possible. 22nd August 2022 <https://www.trouw.nl/ opinie/ga-niet-weer-twijfel-zaaien-aan-die-stikstofdoelen-valt-echt-niet-te-ontkomen~b4dbbd67/>

Podcast on BNR Duurzaam about biodiversity, 4th April 2022
<https://www.bnr.nl/podcast/duurzaam/10472402/minder-biodiversiteit-een-onzichtbare-ramp>

Contributed to article in *De Correspondent* about grain production and chernozem soils in Ukraine: <https://decorrespondent.nl/13202/oekraïne-is-de-graanschuur-van-de-wereld-en-dat-weet-poetin-maar-al-te-goed/1057736054760-2f7944cf>

Quoted in article “Hondendrollen weren uit natuurgebieden” *Bionieuws* 4, 26th February 2022

Radio interview on national radio show “Met het oog op morgen” about nitrogen from dog poo in nature reserves, 11th February 2022

Quoted in article “25 Miljard om groei bramen te voorkomen”, *Elsevier Weekblad*, 5th February 2022

Quoted in article “Is Don’t Look Up herkenbaar voor wetenschappers?” *Bionieuws* 3, 12th February 2022

2021 Proofread and commented on chapter 1 of *Regenesis* by George Monbiot
<https://www.penguin.co.uk/books/317018/regenesis-by-monbiot-george/9780241447642>

Youtube channel <https://www.youtube.com/@franciskadevries6103>
Currently 11 subscribers

Quoted in article “Koolstof in de bodem gaat het klimaat niet redden” *Vork* 26th November 2021

Quote in *Leeuwarder Courant* article about the Glasgow Climate Conference COP26:
<https://lc.nl/buitenland/Halverwege-Glasgow-hoe-staan-we-ervoor-27141338.html>

Quoted in NRC article on expanding farms near nature reserves:
<https://www.nrc.nl/nieuws/2021/10/24/honderden-veehouderijen-bij-natuurgebieden-mogen-toch-uitbreiden-a4062955>

Quoted in *Boerderij/ Food+Agribusiness* in article about nitrogen deposition and mineralisation: <https://www.foodagribusiness.nl/onrust-over-stikstof-uit-bodem/>

Experiment featured at Amsterdam Science Park “The Living Lab experiment creating drought at Amsterdam Science Park”, 20th January, 2021
<https://www.amsterdamsciencepark.nl/news/the-living-lab-experiment-creating-drought-at-asp/>

2020

Article in De Stentor about our network of drought experiments on the Veluwe:
https://www.destentor.nl/apeldoorn/wat-doen-die-vreemde-bouwsels-in-de-veluwse-natuur~add0e97e/?utm_source=twitter&utm_medium=social&utm_campaign=socialsharing_web

Quoted in Den Haag Centraal in article about nitrogen emission licence for New Year’s fires: <https://www.denhaagcentraal.net/nieuws/vraagtekens-bij-vreemde-vergunning-voor-stikstof-vreugdevuren/>

Item on national news (NOS Journaal and Jeugdjournaal) about our network of drought experiments on the Veluwe

Item on Regional News of Omroep Gelderland about our network of drought experiments on the Veluwe: <https://www.omroep gelderland.nl/nieuws/2477413/Hoogleraar-plaatst-afdakjes-in-Veluwse-natuur-maar-waarom> and <https://www.omroep gelderland.nl/media/38855/Wat-doen-die-kleine-dakjes-op-de-Veluwe>

Radio interview on Omroep Gelderland about our network of drought experiments on the Veluwe: <https://www.omroep gelderland.nl/radio/programma/19/Goedemorgen-Gelderland/aflevering/44593>

Quoted in article in Eindhovens Dagblad on nitrogen trading:
<https://www.ed.nl/brabant/brabantse-boeren-en-milieclubs-nu-samen-in-het-geweertegen-stikstofbeleid-in-brabant~a41fab5b/?referrer=https://t.co/WRGgGmC70C?amp%3D1>

Episode in national radio show Vroege vogels about my research on drought:
<https://www.nporadio1.nl/vroege-vogels/onderwerpen/61374-2020-07-05-bodem-is-de-sleutel-bij-droogte>

Article in national newspaper de Volkskrant about ‘natural solutions’ for drought:
https://www.volkskrant.nl/wetenschap/wat-de-natuur-zelf-kan-doen-tegen-de-droogte~b4d4f608/?utm_source=link&utm_medium=app&utm_campaign=shared%20content&utm_content=free

Article in national newspaper NRC about how plant roots respond to drought:
<https://www.nrc.nl/nieuws/2020/06/12/krijgt-een-plant-luie-wortels-van-te-veel-water-a4002612>

Article in Bionieuws about plant and soil response to drought and rewetting:
<https://bionieuws.nl/article/572229/vraag-kunnen-planten-zich-voorbereiden-op-droogte>

Article in newspaper Nieuwe Oogst about my research:
<https://www.nieuweoogst.nl/nieuws/2020/05/11/onderzoek-naar-wisselwerking-plant-en-bodemorganismen>

Article in national newspaper de Volkskrant about drought:
<https://www.volkskrant.nl/nieuws-achtergrond/wetenschappers-slaan-alarm-droogte-is-een-sluipmoordenaar~bc1b07f0/>

Article in China Science Daily about De Vries et al. (2020)

Assessor of advice for the Dutch government “Vitale bodem (vital soil)” by Rli (Council for the Living Environment and Infrastructure)

Podcast about nitrogen deposition on RTV Oost:
<https://www.rtvooost.nl/nieuws/326052/De-Stikstof-Podcast-Aflevering-1-Wat-is-stikstof>

2019 Article in national newspaper NRC about Phillips et al. (2019):
<https://www.nrc.nl/nieuws/2019/11/06/de-regenworm-is-de-ingenieur-van-de-bodem-a3979379>

Interview on BNR Radio about Phillips et al. (2019):
<https://www.bnr.nl/podcast/wetenschap-vandaag/10393492/in-nederland-hebben-we-nu-nog-veel-regenwormen>

Commented on iScience paper in The Atlantic:
<https://www.theatlantic.com/science/archive/2019/07/mystery-undead-tree-stump/594673/>

Interview on German radio station Deutschlandfunk about De Vries et al. (2019):
https://www.deutschlandfunk.de/pflanzen-und-duerrephasen-ein-energieschub-fuer-die-wurzeln.676.de.html?dram:article_id=455024

My speech at the L'Oréal Foundation breakfast debate (curated by the New York Times), was featured in El País:
https://elpais.com/elpais/2019/03/14/ciencia/1552558928_779129.html

2018 De Vries et al. (2018) featured in 'Women killin' it in sustainability research' of The University Network: <https://www.tun.com/blog/women-killin-it-sustainability-research/>

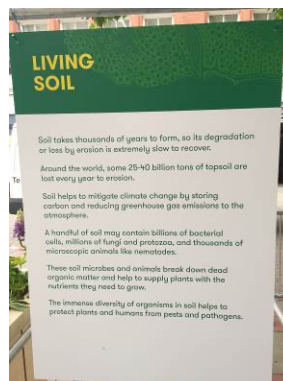
2017 Ramirez et al. (2017) featured in Dutch radio show Nieuws en Co (Radio 1), 27 November 2017

Ramirez et al. (2017) featured in Dutch BNR podcast, 21 November 2017:
<https://www.bnr.nl/podcast/wetenschap-vandaag/10333835/de-ene-grond-is-de-andere-niet>

Commented on Nature Communications paper in New Scientist:
https://www.newscientist.com/article/2123762-raindrops-make-soil-bacteria-take-off-and-fly-through-air/?utm_campaign=RSS|NSNS&utm_source=NSNS&utm_medium=RSS&utm_content=health&campaign_id=RSS|NSNS-health

2016 As part of the 500womenscientists.org initiative:
Article on BBC website <http://www.bbc.co.uk/news/science-environment-38094016>
Interview on BBC World's The Science Hour, Saturday 26 November 2016

2016 Organisation and set up of exhibition 'Allotment of the future' for European City of Science Manchester 2016, St Annes Square, Manchester. We built two large (1.50m x 1m x 0.5m) soil profiles for display in the city centre of Manchester



Commented on Science paper in The Atlantic:

<http://www.theatlantic.com/science/archive/2016/04/the-wood-wide-web/478224/>

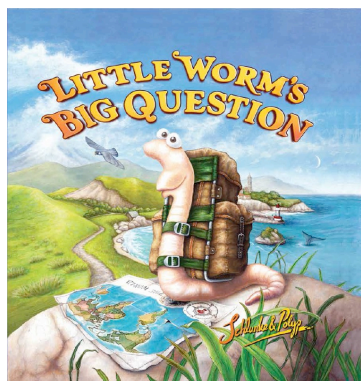
Contributed response to the National Soil Health Inquiry

<http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/inquiries/parliament-2015/soil-health/>

and the resulting Soil Health report

<http://www.publications.parliament.uk/pa/cm201617/cmselect/cmenvaud/180/180.pdf>

Scientific advisor for 'Little Worm's Big Question' by Eva Schlunke and Paul Fitzgerald, New Internationalist, 2016.



2015 Commented on PNAS paper on BBC Radio Hereford and Worcester on 6 November 2015:
<http://www.pnas.org/content/early/2015/10/23/1502549112.abstract>

Contributed to LWEC Biodiversity Climate Change Impacts Report Card 2015
<http://www.nerc.ac.uk/research/partnerships/lwec/products/report-cards/biodiversity/>

Contributed to Sutherland, W.J, L. Dicks, N. Ockendon, and R.K. Smith (2015) *What Works in Conservation 2015*. Open Book Publishers, Cambridge, UK.

<http://dx.doi.org/10.11647/OBP.0060>

2013 Participated in knowledge exchange event aimed at Cumbrian farmers, sponsored by the British Ecological Society and the Ecosystems Knowledge Network

Article in European Commission Science for Policy News Alert about De Vries et al. (2013):
<http://ec.europa.eu/environment/integration/research/newsalert/newsalert.htm> (direct download)

<http://ec.europa.eu/environment/integration/research/newsalert/pdf/349na6.pdf>

Article in Farming Monthly September 2013 (page 14-15) about De Vries et al. (2013):
http://issuu.com/farmingmonthly/docs/september_2013_farming_monthly_nati/1

Article on German Food Safety Agency website (in German) about De Vries et al. (2013):
<http://www.aid.de/presse/archiv.php?mode=beitrag&id=6594>

De Vries et al. (2006) featured in the national Dutch A-level (VWO) biology exam (taken by ~25,000 students)

Article in bionieuws about the work featuring in the national Dutch A-level exam (bionieuws 8 June 2013, page 13): <http://www.bionieuws.nl>

2013-present Twitter 'frantecol' <https://twitter.com/frantecol>
Currently 16.2k followers

Blog 'frantecologist' <https://franciskadevries.wordpress.com>

Average monthly views ~ 400, peak monthly views 2,289