Post-Congress Tour 6: Northeast Thin Black Soil Region Scientific expedition

June 12-17, 2026

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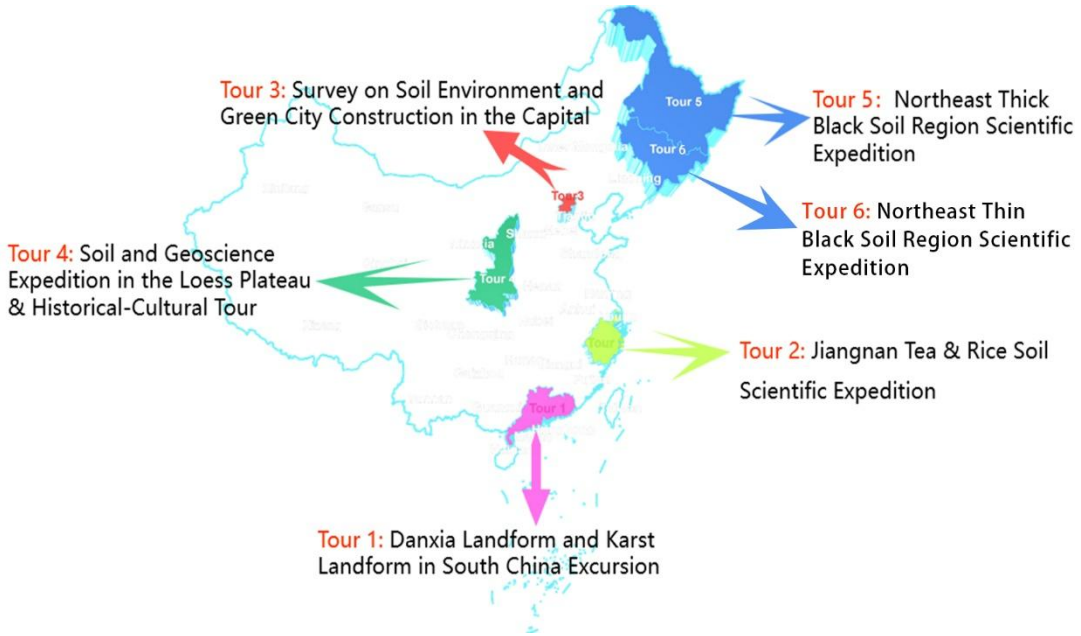
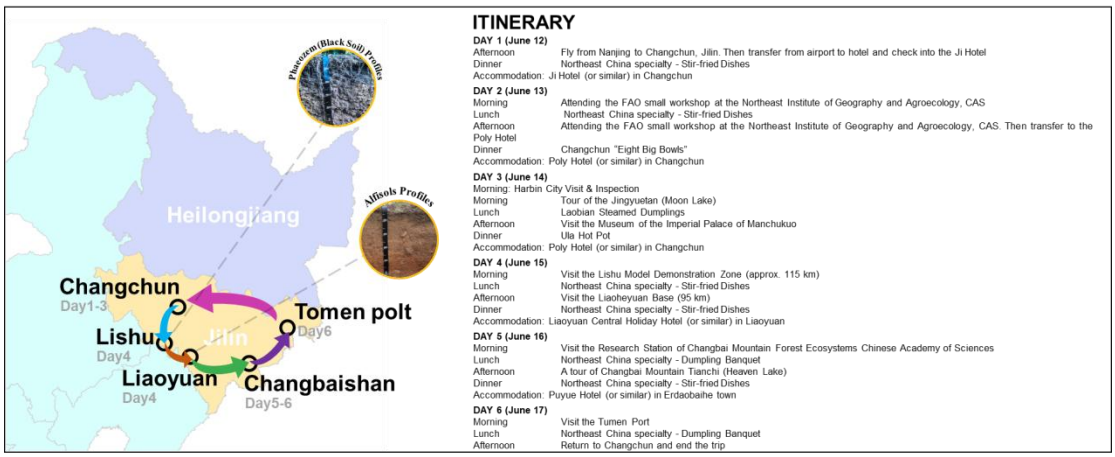
Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

PROGRAM:

Tour 6: Northeast Thin Black Soil Region Scientific expedition

This 5-day scientific expedition focuses on the distinctive thin black soil regions of Northeast China, with emphasis on key soil types including Chernozem (Black soil), Volcanic ash soil, Dark brown soil, Brown coniferous forest soil, and Albie soil. It also includes visits to some cultural sites such as Jingyuetan (Moon Lake) and Museum of the Imperial Palace of Manchukuo.





Price: $865 or ¥6200 per person.

The quoted price includes:

Entrance Fees: To all scheduled attractions.

Meals: 5 breakfasts, 5 lunches and 5 dinners, and complimentary bottled water.

Accommodation: Provide a double room per person at a local 4- to 5-star standard hotels.

Transport: Flight (economy class) from Nanjing to Changchun, with air-conditioned coach throughout.

Insurance: Personal travel accident insurance.

DAY 1 (June 12)

Afternoon Fly from Nanjing to Changchun, Jilin. Then transfer from airport to hotel and check into the Ji Hotel

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Ji Hotel (or similar) in Changchun

DAY 2 (June 13)

Morning Attending the FAO small workshop at the Northeast Institute of Geography and Agroecology, CAS

Lunch Northeast China specialty - Stir-fried Dishes

Afternoon Attending the FAO small workshop at the Northeast Institute of Geography and Agroecology, CAS. Then transfer to the Poly Hotel

Dinner Changchun “Eight Big Bowls”

Accommodation: Poly Hotel (or similar) in Changchun

DAY 3 (June 14)

Morning Tour of the Jingyuetan (Moon Lake)

Lunch Laobian Steamed Dumplings

Afternoon Visit the Museum of the Imperial Palace of Manchukuo

Dinner Ula Hot Pot

Accommodation: Poly Hotel (or similar) in Changchun

DAY 4 (June 15)

Morning Visit the Lishu Model Demonstration Zone (approx. 115 km)

Lunch Northeast China specialty - Stir-fried Dishes

Afternoon Visit the Liaoheyuan Base (95 km)

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Liaoyuan Central Holiday Hotel (or similar) in Liaoyuan

DAY 5 (June 16)

Morning Visit the Research Station of Changbai Mountain Forest Ecosystems Chinese Academy of Sciences

Lunch Northeast China specialty - Dumpling Banquet

Afternoon A tour of Changbai Mountain Tianchi (Heaven Lake)

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Puyue Hotel (or similar) in Erdaobaihe town

DAY 6 (June 17)

Morning Visit the Tumen Port

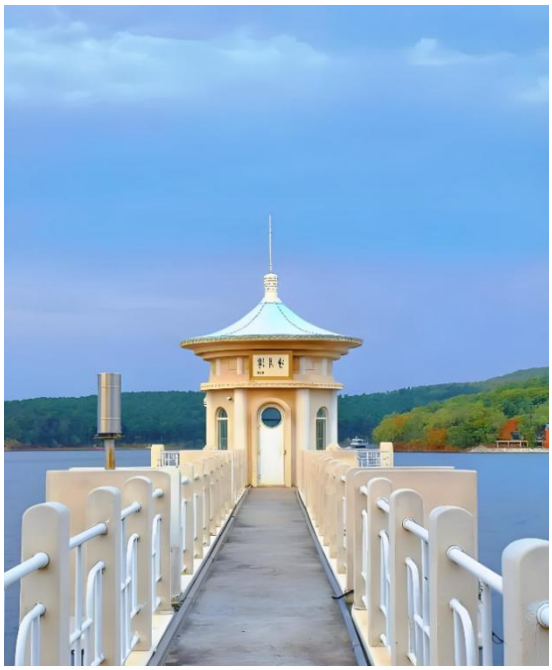
Lunch Northeast China specialty - Dumpling Banquet

Afternoon Return to Changchun and end the trip

SITE 1: Changchun, Jilin

BACKGROUND:

- Jingyuetan (Moon Lake): A national 5A-level tourist attraction, national scenic area, and national forest park. It was artificially constructed in 1934 as the first water source for Changchun city. Renowned as the "Green Sea Pearl" and "Urban Oxygen Bar".
- Palace Museum of the Manchurian Regime: This is a palace relic museum and a national first-class museum, covering a total area of 250,500 square meters with a building area of 137,000 square meters. Its predecessor was the Changchun Salt Warehouse of the late Qing Dynasty. From 1932 to 1945, it served as the court residence of Puyi, the puppet emperor of Manchukuo. In 1962, it became the Exhibition Hall of Imperialist Invasion of Northeast China and the Exhibition Hall of the Puppet Imperial Palace.



SITE 2: Lishu Model Demonstration Zone, Siping

BACKGROUND:

- It's the core area of the million-mu green food corn standardization base.
- The Lishu Model Demonstration Zone is also a core demonstration area for black soil protection, integrating and promoting the sustainable farming system of the "Lishu Model" to drive the synergistic improvement of high-quality agricultural development and the ecological environment.

PROFILE DESCRIPTION:

Pit 1: Phaeozem (Black Soil) Profiles

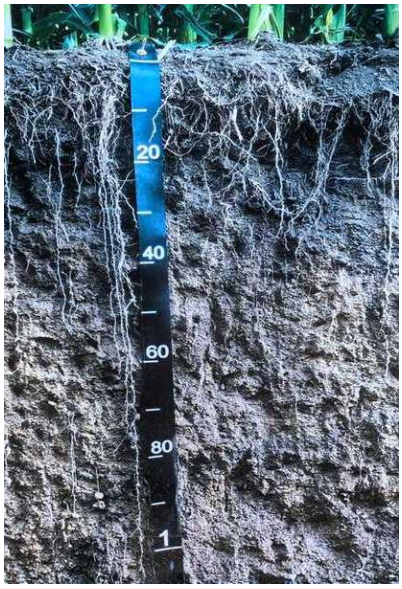
Theme: Anthropogenic influence on Phaeozem (Black Soil) development

Genetic explanation of soil profile morphology:

Phaeozem: Phaeozem develop in a temperate semi-humid climate, characterized by warm, rainy summers and severely cold winters with little snow. The mean annual temperature ranges from -0.5 ℃ to 5 ℃, with a seasonal frozen layer reaching depths of 1.5-2.0 m, and up to 3 m in northern regions. The accumulated temperature (≥ 10 ℃) is between 2100 ℃ and 2700 ℃. Annual precipitation ranges from 450 to 600 mm, with an aridity index of 0.75-0.90. The parent material primarily consists of Quaternary diluvial loess-like clay, with thicknesses up to 10-40 m and no calcium carbonate content. The groundwater table is deep, at about 10-30 m, with a

mineralization degree of 0.3-0.7 g/L. Due to the relatively heavy and clayey soil texture, meltwater and rainwater during the wet season struggle to infiltrate downward, leading to the formation of a perched water table in the upper soil layer. The soil moisture regime is classified as a semi-frozen periodic leaching type. The profile exhibited a typical Ap-Ah-AB-BC horizon sequence. Located in Lishu, Siping, Jilin.

Position: 124°26′24″E, 43°17′38″N



Morphological descriptions

Horizon	Depth (cm)
Ap	0~20
Ah1	20~42
AB	42~75
BC	75~110

SITE 3: Liaoheyuan Base, Liaoyuan

BACKGROUND:

- It's the demonstration and display platform for high-tech achievements in the agricultural field of the Chinese Academy of Sciences.
- Established in 2017, its main goal is to establish an innovative development model of efficient eco-agriculture for the sustainable development of water source areas.

- It provides scientific and technological support for solving ecological and environmental problems in the East Liaohe River Basin and serves as a scientific reference for developing ecological civilization and building a beautiful Jilin.

PROFILE DESCRIPTION：

Pit 2: Alfisols Profiles

Theme: The formation of Alfisols

Genetic explanation of soil profile morphology:

Alfisols: Alfisols typically form in temperate humid or sub-humid regions with distinct seasonal variations, under deciduous or mixed forest vegetation. The climate provides sufficient precipitation to promote leaching (eluviation) of soluble bases and clay particles from the surface horizon (E horizon), which are then translocated downward. A crucial process is illuviation, where these leached silicate clay minerals accumulate in the subsurface (B horizon), forming a distinct argillic horizon. The forest leaf litter contributes organic matter, which decomposes to form a dark, humus-rich surface layer (A horizon). Good drainage is essential for this translocation process, and these soils often develop on permeable parent materials like loess, glacial till, or weathered bedrock. Located in Liaoheyuan, Liaoyuan, Jilin.

Position: 125°25′20.53″E, 42°54′11.63″N

Morphological descriptions

Horizon	Depth (cm)
Ap	0~16
AE	16~32
Bt	32~68
C	68~101

SITE 4: The Research Station of Changbai Mountain Forest Ecosystems Chinese Academy of Sciences, Antu county

BACKGROUND:

- It's an ecological science education base of the Ecological Society of China and belongs to the Shenyang Institute of Applied Ecology, Chinese Academy of Sciences.
- It was established in 1979 and joined the UNESCO MAB program in the same year. It joined the International Long-Term Ecological Research Network (ILTER) in 1993, was approved as a pilot station for national key open experimental stations in 2000, was approved as a National Field Station in 2005 and named the Jilin Changbai Mountain Forest Ecosystem National Observation and Research Station, and was rated as an excellent National Station in 2018.

SITE 5: Changbai Mountain Tianchi (Heaven Lake), Erdaobaihe town

BACKGROUND:

- Located in the crater of the main peak of Changbai Mountain. It is a border lake between China and North Korea and the highest volcanic crater lake in China.
- The lake surface is at an elevation of 2189 meters. The lake water is clear and deep blue, surrounded by 16 peaks, creating a magnificent spectacle.
- Tianchi is often shrouded in clouds and fog throughout the year. If fortunate enough to encounter clear weather, the blue sky, azure water, and reflections of the snow-capped mountains are breathtakingly beautiful.
- It is known as the “Lake in the Sky” and is the symbol and essence of Changbai Mountain.

SITE 6: Tumen Port Inspection, Tumen

BACKGROUND:

- Located within Tumen city, on the eastern foothills of Changbai Mountain and the lower reaches of the Tumen River. Opposite is the North Korean Namyang Railway Port.
- The city grew because of the port, built along the river, and named after the Tumen River. It is known as the "First City on the Tumen River".

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

Changchun Municipal Bureau of Culture, Radio, Television and Tourism: http://wglj.changchun.gov.cn/

Jingyuetan (Moon Lake): http://ijingyuetan.com/

Palace Museum of the Manchurian Regime: https://www.wmhg.com.cn/index.html