

CHINA

Legendary visit



Tennis legend Roger Federer attends the unveiling ceremony of a tennis court at a youth amateur sports school in Shanghai's Xuhui district on Wednesday to help promote the development of the sport. Federer interacted with fans after the ceremony. YUAN JING / FOR CHINA DAILY

‘Fire and water’ facilitate torch lighting for National Games

Flammable ice from ocean depths ignites new spark of innovation

By **ZHENG CAIXIONG**
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A grand torch-lighting ceremony for the 15th National Games, the 12th National Games for Persons with Disabilities and the 9th National Special Olympic Games was held on Thursday in Guangzhou's Nansha district, Guangdong province — a key milestone as China's largest comprehensive sports event enters its final preparation stage.

The source flame was created using flammable ice collected from the Haima cold seep in the South China Sea at a depth of 1,522 meters, marking the first time in world history that the catalyst of a “source flame” had been directly obtained from the ocean floor.

“The successful torch-lighting demonstrates a breakthrough in in-situ collection technology for deep-sea flammable ice, enabling the extraction of a ‘source flame’ from more than 1,500 meters underwater,” said Chen Zongheng, an official with the Guangzhou Marine Geological Survey.

Chen said scientific researchers aboard a research vessel located



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cold seep vents and remotely operated a device to collect gas hydrates from the seabed. Through pressure reduction, the hydrates released gas, which was dried and sent to a combustion chamber specially designed for the collection of the primordial flame.

After synthesizing flammable ice,

also known as methane hydrate, the team used a pressure reduction device to obtain decomposed gas and relied on electricity from a solar photovoltaic power system to achieve deep-sea ignition, Chen said.

The achievement brought to life the spectacular vision of “fire and water coexisting in harmony”, symbolizing the integration of clean energy sources such as flammable ice and solar power with advanced deep-sea exploration technologies and equipment.

It also underscored Guangdong's strategy of “prospering and growing stronger through the ocean”, showcasing the technological strength and innovative confidence of the Guangdong-Hong Kong-Macao Greater Bay Area to the world.

The ceremony took place at the scientific research pier of the Guangzhou Marine Geological Survey, located at the mouth of the Pearl River.

Senior officials from central, provincial and city governments attended the event, including Huang Kunming, a member of the Political Bureau of the Communist Party of China Central Committee and Party chief of Guangdong province; Gao Zhidan, director of the General Administration of Sport; Zhou Changkui, chairman of the

Board of Executive Directors of the China Disabled Persons' Federation; Hong Kong Chief Executive John Lee Ka-chiu; and Macao Chief Executive Sam Hou-fai.

The flame will travel to Guangzhou and Shenzhen in Guangdong and the Hong Kong and Macao special administrative regions for torch relays in November.

The 15th National Games, the 12th National Games for Persons with Disabilities and the 9th National Special Olympic Games are expected to bring together more than 6,000 athletes from the Chinese mainland and about 3,000 athletes from Hong Kong and Macao.

Guangzhou will host the opening ceremony for the 15th National Games at the Guangdong Olympic Sports Center. Shenzhen, which borders Hong Kong, will host the closing ceremony. Competitions will take place from Nov 9 to 21.

The 12th National Games for Persons with Disabilities and the 9th National Special Olympic Games will run from Dec 8 to 15. The opening ceremonies for both will also be held in Guangzhou, and the closing ceremonies in Shenzhen.

This year marks the first time the National Games will be jointly held in Guangdong, Hong Kong and Macao.

‘Bird facial recognition’ aids avian conservation

KUNMING — Every winter, tens of thousands of black-headed gulls complete their long journey from as far away as Siberia to Kunming, the capital of Yunnan province, where it is renowned as the “Spring City”.

This year, these regular visitors will be greeted not only by enthusiastic Kunming residents, but also high-definition cameras and drones stationed at the city's Dianchi Lake, ready to monitor them using AI-powered “bird facial recognition” technology.

The enduring bond between the people and the gulls is a distinctive ecological and cultural feature of Kunming. Now, this relationship is being redefined by technology, as research teams collaborate with institutes and tech firms to integrate artificial intelligence deeply into bird protection — creating an intelligent observation system centered on this novel identification method.

Since October 2022, the Kunming Dianchi Plateau Lake Research Institute has used an intelligent observation program for gulls at a monitoring station near Haigeng Dam.

After two years of continuous

tracking, this system revealed that the main flock's arrival in Kunming in 2024 was about 10 days later compared to 2022 and 2023. The system will continue monitoring arrival times and population numbers this year, accumulating crucial data for migratory bird research, according to the institute.

Unlike traditional manual observation, the system utilizes high-definition cameras, drones, microphones and deep neural network algorithms to identify birds.

Distinctive features such as plumage, body size and beak shape serve as unique “identity markers”, enabling real-time species identification, population counting, tracking of migration routes and the creation of a dynamic Dianchi bird archive.

“Previously, manual monitoring of the same area required at least two professional birders for a full day. Now, the AI system accomplishes this in just hours with 90 percent accuracy, while simultaneously recording behavioral data such as feeding and roosting,” said Pan Min, deputy director of the institute.

Traditional methods, reliant on

human observation, were labor-intensive, required high-level expertise and struggled to ensure consistent accuracy. The integration of AI is now driving a digital transformation in bird surveys across China.

Employed at several demonstration sites in Kunming, the AI system has identified 17 bird species, building a database containing hundreds of thousands of images, videos and audio recordings. The team has also deployed acoustic recognition systems that identify species such as the night heron and magpie via their unique call signatures.

According to Zhang Zhizhong, an engineer at the institute, the AI system allows researchers to not only monitor long-term changes in bird communities but also to study activity patterns, breeding habits and migration routes. This provides vital data for assessing wetland ecological health and biodiversity levels.

The reliability of this “bird facial recognition” technology was validated in a paper published by the research team in the Journal of Environmental Management in May 2025 — offering new perspectives for

future biodiversity investigations.

Notably, the application of AI monitoring of birds is expanding beyond Kunming. In Chongqing Liangping Shuanggui Lake National Wetland Park, a big data platform uses ultra-high-definition cameras for real-time multi-target bird capture and identification. Similarly, at the Yellow River Delta National Nature Reserve in Shandong province, an AI system operational since 2022 has recorded over 1,200 birds, including oriental white storks and whooper swans, thereby providing robust data support for reserve management.

“The use of technological means allows us to understand and protect nature more scientifically and gently,” Zhang said.

Zhang added that while minimizing human disturbance, the introduction of AI and intelligent monitoring systems also addresses the shortcomings of incomplete and inaccurate data inherent in traditional methods, thus creating new possibilities for biodiversity conservation.

Holiday tourism boom leads to record highs

By **CHENG SI**
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The recent National Day holiday bolstered China's tourism market, with both the number of tourists and tourism spending reaching record highs.

This year's holiday lasted eight days, from Oct 1 to Wednesday, as Mid-Autumn Festival — a traditional Chinese festival for appreciating the full moon — overlapped with the National Day holiday break.

The latest figures from the Ministry of Culture and Tourism show that about 888 million domestic trips were made during the holiday, generating 809 billion yuan (\$113 billion) in tourism spending.

Family trips and long-distance travel — both within China and abroad — were the most popular choices for tourists during the break, according to travel agencies.

Travel portal Tuniu reported on Wednesday that bookings on its platform recorded double-digit growth during the holiday compared with 2024. Major cities with abundant natural and cultural attractions and diverse culinary offerings — including Beijing, Shanghai, Chengdu in Sichuan province and Hangzhou in Zhejiang province — were among the top domestic destinations.

“We took a five-day trip to Guiyang, the capital of Guizhou province, during the holiday,” said 36-year-old Beijing resident, Zeng Jie. “My husband planned the trip because he has always wanted to try Guiyang's local specialties such as sour soup hotpot and *siwawa* — a type of vegetarian spring roll.” She added that the province's natural scenery was

another highlight of their trip.

Chinese travelers also fueled a surge in outbound tourism. The Lofoten Islands in Norway — home to around 20,000 permanent residents — experienced heavy traffic congestion as crowds of Chinese tourists flocked there during the National Day holiday. A topic about the traffic jams trended on social media platform, Sina Weibo, with several netizens commenting that “the whole world knows Chinese people are on vacation!”

According to travel platform Qunar, hotel bookings in Norway during the holiday were 1.2 times higher than during the same period in 2024. Egypt also saw a strong increase, with bookings roughly doubling year-on-year. Qunar said its users booked hotels in 4,588 cities worldwide during the holiday, with Japan, Thailand, South Korea and Malaysia ranking as the most popular overseas destinations.

Online travel agency Trip.com Group said some European destinations also benefited from the surge in Chinese tourists. Bookings to Iceland and Norway on its platform doubled, while those to Spain, Italy and Germany rose by about 70 percent.

Trip.com Group also noted a steady increase in international visitors to the Chinese mainland during the holiday, mainly from South Korea, the United States, Russia and Japan.

According to the National Immigration Administration, immigration inspection offices across the country handled about 16.34 million inbound and outbound trips by Chinese and foreign travelers during the holiday, with a daily average of 2.04 million crossings.



Visitors watch a performance at the Hetou Old Street scenic area in Tangshan, Hebei province, on Oct 4. ZOU HONG / CHINA DAILY

Tourists flock to rural destinations nationwide

By **LIU BOQIAN** in Guiyang
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Tourists flocked to China's rural destinations during the eight-day National Day and Mid-Autumn Festival holiday, bringing fresh income to villagers close to home.

The Huajiang Grand Canyon Bridge, which opened to traffic on Sept 28, became a major draw in Guizhou province. Huge crowds descended on nearby hamlets to find the best vantage points of what is billed as the world's tallest bridge.

Keli village in Huajiang township, Guangling county, sits at one of the prime viewing spots. On Oct 1 alone, vehicle entries exceeded 10,000.

“Over the holiday, the village saw nearly 70,000 vehicle visits and hosted almost 200,000 visits,” said Xu Daihui, deputy Party secretary of the township. “Most visitors come to see the bridge, and they eat in Huajiang and stay in Huajiang.”

Villagers set up about 50 temporary stalls selling snacks, drinks and traditional dishes. Xu said she learned that one villager selling a local rice-noodle specialty earned about 500 yuan (\$70) per day.

All 24 lodging businesses in the town were fully booked for the holiday, forcing some visitors to seek rooms in more distant areas.

Tourists have not only boosted local incomes but also raised the profile of regional agricultural specialties. Several viewing platforms around the town offer different perspectives of the bridge and host stalls selling local produce, including the regionally famed yellow cattle.

Huajiang village, directly below

the bridge, also experienced heavy traffic. Some village elders joked that the number of cars over just a few days surpassed anything they had seen in the past decade.

Local authorities coordinated shuttle services to ferry visitors into the village and hastily built a temporary parking lot with space for 200 vehicles.

“At first the guesthouse ran with three staff members, but during this period we had to hire eight to keep up,” said Lin Guoquan, who runs a guesthouse in the village. His property offers a view of the bridge from its bedrooms.

Lin said the guesthouse's more than 40 rooms were full every day. With demand so high, he even set up tents and opened family homes to accommodate nearly 100 guests per day.

Locals welcomed the chance to earn money without leaving home.

Beyond Guizhou, rural destinations in Hubei province also saw increased visitor numbers. In Zigui county, tourists traveled to Shiya village to admire morning mountain mist and tiered tea terraces, and to take part in tea-picking and processing at highland gardens.

“We have built homestays, pavilions and walking paths, and used our tea brand to develop tea-tourism experiences,” said Li Wentong, general manager of Zigui County Shanshan Agricultural Development.

The local tourism department said guesthouses in the village were nearly full during the first four days of the holiday.

Li said that his company has assisted over 1,000 households in joining the tea-related industry.