

“As a wildlife ecologist, I’m eager to see China step into a global leadership role. Biodiversity matters, because having more ecosystems, species and genes makes nature more resilient and able to weather stresses like diseases and climate change.

Vanessa Hull

Assistant professor of wildlife ecology and conservation at the University of Florida

leaves from different trees and turned them into dried labeled plant specimen. Each holding two herbarium sheets in the hands, the children said to the audience: “We are paying attention to plant diversity.”

Solid actions

Also on Thursday, the department of ecology and environment of Zhejiang Province published a report noting 16 new species had been discovered since 2019 in Lishui, a picturesque city in the southwest of the province.

For example, the discovery of a new kind of freshwater fish, named *Microphysogobio oujiangensis*, was announced in a recent issue of *Zoological Research*, a renowned global publication on the study of zoology. The fish is named after the Oujiang River, where it was found.

“The discovery of all these new species once again attests to Lishui’s unique and rich biodiversity,” said the report.

Lishui’s success is by no means accidental. According to the report, the city is one of the areas which gave rise to the well-known sustainable development concept: Clear waters and lush mountains are invaluable assets.

“For many years, Lishui has carried out this green development strategy by giving priority to ecological protection,” the report noted. “In 2021, Lishui ranked among China’s top 10 cities in all three categories: water quality, air quality and overall environmental quality. No other city achieved the same status.”

What surprised me most,

however, is that forests cover nearly 82 percent of the city. Compare that with the country’s average forest coverage rate of 23 percent.

On November 29, Nanjing, capital of Jiangsu Province, announced the discovery of many metasequoia sprouts between the bricks of city walls built in the Ming Dynasty (1368-1644), saying they form the world’s largest cluster of such wild plants in an urban environment.

Lishui and Nanjing are two examples of how China has been mapping its biosphere for better protection.

A vision for nature

British zoologist Alice Hughes, who has worked in China for about eight years, said in an interview with *Nature* magazine last year: “In the past two years, there has been a complete inventory of all China’s marine and terrestrial protected areas so they can be accurately mapped and future targets can be based on them. That really is an unparalleled effort. This involved mapping 400 marine protected areas and 13,600 terrestrial ones. I haven’t heard of anything equivalent to this scale and speed in any other country.”

Vanessa Hull, assistant professor of wildlife ecology and conservation at the University of Florida, wrote in an article published on November 30: “If you ask people where on Earth the greatest concentrations of wild species are found, many will assume it’s in rainforests or tropical coral reefs. But China too boasts a rich ecological environment. It’s home



***Megophrys baishanzuensis* is a new frog species found in Lishui, Zhejiang Province, in 2020.**

to nearly 38,000 higher plant species like trees, shrubs and ferns. There are over 8,100 species of vertebrate animals, and over 1,400 species of birds. Twenty percent of the world’s fish species also exist in China.”

The article, titled “China to Run UN Biodiversity Conference,” pointed out: “Western media coverage of environmental issues in China often focuses on the nation’s severe urban air pollution and its role as the world’s largest greenhouse gas emitter. But China has a vision for protecting nature, and it has made progress since the last global biodiversity conference in

2018. In 2021, President Xi Jinping announced that China was formally augmenting this system with a network of five national parks covering 88,000 square miles (228,000 square kilometers) — the largest such system in the world.”

According to Hull’s study, China also has the fastest expanding forest area in the world. From 2013 to 2017 alone, China reforested 334 million hectares of bare or cultivated land — an area four times as large as the entire US national forest system.

In her view, China has a key role to play in protecting nature, despite certain challenges lying ahead.

She wrote: “As a wildlife ecologist, I’m eager to see China step into a global leadership role. Biodiversity matters, because having more ecosystems, species and genes makes nature more resilient and able to weather stresses like diseases and climate change.”

I would add one footnote, that is, by protecting its own and the world’s bioreserves, China is essentially creating an ecological civilization that puts man back into nature, not above it. It’s a new concept in civilization, in contrast to erstwhile ones based on modern Western beliefs in so-called “machine power over nature.”