

# Lushan UGGP, 2023 Annual Report, China

## 1. Geopark Identity

**1.1 Geopark Name, Country, Regional Network:** Lushan UNESCO Global Geopark, China, Asia-Pacific Geoparks Network

**1.2 Year of inscription/ Year of the last revalidation:** 2004 / 2018



Annual representative activity: Lushan Half Marathon Race

## 2. GEOPARK FIGURES

**2.1 Number of Geopark staffs:** The geopark currently employs 1926 people, including 5 geological experts and 15 botany professionals.

**2.2 Number of Visitors:** The park received 26.55 million visitors of man/times, slightly more than the time before the pandemic time in 2019.

**2.3 Number of Geopark events:** 36.

2.3.1. Lushan UGGp held regular geoscience training classes. During World Earth Day, World Environment Day, Love Birds Week, World Flora and Fauna Day, National Science Day, Biodiversity Day, series of publicity and education activities involving students, community residents, and tourists are held.

2.3.2. The geopark held cultural and sports events. We have hosted the First Traditional Chinese Medicine Culture Innovation and Development Conference, the Second Lushan

High-Level Forum on "Restoring Biodiversity for Promoting Green Development in Jiangxi", Lushan Global Business Elites Conference, the First "Lushan Dialogue" for High-quality Development Consultation by Academicians, the Fourth Lushan International Romance Film Week, Lushan Half Marathon Race, Yangtze River Economic Belt Lushan Tennis Invitational, QQ Speed National Open E-sports Games, Provincial Chongyang(Double Ninth) Festival Climbing Contest, and the First "Tea Saint Cup" Lushan Cloud Mist Tea Skills Competition, enhancing the geopark's influence.

2.3.3. Education: Served as a research and education base for schools at all levels, Lushan UGGp hosted multiple study tours, summer and winter camps. Museums, historical conference sites, botanical gardens, and meteorological stations provided secondary classroom education and natural education activities for students.

2.3.4. Strengthened online and offline visitor services through websites, WeChat public accounts, mini-programs, and other methods, offering a variety of online visiting activities. The museum hosted both online and offline geological studies of Lushan, famous people related to Lushan, poetry and Lushan, villa relics, villa architecture, landscape photography exhibitions, and promotional video displays, interacting with community residents, tourists, and students to enhance public awareness of heritage conservation.

2.3.5. Emergency Response Training: Conducted emergency drills on geological, meteorological, forest fire prevention, and other natural disasters as well as first aid knowledge, improving the community's ability to recognize disasters and respond correctly.

**2.4. Number of school classes realize Geopark educational programmes: 45.**

**2.5 Number of Geopark press release:**The geopark's official website is regularly updated. A total of 2008 articles were used by media at all levels, including 672 by central media, 406 by provincial media, and 930 by city and local media. During peak tourist seasons and major events, Lushan was promoted through mainstream media such as Xinhua News Agency, People's Daily, and CCTV News. The official social media platforms posted a total of 1314 articles on Lushan's tourism policies, ticket discounts announcement, scenic views, cultural history introductions, and significant event promotions, reaching a total of 40.536 million views, 1.457 million followers, and 1.528 million likes.

### **3.GEOPARK ACTIVITIES**

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

**3.1.1Strengthening Ecological Conservation:** Integrated the monitoring and early warning system with the intelligent tourism management service platform, Lushan UGGp uses cloud computing and big data technology to support the monitoring and management, tourism services, and scientific development of the geopark. Effective dynamic supervision of the ecological environment is implemented by using intelligent checkpoint monitoring devices, infrared cameras, and drones for surveillance and patrol. The constructions of a national

positioning research station for forest ecosystems and outdoor ecological protection infrastructure are completed, followed by the finishing of sample plots, comprehensive observation towers, meteorological fields, and flow measurement weirs, obtaining national standard certification. We had established a national wildlife disease monitoring station and wildlife rescue station and is recognized for eight consecutive years as a provincial advanced county for wintering bird and wetland protection. Phase one of the core scenic area's sewage collection and treatment project was completed, with rapid progress on phase two. The ecological protection and restoration of Ruqin Lake is completed. The greening projects around mountain roads, tourism greenways, river and lake shorelines, and expressway entrances are undertaking. We had initiated forest quality and species improvement projects, completing a comprehensive survey of Japanese cedar and cypress plantations.

**3.1.2 Infrastructure Improvement:** The construction of the Beijing-Hong Kong high-speed rail Lushan section has started. We have completed the construction of Lushan International Conference Center (Phase I) and undertook protective repairs of the historical and cultural district of Kuling Street; renovated the infrastructure of the Three Cascades Waterfall scenic area, North and South Gate Transfer Centers, and the hot spring resort area. Introducing new tourist interpretive, guiding, fire safety signs, we also built and renovated safety biomimetic guardrails, repaired or widened walking paths, repaired or added viewing platforms, installed new lightning protection facilities, replaced or added classified trash bins, and added rest seats for tourists. Equipped the core scenic area with automatic external defibrillators and trained staff to improve medical emergency services in the scenic area. Undertook undergrounding of strong and weak electrical comprehensive pipelines and smart streetlight construction in the core scenic area. Improved Lushan's road traffic order and safety management using smart traffic management platforms, traffic guidance and announcement systems, Lushan One-Machine Tour app, and One-Machine Control traffic service system.

**3.1.3 Social Honors:** Lushan Global Geopark received the "Annual Contribution" and the "Most Beautiful Geopark" awards at the 7th "Most Beautiful Earth Mark" theme science popularization activity co-hosted by the Chinese Academy of Geological Sciences, the National Geopark Network Center, the Ministry of Natural Resources Publicity and Education Center, and the Geological Society of China's Tourism Geology and Geoparks Research Branch. Selected by the Ministry of Culture and Tourism for two theme tourism routes in the Yangtze River International Golden Tourism Belt: the Magnificent Landforms of the Yangtze River journey and the World Heritage Sites of the Yangtze River journey; selected for the "Great Tea Road" (China section) tourism brand and the national rural tourism quality route "Unique Maple Scenery" journey. Lushan's Bailudong (White Deer Cave) Academy was approved as a corporate member of the International Confucian Association; Lushan Museum's Qing dynasty Xu Conglong's Five Hundred Arhats scroll was selected by Jiangxi's

Provincial Department of Culture and Tourism (Cultural Relics Bureau) as a provincial treasure. "Telling Red Stories", "Studying Alongside Glaciers", "Traveling with Poems in Lushan", and "Famous People and Lushan" were awarded the first and second batch of provincial museum youth education quality courses; Lushan Library was once again rated by the Ministry of Culture and Tourism as a national first-level library and the fourth batch of national key ancient book protection units. Lushan Botanical Garden was included in the national botanical garden creation list, approved as a national talent introduction demonstration base, a national science popularization base of National Forestry and Grassland Administration, a science popularization education base of the Chinese Botanical Society. The nature reserve was awarded titles such as "National Forestry Science Popularization Base", "National Nature Education Base", "National Wildlife Protection Science Education Base", "Provincial Forestry Science Popularization Base", and "Provincial Ecological Civilization Publicity Base". Added one provincial academician workstation, one provincial key laboratory, and one city-level expert workstation each. Constructed a national-level cloud and mist physics comprehensive observation experiment base.

**3.1.4. Botanic Garden up grading:** As China's earliest subtropical high mountain botanical garden, Lushan Botanical Garden also applied for national botanical garden status this year and recruited several masters and doctoral graduates specializing in botany.

**3.1.5. Rich Scientific Research Achievements:** Published over 70 research papers on ecological protection, including more than 30 SCI papers, published 7 monographs, obtained 10 patents, 5 software copyrights, discovered 2 new macrofungi species, issued 1 technical procedure or standard, received 2 provincial science and technology awards, selected 2 individuals for Jiangxi's "Thousand Talents Plan", and applied for more than 10 national natural science funds, provincial finance projects, and education department projects. Additionally, Lushan Reserve and Jiangxi Agricultural University established a "national forestry master's professional degree graduate student model professional practice base", cumulatively training more than 200 master's, doctoral, and undergraduate students. Compiled and published a series of scientific monitoring results monographs, including "Butterflies of Jiangxi Lushan", "Rare Plants of Jiangxi Lushan (Volume I)", "Macrofungi of Jiangxi Lushan", "Ecological Environment Protection and Sustainable Development of Tourist Attractions: A Case Study of Lushan", and "Whispers of the Wind: A Collection of Stories of Lushan's Ancient Trees", with four monographs receiving Jiangxi Provincial Forestry Science Popularization Awards. Captured clear images of the national second-class protected bird species, the Red-billed Leiothrix, for the first time, with a total of 262 bird species recorded in the area to date; infrared cameras recorded clear images of the leopard cat three times, and the sightings of muntjacs were featured in the CCTV program "Eye of the Secret Realm".

**3.1.6. Promoting Socio-Economic Development:** We have established two national four-star leisure agriculture and rural tourism boutique enterprises and two provincial-level

agricultural Internet of Things demonstration bases. Lushan Cloud and Mist Tea was selected for the national geographical indication top 100 list for six consecutive years. Lushan Cloud and Mist Tea Farm was rated as a "Time-Honored Brand" enterprise. Added 11 "Two Products One Standard" (green food, organic agricultural products, and agricultural product geographical indications), and one Jiangxi whole-domain agricultural product brand (geographical indication) "Gan Po Authentic Product". Donglin Yulu was rated as a "Gan Chu Excellent Product" brand and selected for the Jiangxi Agricultural Product Brand Top 100 list. For two consecutive years, the geopark was rated as a national key county for leisure agriculture. For six consecutive years, the geopark was listed among the top 100 counties for comprehensive tourism competitiveness. The geopark was awarded the title of provincial excellent scenic area, excellent tourism service experience pilot city. Kuling Street was rated as a provincial-level model commercial district. Lushan Tourism Sightseeing Bus Company was rated as a provincial-level leading enterprise in the service industry. Lushan Cloud-top Mountain Record was rated as a national Ministry of Culture and Tourism grade B tourism homestay.

### **3.2 Contributions to GGN – Network Activities and Participation:**

3.2.1. In 2023, the geopark timely paid the GGN network organization membership fee, sent the official support letter document for the 2022 financial report and 2023 budget of the Global Geoparks Network organization to GGN, and participated in the 9th GGN Annual General Assembly for Accounts. Lushan provided two case tweets that were selected for publication in GGN's Geoparks Going Green Issue 1 and the Geodiversity magazine Geodiversity In UNESCO Global Geoparks.

3.2.2. In March 2023, the geopark participated the International Symposium on Wugongshan Dome Research and Geoparks Development hosted by Wugongshan Geopark, and made an exchange speech.

3.2.3. In June 2023, the geopark participated in the special online meeting co-hosted by UNESCO and the Global Geoparks Network to celebrate "World Environment Day" and welcome new members.

3.2.4. In July 2023, the geopark assisted Wugongshan Geopark in training geological interpreters, participated in and helped the geopark complete the on-site inspection and evaluation work for the Global Geopark.

3.2.5. In April 2023, participated in the online training for Global Geopark evaluators.

3.2.6. In April 2023, assisted Wugongshan Geopark in applying for the Global Geopark and establishing sister park relationships.

3.2.7. In April 2023, the geopark jointly hosted the 4th Asia-Pacific Geopark Week and the 54th World Earth Day "Friendly Sister Parks Mutual Display and Interaction" theme publicity event with Yandangshan UGGp and 29 other geoparks. Strengthened sister park

publicity linkage and science popularization interaction, showcasing the conservation and development achievements of global geoparks.

3.2.8. In September 2023, the geopark established sister park relationships with Haute-Provence UGGp in France and M'Goun Global Geopark in Morocco.

3.2.9. In September 2023, the geopark participated in the 10th UNESCO Global Geoparks Conference held in M'Goun UNESCO Global Geopark, Morocco, attended the conference's Sustainable Development SDG group meeting and made an exchange report, participated in the Global Geoparks Conference's GGN special exhibition, produced and pushed promotional short films to participate in the GGN Film Festival and permanently played on the GGN official website.

3.2.10. In September 2023, the geopark participated in the International Geodiversity Day - Volcanic Geodiversity online meeting hosted by Hong Kong UGGp and AGHK( the Association for Geoconservation, Hong Kong).

3.2.11. In October 2023, the geopark participated the International Online Seminar which Celebrating Geodiversity Day hosted by Merangin Jambi UGGp and Khorat UGGp.

3.2.12. In October 2023, the geopark participated the 7th International Training Course on UNESCO Global Geoparks Management and Development held in Zhangye UGGp.

3.2.13 From February to November 2023, the geopark participated four APGN (Asia-Pacific Geoparks Network) online meetings of "Let's do it" hosted by the Hong Kong UGGp.

3.2.14. In November 2023, the geopark participated the 2023 China UNESCO Global Geopark Annual Conference held in Yimengshan UGGp.

3.2.15. In December 2023, the geopark established sister park relationships with Enshi Grand Canyon-Tenglongdong Cave Geopark.

### **3.3 Management and Financial Status:**

**3.3.1. Management Organization:** Lushan UGGp Administration Committee serves as the overall conservation and management coordination body for the geopark, and Lushan World Heritage Management Division of Lushan UGGp Administration Committee serves as world heritage and global geopark conservation and management specialized agency.

**3.3.2. Financial Status:** The financial situation is sound, with income and expenditure basically balanced. Income can cover the park's conservation, infrastructure renewal and maintenance, scientific research and popularization, cooperation and exchange, and publicity and promotion.

### **3.4. Geoconservation:**

The geopark implements a strict tiered protection mechanism according to the overall protection plan. Currently, the geological heritage resources within the park are well-preserved, with most geological heritage landscapes in their original natural state. Due to the absence of industry, they have not been subjected to or have rarely encountered

large-scale human destruction, with only a few geological heritage sites affected by natural weathering and severe weather.

### **3.5. Sustainable Tourism (Geotourism):**

The geopark has established 5 geotourism routes, equipped with a geotourism guide interpretation system at geoheritage sites, ensuring the routine maintenance and annual update of interpretive signs. Conducted training in geoscience knowledge for park guides, staff, and volunteers to enhance the recognition and popularization of geoscience knowledge in the geopark. Cooperated with study tour institutions to promote sustainable tourism.

**3.6. New Educational Plans on Geological Heritage Protection: Sustainable Development, and Disaster Risk Reduction:** We continued the investment in the construction of the monitoring and early warning system for Lushan World Heritage and Global Geopark, optimized integration with the Lushan Intelligent Tourism System, using advanced cloud computing and big data technologies to provide technical support for geological heritage protection, sustainable development, and disaster risk monitoring and management, tourism services, and scientific development in Lushan Geopark. Conducted science popularization education activities on "World Earth Day", "World Meteorological Day", "Environment Day", and "Disaster Prevention and Reduction Week", publicizing relevant disaster cognition, disaster prevention measures, and early warning signals (types, levels, and prevention recommendations); strengthened safety management, actively responded to forest fire prevention, lightning protection, flood prevention (flash floods), frost prevention, slip prevention, etc., conducted emergency investigations of geological disasters, managed hidden dangers of geological disasters, timely identified and eliminated various safety hazards, ensured the safety of scenic areas and tourists, enhanced safety education and training for staff, and regularly conducted emergency drills for tourists in scenic areas, forest fire prevention, and accident handling, etc. Meanwhile we had also signed cooperation agreements with the Chinese Academy of Geological Sciences, Jiangxi Geological Survey Brigade 916, Jiangxi Geological Survey Bureau, Jiangxi Provincial Urban and Rural Planning and Design Research Institute, Jiangxi Geological Environment Station, and Jiangxi Geological Society in the fields of earth science research and geoscience popularization.

### **3.7. Strategic Partners**

The cooperation with scientific research institutions and universities such as the Chinese Academy of Geological Sciences, Jiangxi Geological Society, Jiangxi Geological Survey Brigade 916, Wuhan University, China University of Geosciences (Wuhan) are continued. We also share research results and jointly managing and utilizing Lushan's natural resources. Therefore we had attracted investment, strengthened cooperation with travel agencies, film and television culture, and marketing planning enterprises, enriched tourism formats, enhanced tourism publicity, marketing and promotion, and provided high-quality tourism services.

### **3.8. Promotion and Publicity Activities**

Lushan tourism advertisements are posted national, provincial, and city mainstream websites, TV stations, newspapers, and magazines. Operated Lushan tourism social media on platforms such as Douyin, Kuaishou, WeChat, etc. Actively participated in various types of tourism trade fairs organized by national, provincial, and municipal authorities, carried out a series of tourism promotion activities, promoted tourism quality routes, and showcased Lushan's beautiful scenery and profound cultural history. We had hosted the First Traditional Chinese Medicine Culture Innovation and Development Conference, Lushan Global Business Elites Conference, the first "Lushan Dialogue" for high-quality development consultation by academicians, the Second Lushan High-Level Forum on "Restoring Biodiversity for Promoting Green Development in Jiangxi", the Fourth Lushan International Love Film Week, the national autumn "Village Evening" main venue activity, Lushan Half Marathon, Yangtze River Economic Belt Lushan Tennis Invitational, National Kart Racing Open S3 mobile game race offline race, Provincial Chongyang Festival Climbing Contest, and the First "Tea Saint Cup" Lushan Cloud Mist Tea Skills Competition, enhancing visibility and reputation. Lushan's cases were selected for publication in GGN's Geoparks Going Green Issue 1 and the geodiversity magazine Geodiversity in UNESCO Global Geoparks, Geological Publishing House's "China Geopark Development Report", and "China National Parks and Scenic Sites " magazine, "Earth" magazine World Earth Day special issue. Received the "Most Beautiful Geopark" and "Annual Contribution Award" at the 7th World Earth Day "Most Beautiful Earth Mark" theme science popularization activity; assisted CCTV special production team in filming documentaries "Century Masters" "Science and Technology Episode: Li Siguang" and "Traveling with Tang Poetry", etc.; hosted "Warm New Year's Travel in Jiangxi - New Year's Celebration in Snowy Lushan" series of activities, "Splendid Kuanglu - Dragon Boat Festival Gathering" series of Dragon Boat Festival intangible cultural experience activities, "Colorful Lushan - Love Beautiful China" Mid-Autumn Festival and National Day series of activities, etc., and more than 20 tourism promotion activities, expanding the influence of Lushan Global Geopark.

#### **4. Contacts:**

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