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Wildlife Management Training – What Are You Doing?

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Abstract

With the variety of wildlife tools in use by airports, there comes a need for training. The Minneapolis-St. Paul International Airport (MSP) has developed an extensive training program for those staff members involved in wildlife management activities. This training program provides the necessary foundation for an effective wildlife management program and addresses hands-on as well as legal liability issues.

INTRODUCTION

Throughout the years, MSP's Wildlife Management Training Program has changed to meet the demands and needs of the times. This Program has continuously evolved over the last 15 years into what it is today, an extensive, ever changing and progressive program, which provides the instruction, tools and skills necessary to implement a comprehensive Wildlife Hazards Management Program for a world class airport.

To accomplish this, we had to establish and follow a simple but comprehensive process, which allowed us to create our training program. Through trial and error, we developed a methodology that provided us with the necessary flexibility and guidance to meet our needs and requirements.

METHODOLOGY

At MSP, we applied a simple five phased approach to the creation of our Program. The five phases consisted of:

1. Define
2. Plan
3. Develop
4. Implement
5. Evaluate

Each of the five phases were further broken down into steps to better define what we were trying to accomplish.

1. DEFINE

Before we could even begin to develop our program, we had to answer two simple questions. First, what is training and secondly, why train? Answering these two questions would help provide us with the road map of where our program would need to go.

What is Training?

For the most part, all of us have been involved in training in one way or another. Some of us have found ourselves sitting in a group, opposite of an instructor, while others have found themselves standing in front of that same group, prepared to instruct. Either way, we have all been involved in training.

But what actually is training? Everyone has their own definition, their own perspective, and their own sense of what training is. Some people believe that training is simply the act of teaching others how to do something. While others believe that training is the modification of behavior to perform certain tasks. There are as many definitions of training as there are subjects to train. This

being said, before we could even start to talk about a Wildlife Management Training Program and what's included in it, we needed to first agree on the definition of training.

According to Webster's, training is defined as "to instruct or condition to some manner of behavior or performance; to make proficient through special instruction and drill." This definition is a good start, but it lacks essence. It paints a picture of rote memorization, of behavior modification. It doesn't capture the intent of what training really is. For our purposes, at MSP we have defined training as, becoming proficient through instruction and application, which focuses on learning and understanding. The individual must not only be able to do the task, but they must understand what they are doing and why.

Why Train?

So why train our people? Before we could create a training program, we needed to have a clear understanding of what we were trying to accomplish. We needed to identify what the drivers of our Wildlife Management Training Program were? Over time, we came up with the following drivers:

- To reduce liability.
- To increase credibility of our Wildlife Management Program.
- To meet local, state or federal requirements.
- To protect the safety, health and welfare of our staff and the travelling public.
- To establish minimum, uniform performance and knowledge standards.
- To provide the necessary instruction and skills necessary for our people to do their jobs.
- To clearly identify those individuals who are authorized to implement the program.
- To maintain employee skills and knowledge.
- Because we had to.

After a careful and thorough review of what we wanted to accomplish, it was decided that, these drivers should also be the goals of the MSP Wildlife Management Training Program.

2. PLAN

The Planning Phase consisted of two steps:
1. Inventory
2. Future Visualization

In the Inventory step, we attempted to identify everything that we were currently doing. Our goal was to simply answer the question of, "what are we doing now?" We created the following categories and questions, which allowed us to better understand what we were doing.

❖ **Wildlife Hazards**
  ◆ What species of wildlife pose a threat to aviation at MSP

❖ **Personnel**
  ◆ Who is involved in wildlife management activities at MSP?

❖ **Methods**
  ◆ What are we doing to implement our Wildlife Management Program?

❖ **Documentation**
  ◆ What documentation do we have in place that supports our Wildlife Management Program?

❖ **Tools**
  ◆ What equipment are we using to implement our Wildlife Management Program?

❖ **Training**
  ◆ What are we training our people on?

❖ **Resources**
  ◆ Are there any additional resources that are not listed above, that support our Wildlife Management Program?

Once the inventory was complete, we had a fairly good idea of everything that was involved in our Wildlife Management Program. This allowed us to see the "Big Picture" and showed us where our strengths and weaknesses were.   It became obvious to us that even though we felt that we had a fairly comprehensive program, there were still areas that could use improvement. The inventory also showed us where we had some inefficiency in our processes and forced us to rethink how we did business.

The next step was to visualize the future and to answer the question, "where do we want to be"? We followed the same process as we did earlier for the inventory and categorized the information in the same format. This was our opportunity to rework our business plan and improve on those processes, which needed it.

❖ **Wildlife Hazards**
  ◆ What species of wildlife pose a threat to aviation at MSP?
    ▪ Canada geese
    ▪ Starlings
    ▪ Red-tailed Hawks
    ▪ American Kestrels
    ▪ Mallard Ducks
    ▪ Miscellaneous waterfowl
    ▪ Bald Eagles
    ▪ Crows
    ▪ Swallows
    ▪ Morning Doves
    ▪ Egrets
    ▪ Herons
    ▪ Cormorants
    ▪ Nighthawks
    ▪ Snow buntings
    ▪ Jackrabbits
    ▪ White-tailed Deer
    ▪ Red fox
    ▪ Dogs
    ▪ Coyotes

  After thorough consideration and review, it was decided that the best way to answer this question would be conduct a yearlong Wildlife Hazard Assessment (WHA). USDA Wildlife Services was contracted to provide the WHA, which clearly identified those wildlife species, which posed the greatest risk.

❖ **Personnel**
  ◆ Who is involved in wildlife management activities at MSP?
    ▪ Field Maintenance Department
    ▪ Airside Operations Department
    ▪ Police Department
    ▪ Contractors – University of Minnesota

- Contractors – USDA Wildlife Services
- FAA Air Traffic Control Tower
- Tenants
- Fort Snelling National Cemetery
- MSP Wildlife Hazards Working Group

Originally, we had all members of the Airside Operations Department trained in every aspect and technique of wildlife management from hazing and harassment to chemical immobilization to removal. Our inventory showed that the training overhead required to maintain currency for every staff member in certain areas was massive and overwhelming. It was apparent that large amounts of time and resources were needed to train and maintain proficiency in the areas of lethal force and certain capture techniques. It was becoming impossible to train everyone in the time frames that were needed and the expectation that all staff members would maintain their proficiency in all areas of wildlife management as well as their primary duties in Airside Operations, was unreasonable. It was decided that a new volunteer assignment would be created to resolve this dilemma. The new assignment of Wildlife Specialist was created and filled by those staff members that were interested in wildlife management and were able to specialize in this area, while still maintaining their proficiency in their Airside Operations duties.

The other key point here is that we required all of our contractors to meet the same training standards as our staff. Before USDA Wildlife Services personnel could use lethal force on the airport, they had to undergo the same training as our Wildlife Specialists. To make this as easy as possible, we treated Wildlife Services personnel as staff and included them in all training functions and even paid for their training.

❖ **Methods**
  - What are we doing to implement our Wildlife Management Program?
    - Surveying
    - Habitat modification
    - Exclusion
    - Hazing/harassment
    - Capture
    - Removal

❖ **Documentation**
  - What documentation do we have in place that supports our Wildlife Management Program?
    - Wildlife Hazard Assessment
    - Wildlife Hazard Management Program
    - Domestic animal control policy
    - Airside Operations database
    - Contracts
    - USDA WHIMIS – Survey data
    - Bird Strike Reporting From – FAA Form 5200-7
    - State statutes
    - State wildlife depredation permits
    - Federal regulations – FAR Part 139
    - Migratory Bird Treaty Act
    - Federal wildlife depredation permits

❖ **Tools**
  ◆ What equipment are we using to implement our Wildlife Management Program?
    ▪ 15mm launchers
    ▪ 12 gauge launchers
    ▪ 37mm launchers
    ▪ Paint ball guns
    ▪ 12 gauge shotguns
    ▪ Dart gun
    ▪ Captive bolt
    ▪ Air rifle
    ▪ Net gun
    ▪ Clover traps
    ▪ Bal-chatri traps
    ▪ Swedish Goshawk trap
    ▪ Ketch poles
    ▪ Kennels/transport containers
    ▪ Box traps
    ▪ Leghold traps
    ▪ Pole traps
    ▪ Nets
    ▪ Rodent traps
    ▪ Utility vehicles
    ▪ Boats
    ▪ Propane cannons
    ▪ Distress cry generators
    ▪ Effigies

❖ **Training**
  ◆ What are we training are people on?
    ▪ Principles of an Airport Wildlife Management Program
    ▪ Chemical immobilization
    ▪ Wildlife capture tools, methods and handling
    ▪ Firearms safety
    ▪ Wildlife identification
    ▪ Media relations
    ▪ Liability
    ▪ Basic First Aid/CPR
    ▪ Local, state and federal regulations
    ▪ Hazing tools and methods
    ▪ Wildlife removal tools, methods and handling
    ▪ Documentation
    ▪ Firing range
    ▪ Vehicle usage
    ▪ Euthanasia
    ▪ Airport driving
    ▪ Water safety
    ▪ Radio communication

❖ **Resources**
  ◆ Are there any additional resources that are not listed above, that support our Wildlife Management Program?
    ▪ Minnesota Department of Natural Resources
    ▪ Minnesota Science Museum
    ▪ Minnesota Sports Shooting Education Center
    ▪ Local gun clubs

3.   **DEVELOP**

Utilizing the drivers that we identified in **Phase 1 – DEFINE**, as the general performance objectives, coupled with the completed inventory of everything that we were doing and wanted to do, in **Phase 2 - PLAN**, we were ready to start **Phase 3 – DEVELOP**.

The first step of the Development Phase was to create training objectives. Training objectives are simply statements of what performances you want the trainee to be able to accomplish after the training. In the development of training objectives, we asked ourselves, what do our personnel need to do and how well do they need to do it?

Due to the size limitations imposed by this paper, it would be impossible to list all of the training objectives that we defined in our training program. Therefore, as an example, I will list some of the training objectives that we defined in various areas.

.177 Caliber Air Rifle

1.   The trainee will be able to identify the following parts of the Air Rifle:
 - Stock
 - Safety
 - Action
 - Chamber
 - Sights
 - Barrel
2.   The trainee will be able to safely examine the Air Rifle to ensure that it is unloaded.
3.   The trainee will be able to safely examine the Air Rifle for any obstructions.
4.   The trainee will be able to safely hold, load, aim and fire the Air Rifle.
5.   The trainee will be able to hit the target five times consecutively.
6.   The trainee will be able to safely unload the Air Rifle.
7.   The trainee will be able to safely transport the Air Rifle.

Wildlife Identification

1.   The trainee shall be able to identify at least the following birds:
 - European starling
 - Common grackle
 - Blackbird
 - House sparrow
 - American Kestrel
 - Red-tailed Hawk
 - Nighthawk
 - Rock dove
 - Canada goose
 - Snowy owl
 - Great blue heron
 - Great egret
 - Ring-billed gull
 - Snow bunting
 - Horned lark
 - Mallard
 - Blue-winged teal
 - Wood duck
 - Bald eagle
2.   The trainee shall be able to identify at least the following mammals:
 - White-tailed deer
 - Jackrabbit

- Cottontail rabbit
- 13 lined ground squirrel
- Ground hog
- Muskrat
- Beaver
- Red fox
- Coyote

3. The trainee shall be able to identify what birds are considered endangered or threatened species and what action may be taken against them.
4. The trainee shall be able to report a bird strike using FAA Form 5200-7.
5. The trainee shall be able to identify unfamiliar bird species using a Peterson's Field Guide.
6. The trainee shall be able to identify what wildlife species are authorized to be removed under state and federal permit guidelines.

Media Training

1. The trainee shall be able to identify the types of media, their needs and their audiences.
2. The trainee shall be able to identify terms commonly used by the media.
3. The trainee shall be able to discuss the goals of the media.
4. The trainee shall be able to speak confidently and persuasively before an audience on the various aspects of the MSP Wildlife Management Plan.

Now that we had defined the specific training objectives, our next step of the Development Phase was to create the actual training content and decide how we would deliver it. This should have been the easy part, because all that we had to do was use the individual training objectives as outlines for the training programs. But, as we were starting the process, it became obvious that we needed to answer some additional questions before we could fully develop the training.

1. Who will conduct the training? – In-house, outsource, combination.

In those areas where we lacked the expertise to provide in-house training, we had two options. Our options were to either gain the expertise to provide the training or to outsource it. Again, this was another opportunity to fully utilize the information gathered by the inventory in Phase 2.

We realized that we had a lot of talent and expertise available within the organization to meet our needs, and developed some of the training programs using those resources. For those areas that we didn't have the expertise in, we decided to outsource some of the training while at the same time, having individuals trained and certified where we lacked the expertise. One example was that we sent all of the Airside Operations staff members to the State of Minnesota's Public Information Officer training course to meet our requirements for Media Training. While at the same time, we had a group of staff members (Wildlife Specialists) receive certification as Firearms Safety Instructors by the State of Minnesota. After certification, this group was then responsible for designing and delivering firearms safety and range training for the rest of the staff. In the instance of Wildlife Identification training, we worked with the local USDA Wildlife Services staff to develop a specific curriculum that met our training objectives.

2. How will the training be conducted? – Lecture, hands on, discussion, on-the-job, independent study, computer based, role-play, etc.

Since each topic was unique, there was no one single method for delivering all of the training. In the instance of Wildlife Identification Training, we decided to use a combination of lecture, hands-on and discussion. While in Media Training, the instructor used lecture and role-playing. The majority of the Air Rifle Training was hands on, although there was some lecture.

3. **Where will the training be conducted?** – Classroom, lab, field, combination.

   Again, each topic presented their own challenges. Wildlife Identification Training was done in a classroom/lab where wildlife specimens were on site and able to be handled by the trainees. The Air Rifle Training was done in the field on a firing range and Media Training was done in a classroom.

4. **How often will the training be required?** – Once, annually, quarterly, etc.

   The schedule of training varies for each topic. In the majority of the training that we did, we required annual retraining. This included range training for all of the lethal force, hazing, and euthanasia methods as well as wildlife identification. In other areas, we required training only to be completed once, such as media training, vehicle usage, and radio communication. Still others had a different schedule. Chemical Immobilization has a bi-annual training requirement while Firearms Safety Instructor Certification requires training every two years unless continuing education requirements are met.

Answering the questions above helped us to better develop our training programs, but they didn't give us everything that we needed. We still needed to create the content of the training programs. To do this, we used a variety of resources such as:

▪ Manufacturers operating manuals – Remington, Mossberg, Pneu-Dart, New England Firearms, Coda, John Deere
▪ Private organizations – National Rifle Association, The Wildlife Society, American Red Cross
▪ State and federal organizations – MN Department of Natural Resources, U.S. Fish & Wildlife Service, USDA Wildlife Services, Federal Aviation Administration, Transport Canada
▪ Publications – Peterson's Field Guides, Wildlife Restraint Series, Research and Management Techniques for Wildlife and Habitats

Using these resources and others, we were able to create the content of the training programs that met the training objectives defined earlier that would be used in the next phase.

4. IMPLEMENT

Implementation of the training programs was simple. We took the materials and information developed in Phase 3, picked a date and time, scheduled a location and conducted the training. The hardest part of this whole phase was to ensure that we continued to meet the required training schedules and to adequately document all training.

We tried to keep all training documentation electronic. Anything that was generated as paper such as certificates, tests, score sheets, etc., we scanned, converted to PDF format and stored electronically. Range targets such as paper and 3D were photographed using a digital camera and then stored electronically.

5. EVALUATE

The last phase of our process was evaluation. To ensure that we had done everything that we had set out to do, we needed to measure the success of our program. To do this, we asked ourselves one question, "did the training accomplish our goals and objectives?" In other words, were our people able to do what they needed to and did they understand what they were doing and why.

When the answer was yes, we considered the program a success and left it alone. In those cases when the answer was no, we reevaluated the entire program and worked to improve those areas where our objectives weren't met. In some cases, we found that our training objectives were not valid and decided to revise the objectives instead of the content.

The evaluation phase of this process is critical, because this is the point where process improvement is identified and initiated. Without this key phase, your program will fail.

SUMMARY

Creating a Wildlife Management Training Program for an airport is a complex and difficult task, which takes an extreme amount of time, effort and resources. Creating a successful Airport Wildlife Management Training Program is even more difficult. Utilizing a simple five phased approach,

1. Define
2. Plan
3. Develop
4. Implement
5. Evaluate

the Minneapolis-St. Paul International Airport has successfully developed a comprehensive and progressive Wildlife Management Training Program, which provides the instruction, tools and skills necessary to meet the needs, and requirements set by industry.

Where Do We Go From Here?

Realizing that the development of a Wildlife Management Training Program can be extremely burdensome on an airport's already limited resources, perhaps it's time that we, as airports and industry, come together to collaboratively create a set of training standards that are universally recognized and accepted. Are the drivers of our individual training programs that much different from each other? Is each of us reinventing the wheel? Perhaps it's time that we develop a system and process which allows us to share the benefits of each other's hard-earned knowledge and experience. Perhaps it's time to meet and discuss how we can help each other. Perhaps it's time to act and decide for ourselves, where we go from here!