

## **SALKHAN FOSSIL PARK: ENVIRONMENT**

**NEWS:** Uttar Pradesh's Salkhan Fossil Park makes it to UNESCO tentative list: Stunning facts about the park

### **WHAT'S IN THE NEWS?**

Salkhan Fossil Park in Uttar Pradesh, known for 1.4-billion-year-old stromatolite fossils crucial to understanding early life, has been added to UNESCO's Tentative List of World Heritage Sites, highlighting its global scientific significance.

### **About Salkhan Fossil Park**

#### **Location and Area:**

- The Salkhan Fossil Park is located in Salkhan village, approximately 15 km from Robertsganj in the Sonbhadra district of Uttar Pradesh.
- It spans an area of about 25 hectares in the Kaimur range, which forms part of the larger Vindhyan mountain range.

#### **Fossils of Stromatolites:**

- The park is renowned for its well-preserved stromatolite fossils, which date back roughly 1.4 billion years.
- Stromatolites are layered sedimentary structures created by colonies of cyanobacteria (commonly known as blue-green algae) through photosynthesis and sediment trapping.
- These fossils are significant for understanding early microbial life on Earth and are linked to the Great Oxidation Event — a period when atmospheric oxygen levels dramatically increased due to cyanobacterial activity.

#### **Geological Importance:**

- The stromatolite fossils in the park are found within the Bhander limestone formation, part of the Vindhyan Supergroup.
- This geological group is recognized as one of the largest, most continuous, and best-preserved Proterozoic rock formations globally.
- The park displays a variety of stromatolite forms including columnar, stratiform (layered), and domal (dome-shaped) morphologies, which provide insight into the environmental conditions and microbial activities of the Proterozoic era.

#### **Ecological Significance:**

- Salkhan Fossil Park is part of the larger Kaimoor Wildlife Sanctuary region, which hosts diverse flora and fauna.

- The region contains mixed deciduous forests, riverine ecosystems, and offers important ecological niches that support a variety of plant and animal species.

#### **Scientific and Educational Value:**

- The park is a critical resource for scientific studies on early life, paleoenvironments, and the evolution of Earth's biosphere and atmosphere.
- It serves as an invaluable site for educational tourism, attracting researchers, students, and tourists interested in Earth's deep-time history and evolution.
- The fossils at the park represent some of the earliest records of life on Earth, making them key to understanding the development of life and the oxygenation of Earth's atmosphere.

#### **IUCN Geo-heritage Interest:**

- The International Union for Conservation of Nature (IUCN) recognizes sites like Salkhan Fossil Park under the theme "Evolution of Life," as they bridge gaps in the global World Heritage fossil record.
- It represents a critical phase in Earth's early history (Proterozoic Eon) that remains underrepresented in the list of recognized global heritage fossil sites.

#### **About the Tentative List of UNESCO World Heritage Sites:**

- The Tentative List is a register maintained by UNESCO where countries submit sites they consider to have potential Outstanding Universal Value, with an aim to eventually nominate them for full World Heritage status.
- Submitting a site to the Tentative List is a prerequisite; countries must include sites in this list at least one year prior to their nomination to the World Heritage Committee.
- As of June 2025, India has 63 sites on the UNESCO Tentative List, covering both natural and cultural heritage properties that reflect India's diverse history and landscapes.

#### **Conclusion:**

- Salkhan Fossil Park's inclusion in UNESCO's Tentative List underscores its global significance as a natural heritage site illustrating the evolution of life on Earth.
- It strengthens India's commitment to conserving geo-heritage and promoting scientific, educational, and eco-tourism initiatives.

**Source:** <https://timesofindia.indiatimes.com/life-style/travel/news/uttar-pradeshs-salkhan-fossil-park-makes-it-to-unesco-tentative-list-stunning-facts-about-the-park/articleshow/122073136.cms>