



PD Dr. Valentin H. Klaus

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Webpages and Publications

[Personal Webpage at ETH Zurich](#) and [Agroscope](#)

[Google Scholar](#); March 2023: h-index = 31

- 74 papers published in peer-reviewed journals, with 29 first or last authorships

Most recent overview of publications: [Personal Publication Webpage ETH Zürich](#)

Online presence at [ORCID 0000-0002-7469-6800](#)

Online presence at [ResearchGate](#)

Twitter: [ValentinEcology](#)

Education

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|-----------|---|
| 02.2021 | <i>Privatdozent</i> (teaching qualifications, part of the habilitation) at the Department of Environmental Systems Science (D-USYS), ETH Zurich, <i>Venia Legendi</i> for “Vegetationsökologie, Ökosystemforschung und nachhaltige Landwirtschaft” (EN: Vegetation ecology, ecosystem research and sustainable agriculture) |
| 12.2020 | <i>Habilitation</i> , title of the thesis: “Biodiversity in urban and agricultural grasslands: drivers, effects on ecosystem functioning and perspectives for conservation”, ETH Zurich, Switzerland |
| 07.2012 | <i>Defence</i> (PhD graduation), title of the thesis: “Relationships between productivity, land-use intensity and plant species richness in agricultural grasslands”, Institute of Landscape Ecology, University of Münster, Germany, grade “summa cum laude” |
| 05.2008 | <i>Diploma</i> in Landscape Ecology, title of the thesis: “Vegetations- und Nährstoffgradienten in Auenwiesen am nördlichen Oberrhein” (EN: Gradients in vegetation and site tropic conditions in floodplain meadows at the upper rhine), grade “very good” (1.2) |
| 2002-2008 | Diploma studies Landscape Ecology, University of Münster, Germany |
| 2001-2002 | Civil service: St. Elisabeth Hospital, Gütersloh, Germany |
| 1992-2001 | Secondary school: Abitur, Ev. Stift. Gymnasium, Gütersloh, Germany |
| 1988-1992 | Primary school: Altstadtsschule, Gütersloh, Germany |

Academic Positions

- Since 03.2022 Two part-time positions
- Lecturer and research associate (Oberassistent) in the Grassland Sciences group, Institute of Agricultural Sciences, ETH Zurich (20%)
 - Researcher (Wiss. Mitarbeiter), Agroscope, Forage Production and Grassland Systems group (80%), Agroscope is the Swiss centre of excellence for agricultural research
- Since 08.2017 Lecturer and research associate in the Grassland Sciences group, Institute of Agricultural Sciences, ETH Zurich
- 11.-12. 2016 Research stay in the Plant Ecology group of Prof. Markus Fischer, Institute of Plant Sciences, University of Bern, Switzerland
- 2012-2017 Postdoc at the Institute of Landscape Ecology, University of Münster, Germany
- 2009-2012 PhD student (Research associate) at the Institute of Landscape Ecology, University of Münster, Germany
- 2008-2017 Lecturer at the Faculty of Earth Sciences, University of Münster, Germany
- 2008-2009 Research associate responsible for coordination and organisation of studies at the Department of Geosciences, University of Münster, Germany
- 2006-2008 Teaching assistant at the Institute of Landscape Ecology, University of Münster, Germany

Scientific Expertise

- Plant and Vegetation Ecology in agricultural and urban landscapes
- Biodiversity Research
- Urban Ecology and Human-Nature Relationships
- Ecosystem Services and Ecosystem Multifunctionality
- Land Use and Climate Change Research
- Ecological Restoration and Rehabilitation
- Organic and Sustainable Farming Systems, especially in Grasslands
- Nutrient Cycling, Soil, and Isotope Ecology

Research Projects and Own Funding

- 2022-2024 ReNatUrE – Restoration of urban ecosystems for biodiverse, liveable, and sustainable cities in Europe (**PI**, CHF 87 680)
- 2020-2021 SoilServiceGrass – Biodiversität und Funktion von Grünlandböden unter biologischer und konventioneller Bewirtschaftung (**PI**, CHF 37 000)

- 2019-2023 ServiceGrass – Effects of organic farming on private and public ecosystem services and grassland multifunctionality (**PI**, CHF 325 000 plus CHF 68 000)
- 2018-2022 RELOAD – Resilience of Organic and Conventional Production Systems to Drought (**PhD student supervision and expert for ecosystem services**)
- 2018-2022 Super-G – Sustainable Permanent Grassland (EU H2020, **PhD student supervision and expert for plant diversity**)
- 2018-2022 InnoFarm – Reconciling innovative farming practices and networks to enable sustainable development of smart Swiss farming systems (**PhD student supervision**)
- 2018-2019 Aus der Forschung - Für die Praxis (**Project member**)
- 2017-2021 Escape II – Effects of disturbance and seed addition on plant community assembly and ecosystem functions, Biodiversity Exploratories (DFG SPP 1374, **responsible for acquisition of funds and project member**, EUR 260 000)
- 2016-2021 Urban grassland management: a questionnaire study across Europe (**PI, no general funding**)
- 2014-2017 Escape I – Effects of disturbance and seed addition on plant community assembly and ecosystem functions, Biodiversity Exploratories (DFG SPP 1374, **responsible for acquisition of funds and project coordination**, EUR 250 000)
- 2014-2017 STOICHIO – Effekte der Landnutzung auf die Stöchiometrie von Mikro- und Makronährstoffen von Pflanzen-Herbivoren Systemen, Biodiversity Exploratories (DFG SPP 1374, **PhD student supervision**)
- 2013 International symposium “New developments in restoration research and applied ecology”, University of Münster (**Acquisition of funds, organisation**)
- 2011-2014 BioComp II – Beziehungen zw. Nährstoffkonzentrationen, Rohfasergehalten und Isotopensignalen von Grünlandbiomasse zu Biodiversitätsmustern, Ökosystemprozessen und der Landnutzungsintensität mit Hilfe multi-temporalen Daten, Biodiversity Exploratories (DFG SPP 1374, **project member**)
- 2009-2011 BioComp I – Beziehungen zwischen Biodiversitätsmustern und kompositorischen Eigenschaften von Graslandvegetation mit Hilfe von Nahinfrarot-Spektroskopie, Biodiversity Exploratories (DFG SPP 1374, **project member**)

Teaching

- **Lectures:** Grassland Ecology, Grassland Management (Production of Crops and Forage), Biogeochemistry and Sustainable Management, Natur in der Stadt: Chancen und Potentiale für Ökologie und Naturschutz
- **Courses/seminars:** Isotope Ecology, Landscape Ecology, Land Use Conflicts in Flood Plains, Determination of Woody Species, Colloquium of the Institute of Landscape Ecology
- **Field courses:** Landscape Ecology, Soil Science, Grassland Ecology

- **Field trips/excursions:** South-East Europe (Czech Republic, Slovakia and Hungary, 12 days), Floodplain Ecology (10 days), Landscape Ecology (3 days), National Park Hainich (3 days), National Park Eifel (3 days), numerous one-day excursions on different topics such as urban ecology, vegetation ecology, nature conservation, alpine ecology, and plant species determination
- **Educational outreach activities with schools,** e.g., “LernFeld” - farm visits and research with pupils; lecture on isotope ecology for pupils

Supervision of Students

Doctoral Students

- Supervision and co-supervision (8)
 - Verena Busch (University of Münster)
 - Iris Feigenwinter (ETH Zurich)
 - Martin Freitag (University of Münster)
 - Yujie Liu (ETH Zurich)
 - Regine Maier (ETH Zurich)
 - Franziska Richter (ETH Zurich)
 - Qing Sun (ETH Zurich)
 - Yi Wang (ETH Zurich)
- External referent/opponent
 - Alena Vítová (University of South Bohemia, Czech Republic)

BSc, MSc, and Diploma Students

- BSc theses (32)
- MSc and Diploma theses (15)

Interns, Trainees, and Guest Scientists

- Pupil internships (3)
- Student interns at BSc and MSc level (6)
- Guest scientist and visiting doctoral students (3)

Continuing Education

Regular Participation in Continuing Education:

- Numerous courses on statistical methods, e.g., advanced structural equation modelling
- Several one-day leadership and soft skill trainings

- Educational development and teaching methods:
 - *Foundations of Teaching and Learning* (55 h, ETH Zurich)
 - Several one-day courses at ETH Zurich and the University of Münster
 - Several *Refresh Teaching* lunchtime courses at ETH Zurich

Organisation of Workshops and Conference Sessions

Since 2015	Several special sessions on Urban Ecology, Ecological Restoration and Grassland Ecology at various international conferences
2013	International Symposium for Restoration Ecology, University of Münster, Münster, Germany
2011-2012	“Young Researchers Day”, Faculty of Geosciences, University of Münster, Münster, Germany

Talks and Presentations (Science and Outreach)

Invited Talks and Keynotes (Selection)

2022	“Life is grassy: How the multifunctionality of permanent grasslands supports our wellbeing and how we can support this for sustainable future agriculture”, Institute of Ecology, University of Bremen
2022	“Ökosystemleistungen aus dem Grasland”, Club F (AGFF – Swiss Grassland Association), Solothurn, Switzerland
2022	“Peer assessment – Peeking into the students learning process while they assess their peers”, Refresh Teaching for Continuous Assessment, Educational Development and Technology, ETH Zurich, Switzerland
2021	“The biodiversity potential of urban grasslands: options and limitations of nature conservation efforts in cities” Hungarian Urban Ecology Conference, hosted by Széchenyi István University in Győr, Hungary
2021	“Akkuratesse oder Wildwuchs? Wie wünschen sich Stadt-Bewohner*innen ihre Grünflächen?”, Botanical Garden, University of Bern, Switzerland
2021	“Restoring urban greenspace for nature and people”, Institute of Plant Sciences, University of Bern, Switzerland
2020	“Urban grasslands for nature and people”, Institute of Landscape Ecology, University of Münster, Münster, Germany
2020	“Restoration of urban greenspace for nature and people”, Biodiversity Seminar, WSL, Birmensdorf, Switzerland
2020	“Conservation and restoration of biodiversity in European grasslands”, open workshop <i>Conservation and Restoration of Forest and Grassland Ecosystems</i> , Tuscia University, Viterbo, Italy

- 2020 “Wilderness vs. tidiness – trade-offs in enriching urban grasslands”, open international webinar *Biodiversity of golf courses and urban grasslands: Current knowledge and future trends Golf courses*, Norwegian Institute of Bioeconomy Research, Norway
- 2018 “Hacking ecosystems”, talk at the seminar *Hacking Values*, Zurich University of the Arts, Zurich, Switzerland
- 2017 “Neue Natur in der Stadt: Chancen und Potentiale des Konzepts der novel ecosystems”, stakeholder symposium *Mehr Natur in der Stadt – Neue Ziele, neue Wege?*, Bielefeld, Germany
- 2017 “The relevance of plant diversity in urban and agricultural grasslands”, Department of Botany, University of South Bohemia, Ceske Budejovice, Czech Republic
- 2017 «Wie kommen die Blumen zurück ins Wirtschaftsgrünland?», stakeholder symposium of the DFG SPP *Biodiversitäts-Exploratorien*, Ulm University, Ulm, Germany
- 2016 “Seeds and the city – The importance of urban grasslands and their ecological potential”, Institute of Evolution & Ecology, University of Tübingen, Tübingen, Germany
- 2014 “Aufwuchsqualität, Nährstoffe und Pflanzenvielfalt im Grünland”, stakeholder symposium of the DFG SPP *Biodiversitäts-Exploratorien*, Technical University Munich, Mülverstedt, Germany
- 2012 “Hier fängt Wildnis an”, public talk within the series *Expedition Münsterland*, Steinfurt-Borghorst, Germany

Conference Presentations

- Since 2008 Numerous oral and poster presentations as first and last author at international conferences such as annual meetings of the Society of Ecological Restoration (SER World and Europe Chapters), the Society of Ecology of Germany, Austria and Switzerland (GfÖ), the European Grassland Federation (EGF), and the International Association of Vegetation Sciences (IAVS)

Academic Services and Interest Groups

- Since 2020 Representative of scientific staff at the **Institute's Council** of the Institute of Agricultural Sciences, ETH Zurich
- 2017-2022 **Board member** of the Association of Scientific Staff at D-USYS, ETH Zurich
- 2019-2021 **Treasurer** of the Association of Scientific Staff at D-USYS, ETH Zurich
- 2017-2021 Representative of scientific staff at the **Departmental Conference** of the Department of Environmental Systems Science, ETH Zurich

- 2014-2017 Representative of scientific staff at the **Institute's Council** of the Institute of Landscape Ecology, University of Münster
- 2015-2016 Member of the **Equal Opportunities Commission** at the Faculty of Geosciences, University of Münster
- 2010-2012 **PhD speaker** of the DFG SPP 1374 Biodiversity Exploratories
- 2003-2008 **Member and temporarily head of the student council**, several academic services for in the Faculty Council, Institute's Council and several committees, Institute of Landscape Ecology, University of Münster

Professional Memberships

- Since 2021 Member of the *Society for Urban Ecology* (SURE)
- Since 2017 Member of the *Arbeitsgemeinschaft zur Förderung des Futterbaus* - AGFF (Swiss Grassland Association)
- Since 2015 Member of the *International Association for Vegetation Science* (IAVS)
- Since 2008 Member of the *Ecological Society of Germany, Austria and Switzerland* (GfÖ)

Services to the Scientific Community

- Since 2020 Co-lead of the *Specialist Group Urban Ecology* of the Ecological Society of Germany, Austria and Switzerland (GfÖ Arbeitskreis Stadtökologie)
- 2020-2021 Guest editor for *Basic and Applied Ecology*
- 2020-2021 Guest editor for *Tuexenia*
- Since 2011 Reviewer for numerous scientific journals e.g., *Science Advances*, *Functional Ecology*, *Journal of Applied Ecology*, *Journal of Environmental Management*, *Ecological Engineering*, *Urban Ecosystems*, *Scientific Reports*, *Restoration Ecology*, *Landscape Ecology*, *Biological Conservation*, *European Journal of Agronomy*
- Since 2021 Review of research grants and PhD proposals for e.g., the German Research Foundation (DFG), the Dutch Research Council (NWO), the Czech Science Foundation (GACR), the Hungarian National Research, Development and Innovation Office (NKFIH) the UK Research and Innovation (UKRI) Wageningen University, University of Natural Resources and Life Sciences Vienna (BoKu)