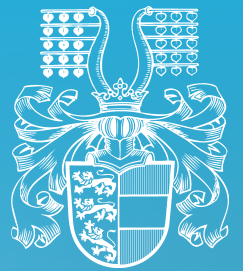


# Carinthia II

Part 3

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# Trying to find common ground: On the fourth issue of Carinthia Nature Tech

Susanne Aigner, Daniel Dalton, Michael Jungmeier

Time passes quickly, and the fourth issue of *Carinthia Nature Tech* is already in your hands. We are pleased that this young journal continues to develop so robustly. The routines in editing, peer review, design, and publication are beginning to settle in. We are grateful for the important contributions of our editorial board, which were especially evident and tangible at the last meeting on April 8<sup>th</sup> (Figure 1). The journal is gaining an international readership, and we are delighted by the growing interest in Carinthia's contributions to natural resource management.



Fig. 1

Thanks to funding by the Austrian Science Fund, FWF, an online editorial system has been set up and is now in operation. This enables an online workflow from submission and peer review to production and publication. The funding has enabled further outreach. The journal is now linked to the newly established Interdisciplinary Center for Ecosystem Services and Biodiversity (ICEB) at Carinthia University of Applied Sciences (CUAS) (Figure 2).

It is increasingly important that editors, authors, reviewers, and of course our readers utilize a shared foundation and common understanding. This applies to data protection and ethics: assessing whether open data sharing could put rare species at risk; compliance with legal requirements; and how societal regulations (such as species and animal protection) should be taken into account and presented in submitted contributions. We must also address the use of artificial intelligence: in what ways and to what extent should AI be permitted in articles, and how should its use be disclosed? These are among the questions our Editorial Board will consider in forthcoming workshops, alongside many operational and technical matters.

Stable terminology and clear classifications are the foundation of scientific order. We aim to bring that clarity to our journal. As Carl Linnaeus famously stated, “Nomina si pereunt, perit et cognitio rerum” (“If the names are lost, the knowledge of things is lost”). As a starting point to promote gradual harmonization of terminology, we propose the following definitions and taxonomy for authors' optional use in *Carinthia Nature Tech*.

**Figure 1:** Editorial Board. We appreciate the support of the high-caliber board, shown here at a hybrid meeting on April 8, 2026 at Carinthia University of Applied Sciences; from left to right: Franz Hölzl, Gernot Paulus, Peter Granig, Wilfried Elmenreich, Ilja Svetnik, Michael Jungmeier, Susanne Aigner, Lilia Schmalzl, and Daniel Dalton; on screen: Christian Komposch, Tamara Schenekar, and Daniel Mengistu. Photo: Lily van der Donk.

**Abbildung 1:** Redaktionsbeirat. Wir freuen uns über die Unterstützung des hochkarätigen Beirates, hier bei einem hybriden Treffen am 8. April 2026 an der Hochschule Kärnten; von links nach rechts: Franz Hölzl, Gernot Paulus, Peter Granig, Wilfried Elmenreich, Ilja Svetnik, Michael Jungmeier, Susanne Aigner, Lilia Schmalzl und Daniel Dalton; am Bildschirm sichtbar: Christian Komposch, Tamara Schenekar und Daniel Mengistu. Foto: Lily van der Donk.



**Figure 2:** New visual identity. The brochure for *Carinthia Nature Tech*—part of a new brand presence—was designed locally by a young agency (LoMa Medien & Dienstleistungen OG, Velden am Wörthersee). The graphic features a stylized photo of a vegetation survey at the Nunatak Kleiner Burgstall (Glockner Group, Hohe Tauern National Park). It presents the journal's thematic focus and scientific standards: double-blind peer review; fully Open Access; published in English; no article processing charges. The invitation to all those interested: Discover *Carinthia Nature Tech*. Read. Submit. Review. Collaborate. (Graphic: LoMa, based on a photo by Vanessa Berger).

**Abbildung 2:** Neues Erscheinungsbild. Der Folder zur *Carinthia Nature Tech*—Element eines neuen Auftritts—wurde von einer lokalen jungen Agentur (LoMa Medien & Dienstleistungen OG, Velden am Wörthersee) gestaltet. Die Grafik zeigt das verfilmte Foto einer Vegetationserhebung am Nuntak Kleiner Burgstall (Glocknergruppe, Nationalpark Hohe Tauern). Dargestellt sind der inhaltliche Schwerpunkt sowie die wissenschaftlichen Standards des Journals: Doppelblinde Begutachtung; vollständig Open Access; erscheint auf Englisch; keine Publikationsgebühren. Es ergeht die Einladung an alle Interessierten: *Carinthia Nature Tech* entdecken. Lesen. Einreichen. Begutachten. Zusammenarbeiten. (Grafik: LoMa, basierend auf Bild von Vanessa Berger).

**Fig. 2**

We use *Nature Techs* as an umbrella term for technologies that sense, measure, analyze, and support the management of natural phenomena—both biotic (living) and abiotic (non-living). *Nature Techs* can be grouped by technology type and by application.

We distinguish three categories of technology:

**BiDiTechs** (Biodiversity Technologies). *BiDiTechs* are designed to detect, identify, and monitor biodiversity at taxonomic and functional levels. Examples include acoustic sensors and classifiers, camera traps coupled with computer vision, metabarcoding of samples collected from the environment, bio-logging and GPS collars, crowd-sourced observation platforms, and ecological modeling and annotation tools.

**EnviTechs** (Environmental Monitoring Technologies). *EnviTechs* measure and monitor non-living components of the environment. Examples include weather stations and microclimate sensors, hydrological monitoring systems, soil moisture and nutrient probes, and air and water quality monitors.

**Management Apps** (Management and Operations Applications). *Management Apps* are software tools that support the planning, execution, monitoring, and evaluation of management actions. Examples include *EarthRanger*, *SMART Connect*, the *IPAM Toolbox*, spatial planning tools, and integrated management and monitoring dashboards. Various dashboards or platforms fall into this category, for example iNaturalist and BirdNET.

We propose that monitoring of human activities specifically fall under *Management Apps*—for example, visitor monitoring tools. Systems for documenting poaching incidents, roadkill, or light pollution are also included here.

**Application domains.** This term refers to where these technologies are used. The nomenclature of a study should follow the conventions of the relevant domain. Illustrative domains include smart farming (digital agriculture), digital forestry, and conservation technologies. The latter subsumes all technologies employed in service of typical conservation objectives, such as biodiversity conservation, habitat protection, ecological restoration, and protected area management.

The path is made by walking. We recognize that these definitions are still evolving. We warmly invite our authors to engage with these provisional definitions to promote common understanding as we proceed in the current digital transformation.

The current issue exemplifies many ways that biodiversity can be observed. In the peer-reviewed sections, engagement of young scientists is visible through an information

technology internship program that occurred at University of Klagenfurt. Analysis of long-term camera trap survey data reveals presence of non-target mammals and birds in Carinthia. Trends of visitor activity are documented through a GPS tracking survey in a Carinthia trans-boundary UNESCO GeoPark. In the Short Notes, results of land use change in an Ethiopian biosphere reserve are documented using satellite remote sensing. Diverse ways to monitor local agrobiodiversity are showcased. Lastly, two Book Reviews round out the issue, with one review on grasshoppers of Carinthia, and one review on the habitats of Europe.

Lastly, attentive readers will notice a novelty in this issue. For the first time, we include a Short Note contribution that examines the situation at Lake Tana Biosphere Reserve in the Amhara Region of Ethiopia. Our author guidelines state that: “The articles must have a clear connection to the Alps–Adriatic Region. At least one contributing author or the study area must be directly connected to the region.” In this case, the contribution arises from a long-standing collaboration between Bahir Dar University and CUAS, reflected in joint project endeavors by researchers from both institutions.

In this respect, too, it is our aim to develop common ground. We wish our readers fresh and engaging insights into current questions surrounding the development and application of *Nature Techs*.

**Disclaimer:** The authors affirm that all analyses, considerations, and representations reflect their personal knowledge and opinions. In this contribution, AI (*ChatBot Academic AI*) was used exclusively for translations and linguistic editing of the text. No generative AI tools were used. The authors remain fully responsible for the content, including any errors or omissions.

## ABOUT THE AUTHORS

### Susanne Aigner

Board member of Natural Science Association for Carinthia, Klagenfurt am Wörthersee, Austria, E-mail: office@oekologiebuero-aigner.com

### Daniel Dalton

UNESCO Chair on Sustainable Management of Conservation Areas ICEB, CUAS Villach, Austria E-Mail: d.dalton@cuas.at

### Michael Jungmeier

UNESCO Chair on Sustainable Management of Conservation Areas ICEB, CUAS Villach, Austria E-Mail: m.jungmeier@cuas.at



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