



Message from Neil Shen

Chair of the TNC China Board

he Nature Conservancy (TNC) in China continues to work tirelessly to implement our conservation projects in the field and incorporate our international conservation experiences into local work. We have also significantly enhanced our influence in the region, setting an example for others working in conservation. In the coming year, we hope that you will join us in protecting and standing up for nature, upholding conservation values, and taking responsibility for this beautiful planet so our world may have a more sustainable and thriving future!

Cover: Qiandao Lake © Chengbo Zheng; Right: Yellow Mountain in China is one of the most spectacular UNESCO listed sites in the world © Callie Chee/TNC Photo Contest 2022



Protect 30 Percent of the Planet

China Protected Areas

Sichuan

Under the guidance of the Sichuan Provincial Administration of the Giant Panda National Park, TNC joined with partners to push forward the establishment of the nation's first ranger association. We held a nature education training for Panda National Park key personnel, with 32 nature education workers from different sub-divisions of the park attending. We have also implemented a habitat restoration project for the small, isolated, giant panda population, planning to transform seven hectares of plantation. Currently, we have finished restoring 2.66 hectares at two pilot areas.

Henan

The first phase of the Danjiang project in Hennan was completed in June 2022, restoring over 100 hectares of damaged ecosystem at an integrated demonstration park. At the same time, the first phase of the green agricultural technology demonstration park was ready too.

Zhejiang

We have finished developing the Baishanzu National Park area guide and standards and applied them to practical work in the park. Agreements regarding all collective lands were signed, easement certificates were issued, the construction of at least two visitor centers have commenced, and greenway planning has been completed.

LEARN MORE:

Easement Certificate in Baishanzu National Park Civic conservation in Sichuan

Tackling the Climate Crisis



Scaling National Climate Action Through Policy

Shape China's Nationally Determined Contributions

By field-testing best practices and facilitating knowledge exchanges, TNC continues to provide science-based scalable and equitable Natural Climate Solutions (NCS) to avoid emissions and sequester carbon. With our partners from the Chinese Academy of Forestry and Chinese Academy of Agricultural Sciences, we have been working on several NCS mitigation pathway analyses that unlock the most potential for China, including reforestation, forest management, nutrient management, and wetland restoration. We anticipate the results will provide a scientific basis for the government to set quantifiable targets for NCS in the next Nationally Determined Contributions update and better inform the policy on China's NCS funding.

Influence China's Carbon Market

In 2022, TNC partnered with the China Ministry of Ecology and Environment's think tank, the National Climate Change Strategy Research and International Cooperation Center (NCSC), to jointly launch the "Research Project on Improving China's Ecosystem Carbon Sink Market Mechanism." The project aims to systematically study the development of China's forest, grassland, and marine ecosystem carbon storage projects through market mechanisms. The research will result in policy recommendations based on the observed impacts of market mechanisms on nature-based carbon storage projects to date, both in China and globally, and the potential to increase that impact.

Pilot Forest Restoration Program

The Multiple Benefits of Forest Conservation

In 2022, TNC China collaborated with our partners in Yunnan to launch a restoration project within endangered golden monkey habitat. A total of 377,000 trees of different species were planted, restoring 248 hectares of forest, which is expected to contribute about 95.000 metric tons of carbon sequestration. Apart from absorbing carbon dioxide from tthe atmosphere, reforestation and afforestation in Yunnan also served many other ecological functions, such as preventing soil erosion, improving water quality, and purifying the air. In addition, TNC China's forest restoration program has also ensured that this and its other reforestation projects resulted in climate change mitigation or adaptation, sustainable community development, and biodiversity protection.

Climate Pilot Program in Inner Mongolia

Enhanced Grazing Management to Make Sustainable Grassland Possible

In Inner Mongolia, decades of intensive livestock grazing and climate change has led to various degrees of degradation of the grassland ecosystem, and its role as an ecological barrier is weakening. However, utilizing remote sensing and climate data in addition to hand-held and fast internet technology has made real-time formulation and adjustment of grazing management plans possible. This refined smart grassland management system helps to restore grassland productivity and regain its ecological function, bringing about sustainable use of Mongolian grasslands.







Opposite: Yunnan golden monkeys in an old-growth alpine forest © Long Yongcheng/TNC; Clockwise from left above: No grazing mangement on the left side of the fence, while grazing managment is implemented on the right side of the fence in Inner Mongolia © Li Qingfeng; Launch of TNC and NCSC's "Research Project on Improving China's Ecosystem Carbon Sink Market Mechanism" © TNC; Afforestration site in Lanping Yunling Provincial Nature Reserve © Duan Huachao

LEARN MORE:

Scaling climate action through policy in China Restoration by Desian:

Nature-based Solutions in Inner Mongolia



Transform Food and Freshwater Systems

Qiandao Lake Water Fund

In 2022, TNC completed the agricultural pollution control demonstration site during the second phase of the Qiandao Lake Water Fund plan, and we have started collecting monitoring data. We are now moving to site and project proposal selection. We have also improved our collaborative governance with both government departments and corporations. And we are exploring best management practices for pecans, tea, and tangerines in order to prevent agricultural non-point source pollution and soil erosion. In addition, we have begun wetland conservation at the lake inlet.

China Water Resources Campaign: Biodiversity Protection

TNC is providing technical support to an initiative integrating biodiversity protection into China's river restoration efforts hosted by the Ministry of Water Resources. We are sharing our global river restoration and protection experience, solutions, and best practices and conducting training activities and work exchanges for working personnel at the pilot sites. We completed and submitted eight research reports within the five-year project timeline. And we have given advice to and participated in various platforms, conferences, and online and in-person exchanges dealing with ecological flow, fishways, freshwater biodiversity, comprehensive ecological restoration of river basins, and aquatic biodiversity restoration and monitoring.

LEARN MORE:

Qiandao Lake Water Fund information can be found <u>here</u>.

China Freshwater Toolbox

TNC compiled the River Basin Freshwater Ecosystem Protection and Restoration Handbook. incorporating our management concept, method, and case studies, and we have proceeded with developing collaborative project and training activities with partners. We have currently completed an assessment regarding critical freshwater ecological attributes and ecological integrity, developing joint scientific planning of water basin security, river connectivity restoration, and long-term protection.

Soil Health Evaluation Tool Development Project

Using Cornell University's soil health assessment system, TNC China's sustainable agricultural program has partnered with China Agricultural University and Cornell University to serve local agricultural producers by identifying soil health assessment shortcomings and reducing agricultural production cost. This exploratory attempt is providing a concrete basis of feasibility for agricultural production in various areas.

Sustainable Dairy

The sustainable dairy program of TNC China was launched in October 2021 with the intention of setting an example in the industry for low-carbon farm activities. As of July 2022, we have conducted seven pasture farm interviews and carbon emission baseline checks. Field implementation work will follow.





Above: Water
Fund explanation
signage on a path
by Qiandao Lake
© Liang Shan/
TNC; Left: Project
team at dairy
farm conducting
interviews and
gathering carbon
emission baseline
information
© Cargill TAC



Activate PeopleCentered Conservation



Shanghai Urban Habitat Gardens Project

In 2017, we hoped that through the creation of habitat gardens in Shanghai's district neighborhoods, a network would gradually build up, carving out critical refuges and passageways for urban wildlife, enhancing urban biodiversity, and providing residents with access to quality green spaces. The good news is that the Shanghai Urban Habitat Gardens Project was incorporated into the *Shanghai Territorial Ecological Restoration Plan (2021-2035)* in 2022, facilitating growth of an urban ecological environment from a policy level.

Shenzhen Climate Resilient City Project

With the support of the "Build Gardens Together" project under Shenzhen's Nanshan District local government authority, TNC joined with local organizations to explore the "Environment + Society" model; foster cooperation between corporations, high schools, communities, and more; and work on building the capacity of planners, architects, and landscape designers to apply nature-based solutions such as rain gardens, roof gardens, and habitat gardens. As of today, 10 unused spaces in urban villages, old neighborhoods, schools, surrounding areas, and roadsides have been modified, helping to enhance climate resilience of these communities.

LEARN MORE:

Carving out refuges for wildlife and people <u>in Shanghai</u>

<u>Caring for nature and people in China's cities</u>

Youth Education

Since its launch in 2017, our E-STEAM youth education project has achieved much. TNC has worked with the People's Education Press **Environmental Education Centre** and Beijing Normal University's International and Comparative **Education Research Centre to** publish Interdisciplinary Learning Guidelines Based on Environmental Themes: Introduction to E-STEAM Theory and Practical Cases. We launched the book on Earth Day, April 22, 2022, and it will be officially published in 2023. We also conducted an online seminar for sharing experiences about developing interdisciplinary and E-STEAM classes and facilitating ecological education in schools.

Above: Leyi Habitat Graden is currently the largest habitat garden in Shanghai © Shan Liang/TNC; Insect-themed habitat garden on Sihai Road, Nanshan District in Shenzen © Huatang Design



Maximize Our Impact

China-US Climate Collaboration

A renewed memorandum of understanding between the People's Republic of China and California was signed on April 19, 2022. TNC teams in China and California also joined hands with the University of California Berkeley's China Climate Institute to form a cooperative climate working group. We will have regular communications or exchange activities regarding natural climate solutions and will continue to explore other in-depth climate change related collaborations.

Sustainable Supply Chain

By studying the environmental and climate risk in China's bulk agricultural products supply chain, TNC China's Sustainable Supply Chain Project aims at identifying finance mechanisms and policy measures to facilitate sustainable trade and investment. We hope to enhance China's level of responsibility in bulk agricultural products trade and also safeguard long-term food security. In 2022, the project continued to collaborate with research partners such as Tsinghua University, the Institute of Agricultural Economics and Development of the Chinese Academy of Agricultural Sciences, the Rural Economic Research Institute of the Ministry of Agriculture and Rural Affairs, and the Beijing Institute of Finance and Sustainability. To provide scientific evidence and advice for policymakers, we conducted research on climate change, food security, and green finance.

China Global Conservation Fund

In the last decade, the China Global Conservation Fund (CGCF) has greatly contributed to TNC's conservation agenda by supporting 42 global projects with foci from the forest to the ocean, from wildlife protection to sustainable community development. In 2022, CGCF supported a community-based conservation project in the Onon-Balzj National Park of Mongolia that successfully demonstrated community-based conservation work. This project is having great impact not only for China and Mongolia but also for the ecology, climate resilience, water security, and biodiversity protection of Northeast Asia.



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