

usually foraged for food in the lower reaches of the river, and after they sexually matured, they would migrate back to the upper reaches for spawning.”

In the 1970s, the construction of the Gezhouba Dam in Yichang section of the Yangtze River blocked the migration passageway. At the same time, overfishing in the river decreased the fish's food sources, and their large bodies were especially prone to injury from ships.

“I remember several Chinese paddlefish encounters in the 1990s,” Wei said. “They had been hurt by ships or fishing nets. None survived. In 2002, we received an emergency call from Nanjing and rushed there to find the fish dead. That one lived for only 29 more days.”

The last encounter with the fish in 2003 was actually a hopeful one. In Yibin in Sichuan Province, a paddlefish was caught by a fishing net by accident. It recovered soon after Wei and his team treated it, so Wei tagged it and released it back to the river.

“We wanted to track it and find its spawning ground, but we eventually lost contact with it,” Wei said. “We tried to find it for the next decade, but the effort was in vain. Our hope became the last goodbye.”

He said his biggest regret is that artificial reproduction of the fish was not carried out early enough to save the breed. Now his priority is ensuring that the same mistakes aren't made with the Chinese sturgeon.

Nicknamed “king of Yangtze fish,” the Chinese sturgeon is at most 5 meters long. Even older than the Chinese paddlefish, its fossils have been dated back as far as 145 million years. Its



A Chinese sturgeon, among 230,000 born from artificial reproduction, is released into the Yangtze River in Yichang, central China's Hubei Province, on April 9. — IC

larvae grow in the East China Sea or the South China Sea, and migrate to the upper reaches of the Yangtze River to spawn.

The fish was once popular on Chinese dinner tables, but after Gezhouba Dam was built, its population dropped. Although new spawning sites formed below the dam, the population never fully recovered.

“We've long been monitoring the natural reproduction of Chinese sturgeon,” said Wei. “Some years we found some eggs; some years we didn't. Unfortunately, we haven't found any natural reproduction of the sturgeon for the past five consecutive years.”

However, artificial reproduction for the fish started early, and now a “seed” of the species is preserved — at least for the present.



A Chinese finless porpoise is spotted in the Yangtze River in Yichang on October 6, 2021. The population of the species is growing back, thanks to China's efforts to restore the ecosystem. — IC

Earlier this year, 50,000 Chinese sturgeon larvae born from artificial reproduction were released into the Yangtze. Scientists are now waiting to see if the fish will reproduce naturally.

According to Wei, the goals are to prevent sturgeon extinction, to encourage its natural reproduction and, ultimately, to restore the population back to the average historical levels.

“We know that the latter could actually be a wish instead of a realistic goal,” he said. “Rapid development of human society and intensive human activities certainly affect the living environment of animals, and what we need is to acquire a balance between the two. It is a lesson that the entire human race should learn.”

His prognosis is sadly true. The lives of freshwater aquatic species face the

threat of extinction worldwide. The latest “red list” alert issued by the International Union for Conservation of Nature shows that all of the world's remaining 26 sturgeon species are now at risk of extinction, up from 85 percent in 2009.

In a desperate race to reverse the trend, China enacted the Yangtze River Protection Law, which came into effect in March 2021. It bans major new development projects on the river to protect its ecological system.

Fishing on the river is also strictly controlled.

In 2002, the Ministry of Agriculture and Rural Affairs designated closed fishing seasons on various parts of Yangtze River, including those in the city of Chongqing and in the riverfront provinces of Yunnan, Guizhou, Sichuan and Hubei. In 2020, fishing was entirely banned for a decade.

The ban gives rise to the possibility that not only fish but also their food cycle will be restored. The Chinese finless porpoise has directly benefited from the decree.

The finless porpoise, which looks somewhat like a dolphin, was once on the verge of extinction. In 2018, its population was estimated at only about 1,000, with numbers dropping.

Today its population is gradually growing back. Although no official statistics have been published, many finless porpoises were reported in the past two years in various sections of the Yangtze River.

“It would be much better if we return 30-40 percent of the Yangtze River's functions to the nature,” said Wei. “Giving up fishing is a good beginning.”



A stranded Chinese paddlefish is photographed in the 1990s. — Courtesy of Wei Qiwei