



ICAO

International Civil Aviation Organization

ICAO Asia/Pacific Wildlife Hazard Management Workshop
and Seventh Meeting of the Asia/Pacific Wildlife Hazard
Management Working Group (AP-WHM/WG/7)

Pokhara, Nepal, 5 to 9 May 2025

**Agenda Item 3: Global, Regional and National Guidance/Best Practices on
Wildlife Hazard Management**

**PRACTICES FOR WILDLIFE HAZARD MANAGEMENT IN
CHINA'S TRANSPORT AIRPORTS**

(Presented by China)

SUMMARY

This paper presents China's comprehensive practices in airport bird strike and animal intrusion prevention. It covers aspects like management system establishment, ecological environment investigation and management, risk management, and information management, aiming to reduce bird-related risks and ensure aviation safety.

1. INTRODUCTION

1.1 In China, the rapid development of civil aviation underscores the paramount importance of flight safety. Bird strikes and animal intrusions pose significant threats to aircraft operations, potentially causing aircraft damage, flight disruptions, and even endangering human lives.

1.2 To address these challenges, the Civil Aviation Administration of China (CAAC) has implemented a comprehensive regulatory framework. In 2022, the CAAC issued the *Management Measures for Prevention of Bird Strikes and Animal Invasions at Transport Airports*, mandating airport management institutions to develop and enforce prevention plans. Building on this, the CAAC's Airport Department introduced the *Prevention Plan for Bird Strikes and Animal Intrusions at Transport Airports (Template)* in 2024. This template encompasses thirteen chapters, covering aspects from general provisions to safety objectives, ecological governance, risk management, information management, among others.

1.3 These efforts are focused on preventing bird strikes and animal intrusions at transport airports, protecting the safety of passengers and crew, and maintaining the normal operation of the aviation industry.

2. DISCUSSION

2.1 Management System Establishment

2.1.1 China has established a comprehensive management system for bird strike and animal intrusion prevention. In line with national laws, regulations, and industry standards, each transport airport formulates specific prevention plans. For example, the *Prevention Plan for Bird Strikes and Animal Intrusions at Transport Airports (Template) (2024)* provides in-depth guidance on all aspects of prevention work.

2.1.2 Airports have established specialized management committees, which are responsible for overall planning, decision-making, and coordination. These committees play a crucial role in integrating resources and formulating strategies to address bird-related and animal-related threats to aviation safety. Additionally, airports have established zoned working groups tasked with implementing prevention measures in different airport areas. These groups take into account the unique ecological and operational characteristics of each zone to ensure the targeted implementation of prevention measures.

2.1.3 Furthermore, airports have established bird strike prevention modules. These modules are dedicated to performing specific tasks such as bird monitoring, bird repelling, and risk assessment. Bird monitoring involves the systematic observation and recording of bird species, population dynamics, and activity patterns in and around the airport. Bird repelling aims to deter birds from approaching the airport through a variety of methods, including the use of specialized equipment and techniques. Risk assessment is a key function of these modules, which evaluates the potential risks posed by bird strikes and animal intrusions and develops appropriate risk-mitigation strategies.

2.2 Ecological Environment Investigation and Management

2.2.1 Ecological Environment Investigation

Airports are obligated to carry out regular ecological environment investigations within and around the airport, strictly adhering to relevant documents such as the *Management Measures for Prevention of Bird Strikes and Animal Invasions at Transport Airports* and the *Civil Aviation Airport Bird Ecology and Environment Investigation Guide*. These investigations are classified into comprehensive ecological environment investigations and daily ecological environment investigations.

Comprehensive ecological environment investigations are large-scale, periodic macro-ecological surveys required by regulations. Their fundamental purpose is to gain a comprehensive understanding of the overall ecological environment of the airport on a broad scale. With a relatively long investigation cycle and a phased nature, they cover an extensive scope. This wide-ranging exploration can comprehensively reflect the changes and patterns of the airport's ecological environment, providing crucial references for formulating bird strike and animal invasion prevention plans.

Daily ecological environment investigations, however, are conducted during the routine daily inspections. Their principal objective is to systematically monitor the changes in the attractors for birds and other animals. By doing so, airports can formulate or adjust ecological management plans in a timely manner and implement targeted countermeasures.

2.2.2 Ecological Environment Management

Ecological environment management is a key link in preventing bird strike accidents. The ecological environment governance work of airports includes ecological management within the airport and environmental management around the airport.

Regarding the environmental management within the airport, it is necessary to promptly and efficiently manage the water sources, feeding grounds and habitats that attract birds and other animals within the flight area, terminal area and working area. This may require the implementation of a series of targeted strategies. For instance, in the flight area, measures such as regular lawn trimming to control its height, preventing it from becoming a food source or shelter for birds, and promptly removing standing water to reduce breeding grounds for water-dependent insects and birds, etc., can be adopted. In the terminal area and working area, appropriate waste management and vegetation control can be carried out to minimize the attraction to wild animals.

For the environmental management around the airport, it is of vital importance to enhance the coordination among various institutions and departments. The airport should regularly inform the surrounding residents about the flight safety risks caused by the release of pigeons, and cooperate with the local government to formulate relevant regulations for the release of pigeons. Because pigeons are an important dangerous bird species at Chinese airports. After establishing a coordination mechanism, the airport can collaborate with local administrative departments to carry out scientific land use planning around the airport. This includes controlling or reducing the number of facilities such as open garbage dumps, livestock farms, crop drying sites, and pigeon breeding areas around the airport that are prone to attract birds and other animals.

2.3 Risk Management

2.3.1 Risk management is another vitally important aspect. Airports identify potential bird strike and animal intrusion risks from multiple perspectives, such as bird activities and environmental changes. After identifying these risks, airports conduct safety risk assessments to determine the severity and likelihood of occurrence. Based on the assessment results, an airport bird strike and animal intrusion prevention risk control list is developed, and corresponding risk control measures are implemented. These measures include strengthening personnel training, improving equipment and facilities, and formulating emergency response plans. For example, when a large number of birds are detected in the airport area, the airport will activate the early warning mechanism and take measures such as increasing inspection frequencies and driving away the birds to ensure flight safety.

2.4 Information Management

2.4.1 Effective information management plays a significant role in preventing bird strike incidents. Airports collect various types of information related to birds and other animals, such as their species, quantity, activity patterns, and migration habits. This information is used to analyze bird strike risks and develop prevention strategies. For example, airports use methods such as manual inspections, equipment monitoring, and data sharing to collect information. Subsequently, the data is analyzed and reported regularly to provide a basis for decision-making in bird strike prevention efforts.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the information contained in this paper. The meeting participants are encouraged to review the comprehensive analysis presented in this document. This includes understanding the current status of bird strike and animal intrusion prevention efforts at Chinese airports, as detailed in the earlier sections. By noting this information, stakeholders can gain a common understanding of the industry-wide initiatives, best practices, and areas of focus in the prevention of bird strikes and animal intrusions. This will serve as a foundation for further discussions and decision-making processes related to enhancing aviation safety in this regard.

- b) Discuss any relevant matters as appropriate, such as how to further improve the effectiveness of bird strike prevention measures, how to strengthen international cooperation in wildlife hazard management, and how to adapt to new challenges in the development of the aviation industry.

—END—