

# Analysis on the Eco-tourism Protection and Development Mode of Boluo Lake Wetland Nature Reserve in Jilin Province

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**ABSTRACT.** *The Boluo Lake wetland nature reserve is Located in the northwest of Changchun city in Jilin province, which is rich in biodiversity and unique wetland ecotourism landscape. This paper firstly introduces the tourism resources of the Boluo Lake wetland nature reserve. Secondly, analysis on the tourism development status of the nature reserve and Find problems. Finally,we put forward the protection and development mode of ecotourism in Boluo lake wetland nature reserve.*

**KEY WORDS:** *Wetland nature reserve; Tourism development status; Development mode*

## 1. Introduction

Wetland is an important natural resource and one of the important living environments for human beings and many wild animals and plants. It has the characteristics of biodiversity and is known as the "gene pool of species".

Jilin Boluo lake wetland nature reserve is a type of "natural ecosystem" and "inland wetland and water ecosystem" nature reserve, which is located in the northwest of Changchun city China and belongs to the temperate continental climate. Developing wetland eco-tourism resources is not only an effective choice to protect wetland resources, but also an inevitable requirement for the sustainable social, economic and environmental development of wetland areas.

There is a considerable amount of research on ecotourism development in wetland nature reserve at home and abroad.

Rugayah Hashima et al. (2015) studied the sustainable regeneration function of Langkawi island ecosystem in Malaysia through ecotourism[1].RashaEl Shiaty (2016) found that the people for the treatment and rehabilitation ecotourism (Healing Eco - tourism) for the purpose of enthusiasm is more and more strong, thus

establishing a framework of evaluation for the ecological environment condition, and provide rehabilitative ecotourism development and plan in Egypt[2].

Different experts at home and abroad such as Chaikumbung, Basyuni m, Riper et al, Carena J, Gawer A, Mohammed B.B, Natalie O, Maik Rehnus et al, they have studied ecotourism in wetland nature reserves from different angles [3-7].

At present, the research on ecotourism in nature reserves abroad focuses on the resource protection of ecotourism and the environmental impact of ecotourism. Domestic research in China mainly focuses on the development of ecotourism in protected areas, as well as related planning principles, models and management schemes.

## **2. An Overview of Ecotourism Resources in Boluo Lake Wetland Nature Reserve**

The unique geographical location, beautiful natural scenery and rich cultural relics constitute an extremely rich tourist landscape resources in the Boluo lake wetland nature reserve.

The habitat types of the Boluo lake wetland nature reserve are diverse, with meadows, lakes and marshes inlaid and distributed, which determines the diversity of biological species in the reserve. According to the preliminary survey and statistics, there are 55 families, 127 genera and 194 species of bryophytes, ferns, gymnosperms and angiosperms in this area, which accounting for 6.71% of the wild plants in Jilin province China.

Among the wild animals in the reserve, there are 198 species of vertebrates from 52 families and 24 orders of 5 classes, accounting for 45.0% of the vertebrates in Jilin province China.

Among the wild animals in the reserve, there are 7 kinds of amphibians and reptiles, 136 kinds of birds, 18 kinds of animals and 29 kinds of fish. In addition, there are 582 species of insects belonging to 428 genera, 126 families, 13 orders.

These wildlife species are rare and have a strong attraction for tourists. 27 species wild animals in the nature reserve are included in the List of endangered and protected species of China, including I level key protected wild animals just like red-crowned cranes, bustard, Oriental white stork and crane four; II level key protected wild animals just like Mandarin duck, whooper swans, falcon eye, etc. 23.

Seven species were included in the List of the red book of Chinese birds, 82 species were included in the List of the agreement on migratory birds between China and Japan, and 13 species were included in the List of the agreement on migratory birds between China and Australia.

In addition, there are many cultural tourism resources in the Bolo lake wetland nature reserve. The location of the Boluo lake nature reserve is a gathering place of many ethnic groups. The main ethnic groups in the reserve include Han, Man, Korean and Mongolian. Although the ethnic minorities in the region have been

assimilated over time, their traditional cultural customs and practices have remained relatively unchanged. There have folk customs, simple and honest. The mysterious shaman culture and food cooking of Manchu nationality has a strong attraction to tourists.

### **3. Current Situation of Ecotourism Development in Boluo lake wetland nature reserve**

Wetland ecotourism resource development is a new field at present. The exploitation and utilization of wetland resources in the Boluo lake wetland nature reserve is also in the initial stage and has not entered the stage of sustainable development and utilization.

At present, the degree of supporting tourism elements in the Boluo lake nature reserve is relatively low. It receives about 10,000 tourists annually in this nature reserve.

However, the biological resources in the nature reserve are rich and diverse, and there are many rare wild species under special state protection. At the same time, the agricultural production conditions in the Boluo lake nature reserve is very good, and the prospect of agricultural tourism is very broad.

### **4. Ecological Tourism Protection and Development Mode**

#### ***4.1 Protection Mode***

##### **4.1.1 Determine the Reasonable Capacity for the Development of the Nature Reserve**

In the process of the development of protected areas, all development activities should be based on the ecological capacity of wetlands, and should not exceed the upper limit of the ecological capacity of wetlands, so as to limit the excessive development of tourism enterprises and the influx of tourists.

##### **4.1.2 Strengthen the Management of Tourism Activities in the Nature Reserve**

In order to protect the background of resources and prevent environmental degradation, tourism activities must be carried out within prescribed routes, and all tourism activities are strictly prohibited in ecologically sensitive areas and periods.

##### **4.1.3 Make the Tourists Participate in Tourism Resource Protection**

A large number of tourists entering the protected areas will inevitably affect the environment. We should increase publicity, let tourists participate in the protection, as a true sense of ecological tourists.

## ***4.2 Eco-tourism Development Mode***

### **4.2.1 Wetland Natural Scenery Tour**

There is a large area of leymus meadow around the lake in the bohu wetland nature reserve, and a large area of reed swamp is distributed in the shallow water area outside the water accumulation area, stretching as far as the eye can see. It is the combination of these plants that gives birth to rich fish and bird resources. The vast lake and the fresh air create a beautiful picture of nature. In early spring, wild flowers bloom; in summer, the lake breeze is fresh and green; in midautumn, golden; in winter, white and boundless. Good ecological environment has greatly aroused people's enthusiasm for caring about nature and caring about life. We can rely on good wetland resources to develop wetland natural scenery tourism.

Accreditation of Engineering education is an important part of higher education in China. It is usually conducted by professional professional associations in conjunction with educators in the field. The subject of this accreditation is the professional certification body and the object is the professional education offered by higher education institutions. Its purpose is to ensure the quality of preparatory education for relevant talents to enter the professional profession. The core idea is to focus on students (practitioners of future professional careers). Accreditation of Engineering education is of great significance to enhance the adaptability of talent training to professional development and further improve the quality of higher education in China. Under the background of accreditation, the survival and development of a major or even a university are closely related to professional certification, and the effectiveness of professional education needs to be reflected by students' learning achievements. This situation puts forward higher requirements for college English teaching. Educators need to innovate teaching methods and establish more effective teaching models to improve students' learning effect and English application ability.

Bird watching is a common eco-tourism activity in wetlands, which is now very popular in Europe, Japan and other developed countries and regions. Bird-watching associations and other college student associations have been established in domestic universities, such as Jilin University and Northeast Forestry University. Reserves existing national I level key protected wild animals, there are four, respectively, bustard, Oriental white stork and crane red-crowned crane, there are 23 national II level key protected wild animals, mainly for the whooper swans, Mandarin duck, falcon, eagle, etc. Bird-watching platforms are set up in the reserve, where bird-watchers can see many different kinds of birds at different times of the year. At the same time, a series of "bird-loving knowledge" competitions, bird-appreciation and knowledge lectures, bird-watching summer camps, nesting and guiding birds and other participatory activities can be held.

### **4.2.3 Agricultural Sightseeing Tour**

Wetland ecological agriculture is highly ornamental and participatory. In the process of development, agro-ecological sightseeing gardens integrating scientific

and technological demonstration, tourism and leisure vacation should be developed to open mature orchards, vegetable gardens and melon gardens for tourists. Sightseeing agricultural Tours should be organized so that tourists can enjoy the pleasure and happiness of rural scenery by observing, appreciating flowers and picking, living in and eating farm vegetables in the farmhouse. The ponds and small lakes in the wetland are the best places for tourists to engage in water fishing, entertainment and other tourist activities.

#### 4.2.4 Skyscape Tourism

Due to the influence of lake microclimate, the natural protection area of Boluo lake wetland has a high humidity, but it is also a sandstorm arid area in the west, so the wind blows and clouds surge, and the light, fog and shadow of the lake are unpredictable. In the early morning of summer, when the red sun sprays out, the golden light shines brightly, and the red sun reflects the blue lake, only a few gauze choose to show the true appearance of lake polo. Can rely on the protection area's unique landscape to carry out the sky landscape tour.

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