

Eurac Research
Viale Druso 1,
39100 Bozen/Bolzano, Italy

RESEARCH INTERESTS

As a landscape ecologist by training with an inter- and transdisciplinary approach, in my work I study the multiple and diverse interactions between people and nature, primarily in mountain agroecosystems. I am particularly interested in cultural landscape change, the provision of ecosystem services and in further understanding the underlying processes towards climate resilience and sustainability. In my work I use both quantitative and qualitative research methods, including spatial modelling and participatory methods to gain new insights into the complex human-nature interactions and to develop sustainable solutions that are equally relevant to the national and international research community as well as the general public and policy makers.

EDUCATION

2023	National Scientific Habilitation in Ecology , MIUR, IT
2012 – 2018	PhD, Ecology ; University of Innsbruck, AT
2007 – 2011	MSc, Geography ; University of Innsbruck, AT
2002 – 2007	BSc, Earth- and Atmospheric Sciences ; University of Innsbruck, AT

EMPLOYMENT

2024 – 2025	Lecturer in Environmental Geomatics and Landscape Planning Faculty of Agricultural, Environmental and Food Sciences, Free University of Bolzano, IT (link to profile)
2014 – 2024	Lecturer in Landscape Ecology and Geomatics Department of Ecology, University of Innsbruck, AT
2011 – Present	Postdoctoral Researcher (since 2013 tenured) Institute for Alpine Environment, Eurac Research, IT (link to profile)

GRANTS & FELLOWSHIPS

(PI=Principal Investigator; WPL=Work Package Leader)

- 2025-2028 EU BIODIVERSA+
TRANSForm: BACK TO THE FUTURE: TRADITIONAL AGROFORESTRY SYSTEMS AS NBS TO FACE MULTIPLE SOCIETAL CHALLENGES
Role: Project lead
Personal share: € 291.800 (Grant amount € 1.6 million)
- 2024-2027 EU INTERREG ALPINE SPACE
RESPOND: CLIMATE RESILIENT ALPINE WINE ORCHARDS
Role: Project lead
Personal share: € 455.000 (Grant amount € 2.2 million)
- 2023-2025 JOINT RESEARCH CALL (www.univr.it/en/joint-research) – Verona (IT)
AGATA: ACCESSIBLE ECOLOGICAL DATA FOR EVIDENCE-BASED DECISIONS
Role: Project lead
Personal share: € 55.000
- 2023-2025 LESSER FOUNDATION FOR NATURE CONSERVATION – MUNICH (DE)
BAUMGART: Competence network for Orchard meadows: Raising awareness, preserving and promoting this species-rich cultural landscape
Role: Project lead
Personal share: €75.000
- 2023-2024 COMMISSIONED RESEARCH BY THE LAND SÜDTIROL
Climatic Water balance for the upper Adige river catchment
Role: Project lead
Personal share: € 25.000
- 2023-2024 FUSION GRANT – NOI TECHPARK
ClimSmart: Climate Smart agriculture. Decision-support tools for agriculture to adapt to climate change in South Tyrol
Role: Project lead
Personal share: € 60.000
- 2023 EU INTERREG ITA-AUT - Subcontracting
Assessing the climate suitability of winegrowing regions in Carinthia (AT) und Friuli (IT)
Role: Project lead
Personal share: € 14.000 (Grant amount € 200,000)

2021-2022	<p>RESEARCH FUNDING PROGRAMME OF THE PROVINCE OF BOLZANO</p> <p>KULTIVAS: Identifying suitable locations for apple orchards based on big data</p> <p><u>Role:</u> Coordinator</p> <p><u>Personal share:</u> € 30.000 (Grant amount € 400,000)</p>
2020-2023	<p>SÜDTIROLER SPARKASSE FOUNDATION</p> <p>VICE: <i>Viticulture In a Changing Environment: climate change, varieties, landscapes, adaptation</i></p> <p><u>Role:</u> Project lead</p> <p><u>Personal share:</u> € 66.000 (Grant amount € 120.000)</p>
2019-2022	<p>EU INTERREG ALPINE SPACE</p> <p>LUIGI: <i>Linking Urban and Inner-alpine Green Infrastructure</i></p> <p><u>Role:</u> Project lead</p> <p><u>Personal share:</u> 245.000 (Grant amount € 2.5 million)</p>
2016-2019	<p>EU INTERREG ITA-AUT</p> <p>REBECKA: Climate suitability of mountain viticulture: opportunities and threats</p> <p><u>Role:</u> Project lead</p> <p><u>Personal share:</u> € 190.000 (Grant amount € 750.000)</p>
2015-2018	<p>EU INTERREG ALPINE SPACE</p> <p>AlpES: Alpine Ecosystem Services – mapping, maintenance, management</p> <p><u>Role:</u> Coordinator</p> <p><u>Personal share:</u> € 200.000 (Grant amount € 2,2 million)</p>
2014-	<p>EURAC RESEARCH (internal funding)</p> <p>ESL: Mountain Ecosystem Services Laboratory</p> <p><u>Personal share:</u> € 20.000/year</p>

PUBLICATIONS

2024	<p>Tscholl S, Candiago S., Fraga H., Giupponi C. Egarter Vigl L. <i>Climate-resilience of European Wine Regions</i>. Nature Communications 15(1):6254 https://doi.org/10.1038/s41467-024-50549-w</p> <p>Candiago S., Tscholl S., Bassani L, Fraga H., Egarter Vigl L. <i>Quality wines in Italy and France: a dataset of protected designation of origin specifications</i>. Data in Brief 54, 110408 https://doi.org/10.1016/j.dib.2024.110408</p>
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- Tscholl S., **Egarter Vigl L.** (2024) *The changing geography of wine climates and its implications on adaptation in the Italian Alps*. Climate Resilience and Sustainability 3, e70000 <https://doi.org/10.1002/cli2.70000>
- Guariento E., Obwegs L., Anderle M., Belle A., Fontana P., Paniccia C., Plunger J., Rüdissler J., Stifter S., Giombini V., Egarter Vigl L., Tappeiner U., Hilpold A. (2024) *Meadow orchards as a good practice example for improving biodiversity in intensive apple orchards*. Biological Conservation 299, 110815 <https://doi.org/10.1016/j.biocon.2024.110815>
- Schönafinger A., **Egarter Vigl L.**, Tasser E. (2024) *Spatiotemporal patterns and drivers of orchard meadow loss in South Tyrol, Italy*. Scientific Reports 14:30812 <https://doi.org/10.1038/s41598-024-81077-8>
- Heilemann K., Schultz M., Weigand A., Molitor D. **Egarter Vigl L.**, Eickermann M. (2024) *Symptoms caused by the invasive American buffalo treehopper *Stictocephala bisonia* Kopp & Yonke, 1977 (Insecta, Hemiptera) in Luxembourgish viticulture*. Bull. Cos. Nat. Luxemb.126
- 2023 Simion H., Giombini V., Tasser E., Marsoner T., **Egarter Vigl L.** *Enhancing understanding of ecosystem multifunctionality in mountain regions*. Ecological Solutions and Evidence 4(3), e12265 <https://doi.org/10.1002/2688-8319.12265>
- Marsoner T., Simion H., Giombini V., **Egarter Vigl L.**, Candiago S. *A detailed land use/land cover map for the European Alps macro region*. Scientific Data 10, 468 <https://doi.org/10.1038/s41597-023-02344-3>
- Ghermandi A., Langemeyer J., Van Berkel D., ... **Egarter Vigl L.**, ...Spencer W. *Social media data for environmental sustainability: A critical review of opportunities, threats, and ethical use*. One Earth 6, 3, 236-250 <https://doi.org/10.1016/j.oneear.2023.02.008>
- 2022 Candiago S, Winkler K., Giombini V., Giupponi C., **Egarter Vigl L.** (2022). *An ecosystem service approach to the study of vineyard landscapes in the context of climate change: a review*. Sustainability Science 18, 997-1013 <https://doi.org/10.1007/s11625-022-01223-x>
- Candiago, S., Tscholl S., Bassani L., Fraga H., **Egarter Vigl L.** (2022). *A geospatial inventory of regulatory information for wine protected designations of origin in Europe*. Scientific Data 9, 394 <https://doi.org/10.1038/s41597-022-01513-0>
- 2021 **Egarter Vigl L.**, Marsoner T., Schirpke U., Tscholl S., Candiago S., Depellegrin D. (2021). *A multi-pressure analysis of ecosystem services for conservation planning in the Alps*. Ecosystem Services 47, 101230 <https://doi.org/10.1016/j.ecoser.2020.101230>

- Egarter Vigl L.**, Marsoner T., Pecher C., Stemle E., Tasser E., Depellegrin D. (2021). *Harnessing Artificial Intelligence technology and social media to support Cultural Ecosystem Services assessments*. *People and Nature* 3(3), 673-685
<https://doi.org/10.1002/pan3.10199>
- 2019 Schirpke U., **Egarter Vigl L.**, Tasser E., Tappeiner U. (2019). *Analyzing the Spatial Congruencies and Mismatches between Supply, Demand and Flow of Ecosystem Services and Sustainable Development*. Sustainability.
<https://doi.org/10.3390/su11082227>
- Schirpke U., Candiago S., **Egarter Vigl L.**, Jäger H., Labadini A., Marsoner T., Meisch C., Tasser E., Tappeiner U. (2019). *Integrating supply, flow and demand to enhance the understanding of interactions among multiple ecosystem services*. *Science of the Total Environment*. DOI: [10.1016/j.scitotenv.2018.09.235](https://doi.org/10.1016/j.scitotenv.2018.09.235)
- Zen M., Candiago L., Schirpke U., **Egarter Vigl L.**, Giupponi C. (2019). *Upscaling ecosystem service maps to administrative levels: beyond scale mismatches*. *Science of the Total Environment*. DOI: [10.1016/j.scitotenv.2019.01.087](https://doi.org/10.1016/j.scitotenv.2019.01.087)
- 2018 **Egarter Vigl L.**, Schmid A., Moser F., Balotti A., Gartner E., Katz H., Quendler S., Ventura S., Raifer B. (2018). *Upward shifts in elevation—a winning strategy for mountain viticulture in the context of climate change?* E3S Web Conferences. DOI: [10.1051/e3sconf/20185002006](https://doi.org/10.1051/e3sconf/20185002006)
- Balotti A., Tscholl S., **Egarter Vigl L.** (2018). *Linking viticultural climatic indices to grape phenology in the South Tyrolean Alps*. E3S Web Conferences. DOI: [10.1051/e3sconf/20185001031](https://doi.org/10.1051/e3sconf/20185001031)
- Marsoner T., **Egarter Vigl L.**, Jaritz G., Manch F., Tappeiner U., Tasser E. (2018). *Indigenous livestock breeds as indicators for cultural ecosystem services: A spatial analysis within the Alpine Space*. *Ecological Indicators*. DOI: [10.1016/j.ecolind.2017.06.046](https://doi.org/10.1016/j.ecolind.2017.06.046)
- 2017 **Egarter Vigl L.**, Tasser E., Schirpke U., Tappeiner U. (2017). *Using land use/land cover trajectories to uncover ecosystem service patterns across the Alps*. *Regional Environmental Change*. DOI: [10.1007/s10113-017-1132-6](https://doi.org/10.1007/s10113-017-1132-6)
- Egarter Vigl L.**, Depellegrin D., Perreira P., de Groot R., Tappeiner U. (2017). *Mapping the ecosystem service delivery chain: capacity, flow, and demand pertaining to aesthetic experiences in mountain landscapes*. *Science of the Total Environment*. DOI: [10.1016/j.scitotenv.2016.08.209](https://doi.org/10.1016/j.scitotenv.2016.08.209)
- 2016 Niedrist G., Tasser E., Bertoldi G., Della Chiesa S., Obojes N., **Egarter Vigl L.**, Tappeiner U. (2016): *Mountain grassland response to transplantation to lower*

altitudes: Warming effects versus methodological artefacts. Flora. DOI: [10.1016/j.flora.2016.07.013](https://doi.org/10.1016/j.flora.2016.07.013)

Egarter Vigl L., Schirpke U., Tasser E., Tappeiner U. (2016): Linking long-term landscape dynamics to the multiple interactions among ecosystem services. Landscape Ecology. DOI: [10.1007/s10980-016-0389-3](https://doi.org/10.1007/s10980-016-0389-3)

Depellegrin D., Perreira P., **Egarter Vigl L.** (2016): *Mapping ecosystem services potential in Lithuania*. International Journal of Sustainable Development & World Ecology. DOI:[10.1080/13504509.2016](https://doi.org/10.1080/13504509.2016)

2014 Depellegrin D., Blazauskas N., **Egarter Vigl L.** (2014): *An integrated visual impact assessment model for offshore windfarm development*. Ocean & Coastal Management 98, 95-110. DOI: [10.1016/j.ocecoaman.2014.05.019](https://doi.org/10.1016/j.ocecoaman.2014.05.019)

Book contributions:

2024 Egarter **Vigl L.**, Tscholl S. *Klimafaktoren, Reifegruppe und der Klimawandel. Einfluss des Klimas auf den Weinbau*. In: Wein in Südtirol – Geschichte und Gegenwart eines besonderen Weinlandes. Konsortium Südtirol Wein, S. 36-47

2022 Misiune I, Depellegrin D., **Egarter Vigl L.** „*Human-Nature Interactions*“ – *Exploring Nature’s Values across Landscapes*”
