AWARD OF EXCELLENCE

The Wild Duck Lake Wetland Park

SITE CONTEXT AND BIRD MIGRATION MAP

AWARD OF EXCELLENCE

Location: Beijing, P.R. China
Size: 927,000 sq m
Design Time: 2010-2012
Construction Time: 2012

Located 60 km northwest of Beijing, Wild Duck Lake Wetland Park is a critical fueling stop for migratory birds in the East Asian-Australasian route that has been severely impacted by environmental degradation. In consultation with ornithologists, ecologists, botanists, and civil engineers, the landscape architecture designers placed the bird - local and migratory - as the primary client. The wetland was transformed into a ‘deluxe’ sanctuary to enable the wildlife to return and flourish. Since completion, local and migratory wildlife species have increased by 32%, and some of the rarest birds have made a remarkable comeback.

The return of these spectacular birds in turn attracted bird lovers, photographers and the general public to visit the Park in record numbers. In 2018, the Park welcomed 160 thousand visitors. The large number of visitors was anticipated. Though humans access to the Park is tightly restricted, a comprehensive suite of comfortable, yet environmentally-friendly facilities, including Observation Pavilions, Boardwalks, High Point Towers were built. To maintain the equilibrium of human interests in nature and the needs of the wildlife, educational programs are conducted at the Visitor’s Center and selected locations to raise public awareness of the appraising history and critical importance of the Park.

The master plan divides the site into seven protection zones based on topographic and hydrological conditions. People are restricted to the Visitor’s Wildlife Experience Zone to lessen the impact on the overall site, providing windows into the pristine reestablished habitats.

WHAT’S DONE FOR WILD LIFE
- 32% increase in overall bird population, from 233 (2005) to 343 (2018) recorded species.
- 10 species are First Class National Protected Birds and 43 species are Second Class National Protected Birds.
- A transit point for the international bird migration route (East Asian - Australasian route).
- 75 migratory bird species and more than 100,000 individuals have been recorded stopping annually (2015).

WHAT’S DONE FOR PEOPLE
- Visitor numbers have increased year by year reaching 160,000 people in 2018.

Before restoration, years of accumulated garbage polluted the site. After a massive clean-up, elevated boardwalks were strategically placed to allow people controlled access, and allow the natural flow of water and animals to pass beneath establishing an undisturbed habitat.

Observation Education Animal Rescue Exercise

Designated Human Activity Area Whole Site

STORMWATER OUTLET REPAIR
HABITAT RESTORATION
ECOLOGICAL DIVERSITY
PLANT DIVERSITY
VEGETATION COVERAGE
REMOVE GARBAGE
FINGER ISLANDS
WATER PURIFICATION
WETLAND BANK REPAIR
BIO-DIVERSITY CONCRETE
dRAIN TANK
RIPARIAN HABITAT STABILITY
ECOLOGICAL RESTORATION
CREATE DEAD-END PATHS
LIVE SPOONGE
BIOMIC SYSTEM CREATION APPROACH
ECOLOGICAL RESTORATION
REVEGETATION
CONNECTION OF WATER
BROKEN LOOP ROAD

Floating Aquatic & Emergent Aquatic
Wetland & Wetland
Shrub & Arbus

Herbaceous
Deciduousness
Carrivorous

Ecosystem Restoration and Reconstruction

Ecological Restoration

Connection of Water
Addition of Finger Islands

Revegetation
Broken Loop Road
Create Dead-End Paths
Wetland Bank Repair

Waterfront Space
Boardwalk
Platform
Human activity area

Visitor Center

Waterfront Space
Boardwalk
Platform
Human activity area

Visitor Center

Education
Animal Rescue
Exercise

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Jinzhong Baicaopo Park - Reconstruction of Regional Natural Ecosystem on Loess

Background of the project

The project is located in the west of the downtown of Jinzhong City, Shanxi Province. The total area is about 2,977 hectares. The main feature is the area's elevation and shape of loess relief. The west side is a flat plain, while the east side is a series of high and low terraces. The area is characterized by a dry climate with annual average temperature of 7.7°C and annual average precipitation of 489.8 mm. The Loess Plateau is one of the most important regions for food production in China, and the area is used for agricultural purposes.

Location

- 70% of the land is threatened by soil erosion
- Annual runoff threat of 60,000 m³
- 40% of the land is not covered by vegetation

Design Challenge

The eroded Loess Plateau is a special area where the soil is vulnerable to erosion. Historically, the Loess Plateau has experienced severe soil erosion, leading to significant ecological problems. The project aims to address these challenges by implementing sustainable land management practices, such as soil conservation and reforestation, to restore the ecological balance and improve the overall sustainability of the region.

Strategy

Water System

A new water system was constructed under the original topography.

Transportation System

A convenient transportation system of the park is based on the original road.

Plant

The covering of park vegetation is based on current vegetation with native vegetation communities as reference.

Sight

The viewpoint is the command point of the whole park, providing a comprehensive overview of the changes in sight.
AWARD OF EXCELLENCE

IFLA THE TENTH CHINA INTERNATIONAL GARDEN EXPO JINSHAN SCENIC AREA IN WUHAN

Construction of jingshan scenic area - landfill restoration

The reuse technology of bottomfield of abandoned domestic waste dums, reduces the degradation process from 50-60 years to 3 years with the rapid degradation treatment and rejuvenates land value. The landfill has been divided into four zones based on the mounds feature. The management features the balance of safety and landscape, creating a beautiful natural mountain landscape with the original landfill.

Site Information

Wuhan Jingshan Landfill covers an area of 45 hectares with a total waste capacity of over 5 million cubic meters and an average landfill depth of 10 meters. Due to the strong opposition from the local residents, the dump stopped operation in June of 2005. At that time, it had only a single course which the waste gas, leachate, and rainwater could not stop. The whole ecological restoration project does not involve any excavation of garbage mounds and features the balance of safety and landscape, creating a beautiful natural mountain landscape with the original landfill.

Urban Ecological Series

Through ecological duming, Wuhan has realized the integration and infiltration of Fuhu green wedges, one of the six urban ecological green wedges, into the urban area, forming the regional ecological systems.