



The small stone island of Luoxingdun in Poyang Lake, before and after this year's drought — CFP

# 90%

However, this year, the lake began to dry up in summer. By the end of August, the water area of the lake had shrunk by 69 percent. Now it's down nearly 90 percent.

“Usually, the water level of Poyang Lake is high in August, and we could open the sluices to irrigate fields,” he told Xinhua News Agency. “This year we pumped the low level of water into the drainage station that feeds farmland, but soon even that gave out.”

The result? At least 38,000 hectares of crops failed this year, causing an economic loss estimated at nearly 3.29 billion yuan (US\$462 million).

The drought also destroyed aquatic production. Large volumes of fish, shrimp, snails and crab were found stranded on mudflats.

That's bad news also for cranes, spoonbills, storks and geese among the 150 species of migratory birds from Siberia, Mongolia, North Korea and northern China who return to the area every November to winter until April. The lake is also home to the Yangtze River finless dolphin.

“Locals typically leave some crops for the birds,” Zhou said. “The area is a big attraction for bird watchers. But if food is sparse, birds might gradually change their route and find a more stable feeding ground.

He said that has happened in the past. When food resources

dwindled around Caohai Lake in the Kunming area of Yunnan Province, the birds shifted to Cuihu Lake and then to Dian Lake. Eventually they moved to Erhai Lake in Dali, which is more than 300 kilometers from Kunming. After water regeneration steps were taken at Dian Lake, the migratory birds returned.

Environmentalists are now looking at steps to retain the birds at Poyang Lake. Wells have been dug to provide extra water, and crops and fish fries were placed in bird reserves to provide food.

The first wave of winter migratory birds has begun to arrive at the lake. The nearby Wuxing White Crane Conservation Area in Liyuzhou started to prepare for them at the early stages of the current drought.

“We began storing water at the first signs of drought,” Liu Hualong, an official with Liyuzhou, told Xinhua News Agency. “In the middle of September, when the water level at Poyang Lake dropped dramatically, we dug three electric motor wells in the area so that the lotus ponds — a favorite of white cranes — would fill with underground water.”

Climate change is blamed for

the long drought. According to the National Meteorological Center, there was no meaningful rainfall in Jiangxi and surrounding provinces from June to the end of September. Heat that broke records dating back to 1961 continued in September, and even the rain from typhoons didn't help much.

Beyond climate, Zhou's research found that rapid urbanization around the lake isn't helping the situation.

“Large construction complexes, landscape projects and traffic facilities changed the original capillary-style river system of small ponds, creeks, wetlands and ditches,” he said. “Construction made the lands ‘water-thirsty,’ while residential and industry water consumption soared. These human activities along with climate change have reduced Poyang Lake to little more than a river now.”

How to solve this conundrum?

A debate about whether to build a dam to control the water level of Poyang Lake has been underway for more than 20 years. But a dam itself might cause a new set of problems affecting water quantity and quality, and the food chain.



Vast tracts of Poyang Lake are reduced to a sandy wasteland because of drought. — Ti Gong



Some migratory birds are beginning to return to the lake, but will they be forced to go elsewhere for food? — CFP

“We need to reconsider many things to solve the problems of Poyang Lake,” Zhou said, citing controls on urban and industrial expansion and lifestyle changes.

What can we common people

do? One suggestion is to calculate our “water footprint” in terms of household water use and to recognize how much water is used to produce the food, electricity and home goods we consume.