

Post-Congress Tour 4:
Soil and Geoscience Expedition in the Loess Plateau
& Historical-Cultural Tour

June 13-17, 2026

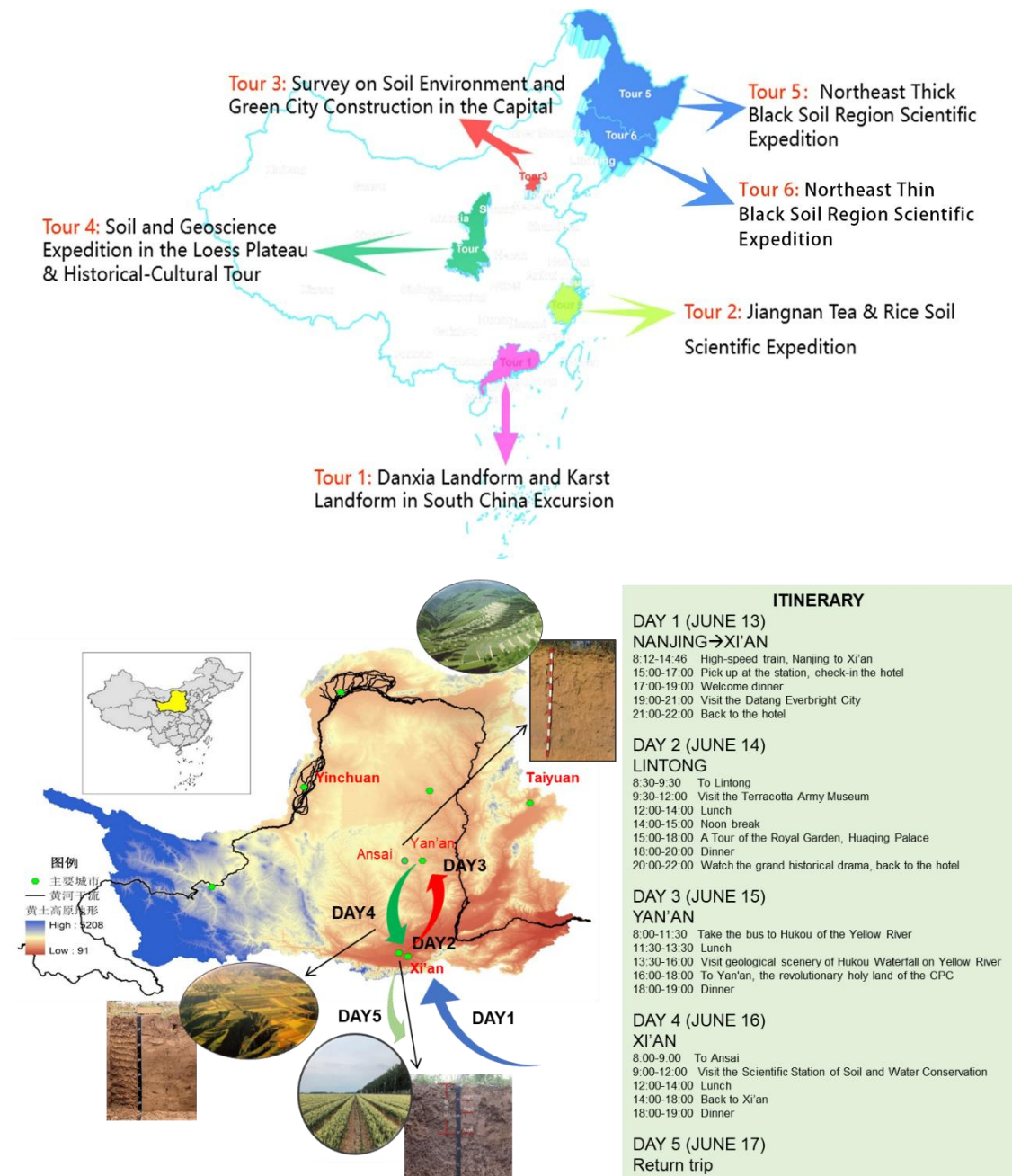
Tour Leaders: Hao Feng, Tibin Zhang, Xilian Geng

Northwest A&F University

PROGRAM:

Tour 4: Soil and Geoscience Expedition in the Loess Plateau & Historical-Cultural Tour

A five-day journey will immerse you in the unique landscapes and heritage of the Loess Plateau. The itinerary includes experiencing the prosperity of the Tang Dynasty, witnessing the awe-inspiring Terracotta Army—the Eighth Wonder of the World—and feeling the power of the Yellow River at Hukou Waterfall. The tour concludes in Yan'an, where you will visit the exemplary achievements in soil and water conservation and ecological restoration. Importantly, the excursion also includes detailed observations of the characteristic pedogenic processes and representative soil profiles of the loess, which constitute an essential component of the region's geomorphological identity.



Date: June 13-17, 2026

Fee: USD \$600 or RMB ¥4200 per person, including:

Entrance Fee	Terracotta Army Museum, Huaqing Palace, drama "The Song of Everlasting Sorrow", Hukou Waterfall
Meals	As Mentioned in itinerary
Hotel	As Mentioned in itinerary (or equivalent), single room.
Traffic	The high-speed train from Nanjing to Xi'an Air-conditioned tourist bus
Guide	English Speaking Guide
Insurance	Tour Insurance

Note:

- 1) The Price is based on 20+ Persons;
- 2) The exchange rate is temporarily calculated at 1 USD = 7.0 RMB. The final exchange rate is subject to the departure date and settlement date;
- 3) If the group size or itinerary requirements changes, the price will be re-calculated

Tour 4: Soil and Geoscience Expedition in the Loess Plateau & Historical-Cultural Tour

Itinerary

Date	Time	Itinerary	Meal	Hotel
DAY 1 (June 13, 2026)	8:12-14:46	High-speed train, Nanjing to Xi'an	Dinner	Mehood Hotel in Xi'an
	15:00-17:00	Pick up at the station, and check-in the hotel		
	17:00-19:00	Dinner		
	19:00-21:00	Visit the Datang Everbright City, to experience the prosperity of the Tang Dynasty.		
	21:00-22:00	Back to the hotel		
DAY 2 (June 14, 2026)	8:30-9:30	To Lintong	Breakfast Lunch Dinner	Mehood Hotel in Lintong
	9:30-12:00	Visit the Terracotta Army Museum, and experience the culture of the Qin Empire		
	12:00-14:00	Lunch		
	14:00-15:00	Noon break		
	15:00-18:00	A Tour of the Royal Garden, Huaqing Palace		
	18:00-20:00	Dinner		
	20:00-22:00	Watch the grand historical dance drama "The Song of Everlasting Sorrow", then back to the hotel		
DAY 3 (June 15, 2026)	8:00-11:30	Take the bus to Hukou of the Yellow River	Breakfast Lunch Dinner	Mehood Hotel in Yan'an
	11:30-13:30	Lunch		
	13:30-16:00	Visit the geological scenery of the Hukou Waterfall on the Yellow River		
	16:00-18:00	To Yan'an, the revolutionary holy land of the CPC, check into the hotel		
	18:00-19:00	Dinner		
DAY 4 (June 16, 2026)	8:00-9:00	To Ansai	Breakfast Lunch Dinner	Mehood Hotel in Xi'an
	9:00-12:00	Visit the Ansai Scientific Experiment Station of Soil and Water Conservation, and the typical soil profiles and erosion conditions of the Loess Plateau		
	12:00-14:00	Lunch		
	14:00-18:00	Back to Xi'an		
	18:00-19:00	Dinner		
DAY 5 (June 17, 2026)		Return trip	Breakfast	

Site 1: The Tang Dynasty Ever-Night City

Discover "Datang Everbright City" – China's Dazzling Nighttime Wonderland!

Step into a mesmerizing blend of history and modernity at "Datang Everbright City" (大唐不夜城) in Xi'an, a flagship immersive cultural tourism district that brings the golden age of China's Tang Dynasty (618-907 AD) back to life. Stretching 1.5 kilometers along the Tang Dynasty Heritage Axis, this pedestrian-only zone dazzles visitors with its grand Tang-style architecture, glowing neon-lit streets, and round-the-clock performances—from royal parades and traditional dances to high-tech light shows. Dubbed "China's No.1 Nightlife Block", it's a viral sensation on platforms like Douyin (TikTok). Whether you're a culture enthusiast, photography buff, or foodie, this is where 1,300 years of heritage meets 21st-century spectacle.

Pro Tip: Visit after sunset for the full neon-and-performance magic!



Site 2: The Terracotta Army Museum

The Terracotta Army Museum: The Eighth Wonder of the World, A Window into Ancient China's Military Might

Step into one of the world's most astonishing archaeological wonders at The

Emperor Qinshihuang's Terracotta Army Museum (秦始皇兵马俑博物馆) near Xi'an. Discovered in 1974 by local farmers, this UNESCO World Heritage Site unveils the silent army of over 8,000 life-sized clay soldiers, chariots, and horses buried over 2,200 years ago to guard China's first emperor in the afterlife.



Site 3: Huaqing Palace

The Imperial Hot Spring Retreat of Tang Dynasty Splendor

Nestled at the foot of Mount Li in Xi'an, **Huaqing Palace** (华清宫) stands as one of China's most legendary imperial gardens, where natural thermal springs and royal romance intertwine. For over 3,000 years—from the Zhou Dynasty to its Tang Dynasty zenith—this site served as the winter retreat for emperors, most famously for **Emperor Xuanzong** and his beloved **Consort Yang Guifei**.

🌿 **Healing Waters:** The palace's 4,000-year-old geothermal springs (40°C/104°F) were reserved exclusively for royalty, with Yang Guifei's personal pool still preserved.

🎭 **Living History:** The nightly outdoor spectacle "*The Song of Everlasting Sorrow*" dramatizes the emperor's ill-fated love story through stunning water-screen

projections and aerial performances.



PROFILE DESCRIPTION

Theme: Soil profile in the typical Guanzhong region of the Loess Plateau

Position: Lintong, Xi'an, (108° 03' 51" E , 34° 15' 45" N)

Genetic explanation of soil profile morphology:

The Guanzhong region lies in the southern part of the Loess Plateau, between the Weihe River and the northern Qinling Mountains. Compared with the central plateau, this region has warmer temperatures, higher precipitation (500–700 mm), and stronger leaching intensity. As a result, the soils are generally more strongly developed, with clearer horizonation, deeper leaching of carbonates, and higher organic matter content. Loess remains the dominant parent material, but pedogenic processes are more advanced due to greater climatic moisture and long-term agricultural cultivation.

The dominant soil types are Lou soils (樓土) and Huangmian soils in Chinese Soil Taxonomy, corresponding primarily to Haplic Luvisols, Ultisols (in localized wetter areas), and Cambisols in WRB/FAO systems.

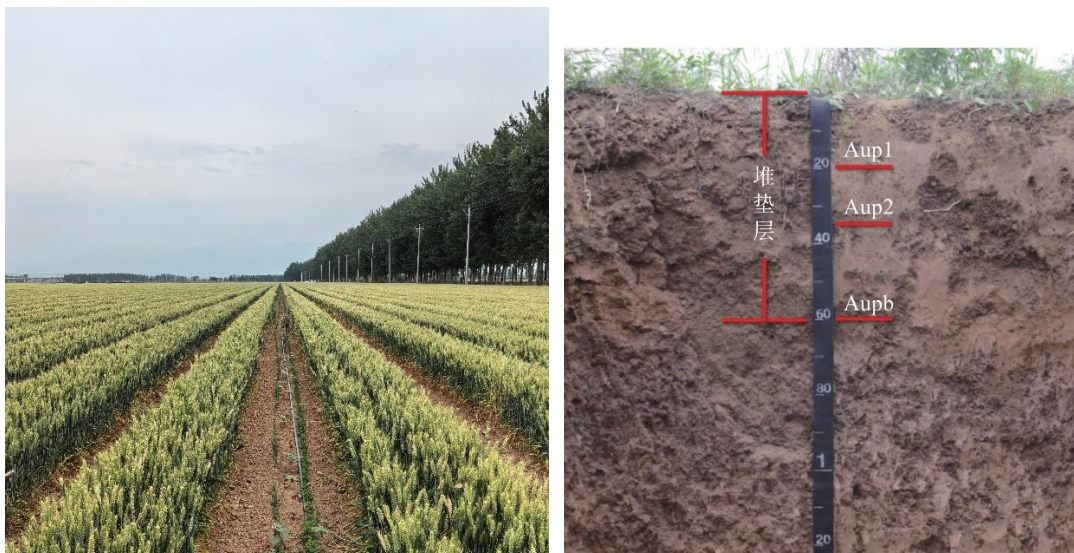
Background:

Soils in the Guanzhong region reflect stronger pedogenic development than those in the hilly–gully or central plateau landscapes. This is primarily due to the region's

warmer and wetter climate, stable geomorphic surfaces, and long-term agricultural activity (thousands of years). These factors promote pronounced leaching, clay illuviation, and deep carbonate redistribution, resulting in a well-defined A–Bt–BC–Ck profile sequence. These soils support more reliable crop production and deeper rooting depths than soils on more eroded loess landforms. As a result, Guanzhong soils have the most advanced pedogenic development within the Loess Plateau, transitioning from classic loess Cambisols toward Luvisols / Alfisols-type morphologies.

Morphological descriptions

layers	depth	Texture
A Horizon	0–20/25 cm	Silt loam to silty clay loam, with slightly higher clay content than northern/central Loess Plateau soils
B Horizon	20/25–80/120 cm	Silty clay loam to clay loam; distinct increase in clay relative to A and C horizons
BC Horizon	80/120–150 cm	Silt loam
C Horizon	>150 cm	Silty loam; dominated by silt-sized quartz and feldspar



Soil profile in the typical Guanzhong region of the Loess Plateau

Site 4: The geological scenery of the Hukou Waterfall on the Yellow River

Yellow River Hukou Waterfall: The Roaring Soul of the Mother River

Witness nature's raw power at Hukou Waterfall (壶口瀑布), where the mighty

Yellow River—China's "Mother River"—plunges dramatically from a 30-meter (98-ft) cliff, creating the world's largest golden waterfall. Straddling the Shanxi-Shaanxi border, this thunderous spectacle narrows from 300 meters to just 50 meters, funneling 1,000 cubic meters of ochre-hued water per second during flood season (July-October).

Must-See Marvels:

🌫️ "River Boiling" Effect: The impact creates mist columns visible miles away, forming rainbows in sunlight.

❄️ Seasonal Transformations: Winter brings rare "ice bridge" formations over frozen cascades.

🥁 Cultural Echoes: Local farmers perform traditional "Yan'an Waist Drum" dances on the riverbed during dry seasons.



PROFILE DESCRIPTION

Theme: Soil profile in the typical tableland region of the Loess Plateau

Position: Changwu, Xianyang, Yan'an (109°19'23" E, 36°51'30" N)

Genetic explanation of soil profile morphology:

The tableland (yuan) region of the central Loess Plateau is characterized by thick, relatively undisturbed loess deposits with minimal slope erosion compared to hilly–gully areas. The soils are typically deep, structurally stable, and well-developed, classified primarily as Huangmian soils (Chinese Soil Taxonomy) and corresponding to Calcic Cambisols, Haplic Luvisols, or Haplic Calcisols (WRB). Pedogenesis is

influenced by long-term aeolian deposition, stable geomorphic surfaces, and semi-arid continental climate conditions.

Background:

The tableland region receives 400–600 mm of rainfall annually—a level intermediate between the wetter Guanzhong region and the more arid northern Loess Plateau. The tableland region of the Loess Plateau represents one of the most stable geomorphic units in the entire plateau. Unlike the intensely eroded hilly–gully region, tablelands are characterized by broad, flat interfluves, minimal recent erosion, and long-term preservation of loess surfaces.

Morphological descriptions

layers	depth	Texture
A Horizon	0–20 cm	Silt loam with high silt content (65-80%)
B Horizon	20–90 cm	Silt loam to silty clay loam, gradually becoming more compact with depth
BC Horizon	90–160 cm	Silt loam
Ck / C Horizon	>150 cm	Massive loess with characteristic vertical joints



Soil profile in the typical Tableland (Yuan) region of the Loess Plateau

Site 5: The national field scientific observation and research station of soil and water conservation in Ansai, Shaanxi

Established in 1973, the Ansai Station is a long-term comprehensive field experimental station established by the Chinese Academy of Sciences (CAS) on the Loess Plateau. Currently, it serves as a member station of the Chinese Ecosystem Research Network (CERN) under CAS, a National Field Scientific Observation and Research Station recognized by the Ministry of Science and Technology, and a National Science and Technology Demonstration Park for Soil and Water Conservation. It has become a vital platform for research, demonstration, talent cultivation, and international collaboration in soil and water conservation and ecological restoration in China.

Located in the typical hilly and gully region of the central Loess Plateau, the Ansai Station represents an area of 280,000 km² characterized by severe soil erosion, which constitutes a primary sediment source for the Yellow River and a key zone for ecological rehabilitation. The station is situated in Ansai District, Yan'an City, Shaanxi Province (109°19'23" E, 36°51'30" N), with an elevation ranging from 1,068 to 1,309 meters above sea level. The region experiences a warm temperate semi-humid to semi-arid climate, with a mean annual temperature of 8.8°C and an average annual precipitation of 500 mm. Ecologically, it falls within the forest-steppe transition zone, and the dominant soil type is loessal soil.





The national field scientific observation and research station of soil and water conservation in Ansai, Shaanxi



Mountain apple orchard on the Loess Plateau

PROFILE DESCRIPTION

Theme: Soil profile in the typical hilly and gully region of the Loess Plateau

Position: Ansai, Yan'an (109°19'23" E, 36°51'30" N)

Genetic explanation of soil profile morphology:

The soils of the hilly and gully region of the central Loess Plateau are predominantly “Huangmian soils” (Chinese soil classification) or Calcic Cambisols / Haplic Luvisols (WRB/FAO), developed from thick, wind-deposited loess parent material. The soil profile is typically deep, well-structured, and vertically differentiated, reflecting long-term loess accumulation, bioturbation, and pedogenic processes under semi-arid climatic conditions.

Background:

The soils developed in the hilly–gully region of the central Loess Plateau reflect the interaction of thick loess parent material, semi-arid climate, and intensive geomorphic processes driven by strong erosion. Pedogenesis here is therefore characterized by incomplete horizon differentiation, weak to moderate profile development, and strong surface disturbance from runoff and mass movement.

Morphological descriptions

layers	depth	Texture
A Horizon	0–15 cm	Silt loam with high silt content (60–75%)
B Horizon	15–80 cm	Silt loam to silty clay loam, slightly more compact than the A horizon
BC Horizon	80–150 cm	Silt loam
C Horizon	>150 cm	Uniform silt with very weak cohesion.



Soil profile in the typical hilly and gully region of the Loess Plateau

REFERENCES:

Soil Classification References, World Reference Base (WRB) & Chinese Soil Taxonomy: <https://www.fao.org/soils-portal/data-hub/soil-classification/world-reference-base/en/>

China's Third National General Detailed Soil Survey

Emperor Qinshihuang's Mausoleum Site Museum

<http://bmy.com.cn/index.html>