

# GGN - Geopark Annual Report 2023

## 1. GEOPARK IDENTITY

### Geopark name, country, regional Network:

UNESCO Global Geopark Ries, Germany, European Geoparks Network

**Year of inscription / Year of the last revalidation:** 2022 (initial certification)



Teacher training course “Education for sustainable development – sustainable, regional, close to everyday life”

Photographer: Marco Kleebauer

## 2. GEOPARK FIGURES

### Number of Geopark staffs:

8 employees, including 2 geoscientists, plus 4 part-time employees (with limited hours and social/tax burden)

## **Number of visitors:**

The total number of visitors to the Geopark Ries is not known. The UGGp Ries is investigating methods to count visitors to the Geopark's most popular geosite, Adventure Geotope Lindle.

The tourism association encompassing the Geopark Ries, Ferienland Donauries, periodically engages market research firms to provide detailed analyses. Market research determined that the Ferienland Donauries benefited from 450,000 overnight visits and 5.2 million day trips in 2016.

The RiesCraterMuseum in Nördlingen reports that it has hosted over 1,000,000 visitors since its opening in 1990, with from 35,000 to 50,000 annual visitors (except during Covid restrictions).

One indication of the Geopark's growing popularity is participation in tours by certified Geopark Ries tour guides. In 2023, certified Geopark Ries tour guides provided a total of 205 tours (both booked and open-to-the-public) – the highest number up to this point – with over 1,000 participants enjoying public guided tours.

## **Number of Geopark events: 15**

Events organized by the UGGp Ries (\*= details under Major Achievements in 2023):

- January 2023: Opening of the Geopark Ries Kids' Station in Wemding.\*
- February 2023: Board meeting of Geopark Ries e.V.
- March 2023: Opening of the first Geopark Ries Kids' Trail in the Adventure Geotope Lindle.\*
- April 2023: General meeting of Geopark Ries e.V. with all member communities
- April 2023: Opening of the Geopark Ries Kids' Trail in the Geotopes Daiting.\*
- May 2023: Opening of Geotope Amerdingen, report broadcast by a.tv.\*
- June 2023: Theodor-Heuss Gymnasium, Nördlingen, becomes Geopark Ries School.\*
- July 2023: Wirtschaftsschule (secondary business school), Nördlingen, becomes Geopark Ries School.\*
- July 2023: Albrecht-Ernst Gymnasium, Oettingen, becomes Geopark Ries School.\*
- July 2023: Certificate as Geopark Ries School, primary school in Mönchsdeggingen, presented during "Crater to Crater" summer festival.\*
- September 2023: Concluding event "ESD in practice" for other German geoparks at the UGGp Ries.\*
- September 2023: Guided tours of selected Geopark Ries geosites on (German) Geotope Day, as well as numerous guided tours throughout the year through Bavarian TourNatur program.
- November 2023: Ostalb Gymnasium, Bopfingen, becomes Geopark Ries School.\*
- November 2023: Teacher training course "Education for sustainable development – sustainable, regional, close to everyday life" with 140 teachers for all types of schools as well as 30 exhibitors.

- December 2023: Installation of first Geopark Ries Kids' Info-Point at the Allemanenschule primary school in Kirchheim am Ries (the first Geopark Ries School).\*

#### **Number of school classes realize Geopark educational programmes:**

- 40 guided tours specially designed for school classes and student groups were booked in 2023 (highest value so far).
- **Geopark Ries Schools:** The Geopark Ries brings a message of regional identity and sustainable development to young people of all ages and education levels (grades 1 through 13) through its Geopark Schools. Five new schools were honored as Geopark Ries Schools (bringing the total to seven) in 2023, and other schools have already expressed interest in joining the network next year. See details under Major Achievements 2023.

**Number of Geopark press releases:** 58

### **3. GEOPARK ACTIVITIES**

#### **Major achievements in 2023**

- **Teacher training course “Education for sustainable development — sustainable, regional, close to everyday life”.** Around 140 teachers and teacher-trainees from all types of schools as well as 30 exhibitors were welcomed to the B+Center in Blossenau. The event was designed to facilitate networking of schools in the District of Donau-Ries and within the Geopark Ries region to increase awareness of education-for-sustainable-development offers and training opportunities of the UGGp Ries and the regional management of the District of Donau-Ries (co-organizer).



Photos: Marco Kleebauer

- **National award—Education for Sustainable Development (ESD):** On 8 November 2023 the UNESCO Global Geopark Ries was honored with the “National Award—Education for

Sustainable Development” by the German Federal Ministry of Education and Research and the German Commission for UNESCO. The Federal Ministry of Education and Research and the German Commission for UNESCO jointly honor initiatives that are committed to ESD. The “National Award—Education for Sustainable Development” recognizes high-quality educational programs as well as an effective and future-oriented commitment to sustainable development.



Photo: German UNESCO Commission / Angela Pfeiffer, Photographer, Hamburg

- **Geopark Ries Schools:** A total of five new schools became Geopark Ries Schools in 2023 and other schools have already expressed interest in joining the network next year):
  - Theodor-Heuss Gymnasium (academic secondary school), Nördlingen
  - Albrecht-Ernst Gymnasium (academic secondary school), Oettingen
  - Wirtschaftsschule (business-education secondary school), Nördlingen
  - Mönchsdeggingen (primary) school, Mönchsdeggingen
  - Ostalb Gymnasium (academic secondary school), Bopfingen

Certificates presentations:



THG Nördlingen

Photo: Cornelia Bäuml



AEG Oettingen

Photo: Linda Hertel



Wirtschaftsschule Nördlingen

Photo: Simone Strass



Primary school in Mönchsdeggingen

Photo: Hans Bergdolt



Ostalb Gymnasium, Bopfingen

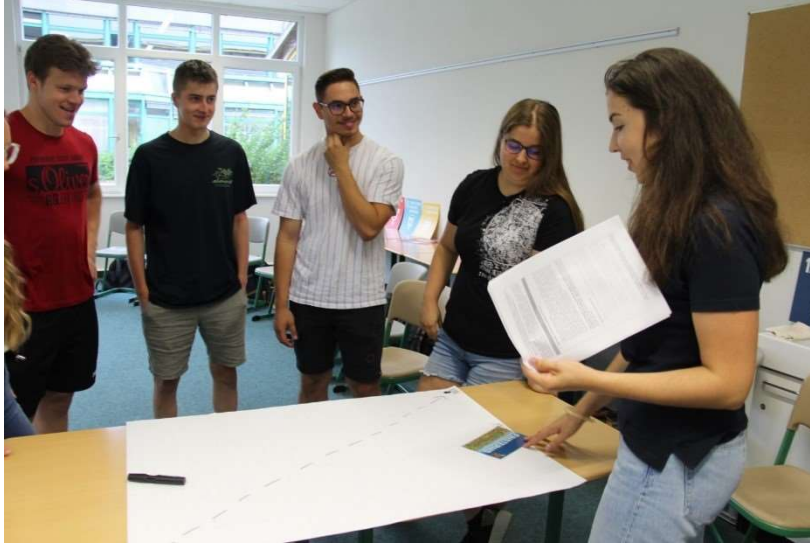
Photo: Susanne Richt

- **Project “ESD for 2030: Implementing education for sustainable development (ESD) in German Geoparks”** was funded by the Deutsche Bundesstiftung Umwelt (DBU, German Environmental Foundation). In this joint project, the eight recognized German UNESCO Global Geoparks, the German UNESCO Commission e.V. and the Alfred Toepfer Academy for Nature Conservation have worked together since 2021 to develop practice-oriented approaches to ESD.

Part of this project was the multi-part workshop **“ESD in practice: Making education for sustainable development tangible”** led by the Alfred Toepfer Academy for Nature Conservation for certified nature and landscape guides. Five Geopark Ries guides participated in the three online workshops and final face-to-face meeting in Donauwörth. The training is intended to strengthen the role of geoparks as ESD multipliers and as education providers. As the concluding event in the “ESD in practice” training, the UGGP Ries invited participants from various German geoparks to Donauwörth and the Glaubenberg Geotope near Großsorheim.

- Another project is **“Geopark Horror Stories”**—an educational program for young adults in which the United Nations’ sustainability goals are negotiated at local level. The aim is to show that landscapes can be destroyed by external factors (meteorite impact, man-made climate

crisis) and made uninhabitable for periods of time. This emphasizes the need for solutions at a global level to achieve the climate targets and motivates people to get involved in political discourse. The program was held at an FÖJ seminar (Freiwilliges Ökologisches Jahr = volunteer ecological year) and at the Hans-Leipelt School in Donauwörth. In the long term it is to be extended to other extracurricular cooperation partners.



Students develop “horror stories” for the UGGp Ries region in a seminar led by Ramona Ruf, Geopark Ries.

Photo: Constantin Bischoff

### **Infrastructure**

- **Opening of Geotope Amerdingen.** The eighth Geopark Ries geotope with nature trail was opened as part of EGN Week 2023. The Geotope Amerdingen is the first exclusively Suevite geotope of the Geopark Ries. Due to its picturesque location with small lakes and exposed Suevite wall, the Geotope is an important biotope for local flora and fauna. Visitors to the Amerdingen “Geotope of Silence” can enjoy the sounds and noises of nature.



Photo: Cornelia Bäuml

- Opening of the first Geopark Ries Kids' Trail in the Adventure Geotope Lindle.** The new Kids' Trail in the Adventure Geopark Lindle near Nördlingen-Holheim was developed especially for youngest visitors but appeals to all ages. The two Geopark Ries mascots, Riesie and Suevie, have been welcoming visitors to a children's play and experience station near the entrance of the Adventure Geotope Lindle since 2021, but now the nature trail around the former quarry has also been outfitted with info-panels providing easy-to-understand explanations along with stories and quiz questions from the two mascots who are also "guardians of the rocks". There is an accompanying handbook too!



Photo: Oliver Hornung

- Opening of the Geopark Ries Kids' Trail in the Geotope Daiting.** The Kids' Trail was opened in the Geotope Daiting as part of Earth Day 2023 celebrations. Here young visitors

learn how the landscape of the Ries was formed and what treasures emerge from it—all presented in an entertaining way by the UGGp Ries mascots, Suevie and Riesie. A special tour for Daiting pre- and primary-school children was given on opening day.



Photo caption: Photo: Constantin Bischoff

- **Opening of the Geopark Ries Kids' Station in Wemding.** The second Kids' Station in the UGGp Ries was opened in Wemding. The highlight in Wemding is a large Memory game with rotating cubes featuring pictures of the town and the entire Ries. Donated by master stonemason Matthias Wittner, Deiningen, so-called “sounding stones” demonstrate that each rock has its own special sound. The realization of the Kids' Station was made possible, in part, by a generous Christmas donation from the Rotary Club Nördlingen for the “promotion of nurture, education and training.”





Photo: Dietmar Denger

- **Installation of the first Geopark Ries Kids' Info-Point** at the Allemanenschule in Kirchheim am Ries. Thanks to the annual "Project Funding for Geoparks in Baden-Württemberg" (2023: 6,000 euros), it was possible to install a Kids' Info-Point outside the first Geopark Park Ries School, the Allemanenschule primary school. The outdoor Info-Point informs young people of the formation of the Ries landscape and the history of their home region. The primary school was built near the site of the former Alemannic burial ground, hence its name and the theme of the Info-Point, the Alemanni (Germanic tribe).



Info-Point panels feature Geopark Ries mascots, Suevie and Riesie

Photo: Marco Kleebauer

- Opened in August 2023, the new Geopark Ries outdoor Info-Point in Birkhausen near Wallerstein is located directly on the popular bike path to Maihingen.

### **Contribution towards GGN - Networking and participation**

- UGGp Ries management participated in these network-strengthening events in 2023:
  - 14. – 19. May 2023 Spring Meeting, AdG (Working Group of German Geoparks), Feldbach, Austria
  - 16. – 17. November 2023 Fall Meeting, AdG (Working Group of German Geoparks), Solms-Oberbiehl, Germany
- **European Geoparks Network (EGN)**
  - 27. – 30. March 2023 EGN CC Meeting in Hateg (Romania) (*Attendance at the meeting was unfortunately precluded at the last minute by an airline-pilot strike.*)
  - 08. – 09. November 2023 EGN CC Online Meeting

- **Global Geoparks Network (GGN)**

- 06. – 10. September 2023 GGN Conference in Marrakesch (Marocco); two presentations were accepted, one presented. (*Conference schedule was affected by the strong earthquake in the region.*)

- **Contributions to EGN and GGN publications and events:**

- Earth Day 2023 events and activities
- EGN Week events and activities
- EGN Geodiversity Day events
- GGN Geoparks going Green Vol. 2 : “A role model for sustainability: the Geopark Ries”
- EGN Magazine No. 21: “Making a difference through Geopark Ries Schools and educational programs”
- EGN Newsletter No. 23: “UGGP Ries: Impact Crater named ESA Training Site”
- EGN Newsletter No. 24 article: “Fifth Geopark Ries School welcomed at ‘Crater to Crater’ Summer Fest raising funds for school construction in Tanzania”

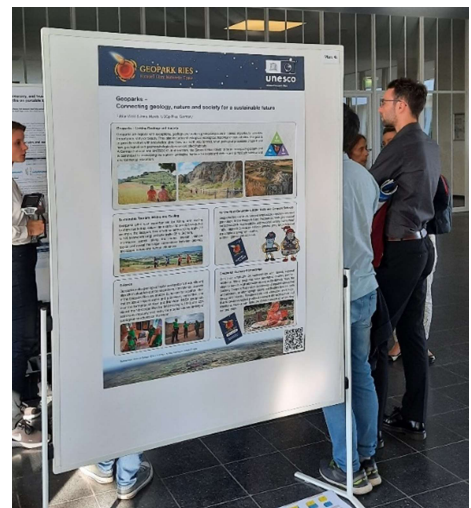
- **Other peer networking**

- **GeoBerlin:** Germany’s geoparks were represented with their own exhibit at the 2023 GeoBerlin. This helped to raise the profile of geoparks among professionals and specialists. The UGGp Ries was also represented with its own poster in the scientific poster session and attracted the attention of many interested visitors.



Left, all German UNESCO Global Geoparks were introduced on posters.

Photo: Anna Mareis



Right, the poster presented by the UGGp Ries was very well received in the scientific poster session.

Photo: Fabian Weiss

- **British author Helen Gordon** (*Notes from Deep Time, Landfall, and other works*)

was accompanied by UGGp Ries team members for several days in August as she researched her work-in-progress on meteorites.

○ **Scientific research publications in 2023:**

- “Understanding the Ries impact structure subsurface from high-resolution seismic data”; McCall, Gulick, et al; September 2023, *Geology* 52 (1), The Geological Society of America
- “Extremely C-enriched dolomite records interval of strong methanogenesis following a sulfate decline in the Miocene Ries impact crater”; Zeng, Gaetjen, et al; December 2023, *Geochimica et Cosmochimica Acta*, Volume 362, Pages 22-40, Science Direct

### **Management and Financial Status**

- The management of the UGGp Ries consists of the full-time management and the board of the Geopark Ries e.V. (e.V. denotes a registered association).
- The financing of the Geopark Ries e.V. is permanently secured through funding from members, municipal subsidies from districts (counties), towns and municipalities. In addition, project-related funding is provided by the participating states of Bavaria and Baden-Württemberg.

### **Geoconservation**

- As described in Major Achievements in the Annual Report 2022, the UGGp Ries and Heide-Allianz Donau-Ries (a landscape conservation association) cooperate on an ongoing nature conservation project “Quarrying sites in the District of Donau-Ries—from wounds in the landscape to nature paradises” funded by the Bavarian Nature Conservation Fund Foundation.

### **Sustainable tourism (Geotourism)**

- As described in our Annual Report 2022, the tourism strategy of the UGGp Ries is focused on sustainability. The expansion of the tourism infrastructure is almost completely focused on **hiking and cycling tourism**. The marketing activities in print and online are also predominantly concerned with these sustainable segments.
- The **Culinary Geopark Ries** is a continuing success. The UGGp Ries and its Culinary Partners (gastronomy, regional food producers and refiners) raise awareness for regional specialties and products by offering high-quality and healthy food for both locals and tourists. The regional cuisine uses products grown nearby.

## **New education programs on geoconservation, sustainable development and disaster risk reduction**

- Continuing geosite protection activities include developing visitor information infrastructure as part of the ongoing program “Quarrying sites in the District of Donau-Ries—from wounds in the landscape to nature paradises” (cooperative program with the Heide-Allianz).
- **Project “ESD for 2030: Implementing education for sustainable development (ESD) in German Geoparks”**. See Major Achievements for details.
  - Multi-part workshop **“ESD in practice: Making education for sustainable development tangible”** for certified nature and landscape guides.
  - In the concluding event, the UGGp Ries hosted participants from other German geoparks in the Ries Crater.
  - **“Geopark Horror Stories”**—an educational program for young adults in which the United Nations’ sustainability goals are negotiated at local level.
- New facilities designed to inform and entertain the youngest visitors, details under Major Achievements in 2023:
  - First Geopark Ries Kids’ Trail in the Adventure Geotope Lindle.
  - Geopark Ries Kids’ Trail in the Adventure Geotope Daiting.
  - Geopark Ries Kids’ Station in Wemding.
  - First Geopark Ries ‘ Kids Info-Point at the Allemanenschule primary school in Kirchheim am Ries (the first Geopark Ries School).
- In 2023 the UGGp Ries added a new staff position dedicated to project management of ESD programs.
- New standard guided tours were developed for the Geotopes Amerdingen and Daiting, and the certified Geopark Ries tour guides received on-site training in both.

## **Strategic partnerships**

- **Scientific exchanges:**
  - **ESA/NASA astronaut training in the UGGp Ries.** Following in the footsteps of Apollo astronauts who trained in the Ries Crater in 1970, ESA and NASA astronauts have trained in the Nördlinger Ries more than the past five years. After training in the UGGp Ries in 2022, ESA issued a press release explaining their geology training course, PANGAEA, which is based on Apollo-mission training principles and relies on four European locations—including the Ries Crater—that are similar to lunar and Martian geology. In 2023, among the astronauts who trained in the Ries Crater were: French astronaut Thomas Pesquet from the ESA (European Space Agency), Jessica Wittner from NASA (the American space agency) and Takuya Onishi from JAXA

(Japanese space agency). They were accompanied by UGGp Ries geologist Gisela Poesges, among others. The astronauts, accompanying scientists and entire logistics crew were delighted with the unique geology of the Ries and the themed geotopes of the UGGp Ries.



PANGEA astronaut training in the Gundesheim outcrop with Prof. Dr. Hiesinger.  
Photo: ESA / V. Crobu

- Excursion of the Commission for Geosciences: The **Commission for Geosciences of the Austrian Academy of Sciences** in Vienna, led by Chairman Prof. Dr. Christian Koeberl, visited the UGGp Ries in September. Organized by the UGGp Ries and accompanied by Geopark Ries geologist Gisela Poesges, the excursion took the group to numerous geosites in the UGGp Ries.
- Excursion, Science in Dialogue (**Wissenschaft im Dialog, WiD, organization for scientific communication in Germany**): Science in Dialogue invited all interested parties to an excursion in the UGGp in October to follow in the footsteps of the Apollo astronauts and explore Germany's most famous impact crater. The excursion was organized as part of WiD's "Hiker's Guide through the Galaxy" project that offered scientifically guided excursions as part of the "Science Year 2023 – Our Universe" and funded by the Federal Ministry of Education and Research.
- **University of Muenster**: Led by Prof. Dr. Harry Hiesinger, students from the University of Muenster benefited from a week-long visit to the Ries Crater, visiting a wide variety of geotopes and other sites for in-depth study in the UGGp Ries.
- **Cooperation between (German) National Geoparks in the education field**: A total of 33 students from two advanced geography classes visited Europe's giant meteorite crater, the Ries Crater, to gain first-hand experience of the geoscientific effects of a cosmic collision. Their school, the Philippinum Gymnasium in Weilburg, Hessen, is a

GeoSchool certified by the Westerwald-Lahn-Taunus Geopark. Both Geoparks intend to continue their cooperation and are considering further reciprocal visits to their extracurricular learning centers by school classes.

- The partnership between the UGGp Ries and the **landscape conservation association Heide-Allianz** (described in the Annual Report 2022, Major Achievements and Geoconservation) continues.
- The **Culinary Geopark Ries** welcome Martina and Andreas Senz with their gastronomy establishments in Dirgenheim, Bopfingen and Nördlingen as official partners. The Senz family is committed to the quality code of the Culinary Geopark Ries initiative and brings more than 150 years of experience as a family business.



Photo: Michael Loefflad

- **International contacts:**
  - **Partnership agreement with Tanzanian UGGp:** A joint declaration of intent for a partnership between the UNESCO Global Geoparks Ngorongoro-Lengai and Ries was signed during the GGN Conference in Marrakesh in September. The content of the partnership agreement will be determined during video conferences. Talks were also held with the Norwegian UGGp Norvegica about a tri-national partnership, as the Norwegian geopark is in the process of initiating a partnership with the UGGp Ngorongoro-Lengai.



Photo: Guenter Zwerger

- **Meeting with delegation from the Kyrgyz Republic:** The UGGp Ries took advantage of two days at the Bavarian Tourism Marketing booth at the ITB Berlin (leading tourism trade show) to cultivate contacts and build networks. Many interesting and future-oriented discussions took place, including meeting a delegation from Kyrgyzstan, who asked the UGGp Ries for concrete and specific advice and support for the establishment of a geopark. The delegation included a Kyrgyz minister and two employees of the Kyrgyz Association for International Cooperation.



Photo: Martin H. Petrich

## Promotional activities

- **Print media, new:**
  - “Offene Führungen 2024” (“Guided Tours open to the public 2024”) with 60 tours open to the public in 2024
  - Joint brochure of the National and UNESCO Global Geoparks in Germany: What a

wealth of geological history! The brochure is available as an online flip-page version or on paper (order via our website). All members of the Working Group of German Geoparks (AdG) were on board.

- **Print media, updated:**

- “Sehenswertes/Places of Interest” folding map, with text in German and English, revised with all changes and improvements in the UGGp Ries
- Two versions (English and German) of “Windows into the Earth” (“Fenster in die Erdgeschichte”) booklet, re-designed and enlarged with inclusion of new geotopes.
- “Führungen im UNESCO Global Geopark Ries” (Tours in the UNESCO Global Geopark Ries, with standard guided tours and introduction of tour guides), updated with tours in the new geotopes, as well as the new tour “Astronauts in the Ries”.

- **Online brochures:**

- Available to download: Two versions (English and German) of the “Ries Panorama Trail” (“Ries-Panoramaweg”) booklet, with general info on UGGp Ries, signage, description of seven stages with maps and highlights
- Available to download: Two versions (English and German) of the “Hiking in the Meteorite Crater” (“Wandern im Meteoritenkrater”) booklet, with general info on UGGp Ries, signage, description of themed hiking trails with maps and highlights

- **Online marketing, social media:**

- The Facebook and Instagram accounts were constantly updated with the latest news and are enjoying ever-growing followings.
  - Facebook: [www.facebook.com/noerdlinger.ries](http://www.facebook.com/noerdlinger.ries)
  - Instagram: [@unescoglobalgeoparkries](https://www.instagram.com/unescoglobalgeoparkries)
- In 2023, all open-to-the-public guided tours offered by UGGp Ries guides were announced and advertised in advance through posts on Instagram and Facebook.
- Scheduled guided tours were published on websites of Geopark Ries, Landratsamt Donau-Ries and RegioPortal Donau-Ries
- Postings were also made regarding “International Day of...” events
- The Geotope Aumühle in the UGGp Ries is listed as one of the 100 most beautiful geotopes in Germany, and now it can be experienced in 3D in a video by the German Geological Association (DGGV): <https://digitalgeology.de/nordlinger-ries>

- **Advertising and text contributions in (trade) publications:** In 2023, the UGGp Ries placed over 30 adverts and advertorials in regional and national trade journals and magazines, including:

- National Geographic, 2023
- Travel guide, 1000 Places to see before you die, Germany, 2023



- “Die schönsten Fernwanderwege” (“The best long-distance hiking trails”), Wandermagazin, 2023
- **Press releases:** 58 (the distribution list may not be shared due to German privacy laws)
- **Trade fairs and conferences:** The UGGp Ries was represented (along with the local tourism association, Ferienland Donauries) at:
  - CMT Stuttgart
  - Freizeit Nuremberg (leisure and recreation trade show)
  - f.re.e Munich
  - afa Augsburg
  - ITB Berlin (leading trade show of worldwide travel and tourism)
  - Donau-Ries-Ausstellung (consumer trade show)
- **Other events and conferences:**
  - **Local events:**
    - June 2023: Participation in the Geopark Festival of our neighboring UNESCO Global Geopark Swabian Alb held on the occasion of EGN Week. The UGGp Ries was well represented by our certified tour guides.



Photo: Georg Seel

- April 2023: The GenussKulturMarkt (Enjoyment-Culture-Market) at the Museum KulturLandRies in Maihingen benefited from the best springtime weather. The UGGp Ries was represented by a team of tour guides.



Photo: Martin Beer

- **Educational institutions:**

- Annual correspondence with all schools in the UGGp Ries region to inform of events, tours, facilities, etc.
- Continuing education and teaching aids for teachers

- **Broadcast media, 2023:**

- **BBC:** As part of a two-part series on the Moon, the British broadcaster BBC visited the UGGp Ries in April 2023 and filmed in the Geotopes of the UGGp Ries with Prof. Dr. Harald Hiesinger, among others



BBC filming in the UGGp Ries with Prof. Dr. Harald Hiesinger.

Photo: Heike Burkhardt

- **TV Chosun:** A film crew from the South Korean television station TV Chosun spent over a week in the UGGp Ries filming an extensive documentary. The organization was largely undertaken by the UGGp Ries.



Photo caption: South Korean TV Chosun filming in the UGGp Ries.

Photo: Anja Friedel

- o a.tv.: Local television station Augsburg.tv produced a report on the opening of the eighth Adventure Geotope in the UGGp Ries, Geotope Amerdingen, which was dedicated during EGN Week.

#### 4. CONTACTS

**Manager:** Heike Burkhardt (Managing Director), [heike.burkhardt@geopark-ries.de](mailto:heike.burkhardt@geopark-ries.de)

**Geologists:** Fabian Weiß, [fabian.weiss@geopark-ries.de](mailto:fabian.weiss@geopark-ries.de),  
Gisela Pösges, [gisela.poesges@geopark-ries.de](mailto:gisela.poesges@geopark-ries.de)