Ekaterina Tarasova

Work permit: Italian   **Nationality:** Russian   **Gender:** Female

✉ **Email address:** ▮▮▮▮▮▮▮▮▮▮

✉ **Email address:** ekaterinatarasova@cnr.it

📍 **Work:** Via Madonna Alta 126 CNR IRPI, 06128 Perugia (Italy)

ABOUT ME

She is a motivated researcher with an international background in landscape architecture, forest and environmental sciences, and sustainability. Her professional experience focuses on sustainable land management, with particular expertise in the Land Use, Land Use Change and Forestry (LULUCF) sector.

Throughout her PhD research, she developed spatial decision support systems to assist policy makers in selecting optimal land management strategies to enhance carbon sequestration through afforestation and agroforestry practices. Her work included the calculation of CO_2 sequestration and the monetary assessment of government subsidies. She actively contributes to environmental policy development aimed at climate change mitigation and the sustainable management of natural resources.
She is highly skilled in GIS-based spatial analysis and modelling, with expertise in QGIS, GRASS GIS, Python, and R Studio. She has demonstrated excellent intercultural communication and leadership abilities, having successfully coordinated cultural and scientific events in international and multidisciplinary settings.

WORK EXPERIENCE

🏢 *Italian National Research Council (CNR)* – Perugia, Italy

City: Perugia | **Country:** Italy
Research fellow

[20/06/2024 – Current]

As part of the research project "URGERE – URban GEodiversity for a Resilient Environment" we developed a GRASS GIS code to map and assess the urban resilience of Italian cities.
https://urgere-project.irpi.cnr.it/partners/

🏢 *Euro-Mediterranean Center on Climate Change (CMCC)* – Viterbo, Italy

City: Viterbo | **Country:** Italy
Research assistant

[01/11/2020 – 31/01/2024]

As a part of my PhD study. I developed a spatial decision support system to assist policy makers in selecting optimal land management strategies for enhancing carbon sequestration through forest plantation activities (afforestation and agroforestry), while ensuring compliance with biodiversity regulations and EU and national policies. I also calculated CO_2 sequestration and performed monetary assessments based on government subsidies.
https://www.cmcc.it

🏢 *RUDN university* – Moscow, Russia

City: Moscow | **Country:** Russia
Laboratory research assistant

[01/10/2018 – 30/04/2020]

Within the project of the Russian Science Foundation №17-77-20046 "Modelling and development of technologies to ensure the sustainable functioning of soil structures in the megalopolis"
https://sunlab.rudn.ru

EDUCATION AND TRAINING

PhD in Science, Technology and Biotechnology for Sustainability (in english)
Universita degli studi della Tuscia [01/11/2020 – 31/01/2024]

Address: Via Santa Maria in Gradi, 4 , 01100 Viterbo (Italy) | Website: http://www.unitus.it | Field(s) of study: Forest ecology and environmental technologies

Master of Science in Forest and Environmental Science (in english)
Universita degli studi della Tuscia [25/09/2018 – 17/07/2020]

Address: Via Santa Maria in Gradi, 4, 01100 Viterbo (Italy) | Website: http://www.unitus.it | Thesis: Effect of amendments on metal solubility and plant growth in soils affected by a Cu/Ni smelter

Master of Science in Landscape Architecture (in english)
RUDN University [25/09/2018 – 27/06/2020]

Address: Miklukho-Maklay Str., 6, 117198 Moscow (Russia) | Website: https://eng.rudn.ru

Bachelor of Science in Landscape Architecture
RUDN University [01/09/2014 – 30/06/2018]

Address: Miklukho-Maklay Str., 6, 117198 Moscow (Russia) | Website: http://eng.rudn.ru | Thesis: Analysis and forecasting of the impact of urbanization on soil quality on the example of New Moscow

PUBLICATIONS

[2025]
Measuring resilience of urban areas using public data and a reproducible approach

Authors: Ekaterina Tarasova, Massimiliano Alvioli | Journal Name: (Ready for submission)

[2025]
Maximizing Carbon Sequestration through Forest Establishment Actions: Case Study of Central Italy

Authors: Ekaterina Tarasova, Alexander Cotrina-Sanchez, Riccardo Valentini | Journal Name: (Ready for submission)

[2024]
Enhancing Carbon Sequestration: A Systematic Literature Review of Spatial Decision Support Tools

Authors: Ekaterina Tarasova, Riccardo Valentini, Giulio Di Lallo, Alexander Corina-Sanchez, M. V. Chiriacò

Link: https://doi.org/10.3390/su16125045

[2023]
The land sector in the low carbon emission strategies in the European Union: role and future expectations

Authors: Di Lallo, G., Chiriacò, M.V., Tarasova, E., Köhl, M., Perugini M. | Journal Name: Climate Policy Journal

Link: https://doi.org/10.1080/14693062.2023.2273948

[2021]
The challenge of reducing metal phytotoxicity in soils affected by historical nickel-copper smelting operations in the Kola Peninsula, Russia

Authors: Neaman, A., Tapia-Pizarro, F., Tarasova, E., Brykov, V., Brykova, R., ... & Stuckey, J. W. | Journal Name: AgroSur Journal

Link: https://doi.org/10.4206/agrosur.2021.v49n1-02

[2020]
Vermiculite-Lizardite Industrial Wastes Promote Plant Growth in a Peat Soil Affected by a Cu/Ni Smelter: a Case Study at the Kola Peninsula, Russia.

Authors: Tarasova, E., Drogobuzhskaya, S., Tapia-Pizarro, F. et al. | Journal Name: Journal of Soil Science and Plant Nutrition. Springer

Link: https://doi.org/10.1007/s42729-020-00188-z

CONFERENCES AND SEMINARS

[27/04/2025 – 02/05/2025] Vienna, Austrua
EGU General Assembly 2025
Presented research activity: **Measuring resilience of urban areas using public data and a reproducible approach**.

Authors: **Tarasova, E.**, Alvioli, M.

Link: https://doi.org/10.5194/egusphere-egu25-11618

[11/12/2023 – 15/12/2023] San Francisco
AGU Fall Meeting 2023
Presented research activity: **Harnessing Agroforestry Potential: Building Bridges between Policy and Practice for Modelling and Predicting Carbon Fluxes**.

Authors: **Tarasova, E.**, Chiriacò, M. V., & Perugini, L. Valentini, R.

Link: https://agu.confex.com/agu/fm23/meetingapp.cgi/Paper/1342573

[24/10/2023 – 27/10/2023] Evora, Portugal
IUFRO Forest Environment DIV 8 Conference 2023
Presented research activity: **Spatial Decision Support Tools for Assessing Land-Based Climate Mitigation Actions**.

Authors: **Tarasova, E.**, Di Lallo, G., Perugini, L., Chiriacò, M. V., Santini, M., Valentini, R.

Link: https://iufro2023.uevora.pt

[23/04/2023 – 28/04/2023] Vienna, Austria
EGU General Assembly 2023
Presented research activity: **Assessment of the impact of the Italian National Forest Strategy on carbon sequestration in the Lazio region up to 2030**.

Authors: **Tarasova, E.**, Chiriacò, M. V., & Perugini, L.

Link: https://doi.org/10.5194/egusphere-egu23-11708

[19/10/2022 – 21/10/2022] Rome, Italy
SISC 2022 Annual Conference
Italian Society for Climate Science (SISC) 2022: Governing the Future

Link: https://www.sisclima.it/hp-rewrite/a818403866f99363d962b9020d52e075

[27/09/2022 – 28/09/2022] Rome, Italy
ICOS science conference 2022
Carbon Neutrality Objective: role, status and prospects of environmental observationsWrite here the description...

Link: https://www.icos-italy.it/conferenza-icos-italy-2022/

[16/06/2019 – 22/06/2019] Apatity
VII Russian Scientific Conference with international participation
VII Russian Scientific Conference with international participation «Ecological problems of the Northern Regions and ways to their solution». Kola Science Centre of the Russian Academy of Sciences.

Link: http://inep.ksc.ru/index.php/portfolio/2019-god

[25/02/2019 – 02/03/2019] Saint Petersburg
International Scientific Conference "XXII Dokuchaev Conference for Young Scientists"
Link: http://www.dokuchaevskie.ru

SKILLS

R Programming Language / MaxEnt / QGIS (Advanced level) / Python Programming Language / Greenhouse gas emission inventories / Carbon Accounting / IPCC Inventory Software / Analytical skills / Team-work oriented / Organizational and planning skills / GRASS-GIS

LANGUAGE SKILLS

Mother tongue(s): Russian

Other language(s):

English	**Italian**
LISTENING C1 **READING** C1 **WRITING** B2	**LISTENING** B2 **READING** B2 **WRITING** B1
SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1	**SPOKEN PRODUCTION** B1 **SPOKEN INTERACTION** B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

MANAGEMENT AND LEADERSHIP SKILLS

Certificate of public activity of the RUDN University

Certificate of public activity of the University of RUDN for participation in the activities of student organizations of the University. Organizing events that support and demonstrate the cultures and traditions of international students.