

Henan
河南

嵩山

Songshan

國家地質公園

National Geopark



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嵩山國家地質公園

SONGSHAN NATIONAL GEOPARK

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序

嵩山国家地质公园位于登封市北部嵩山山系，自西向东横跨安坡山、马鞍山、五佛山、挡阳山、少室山、太室山和五指岭诸峰，群山耸峙、拔地腾霄、层峦叠嶂、气势磅礴。地理坐标：东经 $112^{\circ} 56' 07'' \sim 113^{\circ} 11' 32''$ ；北纬 $34^{\circ} 23' 31'' \sim 34^{\circ} 35' 53''$ ，面积 464km^2 。

地质公园内发育着集典型、稀有、系统完整性于一身且不可再生的珍贵地质遗迹，是研究地壳演化规律、追溯地球演化历史的理想场所。公园内连续完整地出露着太古宙、元古宙、古生代、中生代、新生代五个地质历史时期的沉积和构造——热事件的序列产物，被地学界称为“五代同堂”；清晰地保存着发生在距今25亿年、18亿年、5.43亿年分别被命名为“嵩阳运动”、“中岳运动”、“少林运动”的三次全球性前寒武纪造山、造陆运动所形成的角度不整合接触界面及构造形态遗迹；加之园内独特的盆—岭地貌、优美的生态环境及丰富的内生和外生矿产资源等，被地学界誉为“天然地质博物馆”。

嵩山国家地质公园是珍稀地质遗迹、国家风景名胜区和森林公园三位一体的世界级自然、文化资源，铸成了地学科普、风景名胜、文物古迹、奇特地貌、生态环境等多层次的综合性旅游环境。园内设计有地学游览、地学野营、地学游乐、地学保健、地学科教诸区域和完善的餐饮住宿、购物娱乐、医疗保健、安全卫生等设施，是科学研究、科普教育、旅游观光、休闲度假的胜地。嵩山，必将造福全人类！

张辉

Preface

Henan Songshan National Geopark is located in the Songshan mountain system of the northern part of Dengfeng City. From west to east it covers the peaks of Anposhan, Maanshan, Wufoshan, Dangyangshan, Shaoshishan, Taishishan and Wuzhiling. These mountains, with great momentum, stand out against the sky and tower into the clouds with their peaks rising one upon another. The geographical coordinates of the Geopark are : $112^{\circ} 56' 07'' \sim 113^{\circ} 11' 32''$ E and $34^{\circ} 23' 31'' \sim 34^{\circ} 35' 53''$ N. Its area is about 464km^2 .

The Geopark, in which there are developed the typical, rare, systematic, complete and never regenerating precious geological relics, is an ideal place for studying the crustal evolution laws and tracing back to the evolutionary history of the Earth. In the Geopark there continuously and completely outcrop a series of products of deposition and tectonic-thermal events during five geological historic periods such as Archean, Proterozoic, Paleozoic, Mesozoic and Cenozoic, which the Geoscientific circles call "Undivided family with five generations". The relics of high-angle unconformity interfaces and the structural features caused by three global-wide Precambrian orogenic-epeirogenic movements : Songyang Orogeny, Zhongyue Orogeny and Shaolin Movement dated 2500 Million years ago, 1800 million years ago and 543 million years ago, respectively, have been clearly preserved. In addition, there are the unique basin-range landform, the fine ecologic environment and the rich endogenetic and exogenetic mineral resources etc. in the Geopark. Therefore, the geoscientific circles praise it as the Natural Geological Museum.







Songshan National Geopark is the world-level natural and cultural resources, which have integrated the rare geological relics, the national famous scenic spot and the forest park into one body and formed the multi-level comprehensive tourist environment composed of geoscientific popularization, scenic spots, cultural relics, unique landform and ecologic protection etc. In the Geopark the new facilities for geoscientific tourism, geoscientific camping, geoscientific recreation, geoscientific health protection, geoscientific teaching and the perfect facilities for accommodations, shopping and recreation, medical treatment and health care, safety and hygiene etc. have been set up. It is an ideal resort for scientific research, scientific popularization education, tourism and scenery sightseeing, leisure and vacation etc. Mt. Songshan will certainly benefit all mankind!

Zhang Xuejun



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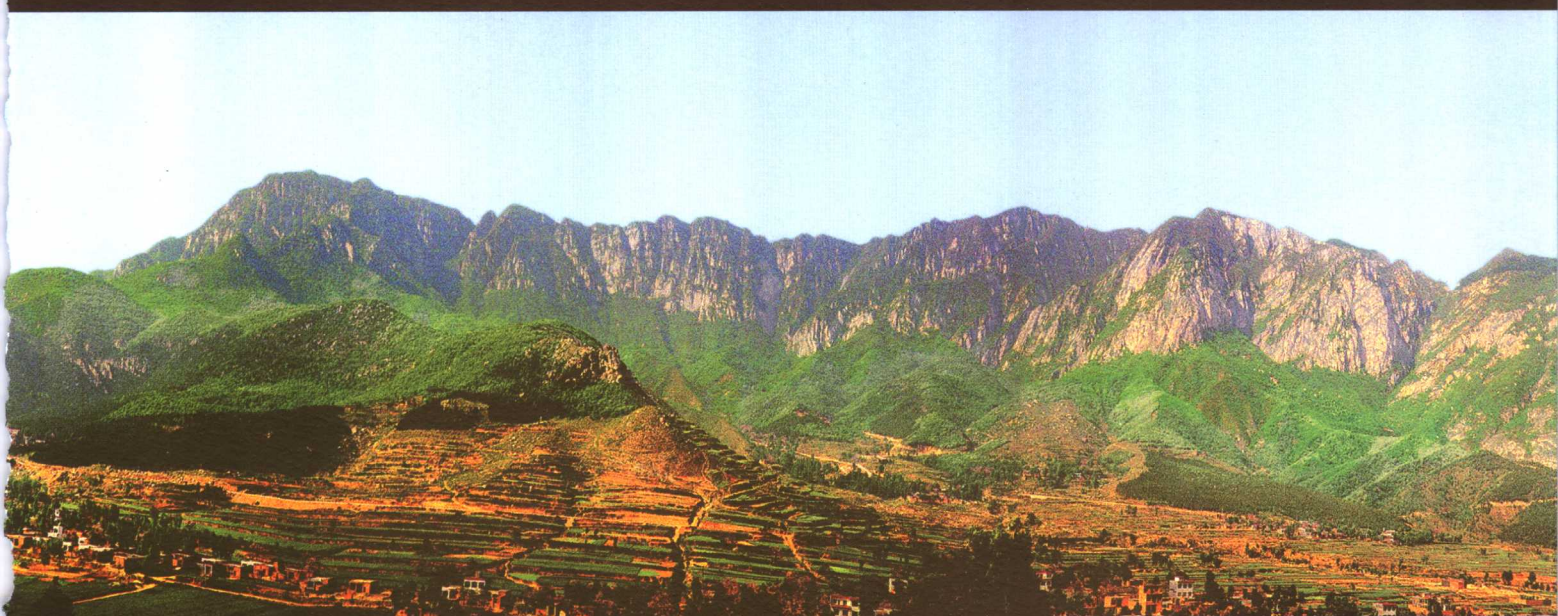
神州瑰宝——嵩山国家地质公园

THE TREASURE OF THE DIVINE LAND — SONGSHAN NATIONAL GEOPARK



嵩山是我国五岳之一，耸立于河南省中部，东望省会郑州，西临九朝古都洛阳，南横颖水，北依黄河，整个山脉东西绵延近百公里。

嵩山山系自西向东依次有万安山、安坡山、马鞍山、五佛山、挡阳山、玉寨山、嵩山主峰（峻极峰）、五指岭和尖山等，峰岳连绵，气势磅礴。



Mt. Songshan, located in the central part of Henan Province, is one of the Five Famous Mountains in China. It extends about 100 km from west to east, looking down to Zhengzhou to the east, adjoining Luoyang, the ancient capital of nine dynasties of China, to the west, being nearest to the Yellow River to the north and to the Yingshui River to the south.

From west to east Mt.Wananshan, Anposhan, Maanshan, Wufoshan, Dangyangshan, Yuzhaishan, Songshan(its highest peak is Junjifeng Peak),Wuzhiling and Jianshan are arranged with great momentum and layer upon layer of rolling peaks.



嵩

山地区的地质遗迹，主要分布在玉寨山、嵩山主峰和五指岭一带。玉寨山又名少室山，群山耸峙，拔地腾霄，雄居于嵩山主峰西南，海拔1512m。嵩山主峰古称太室山，巍峨雄伟，高耸入云，屹立于登封市城北，峻极峰海拔1492m。五指岭蜿蜒起伏，层峦叠嶂，逶迤于嵩山主峰东北，海拔1215m。



The geological relics in Songshan area are mainly distributed along the belt of Mt.Yuzhaishan, Mt.Songshan and Mt.Wuzhiling.

Mt.Yuzhaishan is also called Mt.Shaoshi.It stands to the southwest of Mt.Songshan with its peaks towering to the skies, having an elevation of 1512m.

The main peak of Mt.Songshan was historically called Mt.Taishi. It is lofty and magnificent and towers into the clouds, standing like a giant to the north of Dengfeng City. Its highest peak, Junjifeng, has an elevation of 1492m.

Mt.Wuzhiling, with an elevation of 1215m,wriggles up and down to the northwest of Mt.Songshan.



嵩山国家地质公园是珍稀地质遗迹、国家风景名胜区 and 森林公园三位一体的世界级自然、文化资源，铸就了地学科普、风景名胜、文物古迹、奇特地貌、生态环境等多层次的综合旅游环境。面积为464km²，自西向东依次分布着鞍坡山景区、五佛山景区、挡阳山景区、少林寺景区、三皇寨景区、峻极峰景区、卢崖瀑布景区、纸房湖景区、五指岭景区、石淙河景区等十个游览区域。管理、服务区内具备完善的餐饮住宿、购物娱乐、医疗保健、安全卫生等设施，是科学研究、科普教育、旅游观光、休闲度假的良好场所。

Songshan National Geopark is the wonderful world-level natural and cultural resources, which integrate the valuable and rare geological relics, the national scenic spots and the forest park into one body, and creates multi-level comprehensive tourist environment including geoscience popularization, scenic spots, cultural

relics, unique landforms and ecologic environment etc. The area of the National Geopark is 464km². From west to east there are orderly distributed more than ten sightseeing areas as follows: Anposhan landscape spot, Wufoshan landscape spot, Dangyangshan landscape spot, Shaolin Temple landscape spot, Sanhuangzhai landscape spot, Junjifeng landscape spot, Luya waterfall landscape spot, Zhifanghu Lake landscape spot, Wuzhiling landscape spot, Shiconghe landscape spot etc. In these sightseeing areas there are different kinds of perfect service and management facilities such as restaurants and hotels, shopping and entertainment centers, medical care and health centers, safety and security services. It is a good place for scientific research, scientific popularization, tourism and sightseeing, relaxation and holiday spending.

The treasure of the Divine Land



地质遗迹

GEOLOGICAL RELICS



Garden for scientific research,
Teaching and scientific popularization

嵩山的地质遗迹历来为中、外地质学家所瞩目。独特的地质背景、地理地貌特征及丰富的内生、外生矿产资源等引来国内科研单位、大专院校、地勘群体和国外著名地质学家等在此开展科研、教学、生产、考察和科学普及等工作，积累了丰富的地质资料，提交了大量的科研成果，公开发表和发行了数以百计的地质科学论文和专著，为全面了解嵩山地区各时代地层层序、地壳运动期次、地质构造特征、各类矿产分布、地壳演化规律等提供了可靠基础。高深的地质工作程度，使此区成为国内少有的科研、教学和科普的园地。



Songshan geological relics have been always paid great attention by geologists at home and abroad. The unique geological settings, the unique geographic and geomorphic characteristic and the rich endogenetic and exogenetic mineral resources in Songshan area attract domestic research institutions, universities, geological exploratory units and famous foreign geologists to come here in order to do research work, teaching, production, investigation and scientific popularization etc. They collected a lot of geological data, submitted many scientific research reports and published hundreds of geoscientific papers and monographs, which provided the reliable basis for understanding the stratigraphic sequences, crustal movement, geological structure characters, mineral distribution and crustal evolution of Songshan area. The highly detailed geological research degree makes the area become the garden for scientific research, teaching and scientific popularization, which is rare in China.

