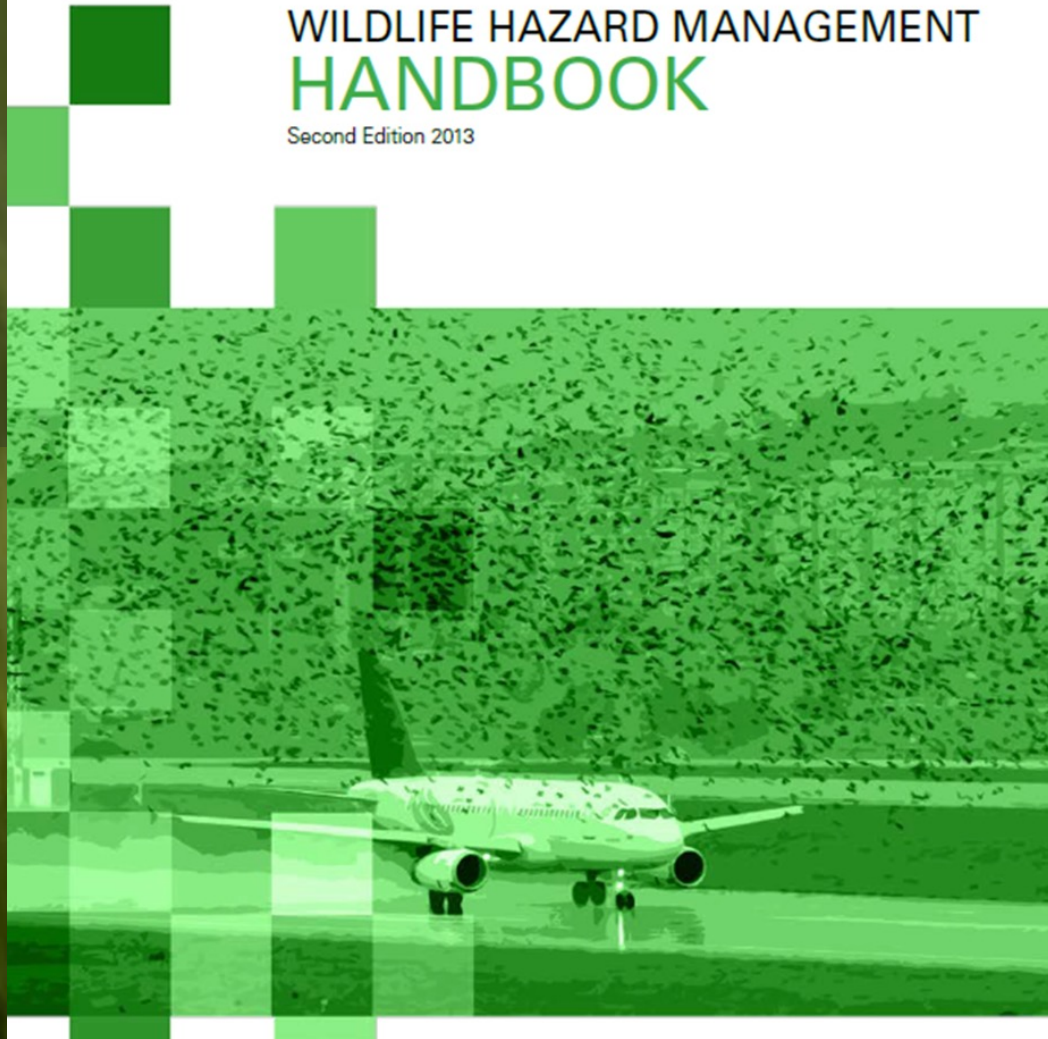




AIRPORTS COUNCIL
INTERNATIONAL

WILDLIFE HAZARD MANAGEMENT HANDBOOK

Second Edition 2013



UPDATE

ABOUT THE UPDATE

ACI - Airports Council International
Updating the Wildlife Hazard Management Handbook
Second Edition 2013



WILDLIFE HAZARD MANAGEMENT
HANDBOOK
Second Edition 2013



GENERAL TIMELINE

FEB – '20

Formal request to update 2nd edition

COVID-19

Continuation of the process

SEP – '22

Publication 3rd edition

STRATEGY

of the update: **milestones**

FEB 2020	STSC meetings Dubai gathering volunteers
JULY 2020	Kick-off working group sessions
MARCH 2022	Delivery final proposal
MARCH 2022	Presentation STSC
APRIL 2022	Consultation ACI World members
MAY – AUG 2022	<ul style="list-style-type: none">▪ Discussion feedback consultation STSC meetings Istanbul▪ Workshop working group to discuss and implement feedback of consultation▪ Formatting by ACI

2022

SEP 1ST, 2022

Publication by ACI



PITCH DECK

PRODUCT OVERVIEW



UNIQUE

- Online ~~review~~ rewrite of the handbook
- Available in 3 languages!



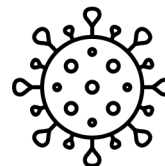
NEW

- Practical approach
- Case studies
- Sponsor



PROCESS

- Participants of all continents
- Google Docs
- Online – virtual review

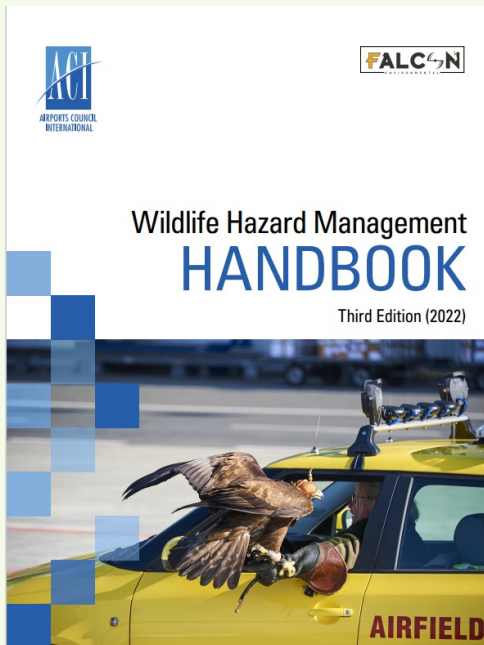


THE END

Unique review resulting in a complete, professional updated handbook



INDEX REVIEW



2022

INDEX 2013

1. What is wildlife management?
2. Roles and responsibilities
3. Risk assessment of wildlife hazard & wildlife hazard management plan
4. Operational practices
5. Training
6. Evaluation of the WHMP

Annexes

- A. Habitat Management
- B. Wildlife Intervention
- C. Wildlife Strike Statistics
- D. Wildlife Strike Report Form
- E. References and Sources
- F. Wildlife Protected Species Register

INDEX 2022

1. Introduction
2. Roles & Responsibilities
3. Wildlife Hazard Management Programme Components
4. Wildlife Risk Assessment
5. Habitat Management – on aerodrome
6. Habitat Management – off aerodrome
7. Active Tools
8. Reporting and Data Management
9. Training
10. Performance of the Wildlife Hazard Management Programme

Annexes

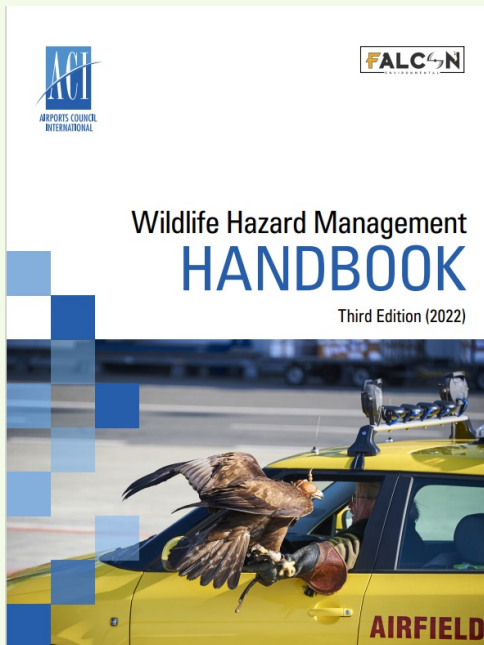
- A. Wildlife Strike Reporting Form
- B. Abundance Based Wildlife Risk Analysis
- C. Wildlife Hazard Management Training

6

WHAT'S NEW:
MORE ABOUT
TRAINING!



INDEX REVIEW



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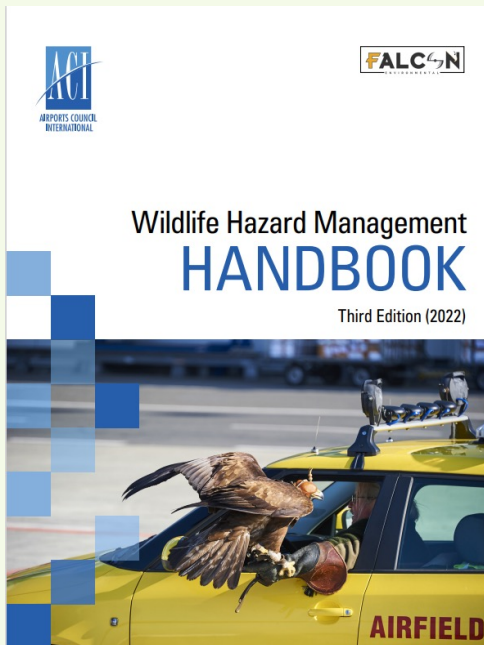
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9. TRAINING



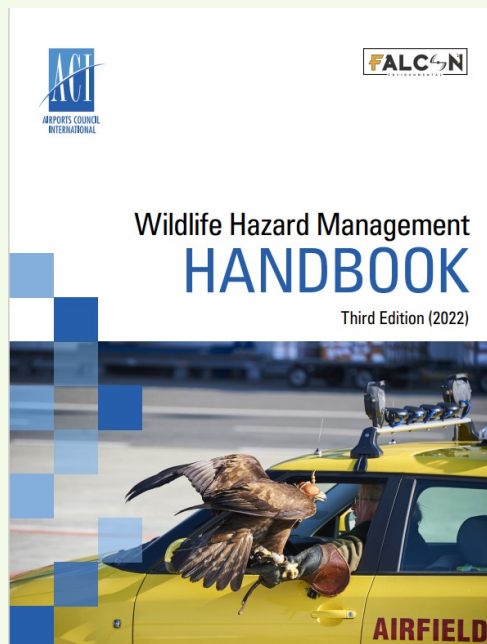
OBJECTIVE OF THE TRAINING PROGRAM

The key objective is to provide airport staff and stakeholders with the knowledge, skills, and abilities to implement a successful, compliant wildlife hazard management program. Additionally, the training provides staff and stakeholders with the ability to provide input and discuss challenges and conflicts faced when implementing the program.

OUTLINE OF THE TRAINING PROGRAM

This section outlines training elements to use in conducting wildlife hazard management training. Each airport should adopt a training program to meet the specific needs of their WHMP, with a focus on high-risk or high-hazard wildlife species capable of causing damage when struck, priority wildlife hazard attractants, regulatory requirements for implementing the WHMP, and safety considerations.

ANNEX 3 TRAINING PROGRAM CHECKLIST



Annex 3 Wildlife Hazard Management Training

WHO SHOULD CONDUCT THE TRAINING?

A qualified, competent wildlife hazard management professional should conduct wildlife hazard management training. Consider the following when selecting a trainer (individual or group):

- Aviation-specific wildlife hazard management experience (wildlife assessments, surveys, control, or other experience).
- Wildlife or environmental education and certifications.
- Specific qualifications are needed at your airport, such as firearms safety instruction, trapping instruments etc.
- The trainer must have a thorough knowledge of all relevant regulatory frameworks applicable to wildlife protection and all environment and forest regulations pertaining to the state/country of the airport.

WHO SHOULD ATTEND TRAINING?

Each airport should list the mandatory and voluntary training attendee requirements in the Wildlife Hazard Management Program (WHMP). Typically, this includes:

Mandatory

- Airport Manager or Executive (or designee)
- Wildlife Coordinator Wildlife Hazard Management Team
- Airport Engineers
- Airport Planners
- Airport Environmental Staff
- Airport Airfield/Maintenance Staff
- Accountable staff of the contractor agencies handling large projects within the airport

Voluntary or Invited

- Air Traffic Control
- Airlines, pilots, airport users (Representative)
- Aviation stakeholders (Representatives from tenant groups, organizations, and local or state compliance regulators)
- Wildlife Control Contractors (falconry, trapping, deterrence, studies)
- Civil Aviation Authority (Representative)

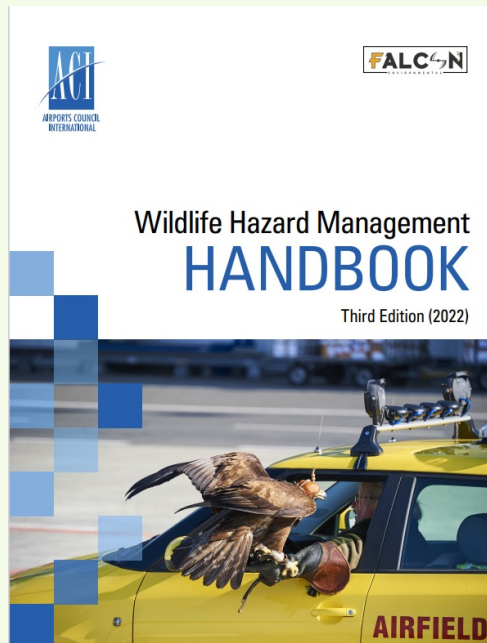
HOW OFTEN SHOULD TRAINING BE CONDUCTED?

Training is required to be conducted every two years. However, a program with significant challenges and ongoing wildlife hazard management issues or wildlife strikes should consider conducting training annually as the best management strategy. Also, in case of any significant seasonal changes are directly correlated to the anticipatable increase in wildlife strikes, the training frequency can be increased for effective planning before the onset of the seasonal changes.

WHAT IS THE DURATION OF A TRAINING COURSE?

Training duration will vary based on the program's needs. Training durations typically range from 4-8 hours, but additional time may be needed for field work, specialized trapping, or wildlife control training. Similarly, the training duration shall vary between those participants attending mandatorily and those attending voluntarily.

ANNEX 3 TRAINING PROGRAM CHECKLIST



Wildlife Hazard Attractants:

- Map and location of wildlife hazard attractants (on-airport, off-airport, and regional)
- Pictures of the attractant
- Description of the type of attractant (food, water, shelter, roosting, perch, loafing or a combination of these types)
- Types of wildlife attracted (high hazard species and/or prey species for high hazard species)
- Current and planned management strategies for each attractant (identify responsible personnel, actions, budgets, and timeline)
- Environmental considerations or other regulatory requirements or concerns

Habitat Management and Wildlife Control Strategies:

- Habitat modification
- Exclusion
- Deterrents (sound, visual, taste)
- Trapping (lethal control or relocation)
- Depredation (lethal control)

Wildlife Identification:

- Identification factors for common wildlife species on or near the airport that may pose a strike risk to aviation or prey species that may attract high-risk species
- Particular focus - high-risk species include large mammals, medium mammals, large flocking birds, large solitary birds, medium and small flocking birds, and any prey species that attract these higher hazard species
- Available resources - guides, websites, and other available resources to aid in the identification of local wildlife
- Overview/Recap of wildlife and habitat regulations and environmental considerations relevant to the airport's WHMP
- Ensure all staff conducting harassment, depredation, or trapping activities thoroughly understand wildlife regulations and permitting requirements.

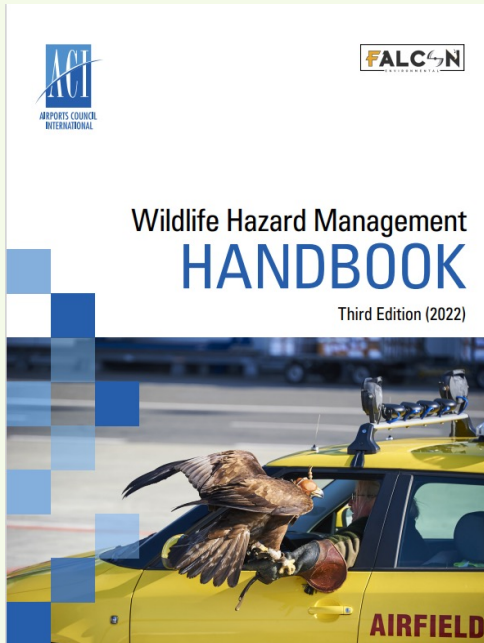
Inspections, Documentation, and Reporting:

- Airfield Inspections - general inspections that include wildlife
- Wildlife observations - specific surveys for wildlife
- Wildlife control activities - log of actions (harassment, depredation, trapping)
- Wildlife strike reporting
- Training records - kept on file by the Wildlife Coordinator
- Periodical trend analysis records of strike versus control measures

Effective Communication and Response to Wildlife Hazards:

- Reporting a wildlife hazard issue/concern
 - How stakeholders report an issue (ATC, pilots, tenants, staff)
- Response to wildlife hazard issues on the airport
 - Who is responsible for responding to the airfield 24-hours a day
- Coordination with air traffic control during wildlife control activities.
 - Before initiating actions and when actions are complete
- Stakeholder Involvement - Wildlife Hazard Working Group, Wildlife Committee
- Public and Stakeholder outreach and education

ANNEX 3 TRAINING PROGRAM CHECKLIST



2022

Additional Training Recommendations and Considerations:

- Airside training - safe operation of vehicles and equipment airside
- Basic firefighting training and emergency first-aid training

Environmental Training:

- Understanding of environmental regulations, permits, approvals, or requirements that are part of or impact the WHMP
- Identification of regulated wildlife or habitats and allowable/prohibited control or modification techniques
- Overview and discussion of how environmental regulations or policies may conflict with wildlife hazard management objectives and how these issues may be resolved
- Understanding environmental sustainability as applied to your airport

Wildlife Management Control Measures:

- Wildlife harassment techniques (audio and visual harassment, predator-based harassment, drones, pyrotechnics, or other scare devices)
- Wildlife removal techniques (lethal control, trap and relocation, lethal traps, predator-based depredation)
- Habitat modification (vegetation management on non-grass airfield areas, water resource management, landscaping, airfield turf management)
- Exclusion (netting, bird spikes, wire grids, other exclusionary devices, or structures)

KEY ELEMENTS

- Airport operators should implement a mandatory training program to ensure the safe and effective implementation of their WHMP.
- Airport staff involved in implementing the program must have a basic understanding of safety concerns and standards, wildlife identification, wildlife hazard attractants, standing operating procedures to address wildlife issues, regulations, and reporting procedures.
- The training program should be outlined in the WHMP and conducted by a qualified, competent wildlife hazard management professional.
- Training should occur annually or, at a minimum, every two years. This section provides information to augment Chapter 7 of ICAO Doc 9137 – *Airport Services Manual*, Part 3 - Wildlife Hazard Management (2020) and any other State guidance related to wildlife hazard management.

WHAT'S NEW: CASE STUDIES



CHAPTER 3. WILDLIFE HAZARD MANAGEMENT PROGRAMME COMPONENTS

- ✓ Ethical responsibility

CHAPTER 4. WILDLIFE RISK ASSESSMENT

- ✓ Risk Assessment (2)

CHAPTER 5. HABITAT MANAGEMENT – ON AERODROME

- ✓ Aloe Vera plantation

CHAPTER 6. HABITAT MANAGEMENT – OFF AERODROME

- ✓ sustainable farming
- ✓ Organic waste

CHAPTER 7. ACTIVE TOOLS

- ✓ Proven Effectiveness of Falconry as a Wildlife Management Tool on Landfill Sites

CHAPTER 8. REPORTING AND DATA MANAGEMENT

- ✓ Software for Record-keeping

CHAPTER 10. PERFORMANCE OF THE WILDLIFE HAZARD MANAGEMENT PROGRAMME

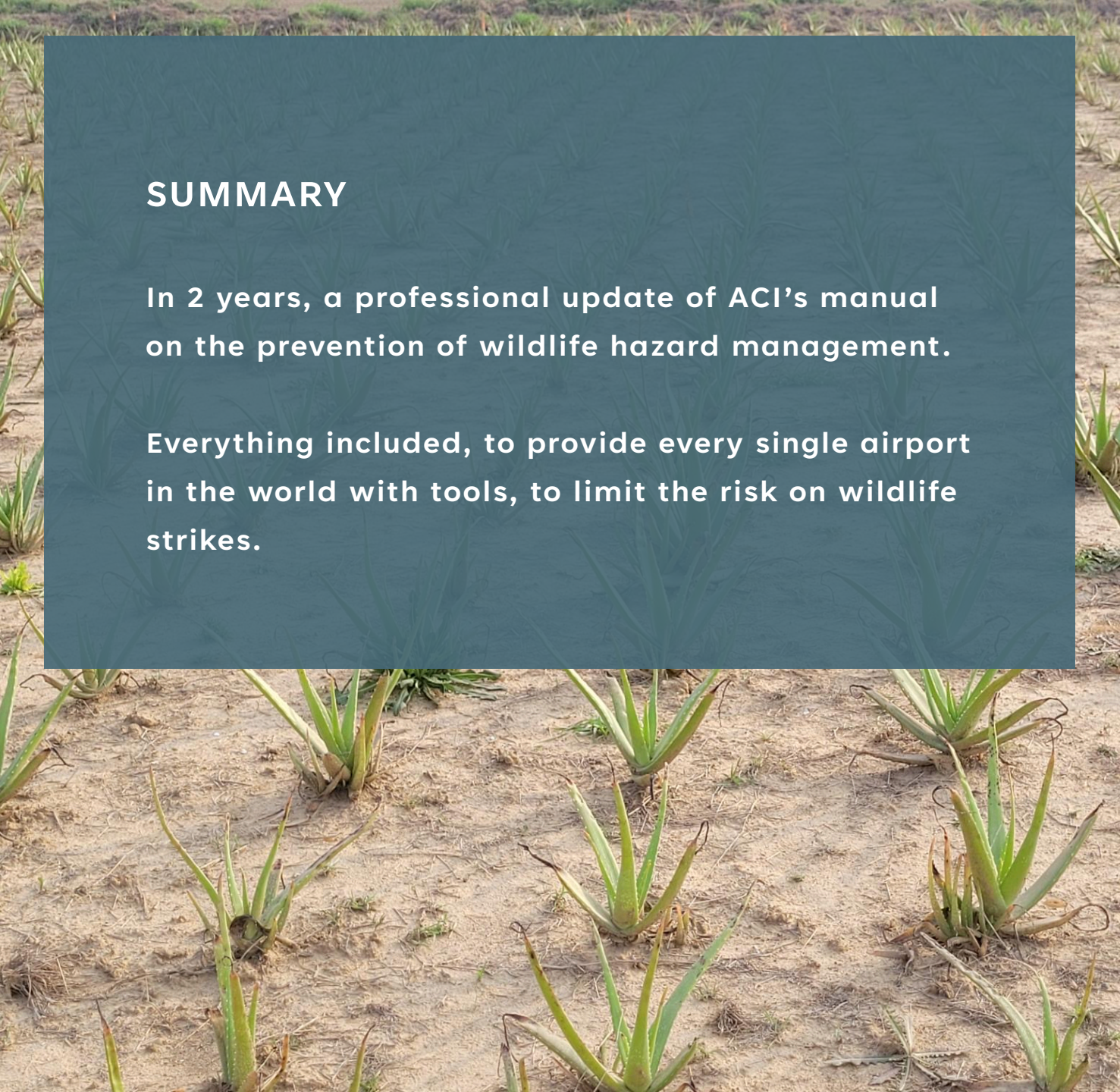
- ✓ PDCA-APPROACH

“TO DELIVER A PRACTICAL, REALISTIC HANDBOOK FOR EVERY SINGLE AIRPORT IN THE WORLD”

SUMMARY

In 2 years, a professional update of ACI's manual on the prevention of wildlife hazard management.

Everything included, to provide every single airport in the world with tools, to limit the risk on wildlife strikes.



QUESTIONS?

THANK YOU

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The Netherlands

