



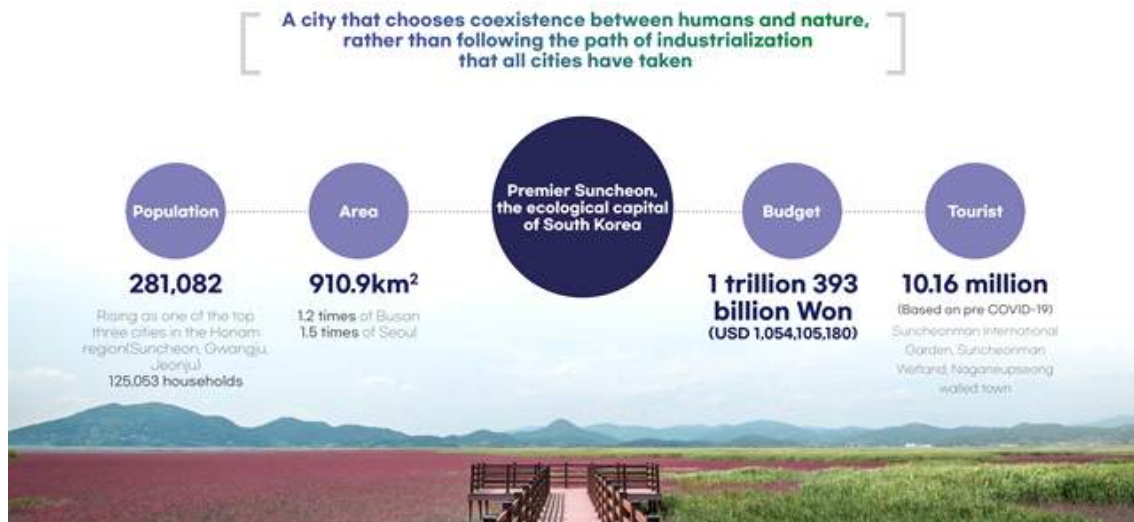
Good afternoon,

I am Sun Mi Hwang from Suncheon Bay Conservation Department of Suncheon City Government.

I would like to share a case study of Suncheon Bay migratory bird protection and HPAI management.

01 The path that Suncheon, the Wetland City has walked

평화로운 생태도시



First up is the introduction of Suncheon City.

Suncheon is a South Korean eco-city of 280,000 people that chose to coexist with nature when every other city chose the path of industrialization.

[The present Suncheon Bay]



Suncheon Bay became the first coastal wetland in Korea to be designated as a Ramsar site in 2006, and in 2021, it was listed as a UNESCO World Natural Heritage Site.

The tidal flats of Suncheon Bay, a World Heritage Site, cover an area of 28 square kilometers. The surrounding estuary and a buffer zone of 5.65 square kilometers of agricultural land are also listed as a Ramsar site.

A total of 252 species of birds, including 48 endangered species, are observed in Suncheon Bay, with 100,000 to 200,000 birds per year.

Especially in winter, 30,000 to 160,000 ducks, geese, and cranes of 70 species arrive annually.



We observe 6 difference crane species are arriving in Suncheon Bay.

The majority of wintering population is the Hooded crane.

Additionally, Eurasian crane, hybrid which breed by Hooded crane and Eurasian crane, White-naped crane, and Sandhill crane also observed in the bay.

Often, we also observe Siberian white crane.



Hooded Crane in Suncheon Bay, they sleep, drink, and rest on the tidal flat here.

In the morning, they fly into the surrounding agricultural fields to feed.

Transforming Suncheon Bay into a paradise for migratory birds

Removal of 282 utility poles and power lines for the benefit of migratory birds



Underground cabling project



Designation of conservation zones for the ecosystems near Suncheon Bay(7.38km²)

Creation of a safe habitat for migratory birds through organic farming methods



Designation of the first scenic agricultural zone in the country

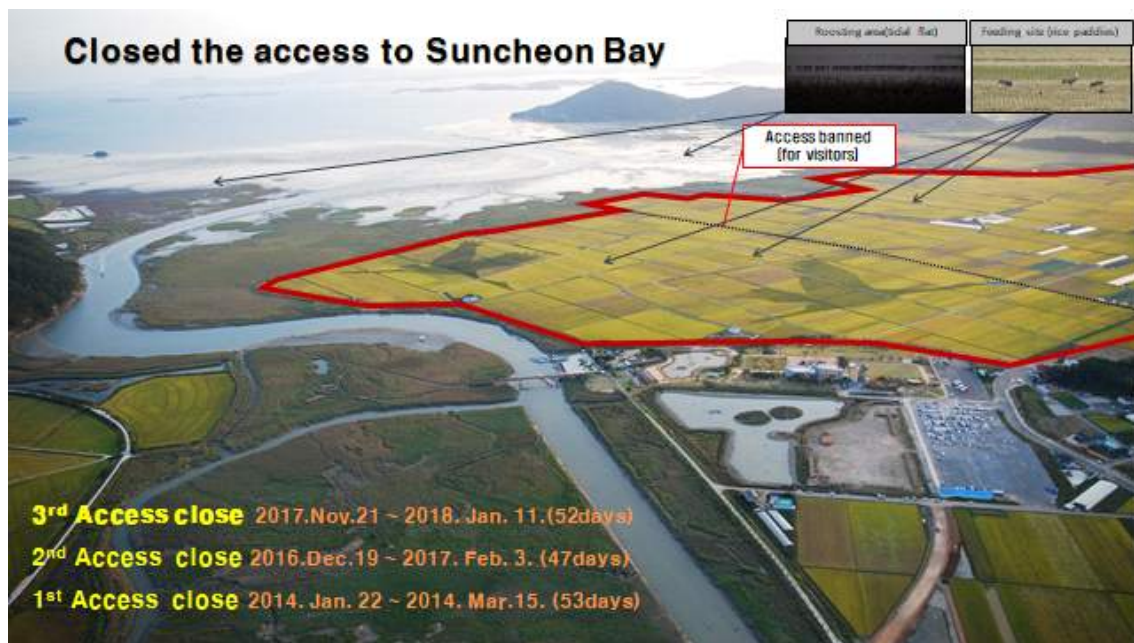


Operation of winter bird watchers (6 people per day) to protect migratory birds

Restriction of access for tourists, vehicles, bicycles, and other modes of transportation

Every winter, wintering birds flying into the feeding grounds collide with power lines. In 2009, the city removed all 282 power poles within 62 hectares of the core feeding grounds and designated 738 hectares as an ecological conservation area to prevent uncontrolled development on the surrounding land.

In addition, we started eco-friendly landscape farming for the first time in Korea to provide a safe wintering environment for wintering birds such as Hooded Cranes.



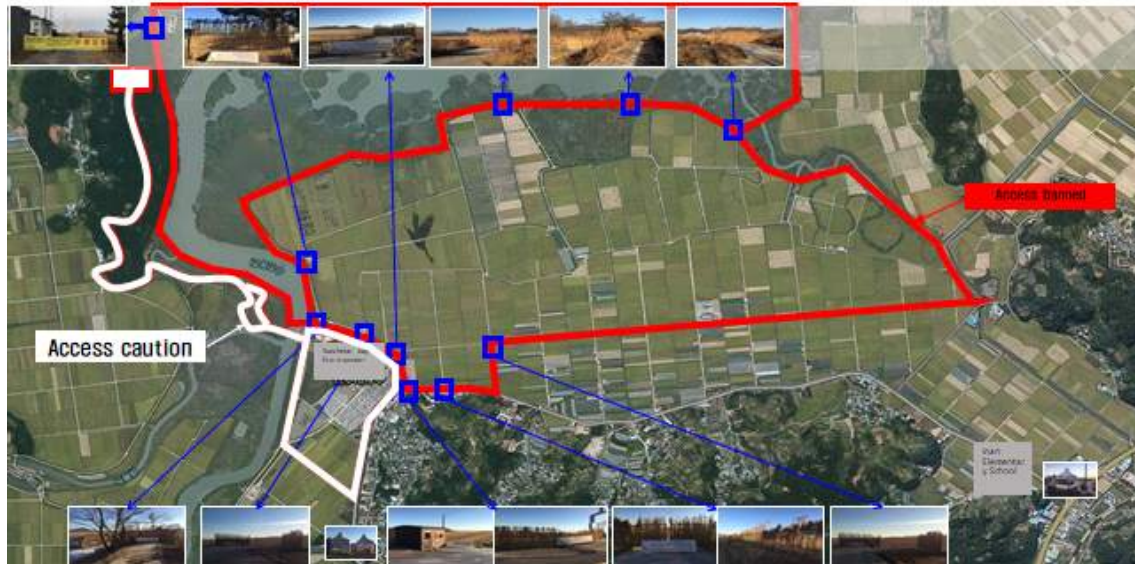
Since 2009, residents have become migratory bird rangers to keep people and cars out of that red line when wintering birds arrive. The right distance between people and migratory birds was maintained.

However, during the expansion of highly pathogenic avian influenza in South Korea, Suncheon Bay closed the park a total of three times.

The closure of the park led to a downturn in the local economy and increased resident frustration.

We needed an efficient way to manage Avian Influenza that would work symbiotically with the birds.

Access control around the Suncheon Bay



First, we set up the Suncheon Bay access control area with bird experts and local residents.

Red is a restricted area.

From November through the end of March, this area provides a safe habitat for birds and protects them from contact with human feces.

And the white line is for the general public, with enhanced disinfection, to provide an environment where visitors can explore Suncheon 365 days a year.

Disinfection around Suncheon Bay



- disinfection mat(car) : 3points(○)
- disinfection mat(people) : 20points(□)
- ultra disinfection gate : 2points
- disinfection cars : 3cars
- portable disinfection machine : 2
- disinfection car: 2cars



Sanitizing mats on the path of visitors within the park.

Management of Migratory Birds habitat

- **Spreading quicklime** around the entrance of farm road (28points)
- **Monitoring** Hooded Crane roosting, feeding site, and rice paddies(everyday)
- **Migratory bird rangers** Setting reed fence, artificial feeding, access control, monitoring
- **Fecal test** once a month (MOE)



Second, it's about better on-site management.

Drones were used to survey wintering bird populations and increase field surveillance for anomalies.

In addition, we worked with the Ministry of Environment to regularize fecal testing and advise residents not to access agricultural fields.

01 The path that Suncheon, the Wetland City has walked

평안습지연구소

- ▶ (Restoration of Mudflats) Restoring the Jangsan Disused Salt pan as a Habitat for Wildlife Instead of Solar Development(420,000㎡ / 2020)
- ▶ (Environmental Improvement) Compensation and Removal of Two Poultry Farms Near the Mudflats to Prevent Highly Pathogenic Avian Influenza(8,000㎡ / 2020)

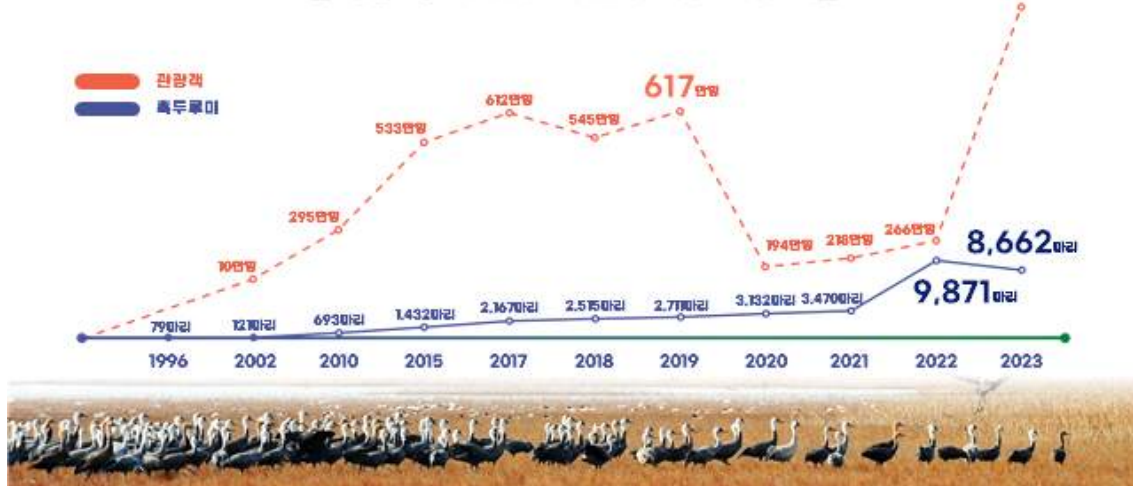


Third, we're restoring it back to its natural state.

In particular, we focused on preemptively preventing highly pathogenic avian influenza by compensatory demolition of two poultry farms located near tidal flats.

Further, a nearby abandoned saltpan is being restored as a tidal flat to secure a healthy habitat

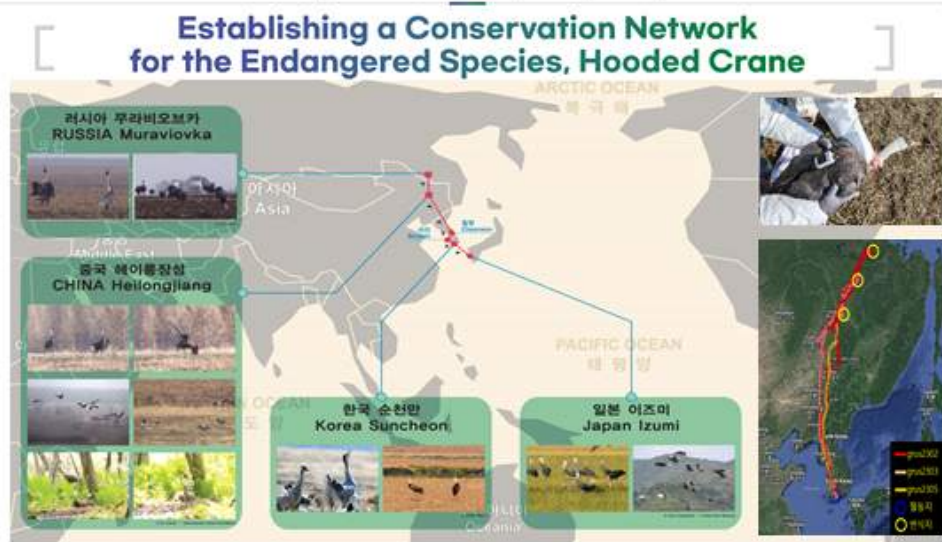
[흑두루미 늘자 관광객도 증가]



As a result of these efforts, the Hooded Crane population has increased 29 times, from 120 birds in 2002 to 3,470 birds in 2021.

In 2022, the temporary migration of Hooded cranes to Suncheon Bay, which felt threatened by the spread of AI in Izumi City, Japan, draw an global attention in November 2022 when 10,000 cranes, 60% of the world's surviving Hooded crane population, were observed in Suncheon Bay.

As the naturalness of Suncheon Bay has been restored, the number of tourists has also increased along with the Hooded cranes, with 6 million visitors before COVID-19 and 9.8 million during the 2023 Suncheon International Garden Expo last year.



In particular, Suncheon city developed an international network between Korea, China, Japan, and Russia to protect the internationally endangered Hooded crane,

For the first time in Korea, we attached location trackers to Hooded cranes to identify the migration routes of breeding and wintering grounds through migration route analysis, and began researching behavioral patterns in wintering grounds.



Based on this, Suncheon City signed a memorandum of understanding with seven neighbor city governments to disperse Hooded Crane habitat and are leading international and local efforts to conserve the species.



There's a saying that's been trending in South Korea for the past year,

'Let's Suncheon' means to present a new standard model for other local cities that cities should be made like Suncheon.

We will continue to think and act more deeply about what path cities should take in the era of biodiversity and climate crisis.

Thank you.