

The Ministry of Environment identified the migratory routes of the Chinese Crested Terns

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I would like to begin the briefing by mentioning that the Chinese Crested Tern was successfully bred in Korea for the sixth time. We have also identified that those birds moved to China via Jeollanam-do through bird banding fitted on their legs.

The Ministry of Environment and the National Institute of Ecology confirmed that the Chinese Crested Tern, one of the rarest birds in the world, having only a hundred in the world, was successfully bred in South Korea. It is the sixth breeding since 2016 and happened in Yuksan-do Island in Yeonggwang-gun, Jeollanam-do. The bird banding made it possible to keep tracking the species' migration pattern.

The Yuksan-do island became the fifth breeding site of the species after China in April 2016 when a Chinese Crested Tern was discovered nesting among a colony of black-tailed gulls.

These fully-grown Chinese Crested Terns have been visiting Yuksan-do Island every year since its first discovery in the area. As its stable population has been maintained, the international academia recognized South Korea as an important breeding site for the Chinese Crested Terns.

From March to June this year, seven Chinese Crested Tern visited the island. A pair

laid an egg among them and fledged one young Chinese Crested Tern.

On June 1, 2021, the NIE researchers tied a metal band on the leg of one adult Chinese Crested Tern and a colored band on the chick's leg.

On June 3, 2022, the researchers captured two adult Chinese Crested Terns, and one chick hatched on Yuksan-do Island this year. The researchers put white bands on the adults' legs; each a mother bird and a non-breeding adult were marked with "PB" and "PA", respectively. They also tied a light blue band tagged "070" on the chick's leg.

While doing it, our research team discovered that the one with the "PA" band is the same bird banded with a metal one last year.

We officially confirmed that some Chinese Crested Terns which stayed in Yuksan-do Island last year have returned to the area.

The team confirmed that another fully-grown bird tied with the white PB band, or the mother bird, and the chick with the light blue band had been living with black-tailed gulls on the seashore of Gochang-gun, Jeollabuk-do, in end-July after they had left the island at the end of June. It has also been proven that the two birds stayed on the seashore of Qingdao, China, until August.

Another Chinese Crested Tern, who left at the same time as the two Chinese Crested Tern with a metal band and a white band marked PA, was discovered around the seashore of Gochang, Jeollabuk-do on August 2 by birdwatchers. Four days later, on August 8, other birdwatchers found those birds again on the shore of Jiaozhou Bay, Qingdao, 536 kilometers west of Gochang-gun.

Our research team also identified the migratory route of the chick tied with a yellow band last year. A Chinese birdwatcher also discovered this Chinese Crested Tern in

September 2021 near the coastline around Shandong, China, which is 610 kilometers from Yuksan-do Island.

Other birdwatchers also observed this bird on June 21 this year in Yilan City, Taiwan, 1,262 kilometers south of the Shandong shore. After two months, the bird was again spotted near Jiaozhou Bay in August.

The NIE was able to track the migratory route of the Chinese Crested Terns thanks to the attached color bands and information sharing among domestic and foreign birdwatchers.

By establishing a network for cooperative bird watching domestically, the institute plans to continue tracking the migratory routes of Chinese Crested Terns and conserve bird habitats based on studies about Chinese Crested Terns breeding.

The Ministry of Environment plans to list Chinese Crested Terns as a Class I Endangered species. The ministry held the public hearing on revising the Enforcement Rules of the Wildlife Protection and Management Act for forty days from September 5.

The Director of Nature and Ecology Policy Division, Kang Seong-gu, said, "Yuksan-do island is one of the breeding sites of the Chinese Crested Tern, which ranked as Critically Endangered on the IUCN Red List. The Ministry of Environment will try to secure habitat diversity as managing habitat was found necessary."

It concludes my briefing for today.

[Q&A]

<Q> I have been wondering if there is recent research that explains how Chinese crested terns had gone extinct.

I can see that China's restoration project increased the bird population. Is the Korean government, by any chance, able to conduct a similar project for the same result?

<A> Our research team here will answer your question.

<Q> Also, I would like to know more about the latest ecological research, if there is any.

<A> (Park Jin-Yeong, Protected Area Research Team Leader of NIE) Hi. I am Park Jin-Yeong from the NIE Protected Area Research Team. We have mentioned earlier that the Chinese crested tern had gone extinct for about 63 years, from 1937 until 2000.

However, the species was later spotted in Taiwan in 2000, reigniting research on the species. At that time, the species' population was no more than 40.

Later, the three-year restoration project in China in 2013 brought almost 100 birds of the kind to life. Roughly 100 birds are living around the globe.

In fact, not enough research has been done on this species or its breeding ecology, which is why China and Taiwan usually study this species together with the greater crested tern.

The latest research in 2018 verified that Chinese crested terns were found with greater crested terns after satellite-tracking a chick. According to the research, this species migrates to Qingdao before heading to Thailand or Cambodia, as we have mentioned today. The GPS signal was lost at that point, so there have been no more findings since

then.

Most recently, researchers have been interested that the Chinese crested terns hatched in South Korea were found in Qingdao. Those hatched in Taiwan and China have also been found on Qingdao's coastline. The academia keeps researching why the Chinese Crested Terns gather around Qingdao.

<Q> Concerning the restoration project, do you think Korea can replicate the project, or do you see some differences?

<A> (Park Jin-Yeong, Protected Area Research Team Leader of NIE) A small number of Chinese crested terns—roughly seven or eight—return to Korea yearly. When we started researching this species, we consulted the team that undertook the restoration project and learned about the social attraction system that combines replicas with the sound reproduction system.

We have used this system from the beginning of our research until now. Once we have gathered more significant findings on bird migrations, we will start finding ways to increase breeding.

The system we are currently studying is the social attraction system that has been used for China's restoration project.

<Q> I have two questions for you. I am curious why the Chinese crested terns live with the group of black-tailed gulls.

Another question is, as I am aware, the Wildlife Protection and Management Act is revised every five years, but the law was not revised in 2017, although the Chinese Crested Tern was first discovered in 2016. What could be the reason for this?

<A> (Park Jin-Yeong, Protected Area Research Team Leader of NIE) Let me answer your second question first. The list of endangered wildlife is renewed every five years, and new registries need specific requirements on their ecology.

However, there has not been enough research conducted on this species, and we lack information about them. That is why the NIE has been collecting data for the past five years to meet the requirements and proceed with the registration process this year.

I'm sorry, what was your first question?

<Q> Why do the Chinese crested terns live with the group of the black-tailed gulls? What have protection measures been taken for the past five years?

<A> (Park Jin-Yeong, Protected Area Research Team Leader of NIE) We collected data to register in the list of endangered wildlife. We were extremely cautious about starting the research since the environment ministry restricted access to the region as the species' population was less than 100.

Chinese crested terns are drawing significant attention overseas because they live with the greater crested terns in Taiwan or China. However, in South Korea, the Chinese Crested Terns live with black-tailed gulls known for their ferocity.

So when we talked about this with international scholars, they doubted that the Chinese crested terns might not breed because of the wildness of the black-tailed gulls. But as you can see, we see that the Chinese crested terns have been successfully bred for the past six years.

So, the relationship between the black-tailed gull and the greater crested tern is also an interesting topic, which we are currently collecting data for research.