

Beat the Heat While Exploring Earth's History: Korea National Park Service Unveils Six Geological Wonders

- Six summer-ready geoparks where nature conservation and geotourism go hand in hand
- Explore Earth's history in the cool outdoors, from natural lava caves to pebble beaches

The Korea National Park Service (KNPS, President Joo Dae-yeong), under the Ministry of Climate, Energy and Environment (MCEE), has recommended six geology parks specially suited for summer, where families can stay cool while learning about Earth's history as the peak summer heat sets in.

A geopark is an area containing a diverse range of geological attractions, including caves, valleys, coastlines, and volcanic landforms. These geological sites are highly valuable scientific and educational resources that reveal Earth's history and the processes that shaped its geology.

The six geoparks (geosites) recommended by the KNPS for this summer are: Hwaamdonggul Cave in the Gangwon Paleozoic National Geopark; Binggye Valley in Uiseong Geopark; Unilam-Banilam in the Jinan-Muju National Geopark; the Yangnam Columnar Joints in Gyeongju along the Gyeongbuk Donghaean Geopark; the Kongdol Pebble Beach of Baengnyeong-Daechong Geopark; and Manjanggul Lava Tube in Jeju Geopark.

Hwaamdonggul Cave, part of the Gangwon Paleozoic National Geopark, is located in Hwaam-myeon, Jeongseon-gun. It is an exceptionally rare cave

where a natural limestone cavern formed in Paleozoic limestone strata coexists with historic gold mine tunnels. Inside the cave, visitors can enjoy the cool environment while observing stalactites and stalagmites that have formed over tens of thousands of years, as well as a variety of limestone cave features created by the erosive action of groundwater.

Binggye Valley, part of the Uiseong Geopark, is located in Binggye-ri, Chunsan-myeon, Uiseong-gun. It is renowned for its so-called “ice valley” terrain, where ice forms and cold air emerges even during the summer. The valley features a talus slope formed by accumulated rock debris and is a remarkable natural attraction where an “ice cave” releases cool air throughout the peak of summer, while a “warm cave” emits warm air during the depths of winter.

Unilam-Banilam, part of the Jinan–Muju National Geopark, are located in Jucheon-myeon, Jinan-gun. The valley is filled with massive, uniquely shaped rock formations created by ancient volcanic activity.

The area is characterized by deep valleys and sheer cliffs that provide natural shade, while a nearby suspension bridge offers sweeping views of the dramatic geological landscape. Visitors can also enjoy cooling off in the valley’s crystal-clear, abundant waters.

The Yangnam Columnar Joints in Gyeongju, part of the Gyeongbuk Donghaean Geopark, consist of pentagonal and hexagonal rock columns formed as lava cooled and contracted. Particularly notable are the fan-shaped columnar joints that have developed along the East Sea coastline, a formation that is exceptionally rare on a global scale. Visitors can walk the 1.7-kilometer coastal trail stretching from Eupcheon Port to Haseo Port, taking in spectacular views of both the blue East Sea and the dramatic columnar joints.

The Kongdol Pebble Beach of Baengnyeong Island, part of the Baengnyeong-Daechong Geopark, is a distinctive geological attraction where

the shoreline is blanketed with smooth, bean-shaped pebbles. These Kongdol pebbles were formed as hard rocks were eroded and polished by waves and ocean currents over tens of millions of years, creating a coastal landscape that is emblematic of Baengnyeong Island's unique geological environment. Visitors can stroll along the beach while listening to the clear, melodic sound of the pebbles rolling against one another, admire the distinctive coastal scenery, and even enjoy a natural foot massage by walking barefoot over the Kongdol pebbles.

Manjanggul Lava Tube in Jeju Geopark, is one of the world's finest lava tubes, stretching approximately 7.4 kilometers, and is among the flagship geological heritage sites of Jeju's UNESCO World Natural Heritage designation. The cave maintains a cool temperature of around 11°C–21°C throughout the year, making it an ideal destination even during the height of summer. Visitors can observe a wide variety of lava cave features, including a massive lava column, lava shelves, and lava flow lines, offering a fascinating glimpse into the volcanic processes that shaped Jeju Island.

Meanwhile, each geopark will offer a variety of geology education programs and evening guided tours for children and families during the summer vacation season. Detailed visitor information, cultural event schedules, and guides to the geological attractions are available on the respective geopark websites.

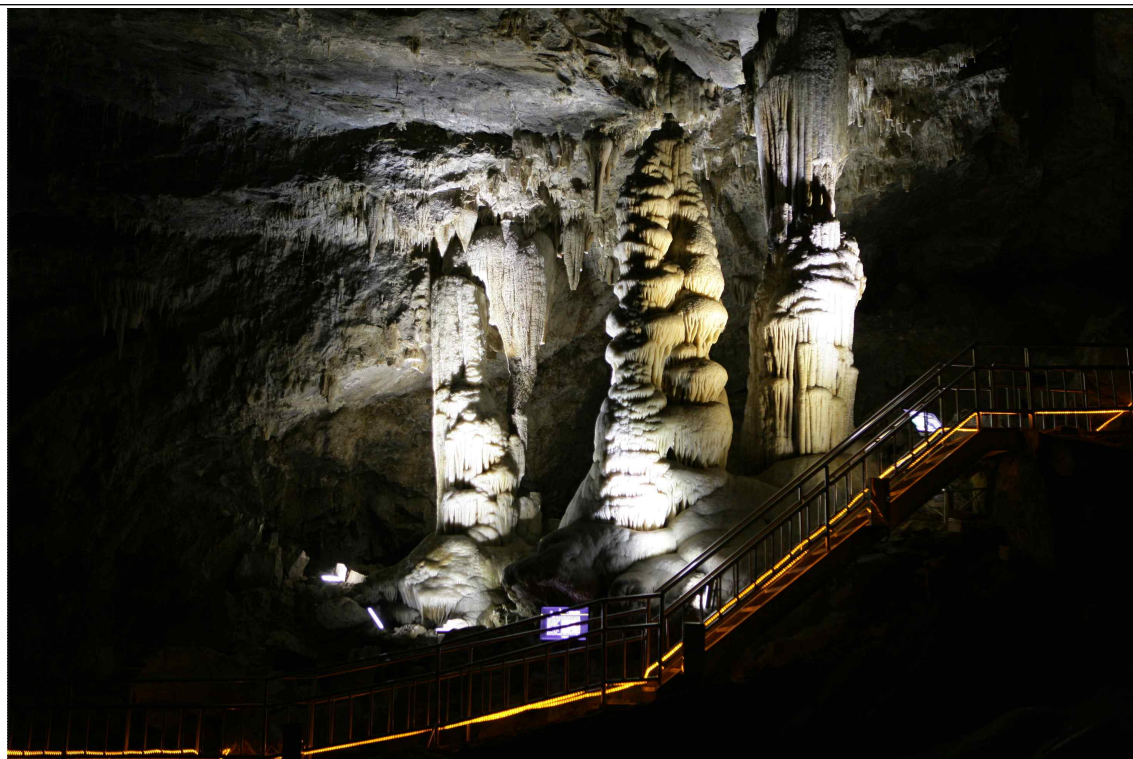
KNPS President Joo Dae-yeong said, "The natural caves and coastal attractions of Korea's National Geoparks offer the perfect place to escape the summer heat while experiencing hundreds of millions of years of Earth's remarkable history firsthand." He added, "This summer, we encourage families to enjoy an eco-friendly geological journey together in these refreshing natural settings."

Geopark Name	Geopark Website Address
Gangwon Paleozoic National Geopark	https://www.paleozoicgp.com/
Uiseong Geopark	https://www.usc.go.kr/geopark/
Jinan-Muju National Geopark	https://jmgeopark.kr/
Gyeongbuk Donghaean Geopark	https://www.geotourism.or.kr/
Baengnyeong-Daechong Geopark	https://www.bdgeopark.kr/
Jeju Geopark	https://www.jeju.go.kr/geopark/index.htm

- **Columnar Joints:** A geological formation created when lava cools and contracts, causing cracks (joints) to develop into column-shaped rock structures. Typically forming pentagonal or hexagonal columns, columnar joints are a distinctive landform that preserves evidence of past volcanic activity.
- **Lava Column:** A pillar-shaped geological feature formed inside a lava tube when molten lava descending from the ceiling remains connected to the floor as it cools and solidifies. Unlike the stalactites and stalagmites found in limestone caves, lava columns are formed through volcanic processes and are a characteristic geological feature of lava tubes.
- **Lava Shelf:** A shelf-like ledge preserved along the wall of a lava tube. It marks the former level of flowing lava inside the cave, providing evidence of the height, flow path, and scale of past lava movement.
- **Lava Flow Line:** Stripe-like markings left on the walls or ceiling of a lava tube as molten lava flowed through it. These features provide important geological evidence that helps scientists determine the direction, level, and relative velocity of past lava flows.
- **Ice Cave:** A natural cavity or space within rock fractures or caves where ice forms or persists even during the summer. Ice caves often occur alongside wind caves and are a characteristic example of a cold-air cave, where trapped cold air creates a naturally refrigerated environment.

- **Blockfield (Boulder Field):** A landform consisting of large rock fragments produced by weathering and rockfall, accumulated across mountain slopes or valley floors. Air circulates through the spaces between the boulders, creating conditions that can give rise to wind caves and ice caves.

- **Paleozoic Era:** A geological era spanning approximately 541 million to 252 million years ago. It was a time of major diversification of marine life and saw the emergence of fish, amphibians, and the earliest reptiles. The Gangwon Paleozoic National Geopark preserves outstanding rock formations and strata that were formed during this era.



Hwa-am Cave in Gangwon Paleozoic National Geopark



Uniram Baniramgyegok Valley in Jinan-Muju National Geopark



Binggyegyegok Valley in Uiseong Geopark



Gyeongju Yangnam Columnar Joint Observatory in Gyeongbuk
Donghaean Geopark



Kongdol Pebble Beach in Baengnyeong-Daechong Geopark



Manjanggul Lava Cave in Jeju Geopark