



# **Comprehensive Airport Wildlife Hazard Management Training Course**

**Ref: #AIR9136**



## **Course Introduction / Overview:**

The escalating risk of bird and wildlife strikes poses a significant threat to aviation safety, operational efficiency, and financial stability worldwide. This course provides a comprehensive framework for understanding and mitigating these complex challenges. Moving beyond simple reactive measures, this program delves into the ecological principles that drive wildlife behavior in and around aerodromes. As highlighted by the extensive research of experts like Dr. Richard A. Dolbeer, whose work in publications such as "Wildlife Strikes to Civil Aircraft in the United States" has shaped modern mitigation strategies, a proactive and data-driven approach is paramount. This training, offered by BIG BEN Training Center, is meticulously designed to equip aviation professionals with the skills to develop, implement, and manage a robust Wildlife Hazard Management Plan (WHMP). Participants will explore everything from species identification and habitat modification to the latest in dispersal technologies and regulatory compliance, ensuring their operations meet the highest international safety standards set by ICAO and national bodies like the FAA. This course is an essential investment in safeguarding aircraft, passengers, and crew through expert-led instruction and practical, real-world applications.

## **Target Audience / This training course is suitable for:**



- Airport Operations Managers.
- Aviation Safety Officers and Managers.
- Wildlife Biologists and Control Personnel.
- Airside Operations Supervisors.
- Air Traffic Controllers.
- Airline Safety and Operations Staff.
- Civil Aviation Authority Inspectors.
- Airport Environmental Specialists.
- Ground Handling Managers.
- Pilots and Flight Operations Personnel.
- Military Airfield Managers.

### **Target Sectors and Industries:**

- Commercial Aviation and Airlines.
- Airport Authorities and Operators.
- Military Aviation and Air Force Bases.
- Cargo and Logistics Airlines.
- Civil Aviation Regulatory Bodies.
- Governmental Agencies responsible for aviation and wildlife.
- Aviation Consulting Firms.
- Flight Training Organizations.

### **Target Organizations Departments:**



- Airside Operations and Management.
- Safety and Compliance Departments.
- Environmental Management and Sustainability.
- Airport Planning and Development.
- Ground Operations and Services.
- Flight Operations.
- Corporate Risk Management.
- Security and Emergency Response.

## **Course Offerings:**

By the end of this course, the participants will have able to:

- Develop and implement a comprehensive Wildlife Hazard Management Plan (WHMP) compliant with ICAO and national standards.
- Conduct thorough wildlife hazard assessments and risk analyses for aerodrome environments.
- Identify common and high-risk avian and mammalian species and understand their behavior.
- Evaluate and apply a range of non-lethal wildlife dispersal and exclusion techniques effectively.
- Determine the appropriate and ethical use of lethal control methods as a last resort.
- Analyze wildlife strike data to identify trends, hotspots, and emerging risks.
- Integrate wildlife hazard management into the airport's overall Safety Management System (SMS).
- Manage airport habitats to make them less attractive to hazardous wildlife.
- Ensure accurate reporting and documentation of wildlife strikes and control activities.
- Lead and train airport staff on wildlife hazard awareness and their roles in the WHMP.

## **Course Methodology:**



The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and highly practical, ensuring participants can directly apply their learning to their operational environments. We move beyond traditional lectures to foster a dynamic learning atmosphere through a blend of expert-led presentations, in-depth case study analyses of significant wildlife strike incidents, and collaborative group workshops. Participants will engage in practical exercises, such as developing a risk assessment matrix for a model airport and designing a habitat modification plan. Interactive sessions will encourage the sharing of experiences and challenges, creating a rich peer-to-peer learning network. The course incorporates video analysis of various wildlife dispersal techniques and technologies, allowing for critical evaluation of their effectiveness. Our approach emphasizes a problem-solving mindset, where participants work through realistic scenarios to build their decision-making skills. Continuous feedback from the instructor and active participation are core components, ensuring a deep and lasting understanding of wildlife hazard management principles.

## **Course Agenda (Course Units):**

### **Unit One: Foundations of Airport Wildlife Hazard Management**

- Introduction to Wildlife Hazards in Aviation.
- The History and Impact of Bird and Wildlife Strikes.
- Ecological Principles of Wildlife Behavior at Airports.
- Key International and National Regulatory Frameworks (ICAO, FAA).
- Legal Liabilities and Responsibilities of Airport Operators.
- The Role of the Airport Wildlife Biologist and Control Team.
- Integrating Wildlife Management into the Airport Safety Management System (SMS).



## **Unit Two: Hazard Identification and Risk Assessment**

- Common Hazardous Avian Species Identification and Behavior.
- Common Hazardous Mammalian Species Identification and Behavior.
- Conducting a Formal Wildlife Hazard Assessment (WHA).
- Techniques for Surveying and Monitoring Wildlife Populations.
- Developing and Using a Wildlife Risk Assessment Matrix.
- Analyzing Strike Data and Reporting Standards.
- Understanding Seasonal and Diurnal Patterns of Wildlife Activity.

## **Unit Three: Passive and Non-Lethal Management Strategies**

- Habitat Management and Modification Techniques.
- Grass Management Policies to Deter Hazardous Species.
- Water Management, Drainage, and Wetland Mitigation.
- Fencing, Netting, and Other Physical Exclusion Methods.
- Application of Bio-Acoustic Dispersal Systems.
- Use of Pyrotechnics and Other Visual Deterrents.
- Emerging Technologies like Avian Radar and Drones.

## **Unit Four: Active and Lethal Management Strategies**

- Principles of an Integrated Wildlife Control Program.
- Falconry as a Bird Dispersal Tool.
- Trapping and Relocation Programs for Mammals and Birds.
- Ethical Considerations and Guidelines for Lethal Control.
- Firearms Safety, Training, and Use in an Airport Environment.
- Procedures for Depredation Permits and Regulatory Approval.
- Responding to Wildlife Incursions on Runways and Taxiways.

## **Unit Five: Developing and Implementing the WHMP**



- Essential Components of a Wildlife Hazard Management Plan (WHMP).
- Setting Objectives and Performance Indicators for the WHMP.
- Training Requirements for Airport Personnel.
- Communication Protocols with Air Traffic Control and Pilots.
- Post-Strike Investigation and Reporting Procedures.
- Conducting Audits and Reviews of the WHMP for Continuous Improvement.
- Future Trends and Innovations in Airport Wildlife Management.

## **FAQ:**

### **Qualifications required for registering to this course?**

There are no requirements.

### **How long is each daily session, and what is the total number of training hours for the course?**

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

### **Something to think about:**

Considering the increasing overlap between urban expansion and natural habitats, how can airports proactively integrate ecological forecasting into their long-term wildlife hazard management strategies?

### **What unique qualities does this course offer compared to other courses?**



This course distinguishes itself by adopting a holistic, ecosystem-based approach to wildlife hazard management, moving beyond a narrow focus on mere dispersal tactics. While other programs may concentrate on the operational "how-to" of scaring wildlife, our curriculum is built on a deep understanding of the ecological "why"—why certain species are attracted to aerodromes and how to fundamentally alter the environment to reduce its appeal. We emphasize proactive, data-driven strategies, teaching participants not just to react to incidents but to analyze trends, forecast risks, and implement long-term habitat modifications that sustainably mitigate hazards. The course integrates wildlife management directly into the broader framework of an airport's Safety Management System (SMS), ensuring it is treated as a critical safety function rather than an isolated operational task. By blending rigorous scientific principles with practical, regulatory-compliant applications, we empower professionals to create safer skies through intelligent, informed, and forward-thinking environmental management, a depth of strategic insight not commonly found in standard training offerings.