

17th ECM Programme

Sunday, 20th September

17:00 – 21:00 Registration (Hotel Zora conference centre)

19:00-21:00 The opening session of the workshop

Guest lecture: Gabor Lövei „Introductory thoughts on a) why is it a good idea to identify a target journal before we start writing? b) how to do that?“

Monday, 21st September

8:30 - 10:00 Registration (Hotel Zora conference centre)

10:00 - 10:30 Opening Ceremony (Kravata conference room)

10:30 - 10:35 Technical Break

10:35 - 11:20 **Invited lecture:** Achille Casale “Past, present and future knowledge of subterranean carabid beetles in the Dinaric chain”

11:20 - 11:45 Coffee break (Hotel Zora conference centre)

11:45 - 13:05 **Session 1** – Carabids and peculiar habitats – evaluation and conservation (chaired by Gabor Lövei)

11:45 – 12:05

Habitat peculiarity evaluation by means of Carabid habits
R.Pizzolotto

12:05 – 12:25

Beetles *versus* Rolling Stones: carabids on cryoperturbed fellfields
M. Gobbi, C. Compostella, D. Tampucci, M. Caccianiga

12:25 – 12:45

Urban mires as hotspots of carabid beetle diversity
Norbertas Noreika*, D. Johan Kotze

12:45 – 13:05

Differences and similarities in drivers of species richness between subterranean Carabidae and Cholevidae in the Dinarides (SE Europe)
Petra Bregović*, Maja Zagmajster

13:05 - 14:30 Lunch

14:30 – 16:10 **Session 2** –Impact of habitat disturbances on carabid assemblages
(chaired by John Spence)

14:30 – 14:50

The effect of different soil treatments on the carabid fauna after topsoil removal
H.J.W. Vermeulen, R. van Klink, K. van der Laaken & A. Woldering

14:50 – 15:10

Response of ground-beetle (Carabidae) assemblages to harvest and wildfire disturbances in lodgepole pine forests of western Alberta, Canada
Vincent Del Bel Belluz*, John Spence, David Langor

15:10 – 15:30

Clear-cut harvesting and impacts of variation in habitat structure on carabid beetle (Coleoptera: Carabidae) assemblages and their post-harvest recovery
Claudio La Rocca*, John R. Spence, Fangliang He

15:30 – 15:50

Body mass distributions along successional gradients in epigeic carabid beetle fauna (Coleoptera: Carabidae)
A. Schreiner, A. Kwiatkowski, J. Szyszko, A. Schwerk

15:50 – 16:10

Relation between carabid beetle fauna (Coleoptera: Carabidae) and plant succession in a post-agricultural area
Izabela Dymitryszyn, Axel Schwerk

16:10 – 16:20 Coffee break (Hotel Zora conference centre)

16:20 – 19:00 Workshop on scientific writing (Kravata conference room)

20:30 – 22:00 Welcome cocktail (the terrace of Hotel Zora conference centre)

Tuesday, 22nd September

8:30 - 9:00 Registration (Hotel Zora conference centre)

9:00 - 9:45 **Invited lecture:** Jean-Yves Rasplus “Reconstructing the biogeographical and evolutionary history of the genus *Carabus*, from multiple genes to pangenomic markers”

9:45 – 10:10 Coffee break

10:10 – 11:50 **Session 3** - Morphology, taxonomy and evolution of carabids (chaired by Claudia Drees)

10:10 – 10:30

Introgression or low molecular differentiation? The case of *Carabus clatratus maacki*
Dietrich Mossakowski

10:30 – 10:50

Phylogeographic structure in the sister species *Calathus cinctus* and *C. melanocephalus*.

Ruiz, C.; Andújar, C.; Arribas, P.; Serrano, J.

10:50 – 11:10

Evolution of sexual shape and size dimorphism and allometry in carabid beetles: an example on *Ceroglossus* spp. using geometric morphometrics.

Hugo A. Benítez*, Avaria-Llautureo J, Jerez V, Parra L, Hernández CE

11:10 – 11:30

The hows and whys of ommatidia measurement in the compound eyes of beetles
Bartosz W. Schramm*, Agnieszka Gudowska*, Filip Kapustka, Anna Maria Labecka, Marcin Czarnoleski, Jan Kozłowski

11:30 – 11:50

Phylogeography and morphology of *Calomera littoralis* in eastern Mediterranean region

R. Jaskuła, T. Rewicz, M. Grabowski, M. Płociennik

11:50 – 12:00

Macro photography of Carabids

Gernot Kunz

12:00 – 13:00 **Poster session**

13:00 – 14:30 Lunch

14:30 – 16:30 **Session 4** - Life history traits, diversity and distribution of carabids (chaired by Roberto Pizzoloto)

14:30 – 14:50

Forest ground beetle (Coleoptera: Carabidae) diversity and assemblage structure on boreal lake islands: an island-mainland comparison

Aaron J. Bell*, Iain D. Phillips*, Scott E. Nielsen, and John R. Spence

14:50 – 15:10

Body size and wing morphology: life history traits influence the distribution of ground beetles (Coleoptera: Carabidae) on boreal lake islands in central Canada.

Aaron J. Bell*, Iain D. Phillips*, Scott E. Nielsen, and John R. Spence

15:10 – 15:30

Pushing connectivity in landscapes: species-specific life history traits and locomotory behavior as tools to design semi-open corridors
Estève Boutaud*, Dorothea Ehlers, Thorsten Assmann

15:30 – 15:50

How many carabid species are missed during biological surveys based on pitfall trapping technique?

Knapp Michal, Knappová Jana, Jakubec Pavel, Vonička Pavel, Moravec Pavel

15:50 – 16:10

How are carabid species distributed?

Stephen Venn

16:10 – 16:30

Level of parasitisation of gregarines (Eugregarinorida, Apicomplexa) is linked to the sex of ground beetles (Coleoptera, Carabidae): a case study in Poland

Paweł Sienkiewicz, Jerzy J. Lipa, Tomasz Skalski

16:30 – 16:50

Habitat requirements of *Rhysodes sulcatus*, an endangered Natura 2000 dead wood beetle

Fran Kostanjšek, Pavel Šebek, Lukaš Čížek, Vladan Riedl, Beata Baranova

16:50 – 17:00 Information about mid-conference excursion

17:00 – 17:10 Coffee break (Hotel Zora conference centre)

17:10 – 19:10 **Workshop on scientific writing** (Kravata conference room)

Recommendations for the evening: sightseeing of Primošten town, or visit of Šibenik or Trogir towns (the info about the local buses can be asked at the hotel reception).

Wednesday, 23rd September

Conference excursion to Krka National Park: visit of Skradinski buk unique waterfalls, Monastery on Visovac Island, Burnum - the archaeological collection and museum in Puljani.

8:30 – 9:30 Travel from Primošten to Krka NP by bus

9:30 – 16:00 Krka NP tour (conference photography at Burnum)

17:00 – 19:30 Traditional Dinner in Etnoland, Pakovo selo

19:30 – 20:30 Travel from Pakovo selo to Primošten by bus

Thursday, 24th September

8:30 - 9:00	Registration (Hotel Zora conference centre)
9:00 - 9:45	Invited lecture: <u>Pietro Brandmayr</u> “Climate change and its impact on epigean and hypogean carabid beetles”
9:45 – 10:10	Coffee break
10:10 – 11:50	Session 5 - Effects of long term changes on carabids (chaired by Axel Schwerk) 10:10 – 10:30 The importance of extreme weather events for ground-beetle communities revealed by 50 year time series from The Netherlands <u>R. van Klink, H.J.W. Vermeulen, F. de Bello</u>
10:30 – 10:50	Recovery of a boreal carabid fauna ten years after variable retention harvest <u>John R. Spence, Jaime Pinzon, Colin Bergeron, Linhao Wu and David Langor</u>
10:50 – 11:10	Exclusive microhabitat specialist <i>Carabus (variolosus) nodulosus</i> is declining in its global population stronghold (Slovenia): large-scale and long-term study <u>Al Vrezec, Andrej Kapla, Špela Ambrožič</u>
11:10 – 11:30	Ground beetles in city forests: influence of forest age and urbanization on behaviour? <u>Claudia Drees & Wiebke Schuett</u>
11:30 – 11:50	Ecosystem Memory and Lasting Effects of Fire History on Early Post-Harvest Recovery of a Boreal Ground-Beetle Community <u>Colin Bergeron, Jaime Pinzon, John Spence</u>
11:50 – 12:10	Ground beetles in the Kampinos catchment area – results of 16 years of observations <u>Jarosław Skłodowski</u>
12:10 – 13:00	Poster session
13:00 – 14:30	Lunch

14:30 – 16:10 **Session 6** - Spatial analyses of carabids –diversity of scales and methods (chaired by Sven Jelaska)

14:30 – 14:50

Interactions between agricultural systems and landscape properties exert a strong filtering on species traits in carabid communities.

Alexia Marie, A. Vialatte, Bertrand Gauffre, M. Plantegenest

14:50 – 15:10

Influence of farming system on ground beetle communities at local and landscape scales

Maud Belhache*, El Aziz Djoudi, Stéphanie Aviron, Julien Pétillon and Manuel Plantegenest

15:10 – 15:30

Ecological knowledge and remotely-sensed landscape variables: a new approach to predict biodiversity.

Ronzani Silvia*, Spence John

15:30 – 15:50

Fine-scale tree spatial distribution and carabid beetle distribution patterns in a Canadian boreal mixwood

Linhao Wu*, Jaime Pinzon, John R. Spence, Fangliang He

15:50 – 16:10

An ordinary species in ordinary landscapes – The genetic structure of *Abax parallelepipedus* in the Biodiversity Exploratories

Tamar Marcus*, Claudia Drees, Thorsten Assmann

16:10 – 16:30 Coffee break (Hotel Zora conference centre)

16:30 – 18:30 **Workshop on scientific writing** (Kravata conference room)

20:00 – 23:00 Conference dinner (Hotel Zora Piano bar)

Friday, 25th September

9:00 - 11:00 **Session 7 –Agroecology (chaired by Manuel Plantegenest)**

9:00 – 9:20

Ground beetle (Coleoptera: Carabidae) assemblages in narrow hedgerows in a Danish agricultural landscape

G. L. Lövei, T. Magura

9:20 – 9:40

Conventional and non-inversion tillage systems as a factor causing changes in ground beetles (Col. Carabidae) assemblages in rape (*Brassica napus*) fields

Agnieszka Kosewska

9:40 – 10:00

Habitat preference and demographic parameters of *Nebria brevicollis* population in agricultural habitats mosaic

Oleg Aleksandrowicz, Brygida Radawiec

10:00 – 10:20

The duration of seed burial in soil affects consumption rates by carabid beetles after exhumation.

A. Honěk, Z. Martinková, P. Saska

10:20 – 10:40

Carabid habits and ecosystem services for agricultural practices

A. Albertini*, R. Petacchi, R. Pizzolotto

10:40 – 11:00

Some seasonal features of the population structure of dominant ground beetles (Coleoptera, Carabidae) species in agrocenoses

A.V. Puchkov, T.Y. Markina

11:00 – 11:25 Coffee break

11:25 – 13:25 **Session 8 - Ecotoxicology and physiology of carabids (chaired by Pavel Saska)**

11:25 – 11:45

Detection of noxious high temperatures in carabids

K. Nurme*, E. Merivee, A. Must

11:45 – 12:05

Life stage specific species sensitivity of ground beetles exposed to the insecticide: chlorpyrifos.

S. B. Dehelean, F. Bakker

12:05 – 12:25

Life traits distribution of ground beetles along heavy metal gradients in Europe
T. Skalski

12:25 – 12:45

Ambient temperature affects respiration pattern and metabolic rate in carabid beetles
Agnieszka Gudowska*, Bartosz W. Schramm*, Jan Kozłowski, Ulf Bauchinger

12:45 – 13:05

Body composition and mass-scaling of metabolic rate – the *Carabidae* perspective
Bartosz W. Schramm*, Agnieszka Gudowska*, Ligia Kurianska-Piatek, Anna Maria Labecka, Ulf Bauchinger, Marcin Czarnoleski, Jan Kozłowski

13:05 – 13:25

Carabids as predators of forest pest moths - molecular detection of trophic interactions via carabid gut content analyses
Lucija Šerić Jelaska, Igor Matić, Inga Marijanović

13:25 – 13:50 Closing ceremony

13:50 – 14:30 Lunch

14:30 – 16:30 **Workshop on scientific writing**

16:30 – 17:00 Award of certificates for the workshop participants and information about post-meeting excursion

Recommendations for the evening: visit of Primošten vineyards of Babić vine sorts, Šibenik or Trogir town (the info about the local buses can be asked at the hotel reception).

*student

POSTER PRESENTATIONS

(in alphabetical order of presenting author)

(1) The role of semi-natural habitats for pest control

A. Albertini*, R.Petacchi, R.Pizzolotto

(2) Intraspecific altitudinal variation in body size of several common carabid beetles

Eliška Baranovská*, Michal Knapp, Věra Zaplatílková, Pavel Saska

(3) New record of *Calosoma (Campalita) auropunctatum auropunctatum* (Herbst, 1784) in Latvia

Maksims Balalaikins, Arvīds Barševskis, Vytautas Tamutis, Uldis Valainis, Sakine Serap Avgin, Stanislaw Huruk, Kristīna Aksjuta, Daiga Zviedrāne

(4) Effects of genetically modified maize for insect resistance on the composition of the ground beetle populations

R. Bažok, C.H. Krupke, L.W. Bledsoe, D. Lemić, Z. Drmić, M. Čaćija, H. Virić

(5) Taxonomic studies on *Morphocarabus* species in the Pannonian biographical region

Bérces, Sándor; Szél, Győző; Szabó, Péter; Fülöp Dávid

(6) Epigaeic arthropod assemblages of extensive green roofs in Edmonton Canada: composition and dynamics

Colin Bergeron, Zoe Crandall, John Spence

(7) Body Size Differences, Mean Individual Biomass (MIB) and Wing Development of Ground Beetle Communities (Coleoptera: Carabidae) along an Altitudinal Gradient on the Belasitsa Mountain, Macedonia

Aleksandra Cvetkovska-Gjorgjevska, Slavčo Hristovski, Dana Prelić, Lucija Šerić Jelaska, Valentina Slavevska-Stamenković, Milica Ristovska

(8) Group selection harvesting supports the diversity of ground-dwelling carabid and spider assemblages

Zsuzsanna Debnár, Szabolcs Mizser, Roland Horváth, András Demkó, Béla Tóthmérész, Tibor Magura

(9) Estimating carabid population size: The relationship between abundance and capture area of pitfall traps

Jared Amos, Colin Bergeron, Aaron Bell*, Vincent Del Bel Belluz*, Zoltan Domahidi, Claudio La Rocca*, Seung-II Lee, Sonya Odsen, Jaime Pinzon, Silvia Ronzani*, Linhao Wu*, John Spence

(10) Body size distribution in ground beetles (Coleoptera: Carabidae) as a possible monitoring method of environmental impacts of transgenic maize

Davide Di Grumo*, Gabor L Lövei

(11) Trapped in urban refugia? ‘Cityscape’ genetics of a flightless ground beetle

Lena Grieger, Claudia Drees

(12) The impact of a rural-urban gradient and spatial distribution on predation rates on sentinel prey in a riparian forest in Hungary
Csaba Béla Eötvös*, Tibor Magura, Gábor L. Lövei

(13) Chewing insect predation on artificial caterpillars is related to activity density of ground beetles (Coleoptera: Carabidae)
M. Ferrante*, G. L. Lövei

(14) A long-term project for spatio-temporal monitoring of carabid species assemblages on Central Italian Alps
M. Gobbi, T. Boscolo, C. Maffioletti, M. Caccianiga, L. Pedrotti

(15) Are carabids and chironomids experiencing similar spatial patterns along a chronosequence of glacier retreat?
V. Lencioni, M. Caccianiga, C. Compostella, A. Franceschini, C. Maffioletti, N. Salmaso, R. Seppi, M. Gobbi

(16) Long-term successional changes of functional diversity in ground beetle communities on post-industrial areas
J. Hodecek*, T. Kuras, J. Sipos

(17) The role of various hedgerow types in shaping carabid and rove beetle assemblages (Coleoptera: Carabidae, Staphylinidae) in meadow dominated landscape
Zuzana Jahnová, Michal Knapp, Jaroslav Boháč, Marie Tulachová

(18) Morphological differences between two sister species: *Carabus (Eucarabus) parreyssi* and *Carabus (Eucarabus) catenulatus* from Dinaric karst and body size variations along altitudinal gradients
Željka Jambrošić Vladić*, Sandra Postić, Lucija Šerić Jelaska

(19) Do lowland and mountainous tiger beetles use the same phenological strategy? An example from the Mediterranean region
R. Jaskuła, K. Kwiatkowski*

(20) Females are larger but males have bigger mandibles – sexual dimorphism in Balkan tiger beetles
R. Jaskuła, K. Kwiatkowski*

(21) Spatial diversity in the genus *Carabus* in extensive cultural landscape of Goričko Nature Park (NE Slovenia)
Andrej Kapla, Al Vrezec

(22) The effect of inundation frequency on ground beetle communities in a channelized mountain stream
R. Kędzior, T. Skalski ,A. Radecki-Pawlik

(23) Life-history traits of ground beetles (Coleoptera, Carabidae) on postindustrial areas of slag deposition
R. Kędzior, T. Skalski, A. Szwalec, P. Mundała

(24) Influence of mowing measures on carabid beetle fauna (Coleoptera: Carabidae) in a post-agricultural area

M. A. Kitka*, A. Schwerk

(25) Formation of ground beetle assemblages on gyttja soils depending on the selected physicochemical factors in these soils

Agnieszka Kosewska, Mariusz Nietupski, Bożena Lemkowska

(26) An effect of different systems of plant protection on carabid beetles assemblages in pea and lupine crops.

Agnieszka Kosewska, Mariusz Nietupski, Katarzyna Nijak

(27) Impact of clear-cut harvesting on functional diversity of carabid beetles (Coleoptera: Carabidae)

Claudio La Rocca*, John R. Spence, Fangliang He

(28) Influence of forest carbon stock on carabid beetle diversity in boreal forests of west-central Alberta, Canada

Claudio La Rocca*, John R. Spence, Fangliang He

(29) Morphological variation of shape and size of the *Pterostichus melanarius* population in intensive sugar beet production

D. Lemic, H. A. Benitez, I. Petrak, Ž. Graša, H. Virić Gašparić, R. Bažok

(30) Communities of beetles (Coleoptera: Carabidae) on landfills

Jozef Macko

(31) Can successional carabid beetle assemblages be discriminated from their life-history traits? A study case from an Alpine glacier foreland

C. Maffioletti, C. Compostella, M. Caccianiga, M. Gobbi

(32) Long-term dynamics of the demographic structure and spatial distribution of local ground beetle populations in a mosaic of floodplain meadows

Trushitsina O.S., Matalin A.V., Makarov K.V.

(33) Mite infection of *Carabus violaceus* in lowland oak forest fragments

Szabolcs Mizser, Leila Nagy, Dávid D. Nagy, Béla Tóthmérész

(34) Recovery dynamics of ground-dwelling arthropods after reforestation

Dávid D. Nagy, Tibor Magura, Dávid Bogyó, Szabolcs Mizser, Béla Tóthmérész

(35) The ground beetles (Coleoptera) in the entomological collection of Andrija Hensch

Ivana Pajač Živković, Tomislav Kos, Božena Barić

(36) Diel activity of carabid beetles

P. Saska, J. Lukáš, M. Vlach

(37) Different responses of epigeic beetles to heavy metal contamination depend on functional traits at the family level

Skalski T., Kędzior R., Kolbe D., Knutelski S.

(38) Interspecific interactions structuring the species composition of carabids
Tibor Magura, Katalin Sólyom*, Béla Tóthmérész

(39) Latitudinal Variation of Body Size in Ground Beetles (Coleoptera, Carabidae): the Case of Intraspecific Study
R. Sukhodolskaya, A. Saveliev

(40) The effects of fragment size and isolation on carabid and spider assemblages in dry sandy grassland fragments
Tibor Magura, Roland Horváth, Bence Tajthi, Csaba Szinetár, János Eichardt, Viktor Kődöböcz, Béla Tóthmérész

(41) Contribution to the knowledge of *Badister* (Coleoptera: Carabidae, Licheninae) species in Baltic countries
V. Tamutis, M. Balalaikins

(42) Exploring the database of pitfall sampling in the Netherlands – A fauna study.
Hans Turin

(43) Does life in caves reduce the diversity of chemicals produced by the pygidial glands of carabids?
N. Vesović*, S. Ćurčić, Lj. Vujisić, M. Nenadić, G. Krstić, V. Perić-Mataruga, S. Milosavljević, D. Antić, B. Mandić, M. Petković, I. Vučković, Đ. Marković, M. Vrbica, D. Pavlović, B. Ćurčić, S. Makarov

(44) On two new high-altitude *Omphreus* subspecies (Carabidae: Harpalinae: Omphreini) from the Dinaric Alps (western Balkan Peninsula)
Srećko Ćurčić, Riccardo Sciaky, Dragan Antić and Nikola Vesović*

(45) Seven new troglobitic species of the genus *Duvalius* Delarouzée, 1859 (Coleoptera: Carabidae: Trechinae) from Eastern and Southeastern Serbia
M. Vrbica*, S. Ćurčić, N. Vesović, D. Antić, Đ. Marković, M. Petković, B. Ćurčić and S. Makarov

(46) Influence of agricultural context on carabid community structure in winter wheat fields of Southern Banat, Serbia
Srećko B. Ćurčić, Milan Plećaš, Maja Vrbica*, Miloš Brkljačić, Srđan Ž. Stamenković

(47) Metabolic traits vs. habitat niche width in different species of carabid beetles
Tatjana Simčić, Maarten de Groot, Al Vrezec

*student

Post-meeting tours:

Saturday, 26th September

8:00 – 20:00 Plitvice lakes NP (guided tour)

Sunday, 27th September

8:00 – 21:00 Brač Island tour