Training Course on Wildlife Hazard Management at Airports

Professional Development Training Course Outline

Category	Aviation and Airport Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Wildlife strikes pose a significant and persistent threat to **aviation safety** globally, leading to substantial economic losses, aircraft damage, and, in severe cases, human casualties. Training Course on Wildlife Hazard Management at Airports is meticulously designed to equip airport personnel with the essential knowledge and practical skills required to develop, implement, and maintain robust **Wildlife Hazard Management Plans (WHMPs)**. Through a blend of **industry best practices**, **regulatory compliance (ICAO)**, and **cutting-edge technologies**, participants will learn how to proactively mitigate risks, protect aircraft, and ensure the continuous, safe operation of airport environments.

Effective **wildlife hazard mitigation** demands a comprehensive and proactive approach, integrating ecological understanding with operational realities. This program delves into the intricacies of **wildlife behavior**, **habitat management**, **deterrent strategies**, and **advanced detection systems** to empower airport operators and related stakeholders. By fostering a culture of **proactive risk assessment** and **data-driven decision-making**, this course aims to significantly reduce the frequency and severity of **wildlife-aircraft interactions**, safeguarding both airside operations and the broader ecosystem.

Programme Curriculum

Training Course on Wildlife Hazard Management at Airports

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Course Objectives

1. Understand and apply the latest ICAO Annex 14 requirements and recommended practices for **aerodrome wildlife hazard management**.
2. Conduct comprehensive **wildlife hazard risk assessments** using modern methodologies and **data analytics** to identify high-risk species and areas.
3. Implement effective **habitat modification** techniques and **ecological solutions** to reduce wildlife attractants on and around airport grounds.
4. Develop and deploy a range of **active and passive wildlife deterrents**, including innovative **acoustic, visual, and pyrotechnic methods**.
5. Explore and integrate **AI-powered wildlife detection systems**, **bird radars**, and **drone technology** for real-time monitoring and threat assessment.
6. Plan and execute safe and efficient **wildlife dispersal and removal operations**, adhering to ethical and regulatory guidelines.
7. Enhance collaboration with air traffic control and flight crews for timely **wildlife strike reporting** and effective communication.
8. Conduct thorough **wildlife strike investigations**, data collection, and root cause analysis for continuous improvement.
9. Establish and practice robust **emergency response procedures** for significant wildlife incidents.
10. Foster strong partnerships with internal and external stakeholders, including environmental agencies, local communities, and regulatory bodies, for integrated **wildlife management**.
11. Ensure ongoing compliance with national and international aviation regulations and prepare for **regulatory audits** in wildlife management.
12. Stay updated on emerging **wildlife hazard management technologies** and their practical application in airport environments.
13. Develop and refine adaptable **Wildlife Hazard Management Programs** that account for climate change impacts and evolving wildlife patterns.

Organizational Benefits

- Significantly reduce the risk of **wildlife strikes**, preventing potential accidents, fatalities, and injuries.

- Minimize expensive aircraft damage, operational disruptions, and insurance claims associated with **wildlife incidents**.
- Ensure adherence to **ICAO** and national aviation authority regulations, avoiding penalties and maintaining certification.
- Reduce runway closures and flight delays caused by wildlife activity, optimizing **airport operations**.
- Enhance the airport's public image and trust by demonstrating a commitment to **safety excellence** and **environmental stewardship**.
- Equip staff with the tools and knowledge for **informed decision-making** based on accurate wildlife data.
- Build a highly competent and specialized team capable of implementing and managing effective **WHMPs**.
- Promote **sustainable practices** and minimize harm to wildlife while ensuring aviation safety.

Target Audience

1. Airport Operations Managers & Staff.
2. Airport Safety Managers & Officers
3. Wildlife Control Personnel & Coordinators.
4. Air Traffic Control (ATC) Personnel
5. Aerodrome Certification & Regulatory Inspectors
6. Airport Planning & Development Staff
7. Airport Maintenance & Engineering Teams.
8. Airline Pilots & Ground Crews

Course Outline

Module 1: Introduction to Wildlife Hazard Management & Regulatory Framework

- Understanding the Global Impact of Wildlife Strikes on Aviation Safety.
- Review of ICAO Annex 14, FAA, and EASA Regulations on Wildlife Hazard Management.
- The Role of the Airport Safety Management System (SMS) in WHM.
- Historical Overview of Significant Wildlife Strike Incidents and Lessons Learned.
- Introduction to Key Terminology and Concepts in Airport Wildlife Control.
- **Case Study:** The US Airways Flight 1549 "Miracle on the Hudson" event – analyzing the factors leading to the bird strike and the subsequent emergency landing, highlighting the importance of resilient WHMPs.

Module 2: Wildlife Ecology & Behavior at Airports

- Identification of Common Hazardous Wildlife Species (Birds, Mammals, Reptiles).
- Understanding Wildlife Attractants: Food, Water, Shelter, and Roosting Sites.
- Seasonal and Daily Activity Patterns of Airport Wildlife.
- Principles of Animal Behavior Relevant to Aviation Safety.
- The Concept of "Learned Aversion" and Wildlife Habituation.
- **Case Study:** Analysis of gull behavior at coastal airports and strategies to mitigate their presence, including waste management and habitat alteration around surrounding landfills.

Module 3: Wildlife Hazard Assessment & Risk Analysis

- Methodologies for Conducting Wildlife Surveys and Data Collection.
- Identifying High-Risk Areas (Hotspots) on and around the Aerodrome.
- Quantifying Wildlife Hazard Risk: Likelihood vs. Severity of Strikes.

- Developing and Implementing a Wildlife Hazard Management Plan (WHMP).
- Utilizing GIS and Mapping Tools for Wildlife Activity Tracking.
- **Case Study:** A medium-sized regional airport experiencing increased deer strikes – developing a risk assessment matrix and prioritizing mitigation actions.

Module 4: Habitat Management & Exclusion Techniques

- Vegetation Management: Grass Height, Landscaping, and Crop Practices.
- Water Management: Drainage, Ponds, and Wetland Mitigation.
- Structural Modifications: Fencing, Netting, and Anti-Perching Devices.
- Waste Management and Food Source Removal Programs.
- Collaboration with Off-Airport Landowners for Habitat Modification.
- **Case Study:** Dublin Airport's challenges with corvid populations and their successful implementation of habitat modification and exclusionary tactics.

Module 5: Active Wildlife Dispersal & Control

- Pyrotechnics and Auditory Deterrents: Types, Usage, and Safety Protocols.
- Visual Deterrents: Lasers, Effigies, and Radio-Controlled Aircraft.
- Live Trapping, Relocation, and Ethical Considerations.
- Aversive Conditioning and Chemical Repellents (where permissible).
- Firearms and Lethal Control (as a last resort, with strict protocols).
- **Case Study:** San Francisco International Airport's innovative use of trained falcons for bird dispersal and its effectiveness in specific scenarios.

Module 6: Advanced Wildlife Detection & Monitoring Technologies

- Introduction to Bird Radar Systems for Real-Time Monitoring.
- Thermal Imaging and Optical Cameras for Night-Time Detection.
- Acoustic Detection Systems for Species Identification.
- Drone Applications in Wildlife Surveying and Dispersal.
- Data Integration and Automated Alert Systems for WHM.
- **Case Study:** A major international airport's deployment of a networked bird radar system, demonstrating improved situational awareness and proactive flight advisories.

Module 7: Wildlife Strike Reporting, Investigation & Training

- Standardized Wildlife Strike Reporting Procedures (FAA, ICAO).
- Conducting Post-Strike Investigations: Data Collection and Analysis.
- Identifying Aircraft Damage and Impact Assessment.
- Feedback Loops for Continuous Improvement of the WHMP.
- Developing and Delivering Effective Wildlife Hazard Awareness Training for all Airport Personnel.
- **Case Study:** Analyzing a series of unreported minor bird strikes at an airport and developing a comprehensive training program to improve reporting accuracy and data quality.

Module 8: Integrated WHM Program Management & Future Trends

- Developing a Comprehensive Airport Wildlife Hazard Management Plan.
- Roles, Responsibilities, and Team Coordination within the WHMP.
- Budgeting and Resource Allocation for Wildlife Management.
- Emerging Technologies: AI in Predictive Analytics, Robotics, and Bioacoustics.
- Future Challenges: Climate Change, Urbanization, and Migratory Bird Patterns.

- **Case Study:** Vancouver International Airport's integrated WHMP, showcasing successful inter-agency collaboration, technological adoption, and adaptation to environmental changes.

Training Methodology

This course employs a dynamic and interactive training methodology to ensure maximum engagement and knowledge retention. Key components include:

- **Instructor-Led Presentations:** Expert-led sessions with engaging visuals and real-world examples.
- **Interactive Discussions:** Fostering knowledge sharing and problem-solving among participants.
- **Case Studies & Workshops:** Practical application of concepts through realistic scenarios and group exercises.
- **Practical Demonstrations (where applicable):** Hands-on experience with wildlife control equipment and technologies.
- **Video Analysis:** Review of actual wildlife strike incidents and mitigation efforts.
- **Regulatory Compliance Exercises:** Activities focused on understanding and applying ICAO standards.
- **Q&A Sessions:** Dedicated time for addressing participant queries and clarifying concepts.
- **Field Visits (optional):** Opportunities to observe actual wildlife management practices at a local airport (subject to availability and airport permission).
- **Assessment:** Quizzes, practical exercises, and a final assessment to evaluate comprehension and skill acquisition.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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