

# Badlands Working Group

## Introduction to WG activities:

The overall scope of the Badlands Working Group is to provide new insights and to develop an integrated assessment of badland origins and evolution, field and laboratory investigation, modeling, using new technologies and exploring the possibility of using these areas as geotourism sites.

The main objective of this WG is to form an international network of badland scientists, to share expertise and organize international meetings, training and field courses on badland evolution and processes, at minimum one per year.

### Outline of the plan

- Formation of an interdisciplinary forum for a wide range scientist interested in analyzing badland areas
- Developing of methodology (measurement, indices, GIS/remote sensing, modelling etc.);
- Developing a model for sustainable land and water management in badland areas;
- Encouraging students in geomorphology to develop skills and knowledge in badlands research.

## Past activities:

The Badlands Working Group (WG) of the International Association of Geomorphologists (IAG) has been actively engaged in various initiatives and events over the past year. Here we present a summary of the main activities organized by the WG during the last year:

### 1. Webinars:

The 8th Badlands Working Group Workshop was successfully held online on 16th July 2024. The webinar was organized by the WG's chairs with the collaboration of Nevena Antic (Serbia) and Aydogan Avcioglu (Turkey). The webinar included three scientific talks from BADLANDS WG members and provided an overview of latest research outcomes on badlands presented by members of the group. Specifically, talks were done by Dino Torri (Italian National Research Council, Italy), Ona Torra (BarcelonaTECH-UPC, Spain), and Rupa Ghosh (Jadavpur University, India). Selçuk Aksay (Wageningen University, The Netherlands) was unable to give his talk due to health issues. A total of 27 participants from 9 different countries participated in the meeting. More details here <https://www.geomorph.org/2024/06/8th-badlands-working-group-workshop-online-16-july-2024/>.

The 9th Badlands Working Group Workshop is scheduled to take place online on 23rd January 2025. The webinar was well attended and received, 61 participants from more than 15 different countries participated in the meeting. Intervention of the speakers was convened thanks to the valuable collaboration of Nevena Antic (Serbia) and Aydogan Avcioglu (Turkey). The webinar included three scientific talks from BADLANDS WG members and provided an overview of latest research outcomes on badlands presented by members of the group. First, Milica Kašanin-Grubin (University of Belgrade, Serbia) give a keynote talk of around 30 minutes about the differences, changes and opportunities of the different material composing badlands around the world.

After the keynote, two interesting presentations of 15 minutes each were given by George Olivier (Stellenbosch University, South Africa) and Cyrille Fauchard (Cerema, France), respectively. George Olivier presented the historical evolution of gullies in South Afripra, relating this with the changes in climate and land use, while Cyrille Fauchard show us the main results of a study of coastal badlands supported by geophysical imaging.

Is worth to mention that all the talks were well attended and received, prove of that was the multiple questions and intervention of the webinar's assistants, as well as some discussion at the end of the last presentation. More details here [https://www.geomorph.org/2024/12/9th-badlands-working-group-workshop-online-23-january-2025/?fbclid=IwY2xjawJXh9xleHRuA2FlbQIxMAABHckDx6G9lIUUVVG6aKKWoDrbsWs1lsPI9mKKy7yayIod56rzziDMFd6Vxdw\\_aem\\_MADGXfExXzsoP7r9WXyhVw](https://www.geomorph.org/2024/12/9th-badlands-working-group-workshop-online-23-january-2025/?fbclid=IwY2xjawJXh9xleHRuA2FlbQIxMAABHckDx6G9lIUUVVG6aKKWoDrbsWs1lsPI9mKKy7yayIod56rzziDMFd6Vxdw_aem_MADGXfExXzsoP7r9WXyhVw).

2. Collaboration with the Denudation and Environmental Change (DENUCHANGE) Working Group:

The Badlands WG actively participated in the DENUCHANGE Working Group meeting in September 2024 in Rome, Italy. This collaboration will provide a platform to discuss synergies between badlands geomorphology and broader denudation processes, enhancing interdisciplinary research efforts.

3. Expansion of Social Media Presence:

The Badlands WG has launched new social media accounts to enhance outreach and engagement with the scientific community and the general public. These platforms serve as a hub for sharing research updates, event announcements, and discussions on badlands-related topics.

- Instagram: @iagbadlands

- X (formerly Twitter): @IAG\_badlands (Note: This platform may be replaced by an alternative social media channel in the near future after the approval of the main member of the WG)

### **Forthcoming activities:**

The plan of the Badlands WG during the coming years remains committed to promote scientific collaboration, disseminating knowledge, and promoting engagement in badlands research:

1. 10th Badlands Working Group Webinar (July 2025): This online workshop will continue with the objective of sharing new research and insights into badlands landscapes worldwide. It will be an opportunity for experts and early-career researchers to present their work and discuss key challenges in the field (further details will be published during the coming months)

2. Session at the IAG Regional Conference in Romania (September 2025): We are organizing a session titled "From Land to Badland – Past, Present, and Future" at the IAG Regional Conference. This session will explore how badlands have formed over time, how they are changing today, and what the future may hold for these landscapes. Abstract submission is already closed but we invite all the participants to the conference to assist and participate in the discussion of our session. More details here <https://rcg2025.geomorphology.ro/programme/thematic-sessions/>.

3. Session at the IAG Conference in New Zealand (February 2026): Our group will also lead a session at the next IAG Conference called "New Frontiers in the Study of Erosion Processes and Geomorphic Dynamics in Badlands." This session will focus on the latest discoveries about erosion and how badlands evolve over time. We encourage badland and soil erosion researchers to submit their abstracts. More details here <https://www.confer.co.nz/icg2026/surface-and-subsurface-processes-and-landscape-evolution/>.