

EUBIRECO²⁰²⁴

EUREGIO BIODIVERSITY RESEARCH CONFERENCE TYROL
SOUTH TYROL
TRENTINO

22. – 23.11. Bozen/Bolzano, Italy



Landesmuseen Südtirol
Musei provinciali Alto Adige
Museums provinziail



NATURMUSEUM SÜDTIROL
MUSEO SCIENZE NATURALI ALTO ADIGE
MUSEUM NATŔA SÜDTIROL

BIODIVERSITY CENTER



EUROPAREGION
EUREGIO
Tirolo Südtirol Trentino
Tirolo Alto Adige Trentino



Tagungsprogramm – Programma del convegno

Conference program

Freitag / Venerdì 22.11.2024

Tagungsort / Luogo del convegno:

Haus der Kultur / Casa della Cultura
„Walther von der Vogelweide“,
Schlernstr. / via Sciliar 1, Bozen/Bolzano

- 8:00 – 9:00 Anmeldung /Registrazione / Registration
- 9:00 – 9:20 Eröffnung der Tagung / Inaugurazione del convegno / Conference opening
- 9:20 – 10:00 **Keynote: Integrating genetic diversity into biodiversity conservation**
MARTIN FISCHER; Institute of Integrative Biology, ETH Zürich (CH)

Session: Biodiversity: recording and monitoring (fungi, animals, plants incl. pollen) 1

Chair: Chiara Paniccia – Institute for Alpine Environment, Eurac Research, Bolzano

- 10:00 – 10:20 **Five years of Biodiversity Monitoring South Tyrol – report on the first monitoring cycle**
ULRIKE TAPPEINER; Institute for Alpine Environment, Eurac Research, Bozen (I), Department of Ecology, University of Innsbruck (A)
- 10:20 – 10:40 **Caddisflies (Trichoptera) diversity in South Tyrol: From historical records to new findings**
FRANCESCA VALLEFUOCO; Institute for Alpine Environment, Eurac Research, Bolzano (I)
- 10:40 – 11:00 **Monitoring of the Alpine Salamander, *Salamandra atra*, in Trentino: a Double Observer approach**
LUCA RONER; MUSE – Museo delle Scienze, Trento (I)

11:00 – 11:40

Coffee break with poster flash-talks 1

Session: Biodiversity: recording and monitoring (fungi, animals, plants incl. pollen) 2

Chair: Peter Huemer – Sammlungs- und Forschungszentrum, Hall i. Tirol

- 11:40 – 12:00 **The City Nature Challenge in Innsbruck – Exploring the Potential of Citizen Science Initiatives to Strengthen Regional Biodiversity Datasets in Museums**
PETRA SCHATANEK-WIESMAIR & CHRISTIAN ANICH; Sammlungs- und Forschungszentrum, Hall i. Tirol (A)

12:00 – 12:20 **The MonitAnt project: towards a European standardized protocol for red wood ants monitoring**

ELIA NALINI; Institute for Alpine Environment, Eurac Research, Bolzano (I)

12:20 – 12:40 **Developing a standardized monitoring scheme of the I Annex Bird Directive species breeding in South Tyrol: methods and first results**

FRANCESCO CERESA; Museo di Scienze Naturali dell'Alto Adige, Bolzano (I)

12:40 – 13:00 **Large-scale passive acoustic monitoring of birds in an Alpine ecosystem**

JAREK SCANFERLA; Institute for Alpine Environment, Eurac Research, Bolzano (I)

13:00 – 14:30 **Lunch break**

Session: Biodiversity: recording and monitoring (fungi, animals, plants incl. pollen) 3

Chair: Mauro Gobbi – MUSE - Museo delle Scienze, Trento

14:30 – 14:50 **Soil fauna on mountaintops: first results from the GLORIA Extended samplings in South Tyrol**

MICHAEL STEINWANDTER; Institute for Alpine Environment, Eurac Research, Bozen (I)

14:50 – 15:10 **Soil biodiversity in protected, near-natural forests**

JULIA SEEBER; Institute for Alpine Environment, Eurac Research, Bozen (I)

15:10 – 15:30 **Long-term study of heavy metal and nitrogen concentrations in moss species *Hylocomium splendens* in South Tyrol**

RENATE ALBER; Biologisches Labor – Landesagentur für Umwelt und Klimaschutz, Leifers (I)

15:30 – 15:50 **Genetic variability of the chestnut blight fungus *Cryphonectria parasitica* in different populations of northern Italy**

SANJA BARIC; Free University of Bozen-Bolzano (I)

15:50- 16:10 **Grasslands4Biodiversity (G4B) – How can we protect biodiversity-rich grasslands in the Central Alps?**

JONAS SOMMER; Institute for Alpine Environment, Eurac Research, Bozen (I)

16:10 – 16:40

Coffee break with poster flash-talks 2

Session: Ecology, environment & global change 1

Chair: Camilla Wellstein – Free University of Bozen-Bolzano

16:40 – 17:00 **Rivers Run Through It – Exploring Aquatic Macroinvertebrate Diversity in the Vinschgau/Venosta Valley**

THEA SCHWINGSHACKL; Institute for Alpine Environment, Eurac Research, Bozen (I)

17:00 – 17:20 **A long-term perspective on hypolimnetic dissolved oxygen and surface CO₂? Case study mountain Lake Tovel**

ULRIKE OBERTEGGER; Fondazione Edmund Mach, San Michele all'Adige (I)

17:20 – 17:40 **Does global change make high-elevation plant communities of the European Alps richer but less unique?**

PAU CARNICERO CAMPMANY; Department of Botany, University of Innsbruck (A)

17:40 – 18:00 **Alpine flora at the extremes: the distribution of plants on mountain peaks**

GIULIA TOMASI; Fondazione Museo Civico di Rovereto (I)

18:00 – 18:20 **Cold-adapted species in the warming Alps: who will survive?**

MAURO GOBBI; MUSE – Museo delle Scienze, Trento (I)

19:00 – 21:00 *Abendessen – Cena – Dinner* – Haus der Kultur / Casa della Cultura „Walther von der Vogelweide“, Schlernstr. / via Sciliar 1, Bozen/Bolzano

Samstag / Sabato 23.11.2024

Tagungsort / Luogo del convegno:

Naturmuseum Südtirol / Museo di Scienze Naturali dell'Alto Adige
Bindergasse/via Bottai 1
Bozen/Bolzano

8:00 – 8:30 Anmeldung / Registrazione / Registration

Session: Biodiversity & nature conservation

Chair: Philipp Kirschner – Department of Botany, University of Innsbruck

- 8:30 – 8:50 **Preliminary Results on the Analysis and Conservation of Natural and Semi-natural Habitats in South Tyrol (LEST Project)**
CAMILLA WELLSTEIN; Free University of Bozen-Bolzano (I)
- 8:50 – 9:10 **Peatlands in Trentino: an overview based on surveys covering 224 hectares conducted since 2011**
DANIEL SPITALE; BioMonitoring Team, Tre Ville, TN (I)
- 9:10 – 9:30 **Wolf depredation on livestock in Trentino: an analysis of dynamics and prevention strategies**
GIULIA BOMBIERI; MUSE – Museo delle Scienze, Trento (I)
- 9:30 – 9:50 **The landscape of fear in cow farms: breeding barn swallows reduce housefly activity in cattle sheds**
FRANCESCA ROSEO; LIPU, Parma (I); MUSE – Museo delle Scienze, Trento (I)
- 9:50 – 10:10 **Extensive management practices and natural structural elements enhance bat conservation in mountain agricultural landscapes**
CHIARA PANICCIA; Institute for Alpine Environment, Eurac Research, Bolzano (I)
- 10:10 – 10:30 **Crowded mountains: large-scale and long-term responses of mammals to human outdoor activity in mountainous areas**
MARCO SALVATORI; MUSE – Museo delle Scienze, Trento (I); Università di Firenze (I)

10:30 – 11:10

Coffee break with poster flash-talks

Session: Systematics & biogeography (taxonomy, phylogenetics & evolution) 1

Chair: Claudio Varotto – Fondazione Edmund Mach (FEM), San Michele all'Adige

- 11:10 – 11:30 **A few more tiny steps towards a better understanding of the flora of the Euregio region**
PETER SCHÖNSWETTER; Department of Botany, University of Innsbruck (A)

- 11:30 – 11:50 **Distribution of polyploid plants in the Eastern Alps: a preliminary report**
TERESA ZENI; Department of Botany, University of Innsbruck (A)
- 11:50 – 12:10 **Cryptic evolution and diversification of the agmatoploid-polyploid species complex *Luzula* sect. *Luzula* (Juncaceae) in the Eastern Alps**
VALENTIN HEIMER; Institute for Alpine Environment, Eurac Research, Bozen (I); University of Innsbruck (A)
- 12:10 – 12:30 **Genomic Insights into Evolution and Refugial Dynamics of Endemic Vascular Plants in the Southeastern Limestone Alps**
PHILIPP KIRSCHNER; Free University of Bozen-Bolzano (I); Department of Botany, University of Innsbruck (A)
- 12:30 – 12:50 **Evolution and range formation of the threatened steppe plant *Astragalus exscapus* and its relatives**
CLEMENS MAYLANDT; Department of Botany, University of Innsbruck (A)

13:00 – 14:30 Lunch break

Session: Systematics & biogeography (taxonomy, phylogenetics & evolution) 2

Chair: Peter Schönswetter – Department of Botany, University of Innsbruck

- 14:30 – 14:50 **Phylogenetic remarks on hexaploid varicoloured fescues in the Southern Alps**
PETER ENGLMAIER; OECONSULT, Sachverständigenbüro für ökologische Wissenschaften, Wien (A)
- 14:50 – 15:10 **Glacial legacies: Refugial dynamics of the endemic bush cricket *Anonconotus italoaustriacus***
PHILIPP KIRSCHNER; Naturmuseum Südtirol, Bozen (I); Department of Botany, University of Innsbruck (A)
- 15:10 – 15:30 **Population genomics and invasion history of a Nearctic Leafhopper in Europe *Scaphoideus titanus***
LAPO RAGIONIERI; Free University of Bozen-Bolzano (I)
- 15:30 – 15:50 **A DNA barcode library of Austrian Geometridae (Lepidoptera) reveals high potential for DNA-based species identification**
BENJAMIN SCHATTANEK-WIESMAIR; Sammlungs- und Forschungszentrum, Hall i. Tirol (A)
- 15:50 – 16:10 **Disentangling evolutionary relationships within *Euphorbia angulata* (Euphorbiaceae)**
ALEXANDER ULBRICH; Department of Botany, University of Innsbruck (A)
- 16:10 Ende der Tagung / Fine del convegno / End of the conference

Abschluss mit Kaffee / Conclusione con caffè / Closure with coffee

Samstag / Sabato 23.11.2024

Tagungsort / Luogo del convegno:

Waaghaus / Casa della Pesa
Kornplatz / Piazza del Grano 2
Bozen/Bolzano

8:00 – 8:30 Anmeldung / Registrazione / Registration

Session: Biodiversity: recording and monitoring (fungi, animals, plants incl. pollen) 4

Chair: Renate Alber – Biologisches Labor, Landesagentur für Umwelt und Klimaschutz, Leifers-Laives

8:30 – 8:50 **Airborne pollen biodiversity: changes in 30 years of data at San Michele all'Adige (North Italy)**

FABIANA CRISTOFOLINI; Fondazione Edmund Mach, San Michele all'Adige (I)

8:50 – 9:10 **Tiny but mighty - Pollen of South Tyrol**

MAGDALENA WIDMANN; Biologisches Labor – Landesagentur für Umwelt und Klimaschutz, Leifers (I)

9:10 – 9:30 **The air as a means to assess plant biodiversity in Alpine environments**

FRANZISKA ZEMMER; Fondazione Edmund Mach, San Michele all'Adige (I)

9:30 – 9:50 **AtlasFloraAlpina – towards a first online flora atlas for the entire Alpine arc**

THOMAS WILHALM; Naturmuseum Südtirol, Bozen (I)

9:50 – 10:10 **Introducing „naturamonta“: A New Scientific Journal Dedicated to Biodiversity and related Research In The EUREGIO Tyrol, South Tyrol, Trentino**

CHRISTIAN ANICH; Sammlungs- und Forschungszentrum, Hall i. Tirol (A)

Session: Ecology, environment & global change 2

Chair: Franziska Zemmer – Fondazione Edmund Mach (FEM), San Michele all'Adige

10:10 -10:30 **Carbon Inventory South Tyrol – Quantification of Soil Organic Carbon (SOC) stocks and assessment of their stability for agricultural areas of South Tyrol, Italy**

ALEXANDER SCHÖNAFINGER; Institute for Alpine Environment, Eurac Research, Bozen (I)

10:30 – 11:10

Coffee break with poster flash-talks

Session: Ecology, environment & global change 2

11:10 – 11:30 **Impact of land management and elevation on composition and structure of alpine flower-visiting arthropod communities**

MARCO CACCIANIGA; Università degli Studi di Milano (I)

- 11:30 – 11:50 **Evaluating the impact of grassland management on wild bee communities along an elevational gradient**
LISA OBWEGS; University of Innsbruck (A)
- 11:50 – 12:10 **Assessing the impact of habitat and landscape heterogeneity on mountain bird communities**
MATTEO ANDERLE; Institute for Alpine Environment, Eurac Research, Bolzano (I)
- 12:10 – 12:30 **Functional diversity of alpine dragonfly communities: The interplay between thermal adaptations and habitat requirements**
FELIX PUFF; University of Vienna (A); Institute for Alpine Environment, Eurac Research, Bozen (I)
- 12:30 – 12:50 **Insect community simplification across land-use and elevational gradients deliver conservation insights from South Tyrol**
ELIA GUARIENTO; Institute for Alpine Environment, Eurac Research, Bozen (I)

13:00 – 14:30 Lunch break

Session: Ecology, environment & global change 3

Chair: Christian Anich – Sammlungs- und Forschungszentrum, Hall i. Tirol

- 14:30 – 14:50 **Chironomid microbiome: new insights for cold adapted species from DNA metabarcoding analysis**
VALERIA LENCIONI; MUSE – Museo delle Scienze, Trento (I)
- 14:50 – 15:10 **Rock glaciers as climate refuge: Preserving aquatic biodiversity in the face of glacier loss in the Eastern Italian Alps**
MAGDALENA VANEK; Institute for Alpine Environment, Eurac Research, Bozen (I)
- 15:10 – 15:30 **Drivers and patterns of arthropod colonization of recently deglaciated terrains in the Dolomites (North-eastern Italian Alps)**
IVAN PETRI; MUSE – Museo delle Scienze, Trento (I); University of Milan (I)
- 15:30 – 15:50 **Climate-driven shifts in the population dynamics of the invasive tiger mosquito (*Aedes albopictus*) in the European Alpine region**
MARHARYTA BLAHA; Università di Trento (I)
- 15:50 – 16:10 **The nematode community of the spruce bark beetle in South Tyrol**
VERONIKA RAU; Free University of Bozen-Bolzano (I)
- 16:10 Ende der Tagung / Fine del convegno / End of the conference

Abschluss mit Kaffee / Conclusione con caffè / Closure with coffee

For reasons of clarity, only **the names of the speakers** and their affiliations are listed here. The names of the co-authors are reported in the abstract book.

Aus Gründen der Übersicht werden hier **nur die Namen der Vortragenden** und deren Affiliationen angeführt. Die Namen der Co-Autorenschaft sind dem Tagungsband zu entnehmen.

Per motivi di chiarezza, qui sono elencati **solo i nomi dei relatori** e le loro affiliazioni. I nomi dei coautori sono riportati nel volume degli abstract.

Poster presentations

Freitag / Venerdì 22.11.2024

Tagungsort / Luogo del convegno:

Haus der Kultur / Casa della Cultura „Walther von der Vogelweide“,
Schlernstr. / via Sciliar 1
Bozen/Bolzano

11:00 – 11:40

Poster flash-talks 1 – with Coffee break

16:10 – 16:40

Poster flash-talks 2 – with Coffee break

Session: Biodiversity: recording and monitoring (fungi, animals, plants incl. pollen)

Biodiversa+ Habitat Pilot: Finding a shared method for mapping and monitoring grasslands and wetlands using Remote Sensing data

ALBIN BJÄRHALL; Institute for Alpine Environment, Eurac Research, Bozen (I)

Diversity of stink bugs and their egg parasitoids in South Tyrol

SARA BORTOLINI; Laimburg Research Centre, Vadena/Pfatten (I)

Biodiversa+: a European Biodiversity Partnership for a transnational network of harmonized biodiversity monitoring schemes

MICHELE BRESADOLA; Institute for Alpine Environment, Eurac Research, Bozen (I)

Unraveling the biology of the invasive apricot aphid (*Myzus mumecola*)

MARTA CHIGNOLA; Free University of Bozen-Bolzano (I)

Remarkable bryophyte discoveries in the area of the “Alter See” natural monument in the Lienz Dolomites (East Tyrol, Austria)

FELIX FALTNER; Revital Integrative Naturraumplanung GmbH, Nußdorf-Debant (Osttirol) (A)

Species Distribution Modeling for Farmland Birds in South Tyrol Using Remote Sensing Data

LENA JOSEPHINA JÄGER; Institute for Alpine Environment, Eurac Research, Bozen (I)

Monitoring invertebrates included in the Habitats Directive in South Tyrol: First results and future strategies

AUDREY MARSY; Institute for Alpine Environment, Eurac Research, Bozen (I)

A survey of larval parasitoids of *Drosophila sukuzii* (Matsumura) (Diptera: Drosophilidae) in semi-natural habitats and ecotones in South Tyrol

MARTINA MELCHIORI; Laimburg Research Centre, Vadena/Pfatten (I)

DNA barcoding of minor fish fauna in South Tyrol

MASSIMO MORPURGO; Museo di Scienze Naturali dell'Alto Adige, Bolzano (I)

Orthopterological highlights from the Biodiversity Monitoring South Tyrol

EMANUELE REPETTO; Institute for Alpine Environment, Eurac Research, Bozen (I)

On the composition of the apple's Sooty Blotch's pathobiome

FILIPPO REY; Free University of Bozen-Bolzano (I)

Advancing biomonitoring through automated image and sound recognition: two European pilot studies

JAREK SCANFERLA; Institute for Alpine Environment, Eurac Research, Bozen (I)

South Tyrol's bat guardians: Citizen science for Barbastelle bat conservation in settlements

HANNA STEIGLEDER; Institute for Alpine Environment, Eurac Research, Bozen (I)

Samstag / Sabato 23.11.2024

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Naturmuseum Südtirol / Museo di Scienze Naturali dell'Alto Adige
Bindergasse/via Bottai 1,
Bozen/Bolzano

10:30 – 11:10

Poster flash-talks– with Coffee break

Session: Biodiversity & nature conservation

Morphological and DNA metabarcoding approaches to identify reliable metrics for the assessment of trout farming-related effects on biological water quality in Alpine rivers

ANDREA CHEMELLO; Fondazione Edmund Mach, San Michele all'Adige (I)

Session: Systematics & biogeography (taxonomy, phylogenetics & evolution)

Factors influencing intraspecific variation in wing morphology in high-elevation specialist birds

FRANCESCO CERESA; Museo di Scienze Naturali dell'Alto Adige, Bolzano (I)

A bibliometric analysis to discuss taxonomic bias in studies of Italian fauna

EMANUELE MICCOLIS; University of Padua (I); University of Palermo (I)

The freshwater jellyfish *Craspedacusta sowerbii* species complex (Cnidaria, Olindiidae) in Italy: distribution and genetic lineages

MASSIMO MORPURGO; Museo di Scienze Naturali dell'Alto Adige, Bolzano (I)

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Bozen/Bolzano

10:30 – 11:10

Poster flash-talks– with Coffee break

Session: Ecology, environment & global change

High temperature thresholds for membranes, proteins, photosystem II, and whole leaf tissues in different mountain species

CLARA BERTEL; Universität Innsbruck, Department of Botany (A)

Alien species in Lake Garda

CRISTINA CAPPELLETTI; Fondazione Edmund Mach, San Michele all'Adige (I)

Trait space occupancy of ants, butterflies, carabid beetles, grasshoppers and vascular plants along elevation in Val Mazia - Matschertal

VERONIKA FONTANA; Institute for Alpine Environment, Eurac Research, Bozen (I)

Is better living upward or downward? Spatial segregation of water shrews *Neomys fodiens* and *Neomys milleri* in South Tyrol

EVA LADURNER; Naturmuseum Südtirol, Bozen (I)

Research on CLIMATE and ECOLOGY at the MUSE – Science Museum of Trento

VALERIA LENCIONI; MUSE – Museo delle Scienze, Trento (I)

The new MUSE biotope: ecological survey for the study of aquatic biodiversity

FRANCESCA PAOLI; MUSE – Museo delle Scienze, Trento (I)

Impact of land-use intensity on spider communities: A study on the taxonomic resolution effect

JULIA PLUNGER; Institute for Alpine Environment, Eurac Research, Bozen (I)

Do dissolved heavy metals enter the food webs of Alpine streams?

MONICA TOLOTTI; Fondazione Edmund Mach, San Michele all'Adige (I)

Effects of global warming on the alpine vegetation of four peaks in the Texel Group, South Tyrol, as part of the GLORIA project

FRIEDERIKE WESTRICH; Department of Botany, University of Innsbruck (A)

Only the first authors and their affiliations are listed here, the co-authors are reported in the abstract book.

Hier sind **nur die Erstautor*innen** mit deren Affiliationen angeführt, die Co-Autorenschaft ist dem Tagungsband zu entnehmen.

Qui sono **elencati solo i primi autori** e le loro affiliazioni; i nomi dei coautori sono riportati nel volume degli abstract.
